



Q/P MANAGEMENT
GROUP, INC.






Hammer's PEMM for CMMI


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Today's Discussion

-  About 40 minutes of presentation, and about 10 minutes of Q&A
-  Briefly discuss history and state of process improvement
-  Introduce the PEMM (Process and Enterprise Maturity Model) - the PEMM is a recently-published maturity model composed of a set of attributes needed for successful process improvement
-  Discuss the PEMM's application to the CMMI[®]
-  If you decide you need to know more, at the end are sources of additional information



Many companies accept that by redesigning business processes they can realize tremendous improvements in cost, quality, speed, profitability, and other key areas.



Dr. Michael Hammer

- Many would call him one of the pioneers of Business Process Reengineering (BPR), and a driving force behind the business process revolution.
- In 1993 he co-authored a book with James Champy called **“Reengineering the Corporation: A Manifesto for Business Revolution”** that discusses topics such as process redesign, better integration of information technology with processes, empowered workers, and performance measured by results. It sold over 2 million copies, was on the New York Times best seller list for over a year, and has been translated into more than 30 languages. In 2002, the book was included in a Forbes magazine list of the 20 most influential business books of the last 20 years.



Dr. Hammer Observed That Many Companies Still Struggle with Process Improvement

“Since 2000, I have personally observed hundreds of companies try to rejuvenate themselves by creating or redesigning business processes. In spite of their intentions and investments, many have made slow or little progress. Even businesses that succeeded in transforming themselves have found the endeavor arduous and harrowing. All change projects are tough to pull off, but process-based change is particularly difficult.”

Dr. Michael Hammer, “The Process Audit.”
Harvard Business Review April, 2007



What Goes Wrong with Process Improvement?

- **Context** - An organization's work is not viewed as a process that can be continuously improved. Process management is not viewed as the primary approach behind managing organizations.
- **Fads** - Organizations jump on short-term fads.
- **Panacea** - Process improvement is treated as the cure-all.
- **Technology** - Technology is viewed as enough to make process improvement happen (neglecting change leadership, change management, etc.).
- **People** - It is not recognized that people are central to the success of process improvement – that is, if people do not want to work in new ways, it will probably not happen.



In 2002 Hammer Started a Research Project with a Group of Companies to Address This Problem

- Why do many organizations struggle despite seeming to have prepared all the elements needed for process improvement success? *What was missing?*
- The goal of the research project was to develop what he called a “process implementation road map.”
- And last year Dr. Hammer published a Harvard Business Review article, called “The Process Audit,” describing the resulting framework called The Process and Enterprise Maturity Model (PEMM).

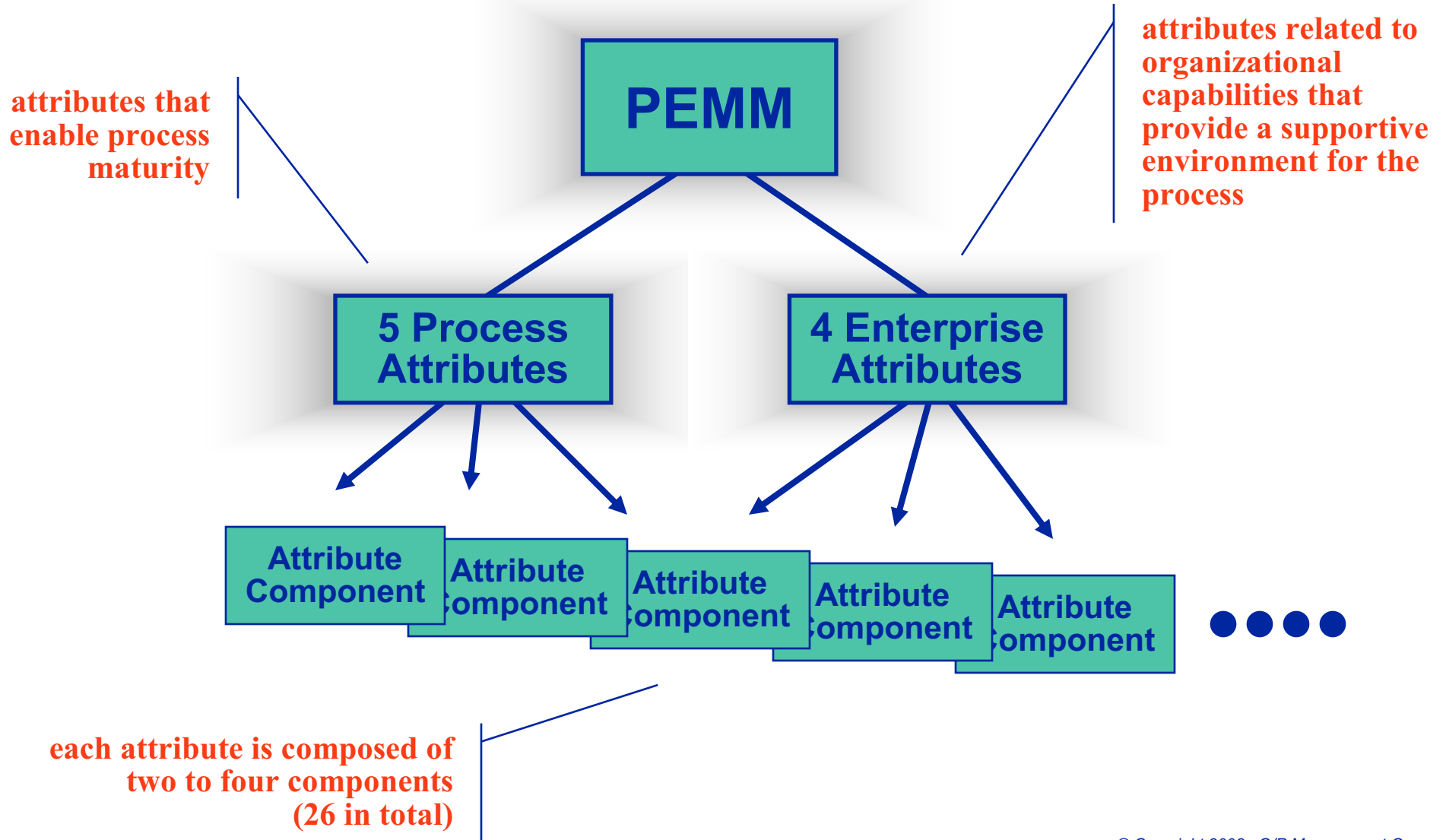


The PEMM Can Be Used for Various Purposes

- In **Planning** for a process improvement initiative.
- In **Monitoring** the progress of a process improvement initiative.
- In **Diagnosing** why a process improvement initiative is not working.
- In **Sustaining** a high level of process performance.

And it's straightforward and practical enough for self-assessments

PEMM Structure

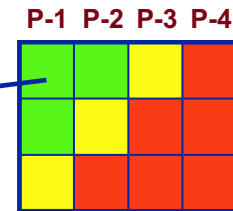


PEMM Structure – Process Attributes

Design - that specifies how the process should be executed.

- Purpose
- Context
- Documentation

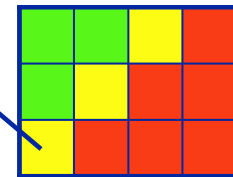
Largely True



Performers - who executes the process.

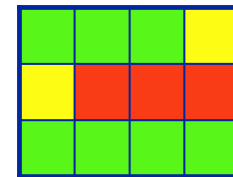
- Knowledge
- Skills
- Behavior

Somewhat True



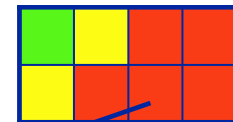
Owner - A senior executive who is responsible for the process.

- Identity
 - Activities
 - Authority
- } *attribute components*



Infrastructure - Information and management systems supporting the process.

- Information systems
- Human resource systems



Metrics - to provide feedback on process performance.

- Definition
- Uses

Largely Untrue

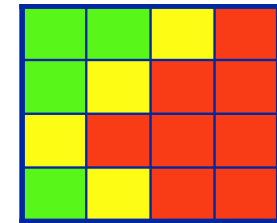


PEMM Structure – Organizational Attributes

Leadership - Senior executives supporting process improvement.

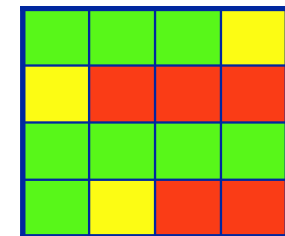
- Awareness
- Alignment
- Behavior
- Style

E-1 E-2 E-3 E-4



Culture - that supports change.

- Teamwork
- Customer focus
- Responsibility
- Attitude toward change



Expertise - in process improvement.

- People
- Methodology



Governance - Mechanisms for managing complex change initiatives.

- Process model
- Accountability
- Integration





Basics of Using the PEMM

- The use of the PEMM involves examining the degree that each of the attributes is established using four maturity levels.
- There are 13 process attributes components to evaluate, and 13 organizational capabilities components to evaluate.
- The model provides descriptions of 104 “cells” (4 maturity levels X 26 components), and each cell is evaluated on a scale of:
 - Largely true
 - Somewhat True
 - Largely Untrue
- A process is at maturity level if all the process enablers for that level are evaluated as “Largely True,” **AND** the organizational capabilities for that level are evaluated as “Largely True.”
- Note that the organizational attributes must be mature enough to support the processes. For example, an organization cannot have Level 2 processes if the organizational attributes are at Level 1.
- A process at Level 1 is considered to be stable. Level 4 is considered to be best-in-class.

Companies' Experiences with the PEMM

Process Improvement Activity	PEMM Diagnostic Results	Interventions
<p>Michelin process redesign to increase customer focus and reduce costs</p>	<p>Managers' new roles and the new organizational charters were not clear.</p>	<p>Workshops to clarify new roles and new departmental charters.</p>
<p>CSAA wanted to understand why some processes performed better than others</p>	<ul style="list-style-type: none"> • Poor process owner training • The culture did not support cross-functional teamwork. Processes that operated within a division performed better than those that crossed divisional boundaries. 	<ul style="list-style-type: none"> • Give process owners more responsibility. • Include process prioritization into strategic planning. • Raise leadership's importance of process in the organization.
<p>Shell redesign of two core processes. Independent PEMM assessments were performed by frontline personnel and process owners/executives.</p>	<ul style="list-style-type: none"> • Process owners/executives had a much "rosier" view. • Weaknesses in performers' metrics expertise. • Weaknesses in governance. 	<ul style="list-style-type: none"> • Improve performers' training regarding the process. • Improve approach to set performance targets. • Establish a PMO.

From Dr. Michael Hammer, "The Process Audit." Harvard Business Review April, 2007

CMMI vs. PEMM

	CMMI for Dev	PEMM
WHAT IT IS	A set of requirements for process excellence, plus an appraisal method (including for each Process Area a set of Generic Practices for making the process area last)	A set of process and organizational attributes that must be in place for process improvement success
SCOPE	Software Development and Maintenance	Any business process
PURPOSES	Planning, Monitoring, Diagnosing, Sustaining	Planning, Monitoring, Diagnosing, Sustaining
TRAINING	Yes (well, probably)	No
DEFINE PROCESS	No, it doesn't specify what a process should look like	No, it doesn't specify what a process should look like



Applying the PEMM to the CMMI

- It is a valuable companion tool for organizations implementing process improvement based on the Software Engineering Institute's (SEI) Capability Maturity Model Integration (CMMI).
- The characteristics of sustainable processes are built into the CMMI, mostly in the Generic Practices (GPs). The focus of its discussion is maturity of the organization's software development capabilities.
- The focus of the PEMM's discussion is key challenges of implementing mature processes.
- The separation of the process and organizational attributes allows for easier synchronization of the process maturity efforts with organizational maturity efforts (for example, so the process maturity does not get taken too far ahead of the organization's capability to support it).



In Closing ...

- When used for a CMMI-based improvement program, the addition of the PEMM perspective would not add much cost - but might add significant value.
- Would the PEMM be useful as a quick pre-assessment to drive some preparation before starting heavily into the complexity of the CMMI??
- Dr. Hammer as author, and publication in the Harvard Business Review give important credibility to the PEMM.
- PEMM learning can be shared between the CMMI-based and other process improvement initiatives.
- The separation of the process and organizational attributes, and the need to synchronize maturity levels between the process and organizational attributes would probably make it easier to engage senior leadership and make clear their “assignments” in a process improvement initiative, and in sustaining process maturity.

Reference Materials

I spent some time Googling the PEMM, but there wasn't much out there – probably because it was so recently released into the public domain.

- Website for Michael Hammer's company (it has some information on the PEMM)
<http://www.hammerandco.com/>
- Michael Hammer's 2007 Harvard Business Review article "The Process Audit" that introduces the PEMM (download in PDF format for \$6.50)
http://harvardbusinessonline.hbsp.harvard.edu/b02/en/common/item_detail.jhtml?id=R0704H&referral=2342
- Business Process Trends article
<http://www.businessprocesstrends.com/publicationfiles/07-07-ART-HammersPEMM-Power-final1.pdf>



Thank You!

Any feedback is, as always, greatly appreciated!
And I'd be especially interested in your PEMM experiences.

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