

Carnegie Mellon
Software Engineering Institute

Process Maturity Profile

CMMI[®] For Development SCAMPISM Class A Appraisal Results 2009 Mid-Year Update

September 2009

We could not produce this report without the support of the organizations and lead appraisers who reported their appraisal results to the SEISM.

Our many thanks for their continuing cooperation with our data collection and analysis efforts.

CMMI Appraisal Program

The Software Engineering Institute is a federally funded research and development center sponsored by the U.S. Department of Defense and

b University

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Introduction

Current Status

Community Trends

Organizational Trends

Summary And Terms used in this Briefing

How to Report your Appraisal Results to the SEI

This briefing is based solely on the appraisals reported to the SEI. It cannot be used as a source for an exact indicator of all organizations in the world using CMMI models or appraisal methods nor can it be used for certification or verification purposes.

The SEI does not certify appraisal results or organizations. The SEI licenses SEI Partners, authorizes/certifies lead appraisers, team leaders and high maturity lead appraisers to conduct appraisals. Neither the SEI nor any other organization is a "certifying authority" of the results from a SCAMPI appraisal. Therefore requests to the SEI to provide information to be used for this purpose can not be fulfilled. Information provided by the SEI, such as this briefing, is to demonstrate reported results of the use of CMMI products and services only.

Organizations performing source selection or verification should consider performing an evaluation appraisal. For more information on appraisal methods and for a directory of authorized lead appraisers who can perform them, visit: http://www.sei.cmu.edu/cmmi/casestudies/profiles/cmmi.cfm



Introduction: Purpose

Characterize the adoption of CMMI® - DEV

Describe results from Standard CMMI Appraisal Method for Process Improvement (SCAMPISM) v1.1/v1.2 Class A appraisals using Capability Maturity Model[®] Integration (CMMI-SE/SW/IPPD/SS v1.1 or CMMI - DEV v1.2) *

Encourage continued reporting of results

 * Organizations previously appraised against CMMI v1.0 and which have not reappraised against v1.1 or v1.2 are not included in this report

Please visit: <u>http://www.sei.cmu.edu/cmmi/casestudies/profiles/cmmi.cfm</u> for additional information or questions you may have about this briefing before contacting the SEI directly



Introduction - 2: Briefing Contents

This briefing includes three primary sections:

- 1. Current Status
 - Snapshot of the software community based on the most recent appraisal, since 2002, of reporting organizations
- 2. Community Trends
 - Global distribution of appraisals
 - Growth in the number of appraisals performed
 - Shifts in the maturity profile over time
- 3. Organizational Trends
 - Analysis of Process Area (PA) satisfaction
 - Time to move up in maturity based on change in maturity level and time between appraisals



Current Status

SCAMPI v1.1/v1.2 Class A appraisals conducted from the SCAMPI V1.1 April 2002 release through June 2009 and reported to the SEI by July 2009

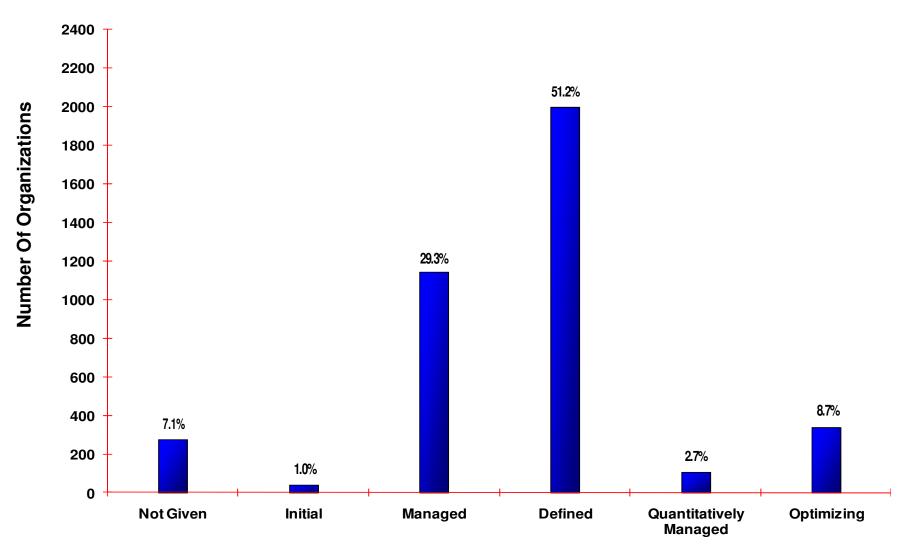
- 4,726 appraisals
- 3906 organizations
- 2,963 participating companies
- 662 reappraised organizations
- 25,013 projects
- 72.9% Non-USA organizations

Please refer to: Terms Used in this Report on page 27

Additional charts providing different views and break down of this information will be added to this briefing as more appraisal data is reported to the SEI over time.



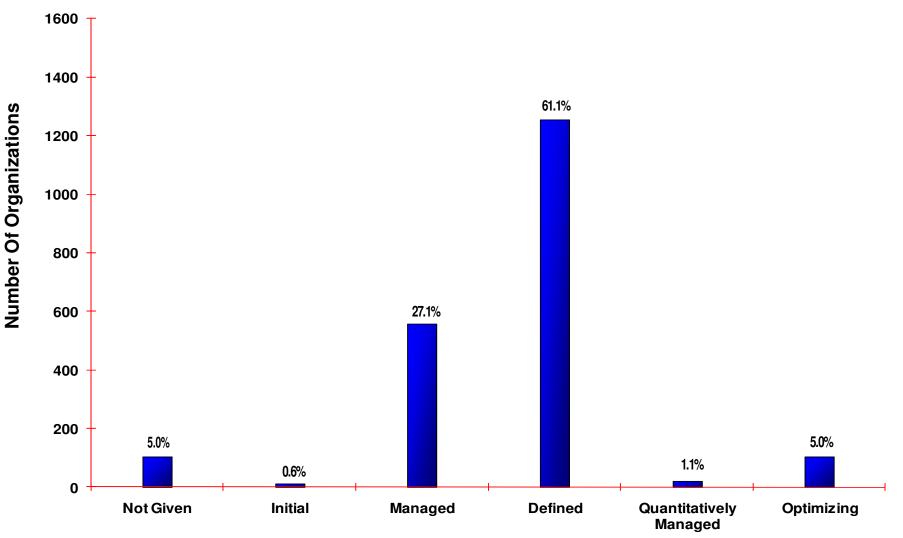
Process Maturity Profile by All Reporting Organizations



Based on most recent appraisal of **3906** organizations



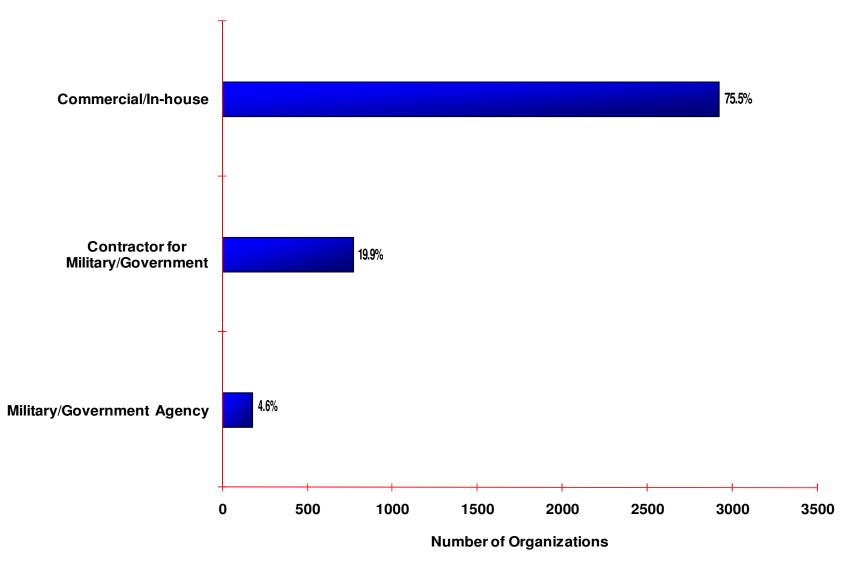
Process Maturity Profile (V1.2 Only) by All Reporting Organizations



Based on most recent appraisal of 2053 organizations



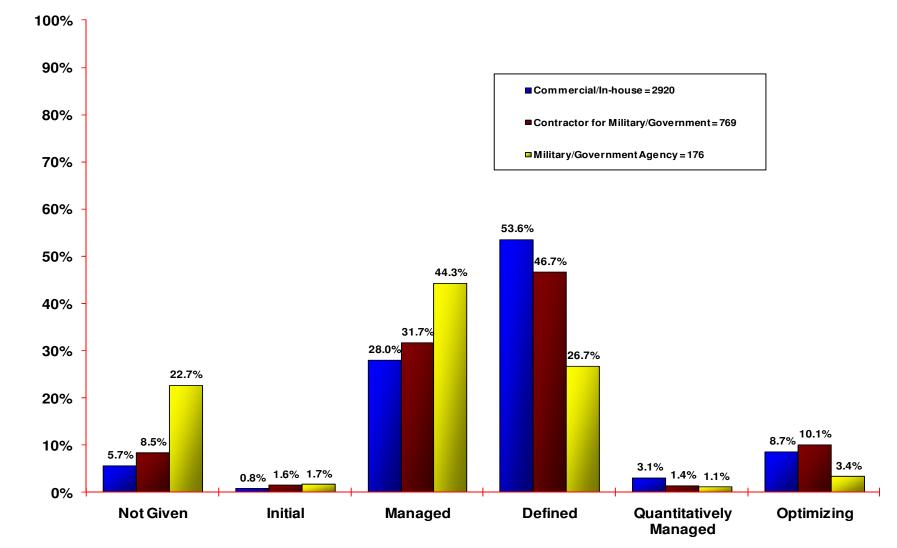
Reporting Organization Categories



Based on 3906 organizations reporting an organization category



Process Maturity Profile by Reporting Organization Categories



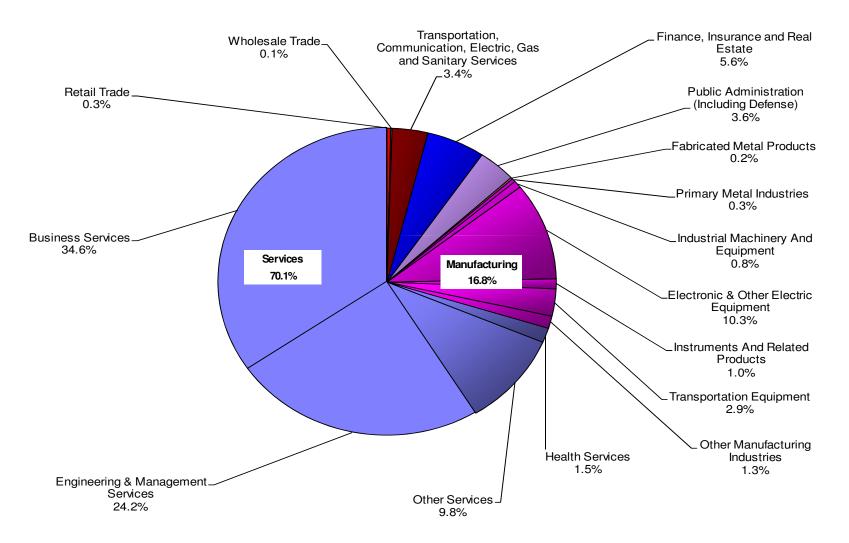
Based on most recent appraisal of 3865 organizations reporting an organization category

% Of Organizations Within Category



Organization Type

Based on Primary Standard Industrial Classification (SIC) Code

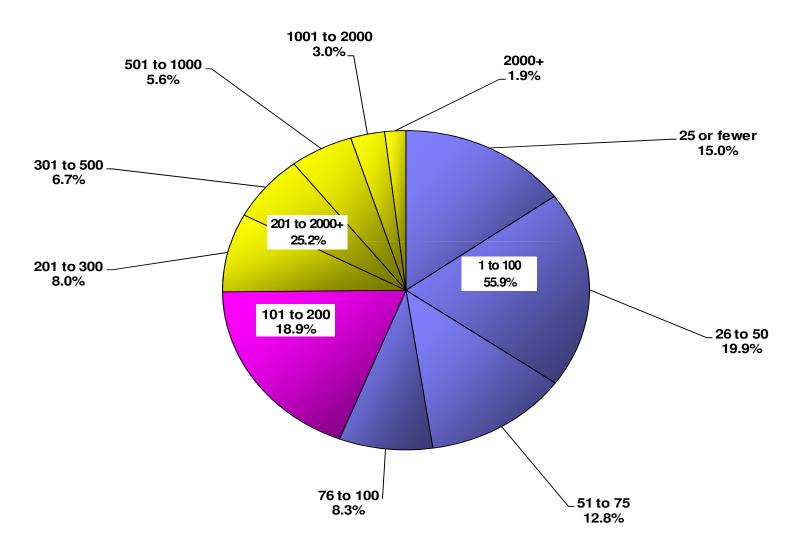


Based on 3152 organizations reporting SIC code. For more information visit: http://www.osha.gov/oshstats/sicser.html



Organization Size

Based on the total number of employees within the area of the organization that was appraised



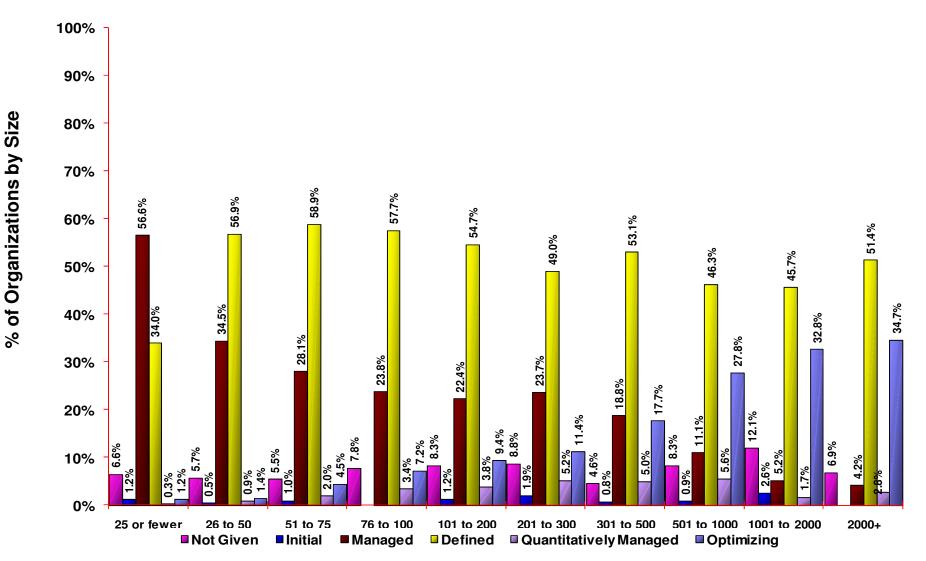
Based on 3863 organizations reporting size data



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Maturity Profile by Organization Size

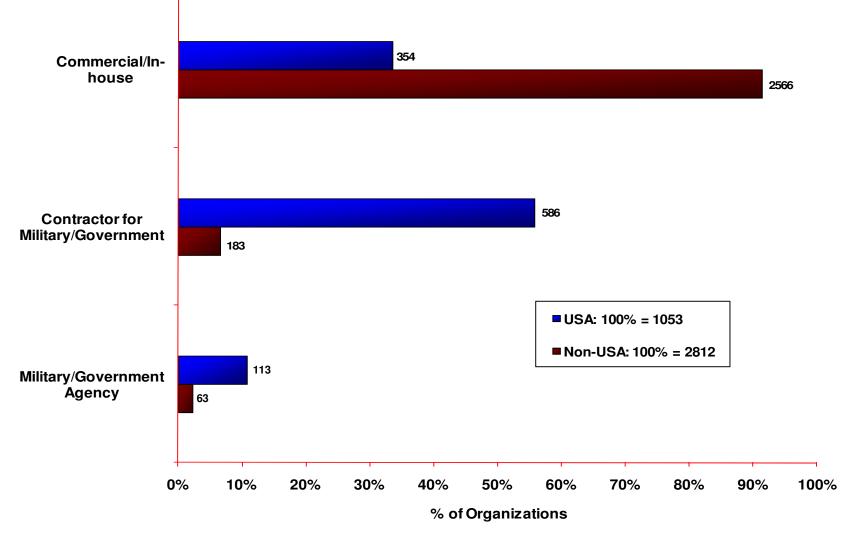
Based on the total number of employees within the area of the organization that was appraised



Based on 3863 organizations reporting size data



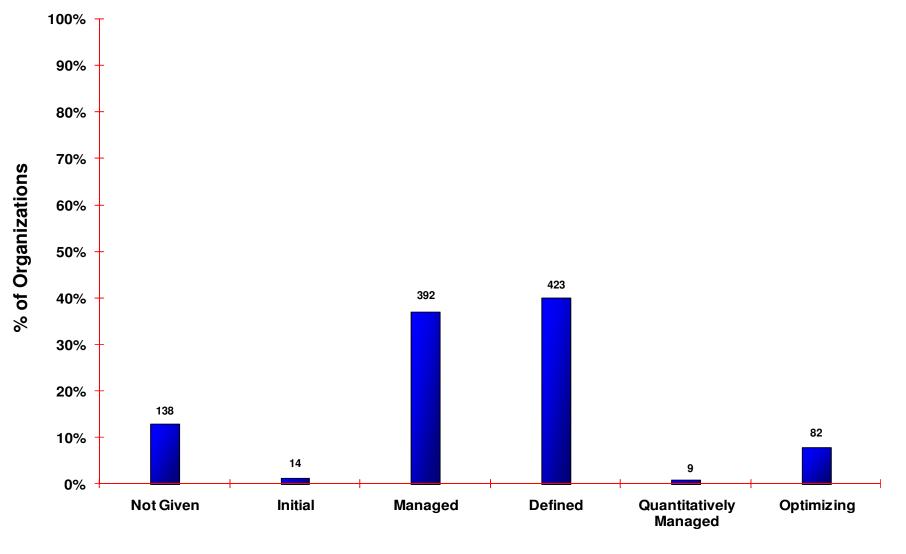
USA and Non-USA Reporting Organization Categories



Based on 1053 USA organizations and 2812 Non-USA organizations reporting an organization category



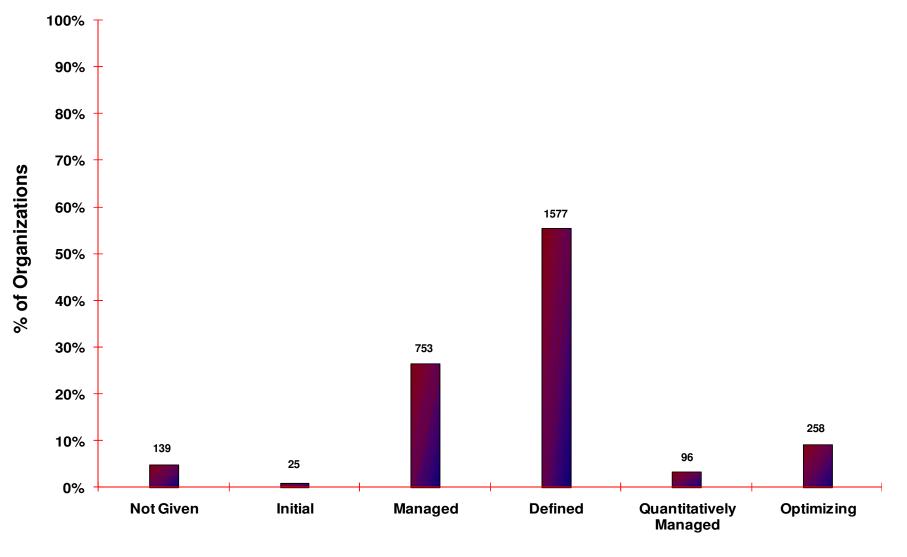
Maturity Profile by All Reporting USA Organizations



Based on 1058 USA organizations



Maturity Profile by All Reporting Non-USA Organizations



Based on 2848 Non-USA organizations



Section 2: Community Trends

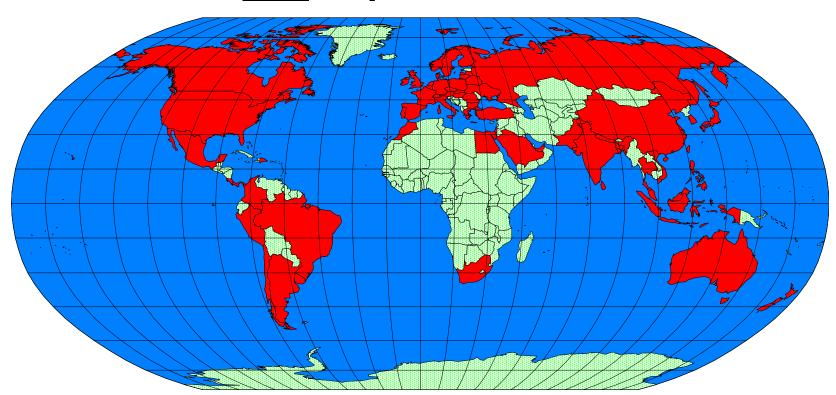
Appraisals conducted through June 2009 and reported to the SEI by July 2009

- 67 Countries reported appraisals
 - most of the appraisals are from Asia and North America
- 3603 Appraisals available on PARS
 - expired appraisals are removed from PARS and replaced with the newest reappraisal result

Please refer to: Terms Used in this Report on page 27



Countries where Appraisals have been Performed <u>and</u> Reported to the SEI

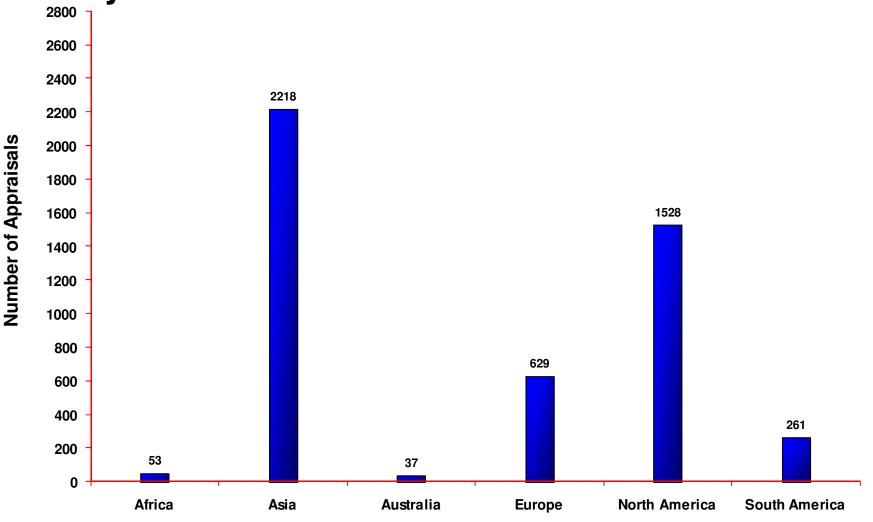


Argentina	Australia	Austria	Bahrain	Bangladesh	Belarus	Belgium	Brazil
Bulgaria	Canada	Chile	China	Colombia	Costa Rica	Czech Republic	Denmark
Dominican Republic	Egypt	Finland	France	Germany	Greece	Hong Kong	Hungary
India	Indonesia	Ireland	Israel	Italy	Japan	Korea, Republic Of	Latvia
Lithuania	Luxembourg	Malaysia	Mauritius	Mexico	Morocco	Nepal	Netherlands
New Zealand	Norway	Pakistan	Panama	Peru	Philippines	Poland	Portugal
Romania	Russia	Saudi Arabia	Singapore	Slovakia	South Africa	Spain	Sri Lanka
Sweden	Switzerland	Taiwan	Thailand	Turkey	Ukraine	United Arab Emirates	United Kingdom
United States	Uruguay	Vietnam		-			-

* No new countries added



Number of Appraisals Reported to the SEI by Continent



Based on 4726 appraisals

* North America includes Canada, the USA, and Mexico; South America includes Central America and the Caribbean ; Australia includes New Zealand



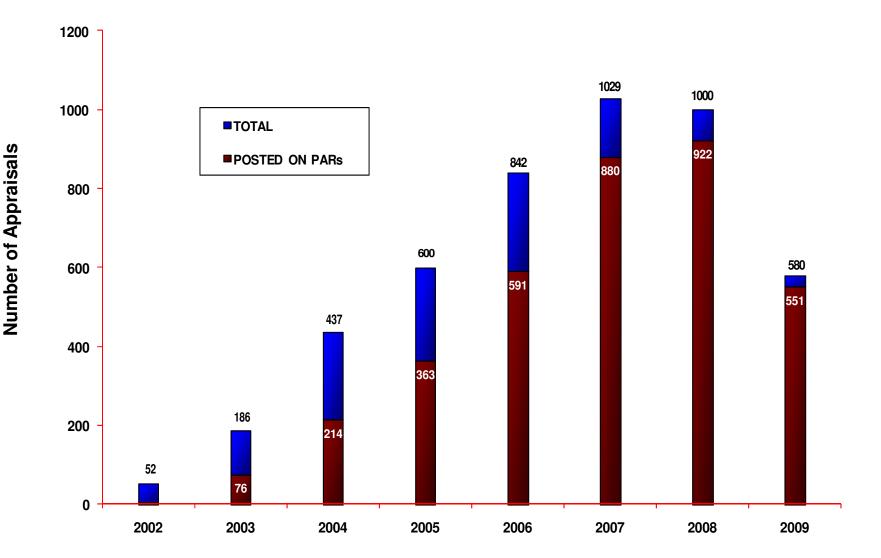


Number of Appraisals and Maturity Levels Reported to the SEI by Country

	Number of	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4	Maturity Level 5		Number of	Maturity Level 1	Maturity Level 2	Maturity Level 3	Maturity Level 4	Maturity Level 5
Country	Appraisals	Reported	Reported		Reported	Reported	Country	Appraisals		Reported		Reported	
Argentina	69		48	13	2	4	Malaysia	59		20	34		5
Australia	34	1	7	7	2	4	Mauritius	10 or fewer					
Austria	10 or fewer						Mexico	68		29	30	3	5
Bahrain	10 or fewer						Morocco	10 or fewer					
Bangladesh	10 or fewer						Nepal	10 or fewer					
Belarus	10 or fewer						Netherlands	10 or fewer					
Belgium	10 or fewer						New Zealand	10 or fewer					
Brazil	117	1	57	46	1	9	Norway	10 or fewer					
Bulgaria	10 or fewer						Pakistan	26	1	19	4		1
Canada	55	1	14	23	5	3	Panama	10 or fewer					
Chile	34		20	11		2	Peru	10 or fewer					
China	946	1	122	728	30	45	Philippines	22		2	11		8
Colombia	24		7	12	2	2	Poland	10 or fewer					
Costa Rica	10 or fewer						Portugal	10 or fewer					
Czech Republic	10 or fewer						Romania	10 or fewer					
Denmark	10 or fewer						Russia	10 or fewer					
Dominican Republic	10 or fewer						Saudi Arabia	10 or fewer					
Egypt	38	1	20	12	2	2	Singapore	20		3	11	1	4
Finland	10 or fewer						Slovakia	10 or fewer					
France	153	4	89	50	1	2	South Africa	10 or fewer					
Germany	70	9	34	13	1	1	Spain	155	1	93	48	3	4
Greece	10 or fewer						Sri Lanka	10 or fewer					
Hong Kong	18		2	11		5	Sweden	10 or fewer					
Hungary	10 or fewer						Switzerland	10 or fewer					
India	460		14	236	24	172	Taiwan	124	1	75	44		2
Indonesia	10 or fewer						Thailand	34		12	20		1
Ireland	10 or fewer						Turkey	15			13		2
Israel	18		3	10		3	Ukraine	10 or fewer					
Italy	37		18	16		-	United Arab Emirate						
Japan	290	18	82	131	13	16	United Kingdom	100	3	45	32	1	3
Korea, Republic Of	147	1	50	65	14	7	United States	1405	27	499	528	21	131
Latvia	10 or fewer						Uruguay	10 or fewer					
Lithuania	10 or fewer						Vietnam	14			11	1	2
Luxembourg	10 or fewer												



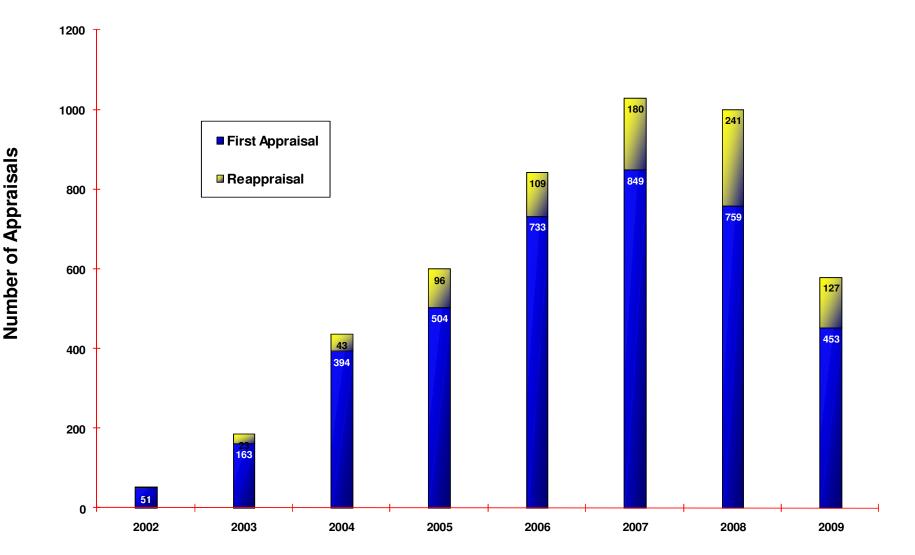
Number of SCAMPI A Appraisals Reported to SEI by Year



Based on 4726 appraisals



Number of SCAMPI A Appraisals Reported to SEI by Year

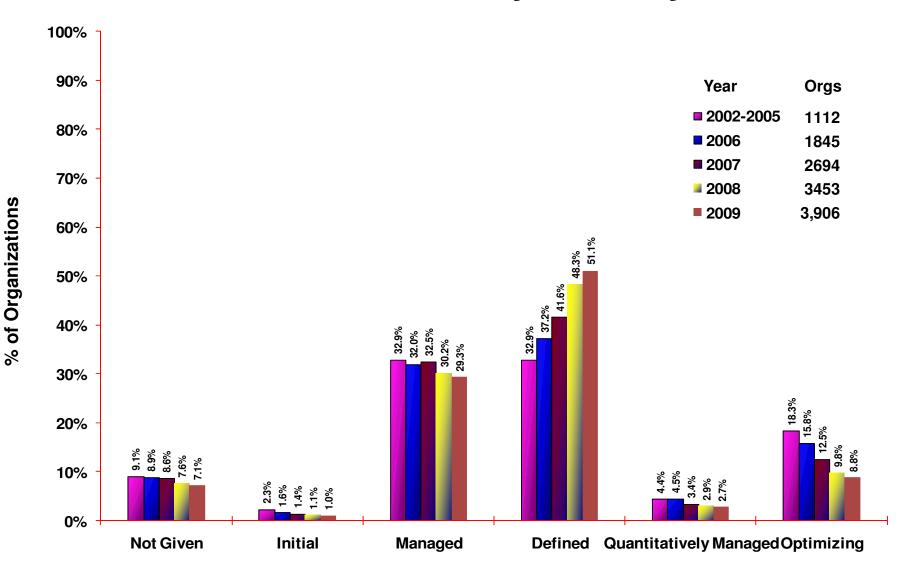


Based on 4726 appraisals

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Trends in the Community Maturity Profile



Based on a cumulative view of the most recent appraisals of organizations up through the year indicated



Section 3: Organizational Trends

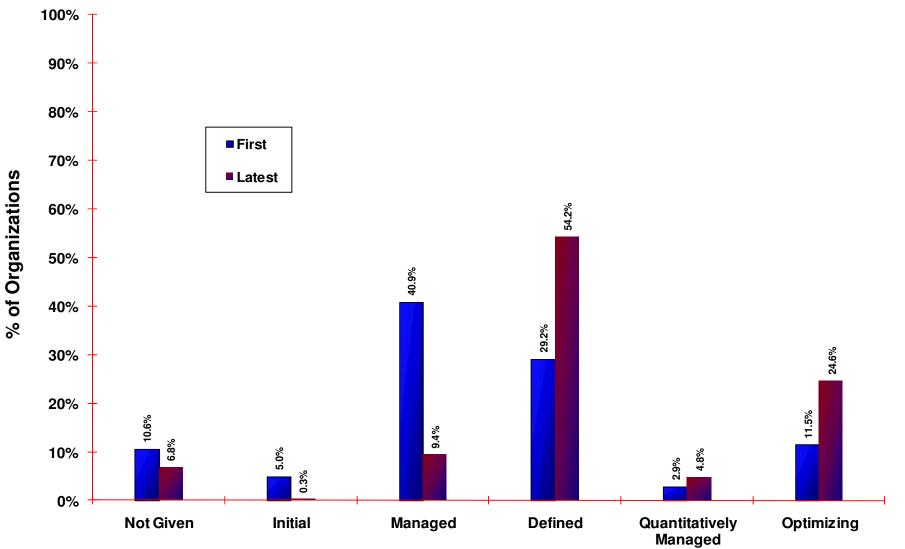
Appraisals conducted through June 2009 and reported to the SEI By July 2009

- 1437 Process Area (PA) profiles
 - satisfaction of PAs by maturity level for organizations appraised at levels 1 and 2
- 662 reappraised organizations
 - accounting for 1,482 appraisals
 - although some organizations conducted multiple reappraisals, only the first and latest appraisals were used in creating the charts on pages 25

Please refer to: Terms Used in this Report on page 27



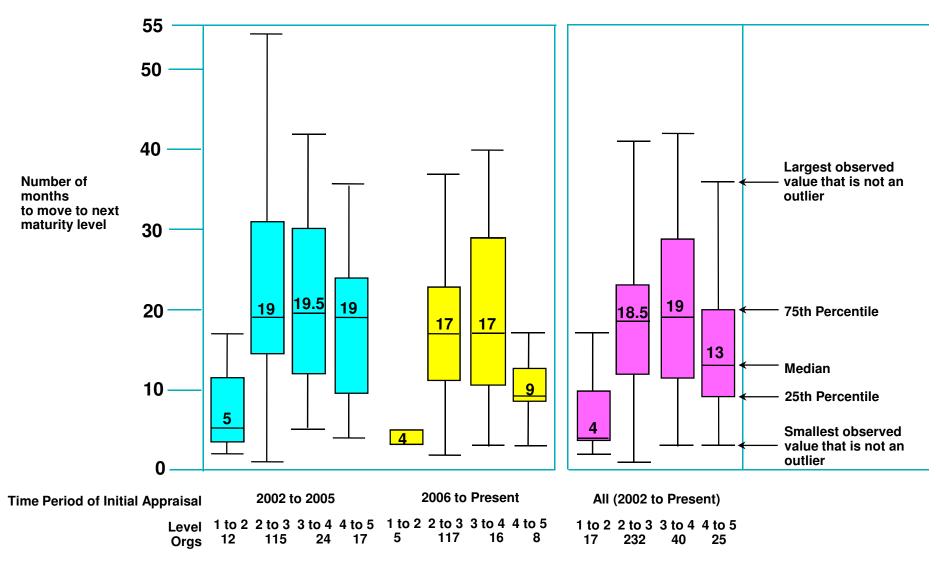
Maturity Level of First and Latest Appraisal



Based on 663 reappraised organizations using their first and latest appraisal



Time to Move Up





Summary

4726 appraisals have been reported to the SEI in 88 months

Outside the USA: China, Spain, Japan, India, Mexico and Brazil reported appraisals are increasing at a rapid rate

For organizations that began their CMMI-based SCAMPI effort in 2002 or later, the median time to move from:

- maturity level 1 to 2 is 4 months
- maturity level 2 to 3 is 18.5 months
- maturity level 3 to 4 is 19 months
- maturity level 4 to 5 is 13 months

Note:

Since the March 2009 report, the median time to move from maturity level 2 to 3 increased from 18 months to 18.5 months. The median time to move from maturity level 3 to 4 ,the median time to move from maturity level 4 to 5 have no change



Terms Used in this Report

- **Company** Parent of the appraised entity A company can be a commercial or non-commercial firm, for-profit or not for-profit business, a research and development unit, a higher education unit, a government agency, or branch of service, etc.
- Organization a.k.a. Appraised entity The organization unit to which the appraisal results apply. An appraised entity can be the entire company, a selected business unit, units supporting a particular product line or service, etc.
- **Non-USA** Appraised entity whose geographic location is not within the United States. The parent of the appraised entity may or may not be based within the United States.
- PARS Published Appraisal Results webpage contains CMMI® appraisals published at the request of the appraisal sponsor. The link is: <u>http://sas.sei.cmu.edu/pars/</u>



Report your Appraisal Results to the SEI

The briefing is only possible due to the cooperation of organizations and individuals sending in their appraisal results to the SEI

In order to provide this information and service in the future, it will depend on this continued cooperation

Please visit:

http://www.sei.cmu.edu/cmmi/casestudies/profiles/cmmi.cfm

for forms, information, and instructions on how to report appraisals to the SEI



Contact Information

Please visit:

http://www.sei.cmu.edu/cmmi/casestudies/profiles/cmmi.cfm

and review the information provided before contacting:

SEI Customer Relations	(412) 268-5800
SEI FAX number	(412) 268-5758

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