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# **What's New with the CMMI® (CMMI® Changes from Version 1.1 to Version 1.2)**

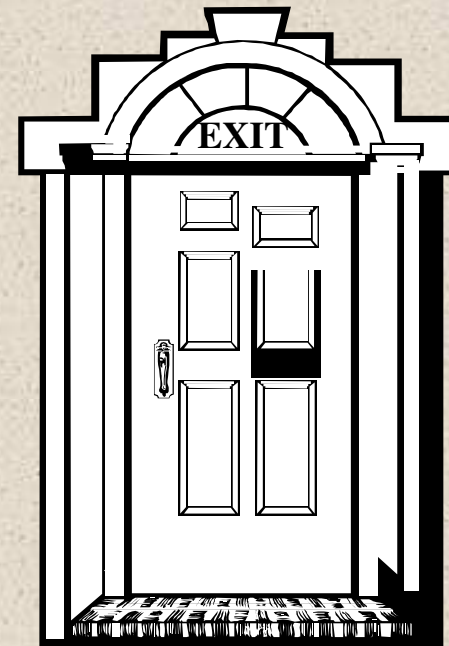
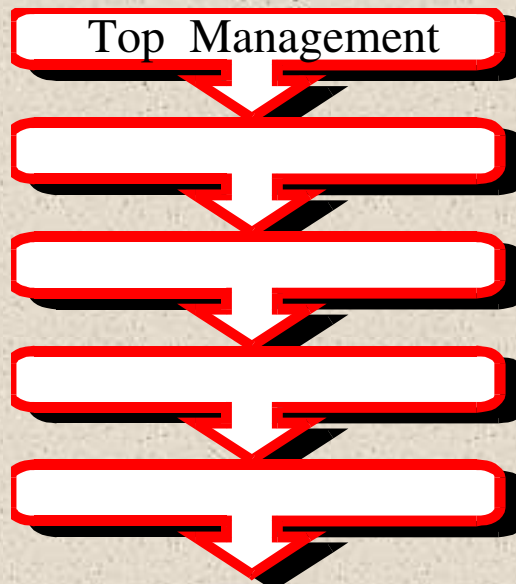
**G. Gordon Schulmeyer**

**PYXIS Systems International, Inc.**



# United Technologies Corp. CEO: George David

LEAD: Convert top management into disciples of the process and make proselytizing part of their job. Nonbelievers can head for the exits.



“Unsung CEO, The,” Brady, Diane (*Business Week*, 25 Oct. 2004), pp.74-84.

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# Reasons for Changes [1]

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## 1. Reduce complexity and size

- Eliminated advanced practices and common features to simplify
- Eliminated the Supplier Sourcing (SS) addition
- Incorporated Integrated Supplier Management (ISM) into Supplier Agreement Management (SAM) to eliminate Supplier Sourcing Discipline
- Consolidated the IPPD material to simplify
- Added, modified, and consolidated definitions in the glossary (e.g., bidirectional traceability) for improved readability and understanding



# Reasons for Changes [2]

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2. Expand model coverage
  - Adopted a single book approach (i.e., both representations are published in one document) for ease of use
  - Added hardware amplifications
  - Added two work environment specific practices [in OPD & IPM]
  - Updated the model name to CMMI® for Development (CMMI®-DEV) to reflect the new CMMI® architecture





# Major Changes [1]

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- Name changed to “CMMI® for Development”
- Both representations in one document
- Amplifications improved; added hardware amplifications
- Common features and advanced practices eliminated
- Supplier Sourcing addition eliminated
- Integrated Supplier Management brought into Supplier Agreement Management



# Major Changes [2]

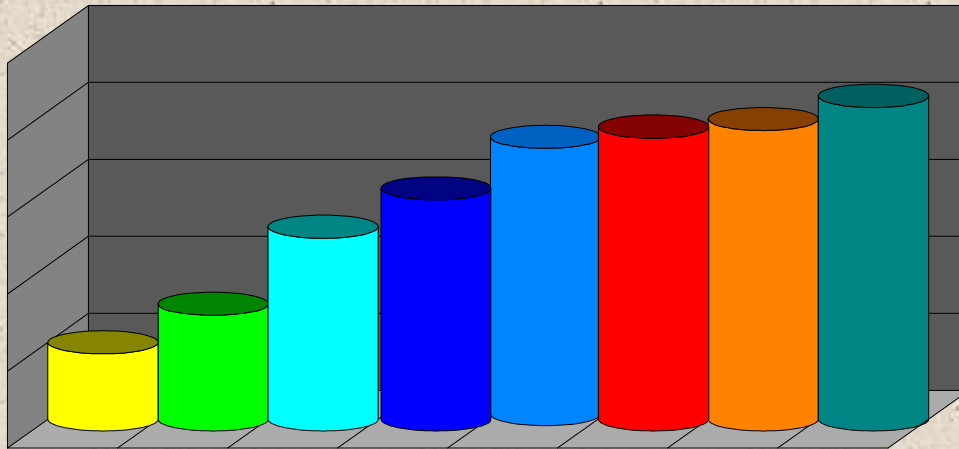
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- Guidelines for “not applicable” process areas clarified
- Overview and glossary improved
- Work environment material added to Organization Process Definition and Integrated Project Management
- Integrated Process and Product Development material simplified and consolidated
- Process deployment strengthened in Integrated Project Management and Organization Process Focus



# U nited T echnologies C orp. CEO: George David

- ANALYZE: Rigorously study the root cause of every defect and complaint. Then, even if it means stopping production, fix the problem once and for all.



For CMMI® v1.2  
the SEI-led team  
clarified material  
based on 1000+  
Change Requests

“Unsung CEO, The,” Brady, Diane (*Business Week*, 25 Oct. 2004), pp.74-84.

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# Specific Changes [1]

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- Advanced practices eliminated [No more SP1.2-3]
- Common features eliminated [Commitment to perform, Ability to perform, etc.]
- Supplier Sourcing addition eliminated
  - Added to SAM Goal 2:
    - SP 2.2 -Monitor Selected Supplier Processes
    - SP 2.3 -Evaluate Selected Supplier Work Products





# Specific Changes [2]

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- IPPD simplified
  - Removed OEI and moved material to OPD
  - Removed IT and moved material to IPM
- Single document
  - Users can choose to use:
    - Representation-specific content (i.e., continuous, staged)
    - Addition-specific content (i.e., IPPD)
    - Amplifications (i.e., hardware engineering, software engineering, systems engineering)



# Specific Changes [3]

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- Added hardware amplifications and examples
- Work Environment
  - Organization level in OPD SP 1.6
  - Project level in IPM SP 1.3
- Only SAM process area can be declared not applicable with supporting rationale
- Glossary updated

# Integrated Project Management +IPPD

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- SP 1.3 – Establish the Project's Work Environment
- SP 3.1 –Establish the Project's Shared Vision
- SP 3.2 –Establish the Integrated Team Structure
- SP 3.3 –Allocate Requirements to Integrated Teams

NOTE: SP 3.1,2,3 Former IPM SG3&4

- SP 3.4 –Establish Integrated Teams
- SP 3.5 –Ensure Collaboration among interfacing Teams

NOTE: SP 3.4,5 Former IT process area



# Organizational Process Definition +IPPD

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- SP 1.6 – Establish Work Environment Standards
- SP 2.1 – Establish Empowerment Mechanisms
- SP 2.2 – Establish Rules and Guidelines for Integrated Teams
- SP 2.3 – Balance Team and Home Organization Responsibilities

NOTE: SP 2.x Former OEI process area





# Organizational Process Focus

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- SP 1.2 –Appraise the Organization’s process
- SP 3.2 –Deploy Standard Processes
- SP 3.3 –Monitor Implementation



# Requirements Management

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- SP 1.4 – Maintain Bidirectional Traceability of Requirements

# Requirements Development

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- SP 1.1 – Elicit Needs
- SP 3.1 – Establish Operational Concepts and Scenarios
- SP 3.5 – Validate Requirements



# Supplier Agreement Management

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- SP 2.2 – Monitor Selected Supplier Processes
- SP 2.3 – Evaluate Selected Supplier Work Products

## Technical Solution

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- SP 1.1 – Develop Alternative Solutions and Selection Criteria
- SP 2.3 – Design Interfaces Using Criteria



# Verification

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- SP 3.2 – Analyze Verification Results

# Validation

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- SP 2.2 – Analyze Validation Results





# Constellations

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- Development – DEV
- Acquisition – ACQ
- Services – SVC



# SCAMPI<sup>SM</sup> Changes

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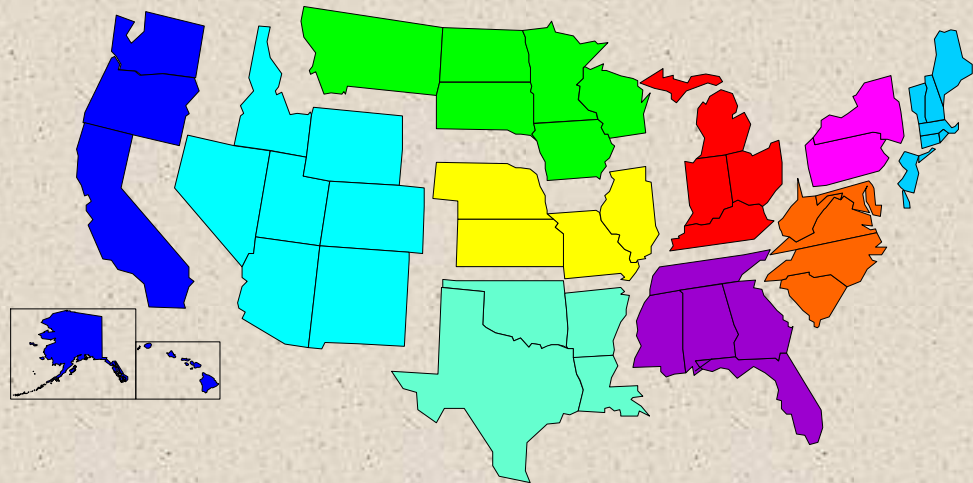
- Appraisal results expire after 3 years
- Organizational Unit sampling
- If SAM is declared NA, then must be justified
- Appraisal Disclosure Statement (ADS) improvements
  - reduce redundancy with other appraisal documents
  - improve usability for sponsor and government
  - require sponsor's signature on the ADS
- SEI needs to “close” appraisal prior to an organization claiming a level



# U<sub>nited</sub> T<sub>echnologies</sub> C<sub>orp.</sub> CEO: George David

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TRACK: Map out every process, make people own it, and reward constant improvements. For every action, ask why and how it could be done better.

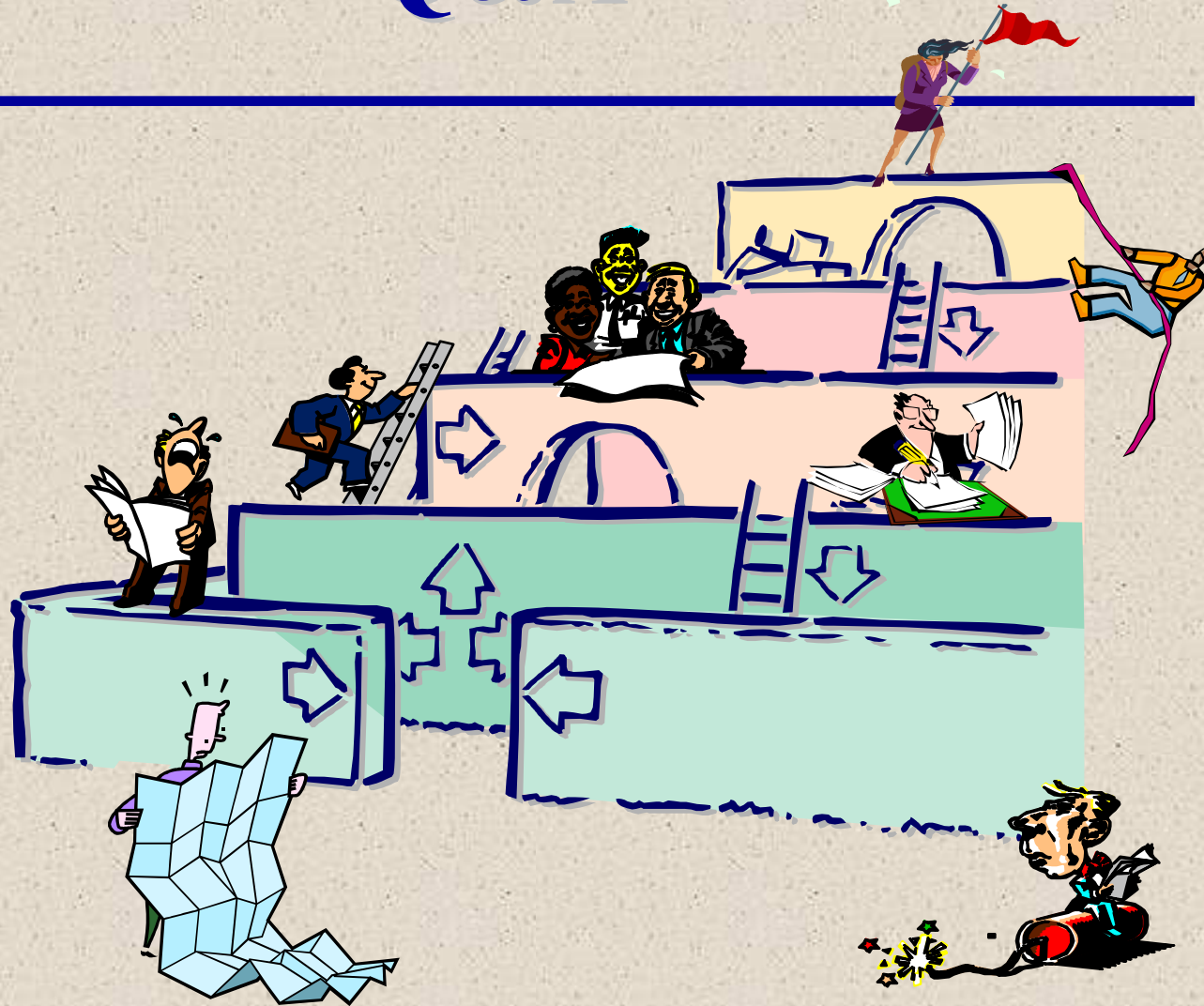


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# Q&A





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