CMMI® Impact
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Carnegie Mellon University

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<table>
<thead>
<tr>
<th>Metric</th>
<th>CYE07</th>
<th>CYE08</th>
<th>Delta</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisals Performed</td>
<td>3,113</td>
<td>4,134</td>
<td>1,021</td>
<td>32.8%</td>
</tr>
<tr>
<td>Organizations Appraised</td>
<td>2,674</td>
<td>3,446</td>
<td>772</td>
<td>28.9%</td>
</tr>
<tr>
<td>Participating Companies</td>
<td>1,882</td>
<td>2,544</td>
<td>672</td>
<td>35.7%</td>
</tr>
<tr>
<td>Re-appraised Organizations</td>
<td>361</td>
<td>564</td>
<td>203</td>
<td>56.2%</td>
</tr>
<tr>
<td>Projects</td>
<td>14,620</td>
<td>21,141</td>
<td>6,521</td>
<td>44.6%</td>
</tr>
</tbody>
</table>
# SCAMPI Military / Government / DoD Contractor Cumulative Statistics Calendar Year-End 2007 & 2008

<table>
<thead>
<tr>
<th>Category</th>
<th>CYE07</th>
<th>CYE08</th>
<th>Delta</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisals Performed</td>
<td>574</td>
<td>661</td>
<td>89</td>
<td>15.2%</td>
</tr>
<tr>
<td>Organizations Appraised</td>
<td>574</td>
<td>661</td>
<td>89</td>
<td>15.2%</td>
</tr>
<tr>
<td>Participating Companies</td>
<td>278</td>
<td>326</td>
<td>48</td>
<td>17.3%</td>
</tr>
<tr>
<td>Projects</td>
<td>2,068</td>
<td>2,573</td>
<td>505</td>
<td>24.4%</td>
</tr>
</tbody>
</table>
CMMI Adoption Has Been Broad

25 countries with 10 or more appraisals (Aug 06 - Jul 08):

- USA  598 -> 1034
- China 158 -> 465
- India 177 -> 323
- Japan 155 -> 220
- France 65 -> 112
- Korea (ROK) 56 -> 107
- Taiwan 31 -> 88
- Brazil 39 -> 79
- Spain 25 -> 75
- U.K. 42 -> 71
- Germany 28 -> 51
- Argentina 15 -> 47
- Canada 18 -> 43
- Malaysia 15 -> 42
- Mexico <10 -> 39
- Australia 23 -> 29
- Egypt 10 -> 27
- Chile <10 -> 20
- Philippines 14 -> 20
- Colombia <10 -> 18
- and Italy, Israel, Singapore, Hong Kong, and Pakistan

SCAMPI A reports from 60 countries

Approx. 70% of adopters in US are contractors for military/government or are government

Estimated 900,000+ work in orgs that have had a SCAMPI A appraisal.
Organizational Size
Based on total employees within area of appraised organization

- 1 to 100: 51%
- 101 to 200: 19.8%
- 201 to 300: 9.0%
- 301 to 500: 7.4%
- 501 to 1000: 6.8%
- 1001 to 2000: 3.7%
- 2000+: 2.5%
- 25 or fewer: 13.6%
- 26 to 50: 15.6%
- 51 to 75: 12.8%
- 76 to 100: 8.9%

Based on 2,968 organizations reporting size data
Organizational Type
Based on Primary Standard Industrial Classification (SIC) Code

72% of adopters are commercial orgs
2/3 Services; 1/5 Manufacturing
Introduction to CMMI Attendees
Cumulative as of 7-31-09
CMMI Adoption

CMMI appraisals are conducted worldwide...

...in a wide range of business domains

- Services (69.2%)
  - Engineering and Management Services
  - Public Administration
  - Transportation and Utilities
  - Finance, Insurance, Real Estate
    - Health Services
    - Retail/Wholesale Trade

- Manufacturing (17.6%)
  - Electronic and Electric Equipment
    - Industrial Machinery
  - Instruments and Related Products
  - Transportation Equipment
  - Other Mfg Industries

...in small and large organizations and projects

![Organization Size Chart]

Organization Size (Employees)

- >2000, 2.1%
- 1001-2000, 3.3%
- 501-1000, 6.0%
- 301-500, 6.9%
- 201-300, 8.5%
- 101-200, 19.6%
- 76-100, 8.2%
- 51-75, 13.0%
- 26-50, 18.3%
- <25, 14.1%

(3407 organizations reporting)

...at all levels of process maturity

<table>
<thead>
<tr>
<th>Commercial In-House</th>
<th>Contractor for Military/Government</th>
<th>Military/Government Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Rating Given</td>
<td>6.3%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Initial (ML1)</td>
<td>0.9%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Managed (ML2)</td>
<td>29.1%</td>
<td>31.9%</td>
</tr>
<tr>
<td>Defined (ML3)</td>
<td>50.4%</td>
<td>45.1%</td>
</tr>
<tr>
<td>Quantitatively Managed (ML4)</td>
<td>3.4%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Optimizing (ML5)</td>
<td>9.9%</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

(2525 orgs) (718 orgs) (163 orgs)

http://www.sei.cmu.edu/appraisal-program/profile/

Based on primary Standard Industrial Classification (SIC) codes reported in CMMI-based appraisals.
Benefits of CMMI-Based Process Improvement

Many companies cite performance benefits from CMMI

- Published in conferences, articles, papers, studies, surveys, reports

SEI collects quantitative measures of CMMI performance improvement

- Technical reports, including:
  - “Performance Results of CMMI-Based Process Improvement” ([http://www.sei.cmu.edu/pub/documents/06.reports/pdf/06tr004.pdf](http://www.sei.cmu.edu/pub/documents/06.reports/pdf/06tr004.pdf))

<table>
<thead>
<tr>
<th>Performance Category</th>
<th>Median Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>34%</td>
</tr>
<tr>
<td>Schedule</td>
<td>50%</td>
</tr>
<tr>
<td>Productivity</td>
<td>61%</td>
</tr>
<tr>
<td>Quality</td>
<td>48%</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>14%</td>
</tr>
<tr>
<td>ROI</td>
<td>4.0 : 1</td>
</tr>
</tbody>
</table>

CMU/SEI-2006-TR-004. Data from 35 organizations.
Number of SCAMPI Appraisals by Year

![Bar chart showing the number of SCAMPI appraisals by year from 2000 to 2008. The chart indicates a significant increase in appraisals, particularly in the years 2005 and 2007.]