

Publicly Reported Data Begging for Analysis

Data Gathered From SEI PARS Site
Everyone Can Do Their Own Analysis

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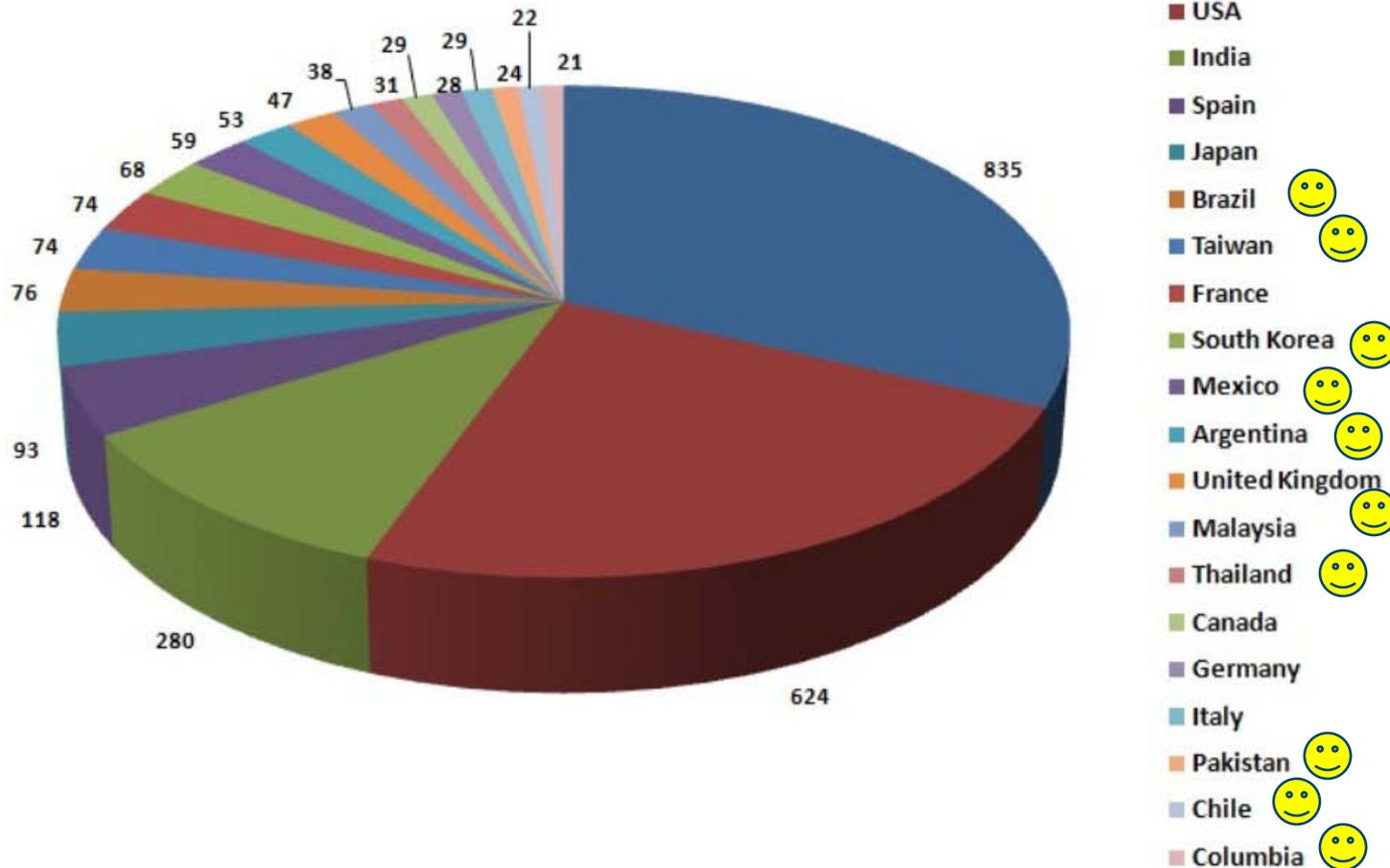
Overheard Over the Years

- Bigger countries with big economies are the principal players in CMMI
 - Smaller countries aren't really participating
- Big US companies with lots of DoD business dominate the US CMMI arena
- DoD companies only apply CMMI to get the ratings for Government competition

What the Publicly Reported Data Says

(thru Nov 14, 2009)

Distribution of Appraisals by Country - Top 20



Vast Majority are CMMI-DEV

As of Nov 14,

2808 CMMI-DEV
 4 CMMI-ACQ
0 CMMI-SVC*
 2812 Total

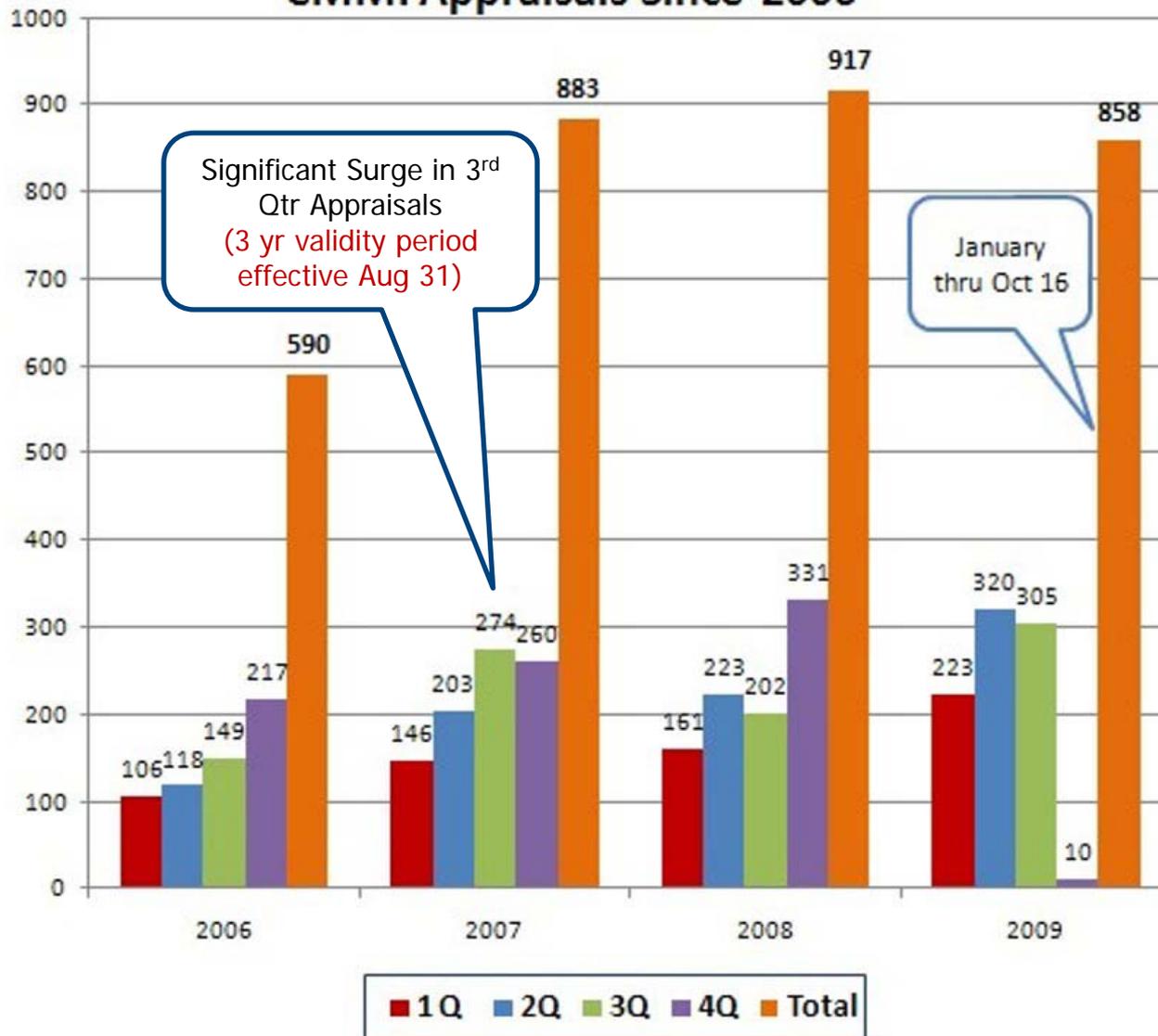
* (CMMI-SVC only eligible for Class A appraisals on Aug 31.)

Appraisal List includes 65 countries:

☺ Ten of the top 20 may not be the countries you expected

Publicly Reported Appraisals (thru Nov 7th)

CMMI Appraisals Since 2006



Note: 3rd Qtr 2007 was an anomaly!

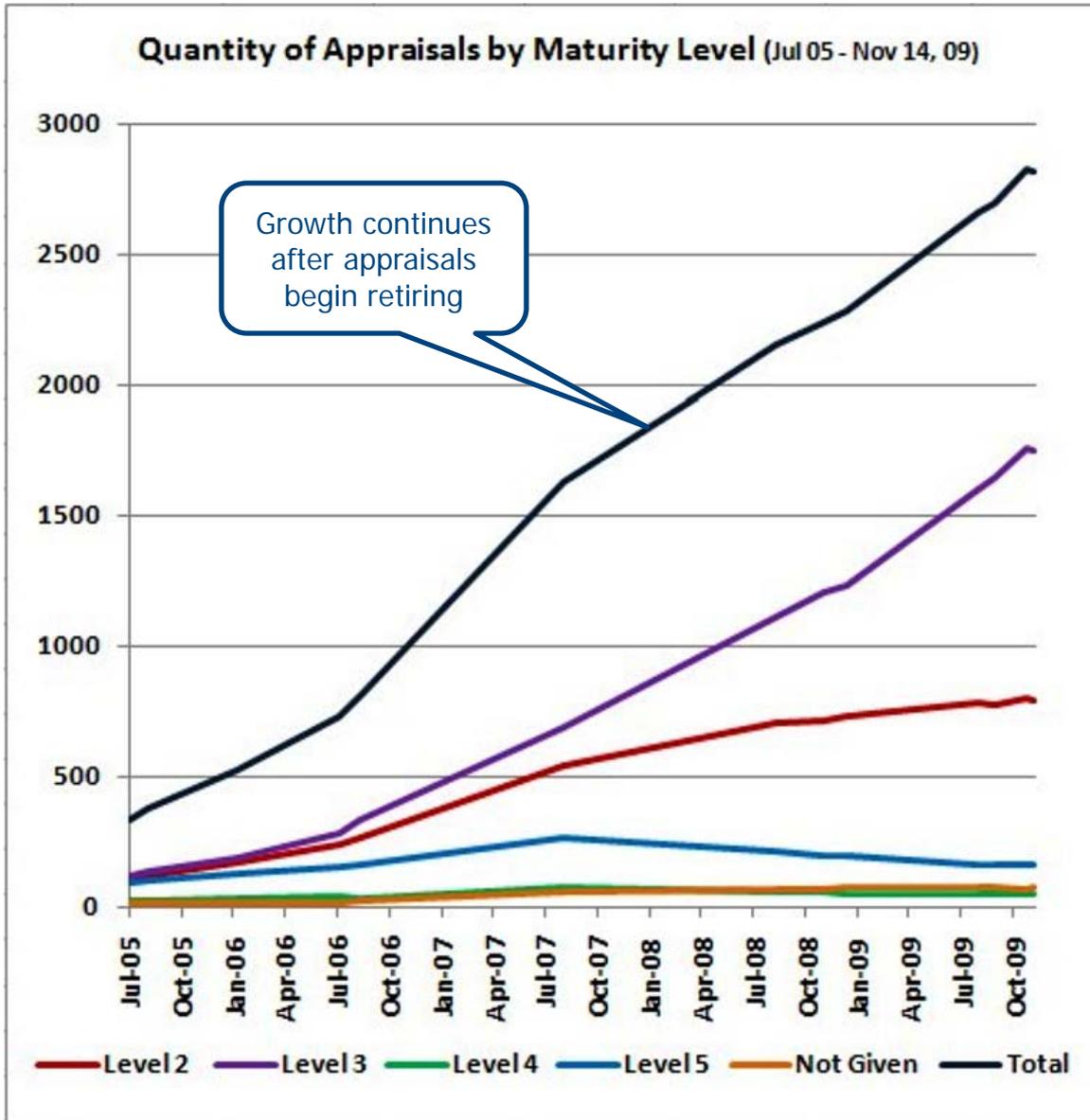
CMMI Steering Group initiated the 3 year validity rule for appraisals and it went into effect on Aug 31, 2007

Slower growth in 2008 may have been the result of older 'appraisals for life' being reappraised in 2007.

2009 is on pace to break 1000 for the first time but needed 590 just to stay even

2010 will need 883 to stay even

We've Had Steady CMMI Growth Over 4 Years



Obviously a good thing

BUT

Only Maturity Level 3 is growing robustly

Maturity Level 2 is growing modestly

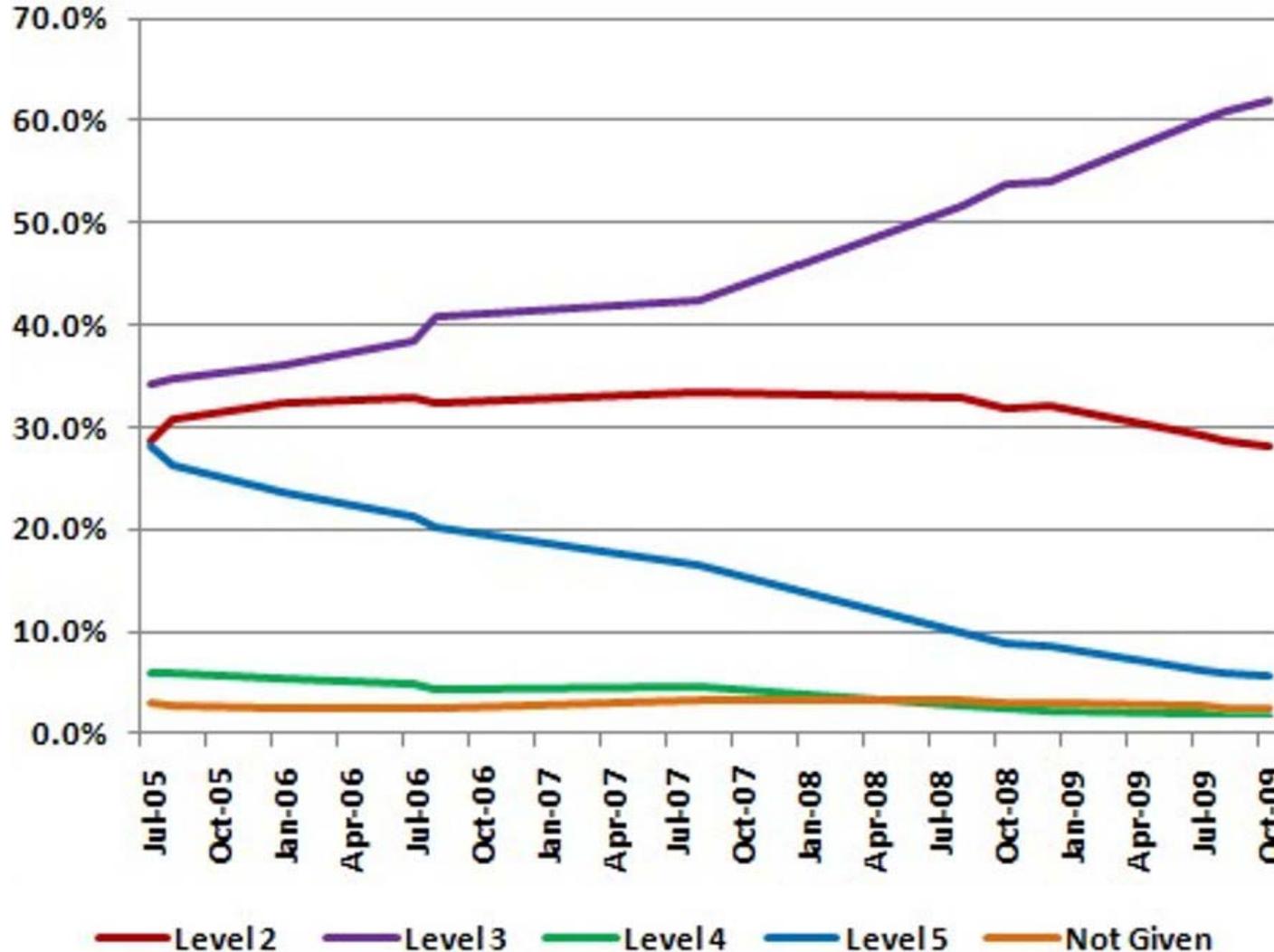
Maturity Level 4 is declining slightly

Maturity Level 5 is declining - Only slightly higher than in July 2005

Not Given results are steady

Only Level 3 Appraisals Increasing

Percent of Appraisals by Maturity Level (Jul 05- Nov 14, 2009)



Relative Percentages of Appraisals tell a different story

Level 3 appraisals have grown from 34% to over 60% of all currently valid appraisals

Level 2 percentages haven't changed

Level 4 percentages have dropped from 6.5% to under 2%

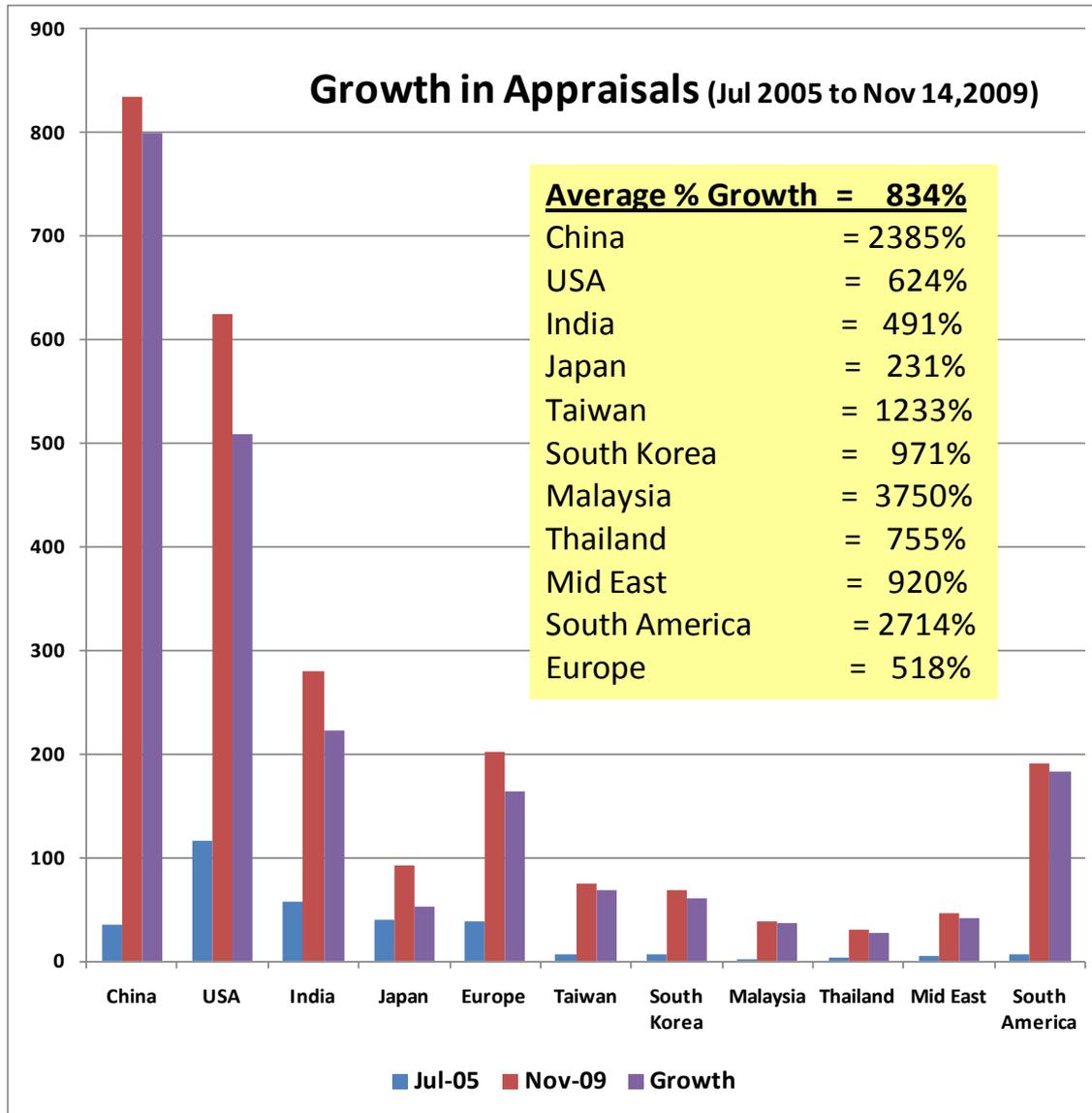
Level 5 has dropped precipitously from 29% to under 5.6%

WHY?

Why the Maturity Level 3 Surge?

- Chinese Government announced stipend for achieving a CMMI Maturity Level 3 in 2007
 - A surge of Chinese appraisals ensued and continues
 - China now has the largest quantity of appraisals of any country in the world
- CMMI Steering Group eliminated the “appraisal for life”, creating a surge in appraisals in 2006-2007
 - There still is a regular, growth overall even though ~ 1/3 of appraisals now retire each year
 - 144 appraisals are needed each year just to maintain the 2006 level.
- In 2008, SEI initiated High Maturity Audits without clearly stated appraisal criteria
 - Some companies re-appraised at Level 3 until they could predict that their expenditures would yield the desired results
- As a result, some did not pursue High Maturity appraisals until the criteria was published in Dec 08.
 - Hi Mat appraisal rates versus Level 2-3 have been dropping each year
 - From 11% to 6.5% to 5.1% since August 2007

External Influence or Early Adopters?



2005 Early Adopters

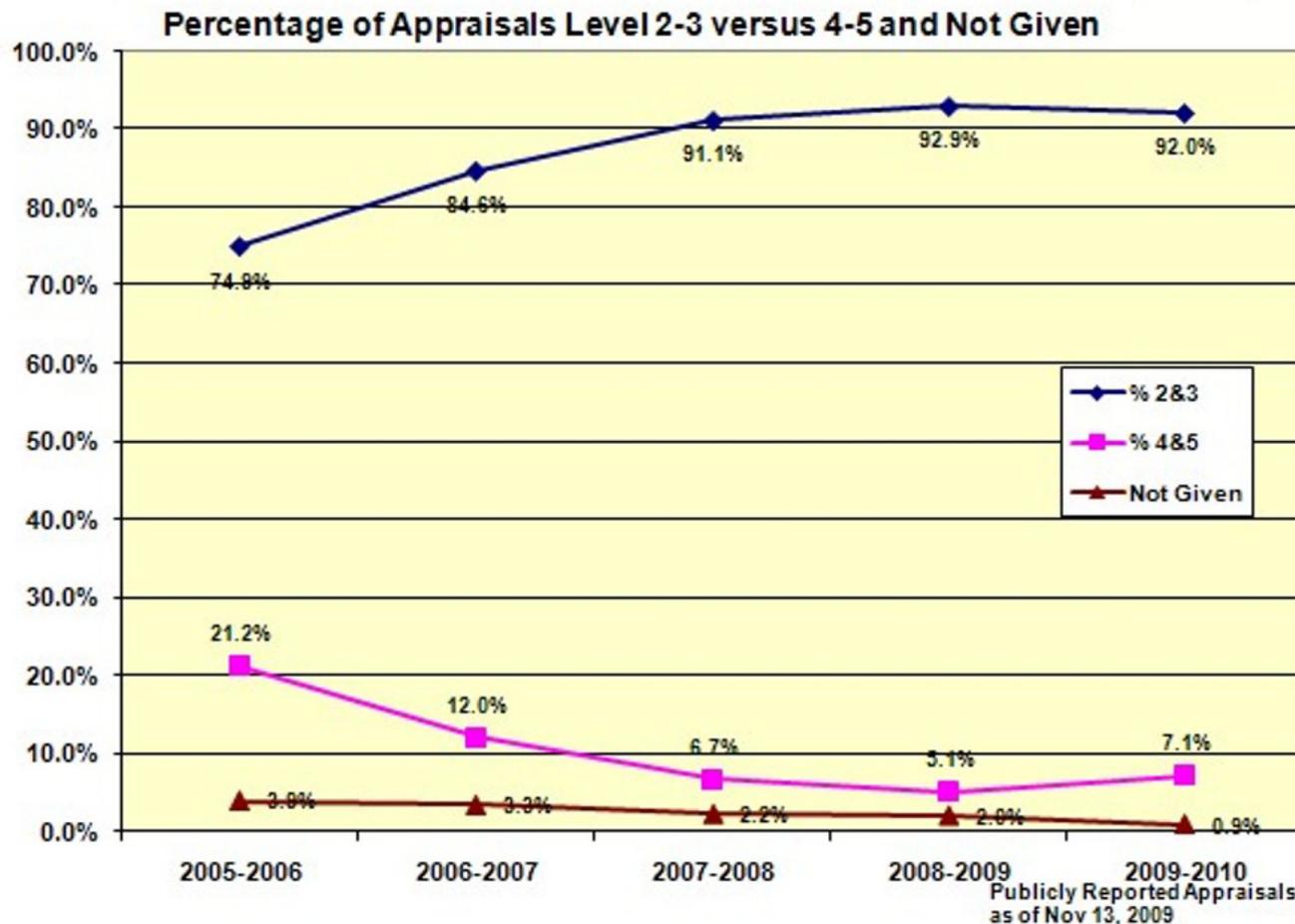
- USA 116
- India 57
- Japan 40
- Europe 39
- China 35

2009 Leaders

- China 835
- USA 624
- India 280
- Europe 366
- Japan 93

Rate of High Maturity Appraisals Slowing

(as of Nov 7, 2009)



Period of Measurement from Sep thru Aug

2006 Events that may have had impact

OSD Director of SSE

- Questioned the 'appraisal for life' status
- Claimed that Level 5 companies weren't demonstrating their Level 5 credentials
- Some complained about the quality of High Maturity appraisers

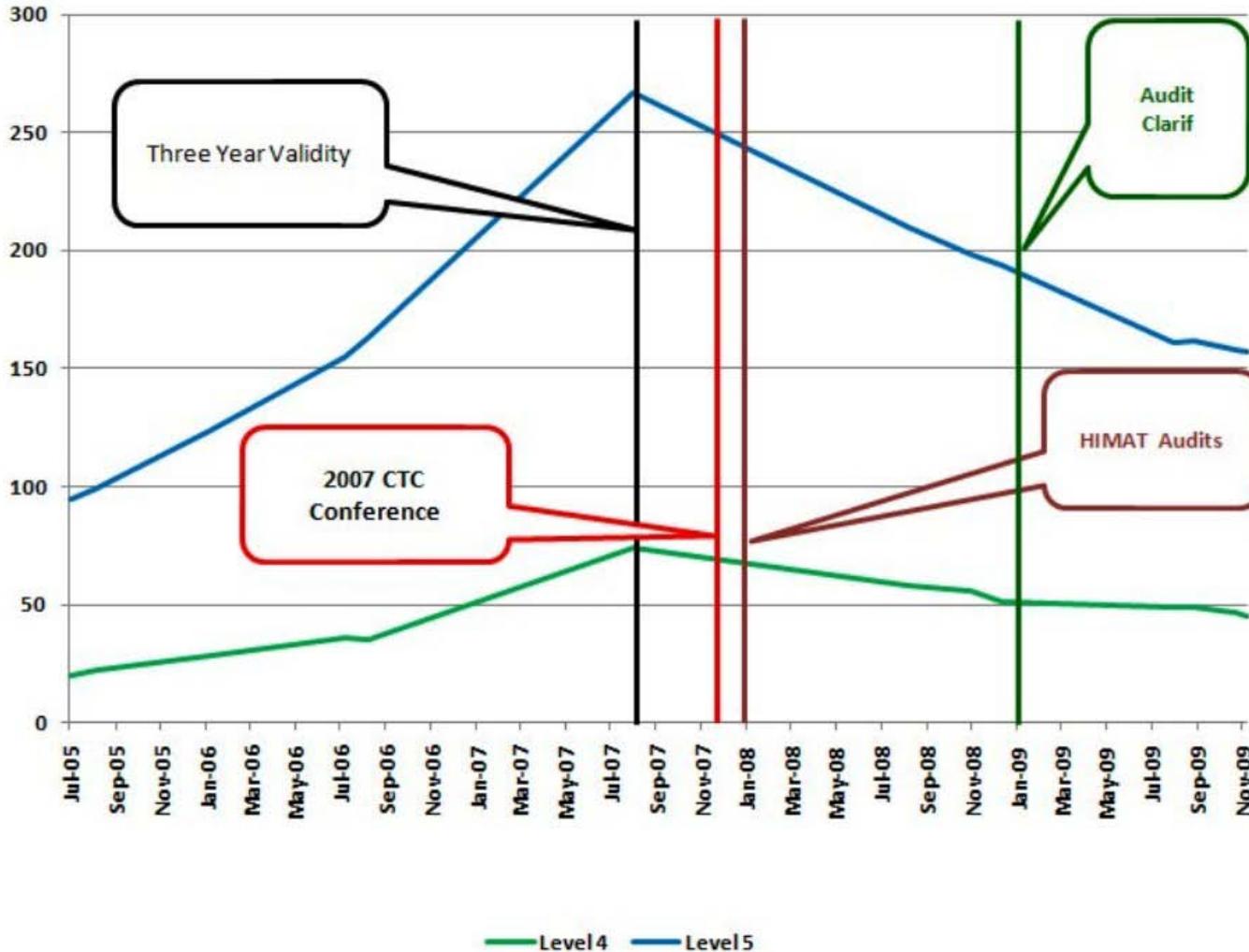
CMMI SG:

1. Instituted the 3 year validity
2. Instituted Hi Mat appraiser training & authorization

May be some hope in 2010

Events That Influenced Hi Mat

Quantity of High Maturity Appraisals (Jul 05 - Nov 14, 09)



Factor: Companies have combined operations to save costs BUT ...

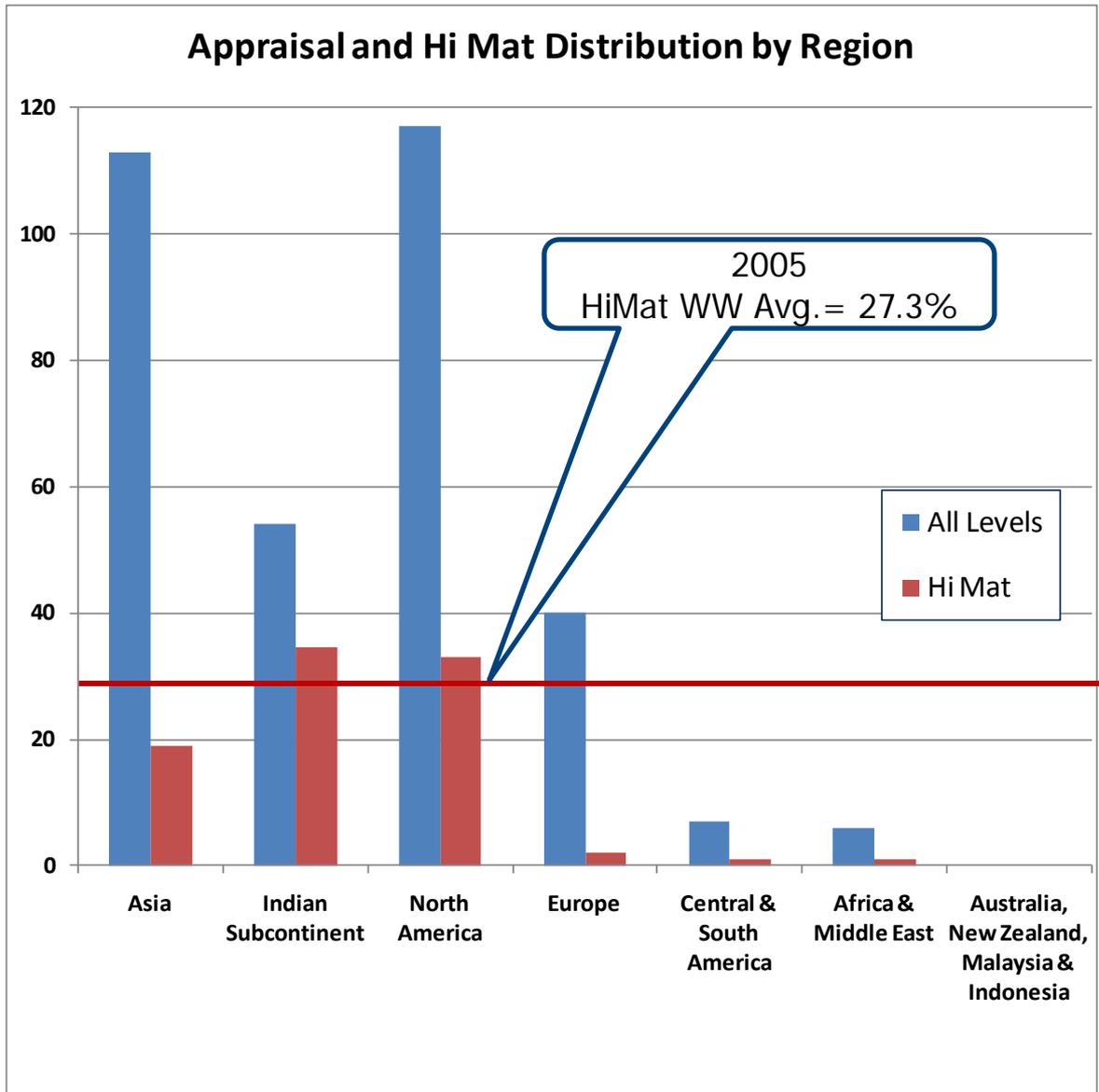
Other events have impacted CMMI Hi Mat Appraisal Rates!

- 1) CMMI SG instituted a 3 year appraisal life
- 2) SEI instituted an undocumented audit process for all Hi Mat appraisals
- 3) Uncertainty about how DoD viewed Hi Mat appraisal holders

Those up for reappraisal may have wondered if it was worth it to continue if their integrity was questioned and they weren't sure of the rules

Distribution of Hi Mat Appraisals (July 2005)

Appraisal and Hi Mat Distribution by Region



July 2005

% Hi Maturity (Level 4 & 5)

WW 27.3%

North America 28.3%

Note:

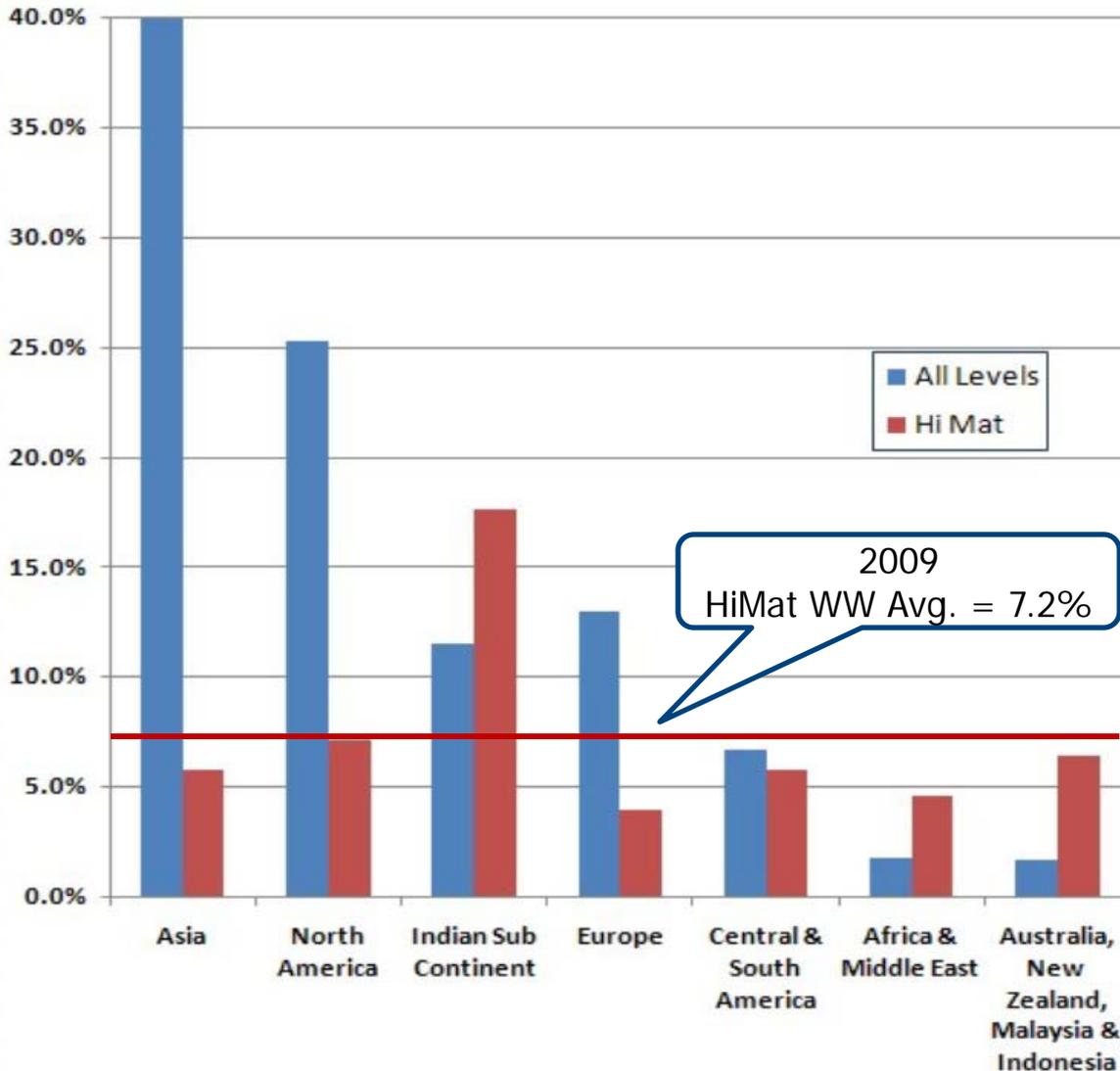
Appraisals did not begin retiring until 2007.

Surge of CMMI appraisals from early CMMI adopters in 2002-3 were still included in the totals

Biased the percentages during the early adopter period from 2002 to 2005

Distribution of Hi Mat Appraisals (Thru Nov 14)

Appraisal & Hi Mat Distribution by Region



Hi Maturity (Level 4 & 5)
Average 7.2% of WW appraisals
(down from 34.9% in July 2005)

India averages 20.1% (Down from 36.5% in 2005)

North America averages 7.2%
US averaged 7.0% (Down from 28.3% in July 2005)

Canada averages 13.9%
Mexico averages 8.4%

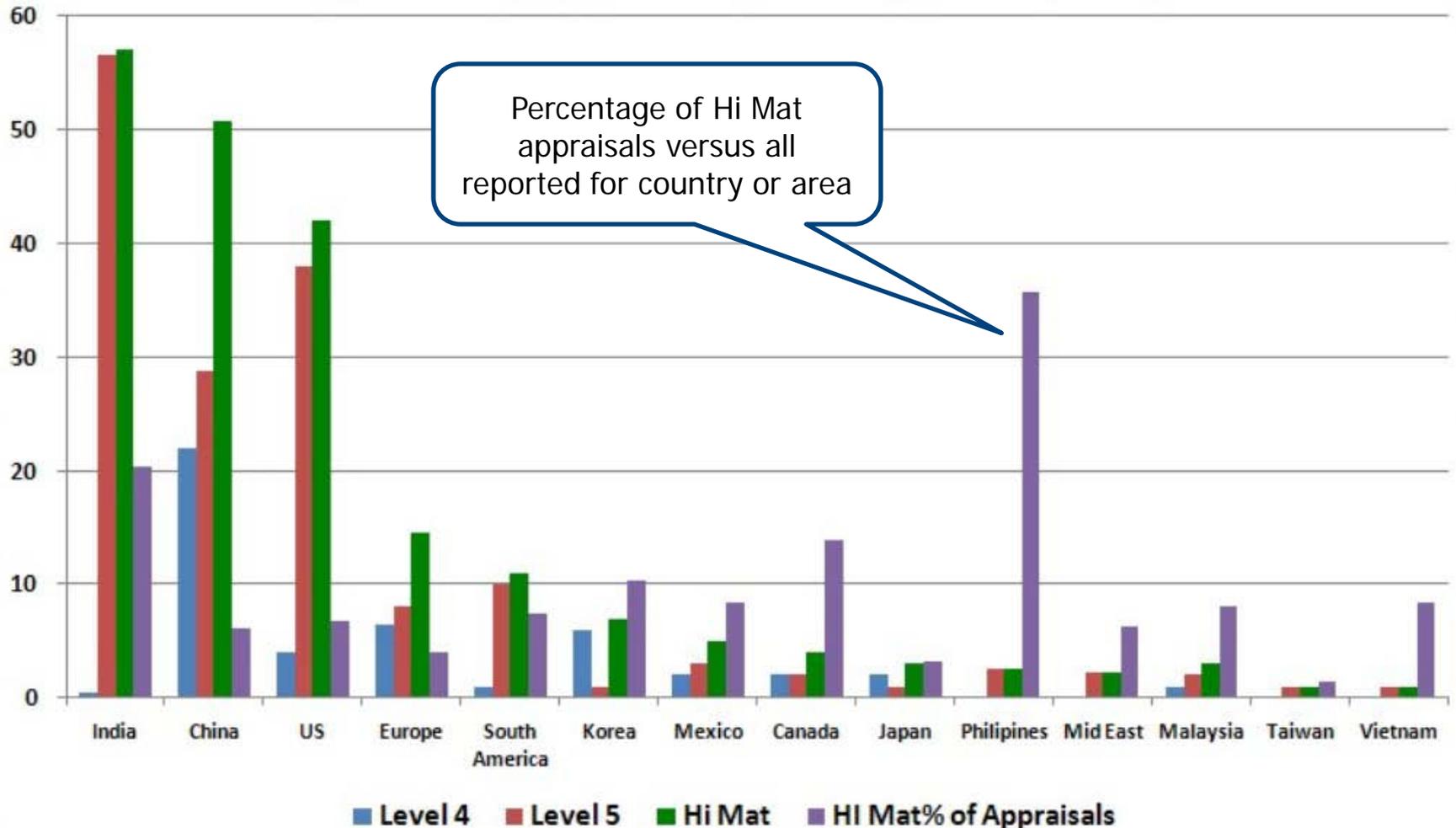
China averages 6.2% (Down from 7.5% in July 2005)
South Korea averages (10% Up from 2.1% in 2005)

Note: Appraisals prior to Oct 2005 (114) are not included

Pursuit of Maturity Level 5 Impacted by US DoD?

(113 of 156 organizations (72.4%) don't seem to be affected)

High Maturity Appraisals by Country (Nov 14, 2009)

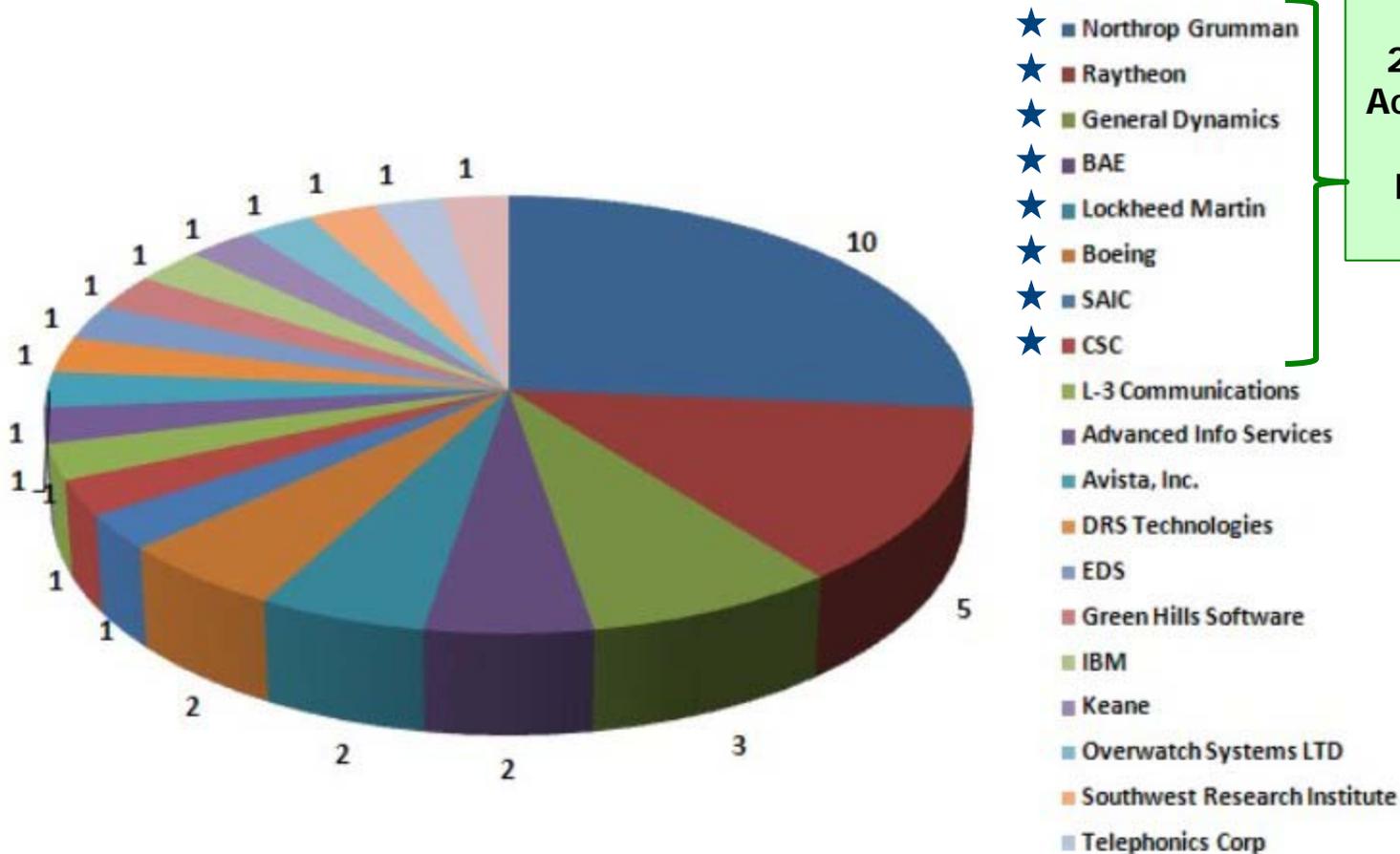


Philippines, India, Canada, Korea, and Mexico still show more than 10% Hi Mat appraisals. India maintains close to a 20% Hi Mat appraisal percentage.

18 US Companies Remain CMMI Maturity Level 5

(Nov 14, 09 Compared to ★8 companies & 2 DoD in Jul 2005)

US Companies with CMMI Maturity Level 5 Appraisals



These 8
2005 Companies
Account for 71.8%
of Current US
Maturity Level 5
Appraisals

After all these
years,
why do they
still believe
there is value
in High
Maturity?

Maybe these companies use measurement and analysis to prove Hi Mat value for themselves!

Possible Explanations?

(Even with consolidation of organizations, ML5 quantities have remained about at 2006 levels.)

Could it be that:

- Companies with successful High Maturity methods won't abandon them if they are working?
 - They believe that there is value in managing with fact instead of supposition
 - They measure the value of their improvements
 - Our VP & General Manager won't allow business units to manage without data
 - He uses that style of management and won't relax his standards of performance
 - His Division has grown from \$450 M in 2002 to almost \$ 4 B in 2009.
- Perhaps the companies who were going for maturity levels instead of improvement never learned to get the real value from High Maturity?
 - That may be a reason some companies have not gone through Hi MAT reappraisals

Pursuit of High Maturity seems to depend upon perseverance and dedication. Expecting to achieve big benefits without continued effort and dedication doesn't appear to pay off!

Your Challenge Awaits

- First look at the data and do your own analysis
 - See how you stack up against your competitors across the world
- Validate your impressions and look into potential factors
 - First determine if what others are saying has any validity in fact
 - Don't be afraid to ask why the traditional perceptions don't seem to be valid
 - Most importantly, look for what matters to your organization
- Keep your eye on CMMI-ACQ and CMMI-SVC
 - It would be natural to see if new organizations or existing organizations predominate initial adoption
 - It may be that your competitors will adopt these new CMMI constellations to improve their operations

NORTHROP GRUMMAN

