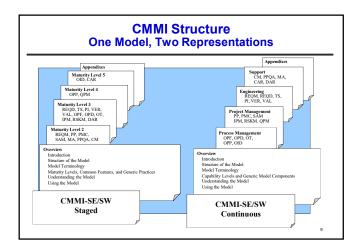
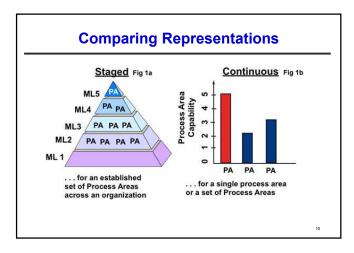
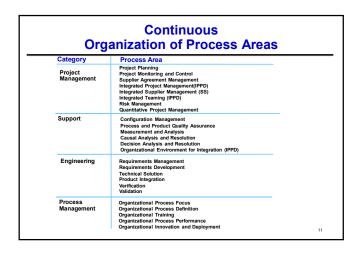
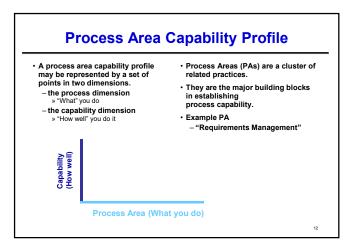


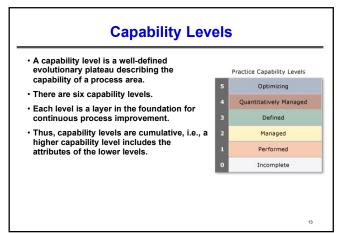
# • What does CMMI stand for? - Capability Maturity Model Integration • What is the CMMI? - The CMMI model is a collection of best practices from leading engineering companies • What the CMMI is not... - The CMMI model is not a process - It shows what to do, not how to do it or who does it • Where do I get more information - http://www.sei.cmu.edu - www.cmmiinstitute.com - Library - Google

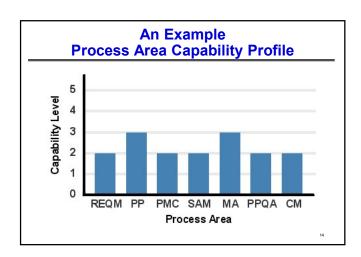










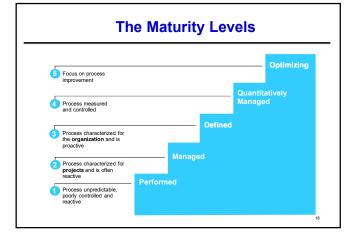


### **Maturity Levels**

- A maturity level is a well-defined evolutionary plateau on the path to becoming a mature organization.
- There are five maturity levels.
- Each level is a layer in the foundation for continuous process improvement.

6

## 



## Maturity Levels Cannot Be Skipped

- A level provides a necessary foundation for effective implementation of processes at the next level.
  - Higher level processes are easily sacrificed without the discipline provided by lower levels.
  - The effect of innovation is obscured in a noisy process.
- Higher maturity level processes may be performed by organizations at lower maturity levels, with risk of not being consistently applied in a crisis.

19

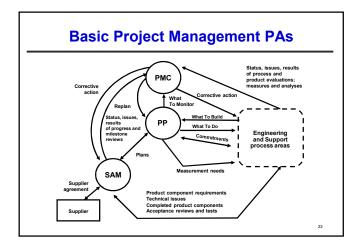
### Example of a CMMI Process Area

### **Project Management**

### Project Management Process Areas

- There are eight Project Management Process Areas.
- -Project Planning (PP)
- -Project Monitoring and Control (PMC)
- -Supplier Agreement Management (SAM)
- -Integrated Project Management (IPM)
- -Risk Management (RSKM)
- -Quantitative Project Management (QPM)
- The SE/SW/IPPD model includes one additional process area under Project Management and an expanded version of Integrated Project Management process area:
  - -Integrated Teaming (IT)
  - -Integrated Project Management (IPM [IPPD])

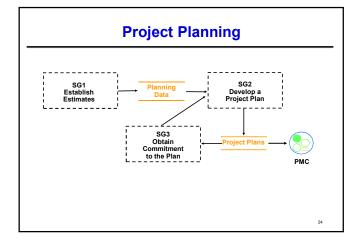
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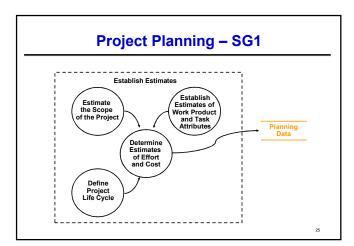


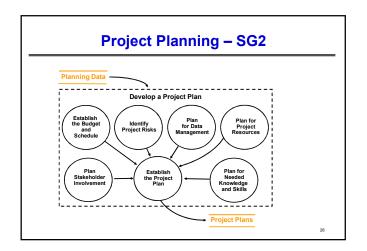
### **Project Planning (PP)**

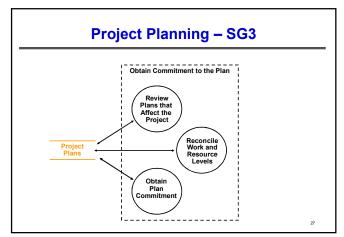
- Purpose
- -Establish and maintain plans that define project activities.
- PP has 3 specific goals...SG1, SG2, SG3
- PP and PMC work together
  - -PP creation of project plan
  - $-\mbox{\rm PMC}$  Tracking against the plan

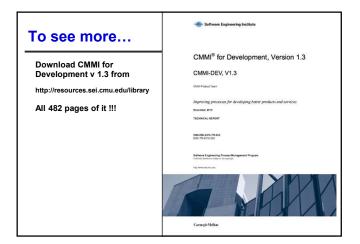
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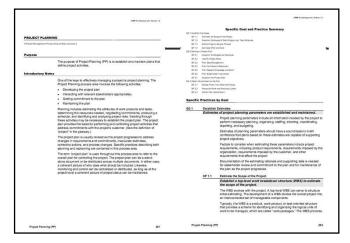


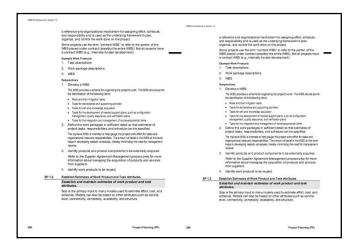








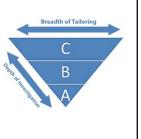






### **Appraisal Method Classes**

- · Class A
- -Full comprehensive method
- -Thorough model coverage
- -Provides maturity level
- · Class B
- Less comprehensive -> less expensive
- -Partial self-assessment
- -Focus on areas needing attention
- -No maturity level rating
- · Class C
  - -Quick look
- -Check for specific risk areas
- -Inexpensive
- -Little training needed



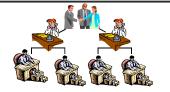
### **Appraisal Method Classes (ARC)**

Characteristics	Class A	Class B	Class C
Amount of objective evidence gathered (relative)	High	Medium	Low
Ratings generated	Yes	No	No
Resource needs (relative)	High	Medium	Low
Team size (relative)	Large	Medium	Small
Appraisal Team Leader Requirements	Lead Appraiser	Lead Appraiser or person trained and experienced	Person trained and experienced

### **Appraisal Scope**

Defining the ·"Organizational Unit"

Selecting CMMI Model









### **Sources of Objective Evidence**

- -Organizational assets reflecting evidence of implementation of model practices (e.g., mapping tables)
- -Questionnaires
- Interviews
- -Standard structured interviews: on-call interviews: follow-up
- -Exploratory or focused questions targeted at manager, practitioners and/or users
- Presentations
- -Briefings, demonstrations
- Documents
- -Hardcopy, softcopy, hyperlinks

### **Indicators in CMMI**

- · PIIs include artifacts as well as information gathered from interviews with managers and practitioners.
- Practice Implementation Indicator Types
  - -Direct Artifacts
  - » Tangible outputs resulting directly from implementation of a practice (e.g., Typical Work Products)

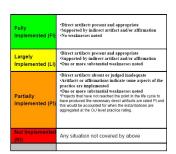
  - Indirect Artifacts

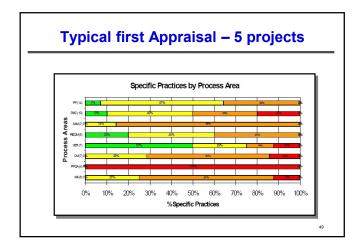
     Artifacts that are a side-effect or indicative of performing a practice (e.g.,

     meeting minutes, reviews, logs, reports)
  - -Affirmations
    - » Oral or written statements confirming or supporting implementation of the practice
      - -(e.g, interviews, questionnaires)

### **Determination of Practice Implementation**

- · The basic approach to determination of practice implementation is to:
- characterize the degree to which the practice is implemented, and
- note any factors which should be considered in addition as the instantiation data is aggregated (strengths, weaknesses, etc.).





# Can I see who is assessed? • Yes for some, not all -Why? • Published Appraisal Results -https://sas.cmmiinstitute.com/pars/

