World Class Standard
for
ICT Project Management
(บริหารจัดการโครงการด้าน ICT: กรณีศึกษา)

โครงการอบรมหลักสูตรผู้บริหารเทคโนโลยีสารสนเทศระดับสูง CIO
(Chief Information Officer) รุ่นที่ 28

Wednesday, April 27, 2016

Chayakorn Piyabunditkul – D.Eng, CSPM
Chayakorn.piyabunditkul@nstda.or.th
National Science and Technology Development Agency (NSTDA)

CIO competencies

สวทช NSTDA

EGA e-Government Agency

สวทช BIOTEC MTEC NSTDA NECTEC NANOTEC TMC members of NSTDA, Ministry of Science and Technology

TPSE

THAILAND PRACTICAL SOFTWARE ENGINEERING

21-22 November 2013

Software Park Thailand, Thailand

สวทช TMC NSTDA SiPA

โครงการส่งเสริมให้ผู้ประกอบการได้รับมาตรฐานกระบวนการผลิตและบริการ

Capability Maturity Model Integration (CMMI)

เปิดรับสมัครเข้าร่วมโครงการ วันนี้ - 15 ก.ย. 57

URGENT สมัครด่วน รับจำนวนจำกัด!!

ดาวน์โหลดรายละเอียดโครงการ www.swpark.or.th/cmmiproject

สอบถามข้อมูลเพิ่มเติม งานบริการด้านไอที โทร. 025839992 ต่อ 1431-34

ACIOA - ASEAN Chief Information Officer Association

สวทช NSTDA

ADEPT COMMIT INNOVATE OPEN ASSOCIATE

ACIOA - ASEAN Chief Information Officer Association

Non-Profit Organization

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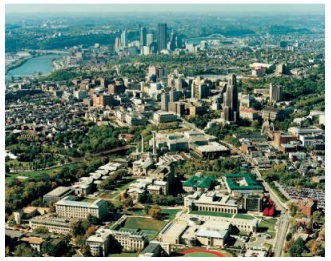
04.28.15

School of Information Systems & Management

- Information Systems Management (MISM)
- Information Security Policy & Management (MSISPM)
- Information Technology (MSIT)
- Information Technology (MSIT) - Australia
- CIO Institute
  - CIO Certificate Program
  - CISO Executive Education

CIO Institute



CMU's CIO Institute delivers executive training.

"The CIO Institute has allowed me to broaden my perspective and my ability to see the trends as they're emerging within the sector. CMU has taught me not only to see emerging trends, but build strategy upon them that bridges the federal and commercial sectors."

Melvin Brown II
Director for Portal Consolidation, Migration & Training, HSIN Program
US Department of Homeland Security

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Miguel Mier 26 Apr @MiguelMier

Last class! Congratulation Class of 2015 of the MEIM (Masters of Entertainment Industry Management)... instagram.com/p/1699_DIC

Retweeted by Heinz College at CMU

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CMU Arts Management 24 Apr @CMU_MAM

#MAMSpeakerSeries is in

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IT SOLUTIONS CHALLENGE AT A GLANCE

39 PARTICIPANTS

19 AGENCIES

6 MONTHS

APRIL
- KICKOFF RECEPTION – APRIL 8TH
- PROBLEM DEFINITION WORKSHOP – APRIL 9TH

JUNE
- MIDPOINT MEETING

SEPT
- SOLUTIONS PRESENTATION

@CIODOTGOV #ITSOLUTIONSCHALLENGE

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Highlights

SiPA

สำนักงานส่งเสริมอุตสาหกรรมซอฟต์แวร์แห่งชาติ (องค์การมหาชน)

Software Industry Promotion Agency (Public Organization)

NECTEC a member of NSTDA

SM

CMMI

SOFTWARE PARK THAILAND

ThailandSPIN Software Process Improvement Network

SOFTWARE PARK THAILAND Thailand SPIN Annual Event 2014 ThailandSPIN

CMMI vs. Agile

มิตร ศัตรู หรือ ความไม่รู้ต่างหากที่หลอกเรา

วันพฤหัสบดีที่ 29 พฤษภาคม 2557

09.30 - 17.00 น.

ข้อมูลเพิ่มเติม : คุณบุลเรือน โทร.025839992 ต่อ 1432

กระทรวงเทคโนโลยีสารสนเทศและการสื่อสาร Ministry of Information and Communication Technology

NSTDA EGA e-Government Agency

BIOTEC MTEC NSTDA NECTEC NANOTEC TMC
members of NSTDA, Ministry of Science and Technology

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16 - 18 March 2015 | London, UK

Gartner Summits

The 1st ASEAN CIO Forum 2012 in Thailand

April 20, 2012 3:03 pm

The Ministry of Informatio
Info-communications Tecl
Association of Thailand jo
concept on how to empha
Sourcing in ASEAN countr

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Taming the Digital Dragon: The 2014 CIO Agenda

Insights From the 2014 Gartner CIO Agenda Report

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2015 SUMMIT THEMES

CYBER SECURITY CLOUD DIGITAL VIRTUALISATION MOBILITY IT AS A SERVICE ANALYTICS BIG DATA STORAGE

richmondevents

THE CIO FORUM

MAY 17 - 19 2015, TURNBERRY ISLE, MIAMI
JUNE 4 2015, RITZ CARLTON, SAN FRANCISCO
SEPTEMBER 13 - 15 2015, PARK HYATT AVIARA, CARLSBAD
NOVEMBER 5 2015, THE HARVARD CLUB, NEW YORK

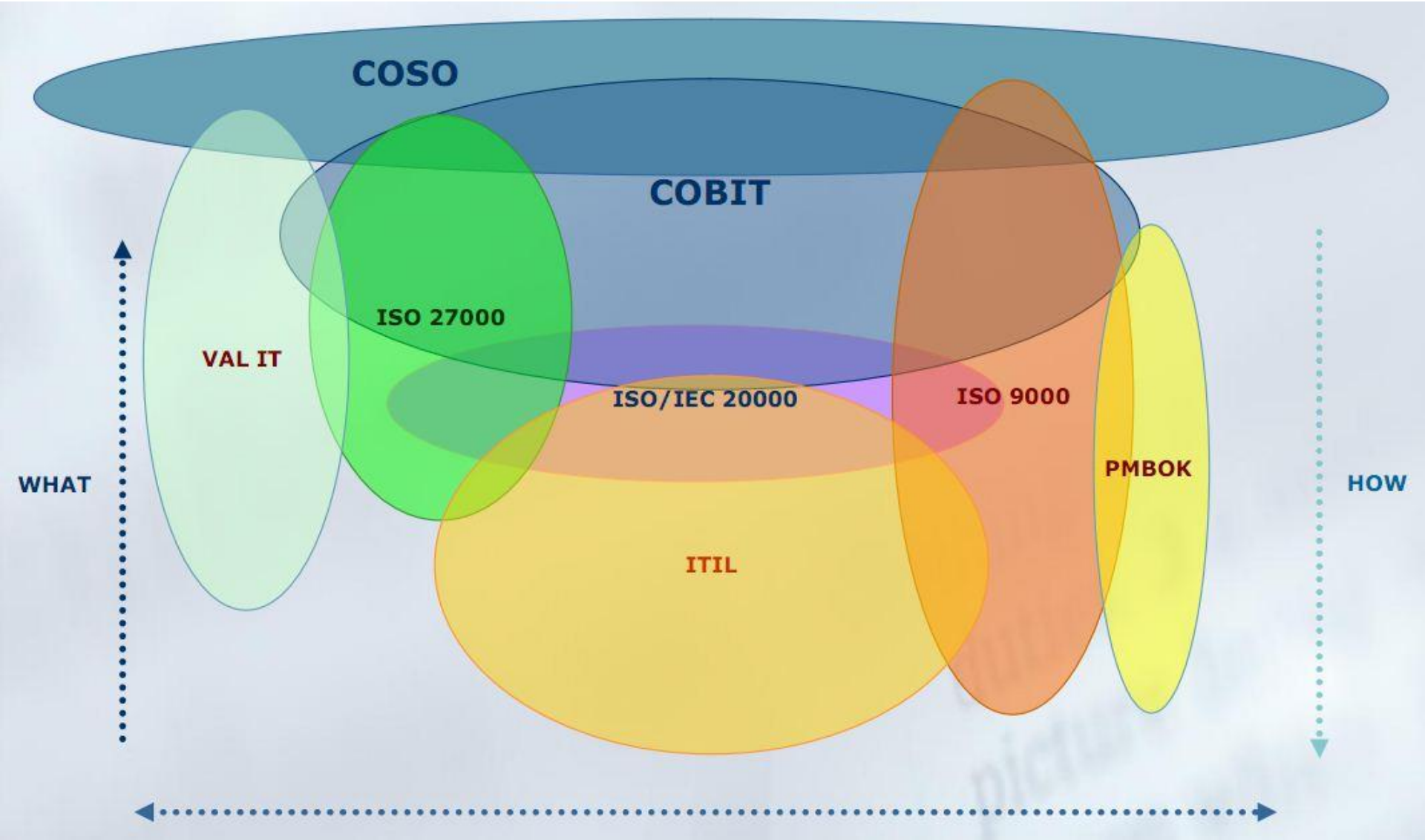
HOME | MAY CONFERENCE | JUNE CONFERENCE | SEPTEMBER CONFERENCE | NOVEMBER CONFERENCE | SUPPLIERS | DELEGATES | UPDATES

Course Index

1. World Class ICT Standard
2. ICT Standard in Thailand
3. Knowledge Area of CMMI
4. CMMI in practices
5. CIO in ICT Standard

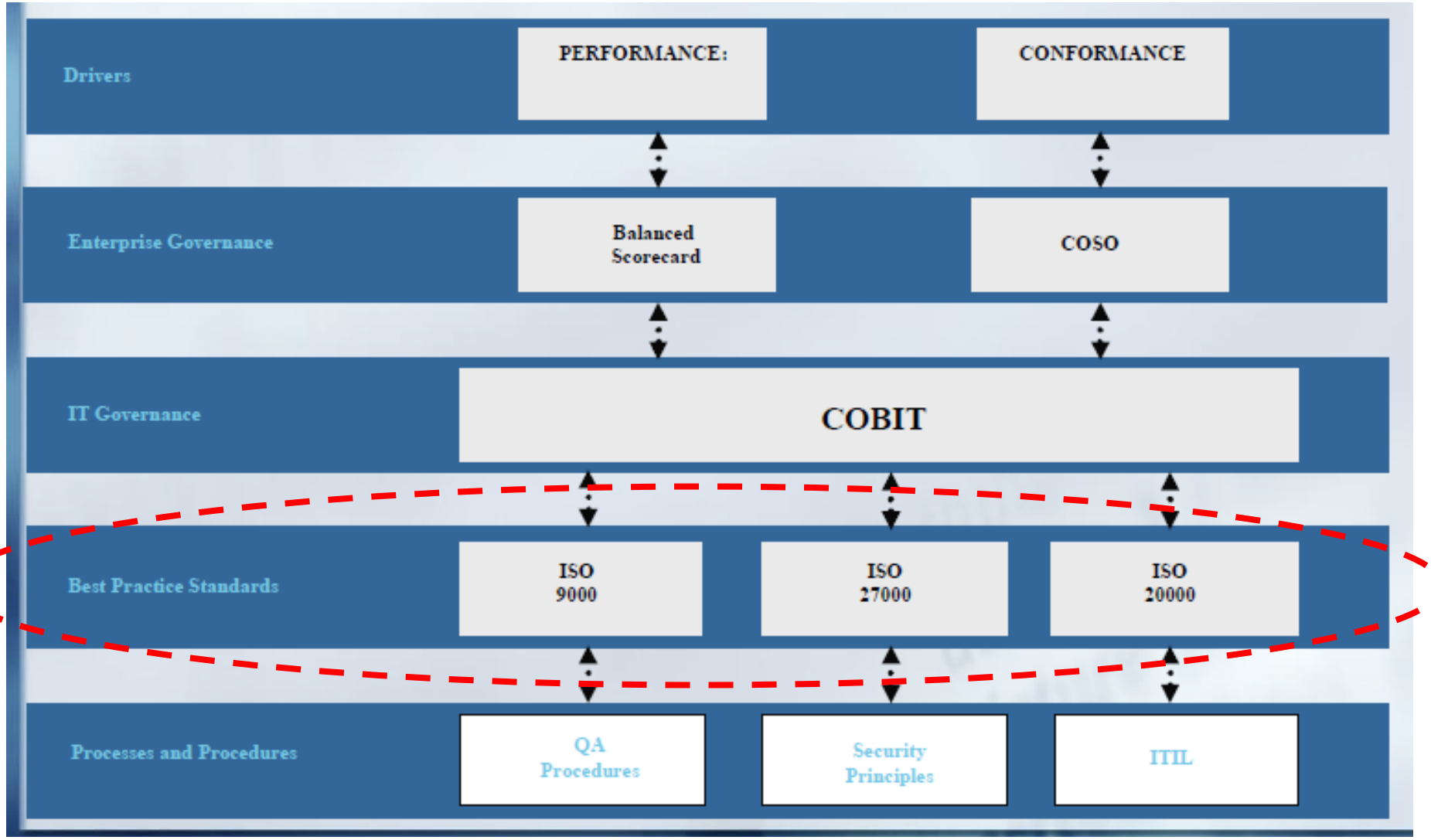
1. World Class ICT Standard

IT framework



ตัวอย่าง กรอบวิธีปฏิบัติ *(คำอธิบาย จะบรรยายถึงกระบวนการและขั้นตอนที่ช่วยให้ผู้ปฏิบัติสามารถดำเนินการและพัฒนาขีดความสามารถของการนำเทคโนโลยีสารสนเทศไปใช้งานได้อย่างมีประสิทธิภาพ สำหรับแนวทางที่ให้จะเป็นลักษณะของ Best practice (แนวทางปฏิบัติชั้นดี))*	**COBIT** **COSO** **ITIL**
ตัวอย่าง มาตรฐานสากลที่เกี่ยวข้องกับระบบเทคโนโลยีสารสนเทศ *(คำอธิบาย มาตรฐานเหล่านี้จะมีขอบเขตที่แตกต่างกันออกไป ได้แก่* • *ISO/IEC 27001 ว่าด้วยเรื่องการรักษาความมั่นคงปลอดภัยระบบ* • *ISO/IEC 13335 ว่าด้วยเรื่องแนวทางปฏิบัติในการบริหารจัดการความมั่นคงปลอดภัยระบบ* • *ISO/IEC 15408 ว่าด้วยเรื่องเทคนิควิธีด้านความมั่นคงปลอดภัยซึ่งจะถูกใช้เป็นเงื่อนไขกลางหรือเกณฑ์กลาง (Common Criteria) ในการประเมินระบบในเรื่องของความมั่นคงปลอดภัย)*	**ISO/IEC 27001** **ISO/IEC 13335** **ISO/IEC 15408**
ตัวอย่าง แนวทางปฏิบัติขั้นต่ำที่องค์กรภาครัฐต้องปฏิบัติตาม *(คำอธิบาย แนวทางปฏิบัติดังกล่าวได้พัฒนาขึ้นโดยหน่วยงานภาครัฐ เพื่อใช้เป็นแนวทางปฏิบัติทางเทคนิคให้กับหน่วยงานที่ต้องการความมั่นคงปลอดภัยเป็นพิเศษและมีมาตรฐานเทคโนโลยีเฉพาะทาง)*	**FIPS PUB 200** **NIST 800-14** **IT BPM Manual**
ตัวอย่าง เครื่องมือต่างๆ ที่ใช้สำหรับบริหารจัดการระบบเทคโนโลยีสารสนเทศ *(คำอธิบาย แนวทางปฏิบัติหรือเครื่องมือต่างๆ มีไว้เพื่อช่วยวิเคราะห์ความต้องการ ช่วยออกแบบ ช่วยจำลองแนวทาง และช่วยบริหารจัดการโครงการทางเทคโนโลยีสารสนเทศให้ดำเนินการได้ง่ายขึ้นและเป็นไปอย่างมีแบบแผน)*	**PRINCE2** **PMBOK** **TickIT** **TOGAF 8.1**

Governance Mapping

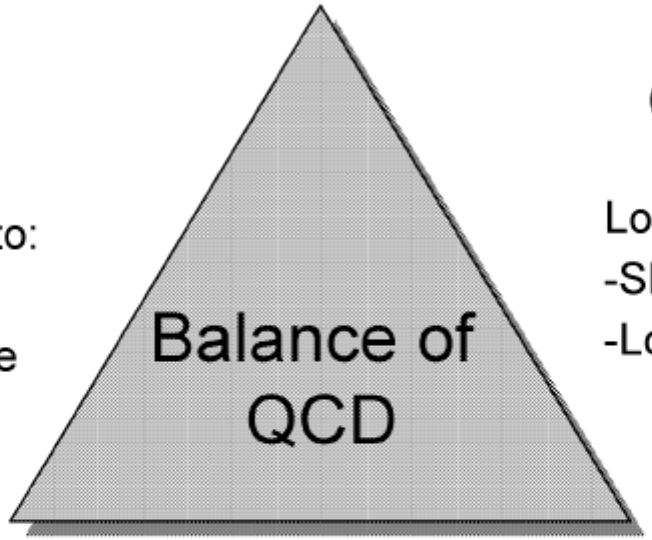


ISACA

QCD-based Project Management

Quality

High quality leads to:
-High cost
-Long delivery Time



Cost

Low cost leads to:
-Short delivery time
-Low quality

Delivery (=Schedule, Time)

Short delivery time leads to:
- Low cost
- Low quality

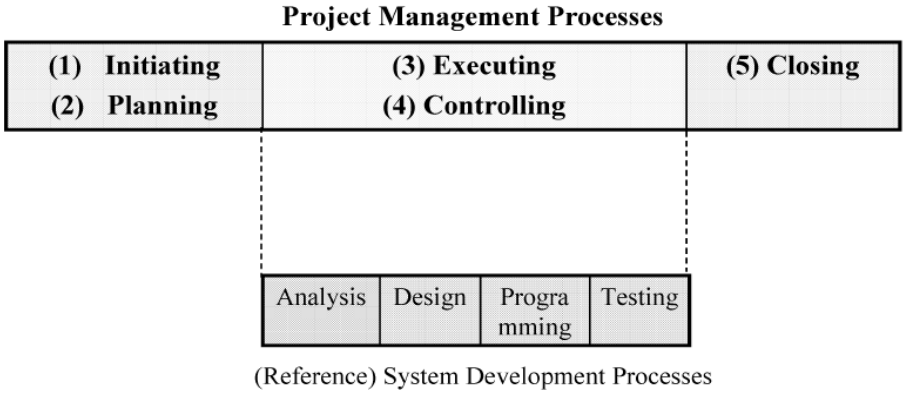
PMBOK-based Project Management #1

PMBOK (Project Management Body of Knowledge)

- Global standard of project management framework issued by PMI
- Can be applied to general industry fields
- Composed of:
  - 9 Knowledge Areas
  - 5 Process Groups

9 Knowledge Areas of PMBOK

5 Process Groups of PMBOK

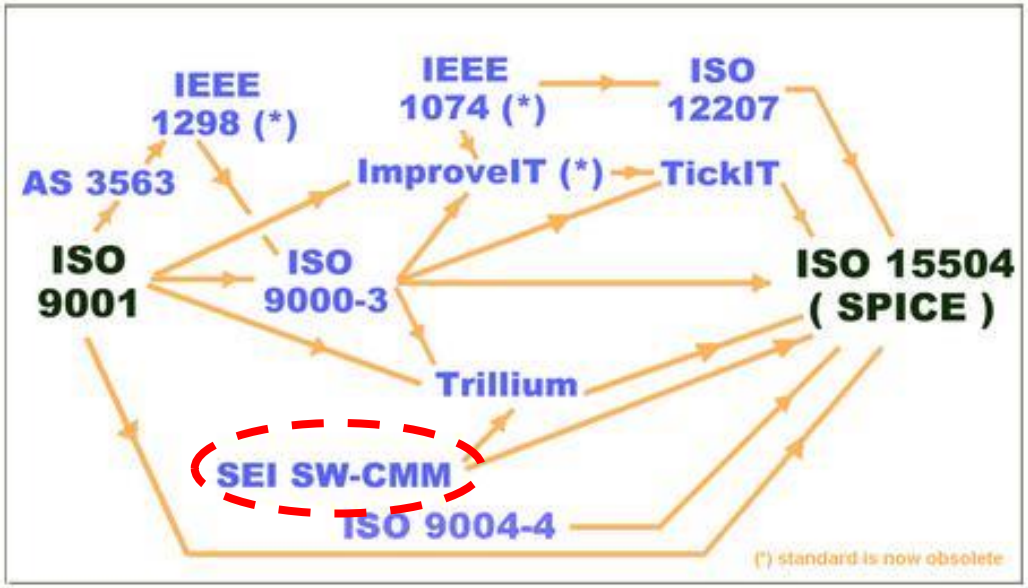


PMBOK-based Project Management #2

Sys. Dev. Stages	(N/A)	(N/A)	Analysis / Design / Programming / Testing		N/A
5 Process Groups / 9 Knowledge Areas	Initiating	Planning	Executing	Controlling	Closing
Integration Mgmt		✔	✔	✔	
Scope Mgmt	✔	✔		✔	
Time Mgmt		✔		✔	
Cost Mgmt		✔		✔	
Quality Mgmt		✔	✔	✔	
Human Resource Mgmt		✔	✔		
Communications Mgmt		✔	✔	✔	✔
Risk Mgmt		✔		✔	
Procurement Mgmt		✔	✔		✔

Mapping of 9 Knowledge Areas and 5 Process Groups


CMM
(SEI)
ISO 9001
(9000-3)
Trillium
(Bell/BNR/NT)
STD
(Scottish Development Agency)
ISO/IEC
15504
Bootstrap
(Bootstrap Institute)
Malcolm
Baldridge
etc.
SQPA
(HP)
SLCP
(ISO/IEC)
Health Check
(BT)

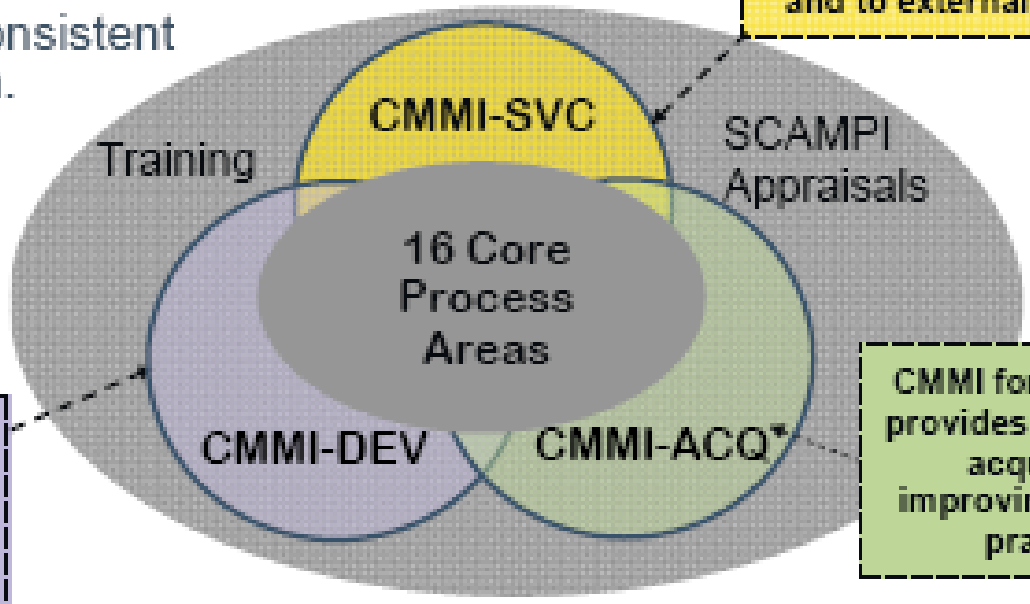

IEEE
1298 (*)
IEEE
1074 (*)
ISO
12207
AS 3563
ImproveIT (*)
TickIT
ISO
9001
ISO
9000-3
ISO 15504
(SPICE)
Trillium
SEI SW-CMM
ISO 9004-4
(*) standard is now obsolete

Flexible and Leverageable Product Suite

The CMMI Product Suite is composed of models, training, and appraisals:

- Models describe best practices for specific target audiences.
- Appraisals allow organizations to benchmark against any model.
- Training ensures a consistent educational approach.

CMMI for Services provides guidance for those providing services within organizations and to external customers.



CMMI for Development provides guidance for measuring, monitoring, and managing development processes.

CMMI for Acquisition provides guidance for acquirers in improving operating practices.

Capability Maturity Model Integration (CMMI)

CMMI, a process improvement framework that guides organizations in high-performance operations given by Carnegie Mellon University of Pittsburg, USA sponsored by the Department of Defense (DoD), USA

2 categories of CMMI (by 22 key process area)

1. Maturity level (ML);

5 MLs level; Initial, Managed, Defined, Quantitatively Managed, Optimizing

2. Capability level (CL);

4 group CLs; Project management, Engineering, Support, Process Management with

6 CLs level; Incomplete, Performed, Managed, Defined, Quantitatively Managed, Optimizing

Background on CMMI®

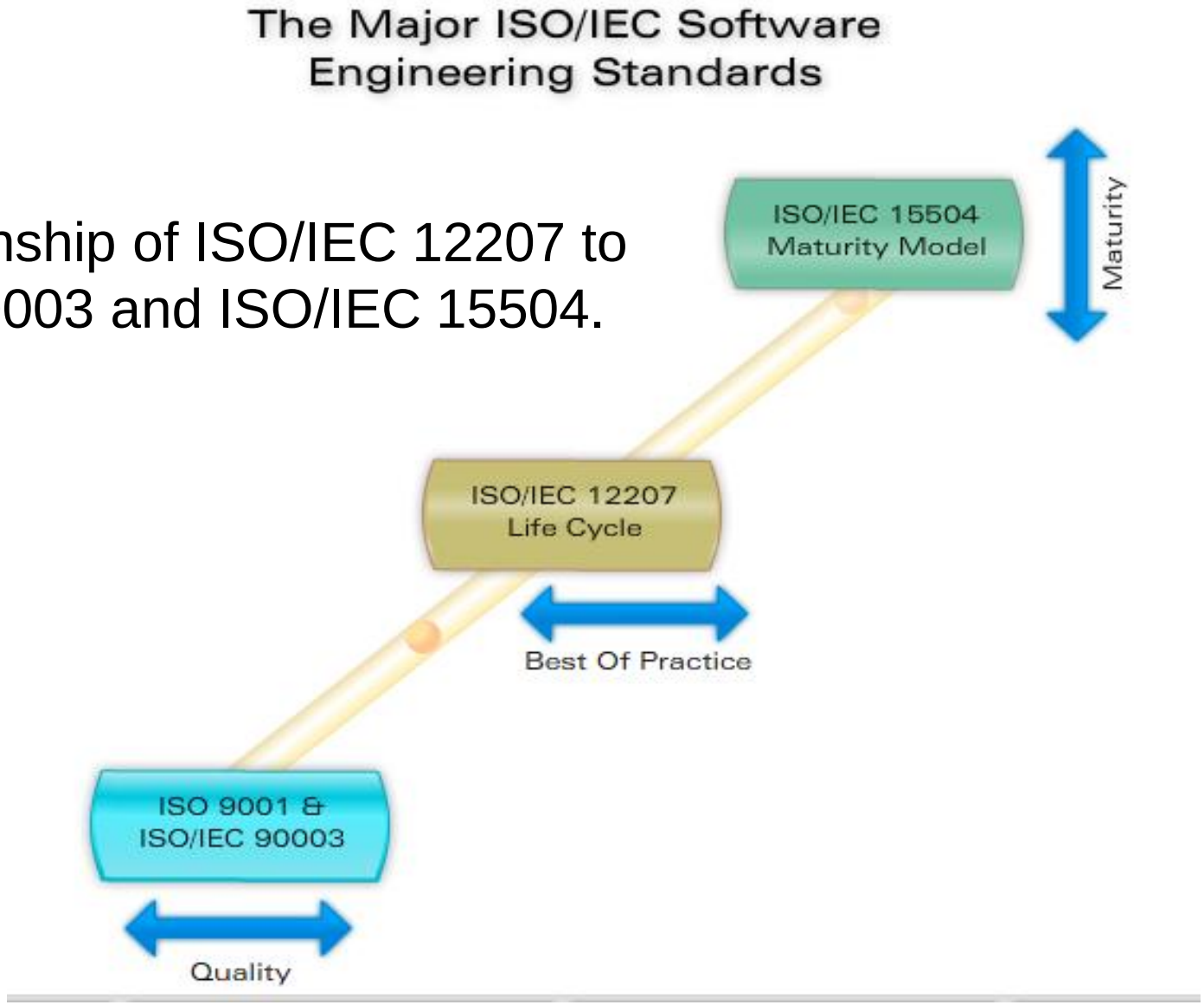
- A Framework for Improving Performance
- A Model, Not a Process
- Satisfy Your Most Important Stakeholders
- CMMI is a Diverse Solution that can Work for Everyone
- CMMI offers **three** constellations:
  CMMI for **Acquisition**,
  CMMI for **Development**, and
  CMMI for **Services**
  that help to improve specific business needs, plus the People Capability Maturity Model (People CMM)

Our models offer best practices in eight capability areas

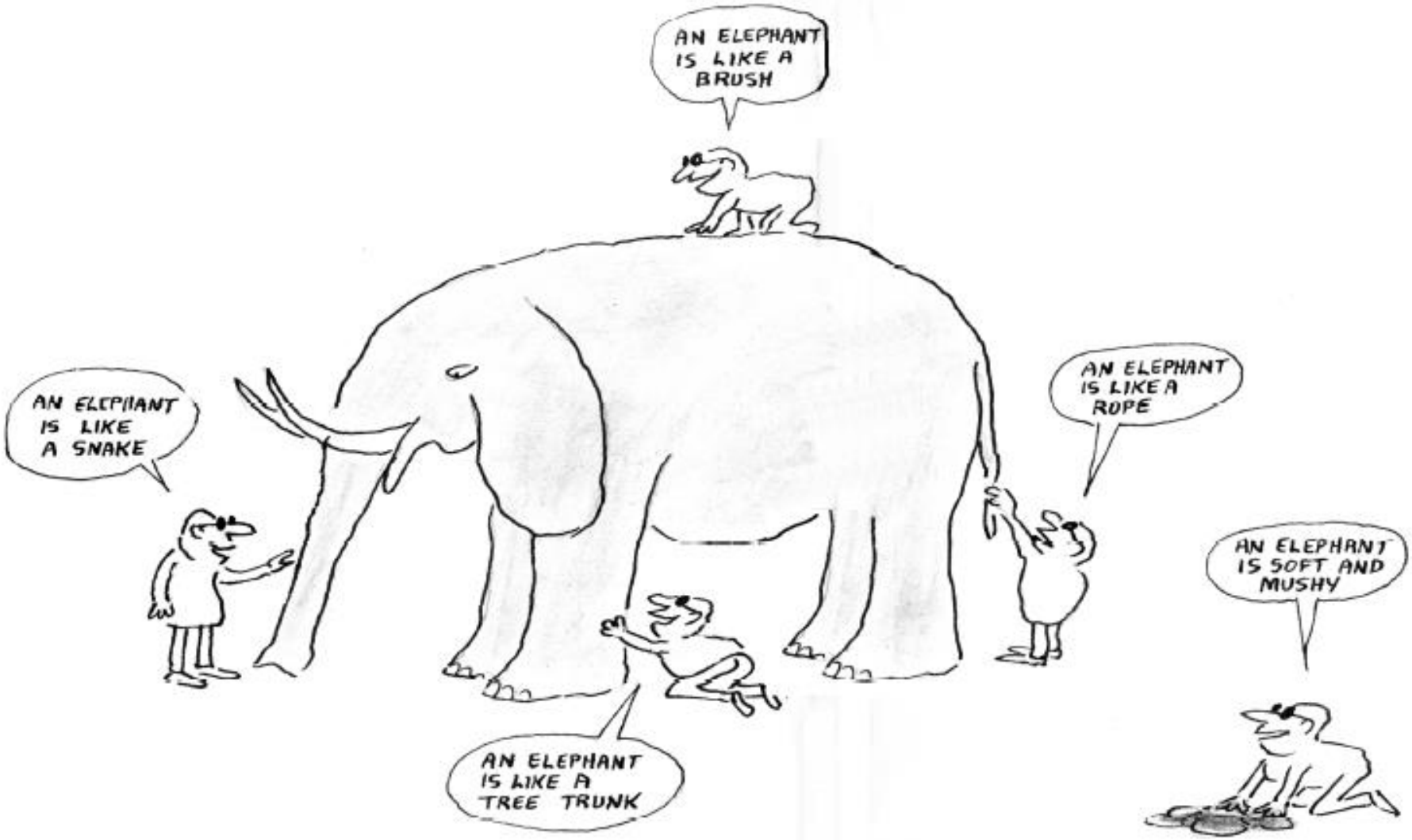
- Project and Work Management
- Process Management
- Supporting Infrastructure
- People Management
- Product Engineering and Development
- Service Delivery and Management
- Supplier Management
- Data Management

SW Engineering Standard

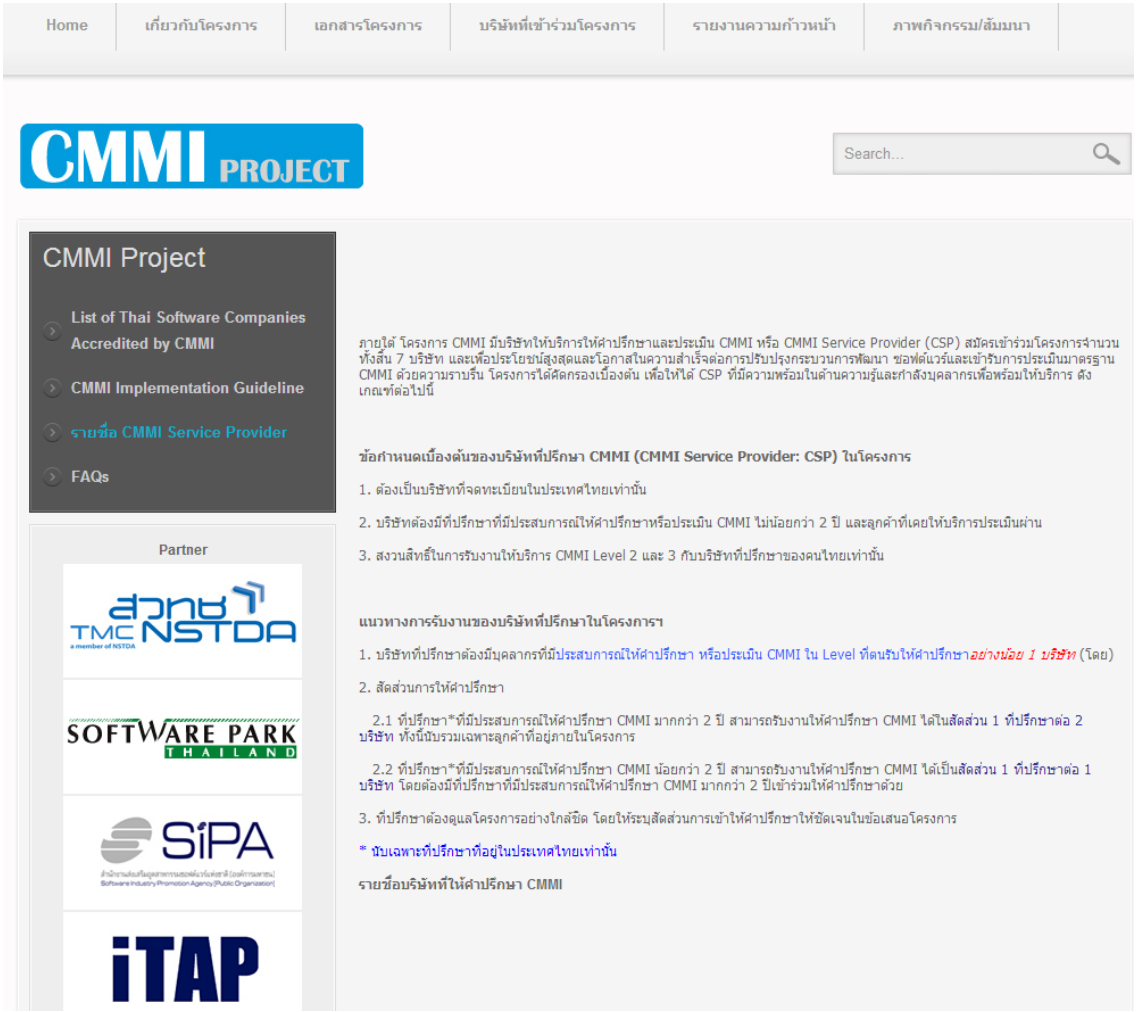
The relationship of ISO/IEC 12207 to ISO/IEC 90003 and ISO/IEC 15504.



2. ICT Standard in Thailand


AN ELEPHANT IS LIKE A BRUSH
AN ELEPHANT IS LIKE A SNAKE
AN ELEPHANT IS LIKE A ROPE
AN ELEPHANT IS SOFT AND MUSHY
AN ELEPHANT IS LIKE A TREE TRUNK

โครงการพัฒนาผู้ประกอบการให้ได้มาตรฐาน CMMI



การสนับสนุนบริษัทซอฟต์แวร์ในการปรับปรุงกระบวนการพัฒนาซอฟต์แวร์ด้วยมาตรฐาน CMMI

ประโยชน์ของ CMMI

- การทำงานทุกอย่างมีร่องรอยหรือหลักฐาน ให้ตรวจสอบได้ง่ายขึ้นและสมบูรณ์มากขึ้น
- ทำงานอย่างเป็นระบบมากขึ้น
- สามารถรับงานจากต่างประเทศ และทำรายได้เข้าประเทศได้อีกมาก
- บริษัทจะมีวัฒนธรรมการทำงานที่เป็นแบบเดียวกัน มีวิธีการปฏิบัติที่เป็นมาตรฐานแต่ก็ยืดหยุ่น เพราะจะแสวงหากลยุทธ์ในการปรับตัวให้เข้ากับความเปลี่ยนแปลงได้ตลอดเวลา

วัตถุประสงค์โครงการ

1. เพื่อสนับสนุนบริษัทซอฟต์แวร์ไทยในการปรับปรุงกระบวนการพัฒนาซอฟต์แวร์ และขอการรับรองมาตรฐาน CMMI มาตรฐานกระบวนการผลิตที่เป็นที่ยอมรับในระดับสากล
2. เพื่อกระตุ้นให้บริษัทซอฟต์แวร์ไทยทำการปรับปรุงกระบวนการพัฒนาซอฟต์แวร์ตามมาตรฐาน CMMI อย่างต่อเนื่อง และให้มีความสามารถต่อยอดไปสู่ระดับวุฒิภาวะที่สูงขึ้น
3. เพื่อสนับสนุนบริษัทซอฟต์แวร์ไทยในการปรับปรุงกระบวนการพัฒนาซอฟต์แวร์ด้าน CMMI for Development (CMMI–DEV) หรือ CMMI for Service (CMMI-SVC)
4. เพื่อ ผลักดัน และส่งเสริมบริษัทซอฟต์แวร์ไทยในการพัฒนา และเร่งสร้างบุคลากรที่มีความรู้ด้านการพัฒนาและการปรับปรุงกระบวนการพัฒนา ซอฟต์แวร์

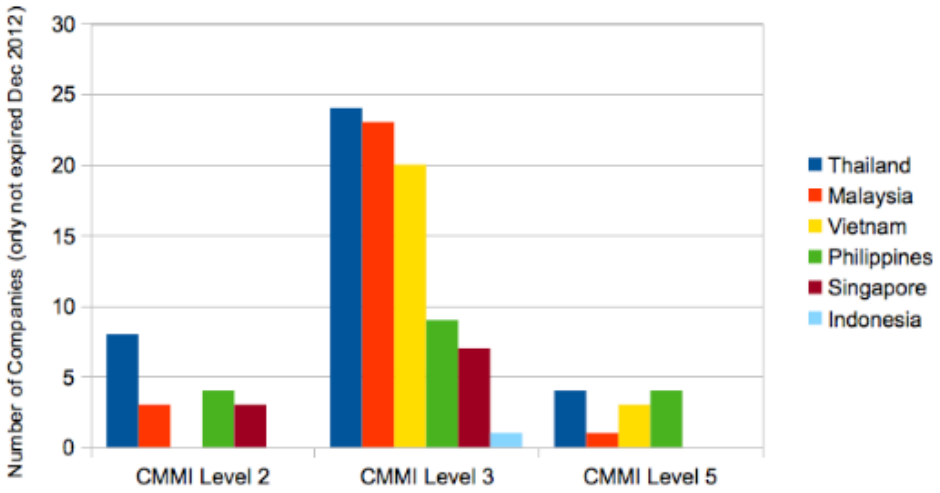
หน่วยงานสนับสนุนในประเทศไทย

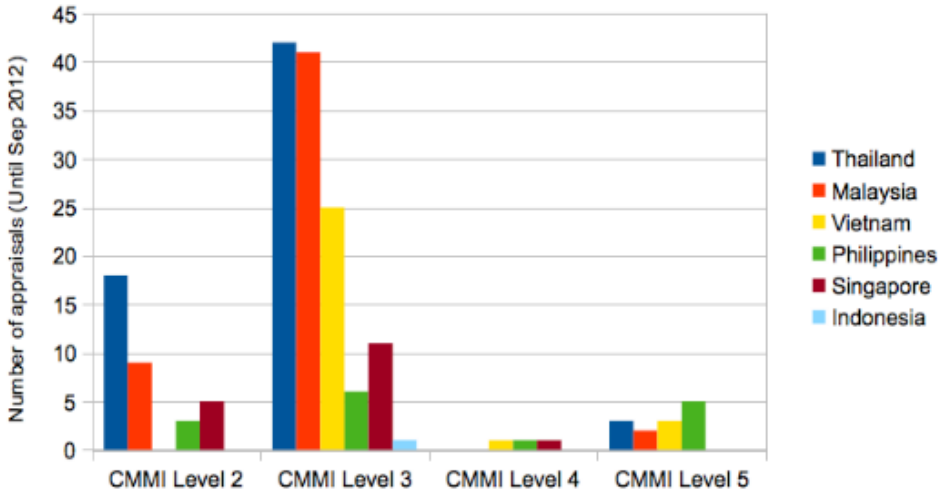
- งานปรึกษาด้านไอที เขตอุตสาหกรรมซอฟต์แวร์ประเทศไทย (ชั้น 4) สำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ
- สำนักงานส่งเสริมอุตสาหกรรมซอฟต์แวร์แห่งชาติ (องค์การมหาชน)

CMMI in practices
Thai companies in PARs (Gov/Private)

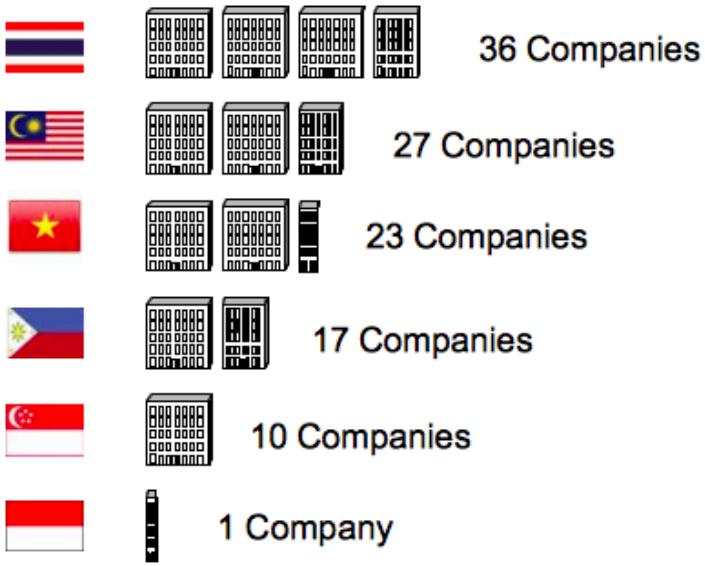
CMMI in ASEAN

Compiled By: IMC Institute
www.facebook.com/imcinstitute





Number of CMMI Companies by Country
(only non-expiring certificates: Dec 2012)



CMMI Level 5 Companies in Thailand

- Avalant Co., Ltd.; since Mar 2010
- CPF IT Center Co., Ltd.; since Oct 2011
- Wealth Management System Limited; since Mar 2012
- Gosoft (Thailand) Co., Ltd.; since Aug 2012

Source: CMMI Institute: Published Appraisal Results 2012

Certificate

CMMI Institute

Published Appraisal Results

Published CMMI® Appraisal Results

The intended goal and purpose of the CMMI® Model and People CMM® Model, and the SCAMPI℠ family of appraisal methods is for process improvement. The outcome, which is entirely dependent on the organization implementing it, is a measurable increase in the quality of the products developed with a better ability to predict the time and budget needed to perform the development. The goal is to increase the entity's ability to reliably develop products and services in a repeatable fashion with continual improvement.

Maintaining and improving beyond a certain maturity status is a continuous process. Therefore once a certain level is reached, appraisals are still necessary to know if the maturity or capability is being maintained and increasing over time. This published list of appraisal results show the maturity or capability status achieved at a point in time indicated by the appraisal's end date.

For information that provides a snapshot of the state of global process maturity, based on appraisal results submitted to the CMMI Institute's SAS database, see the Process Maturity Profile .

The following link will generate a current list of Organizational Units which have completed and reported **SCAMPI Class A** appraisals against the **CMMI or People CMM Model.** Documented authorization has been received from the sponsor of each posted appraisal for this release of information.

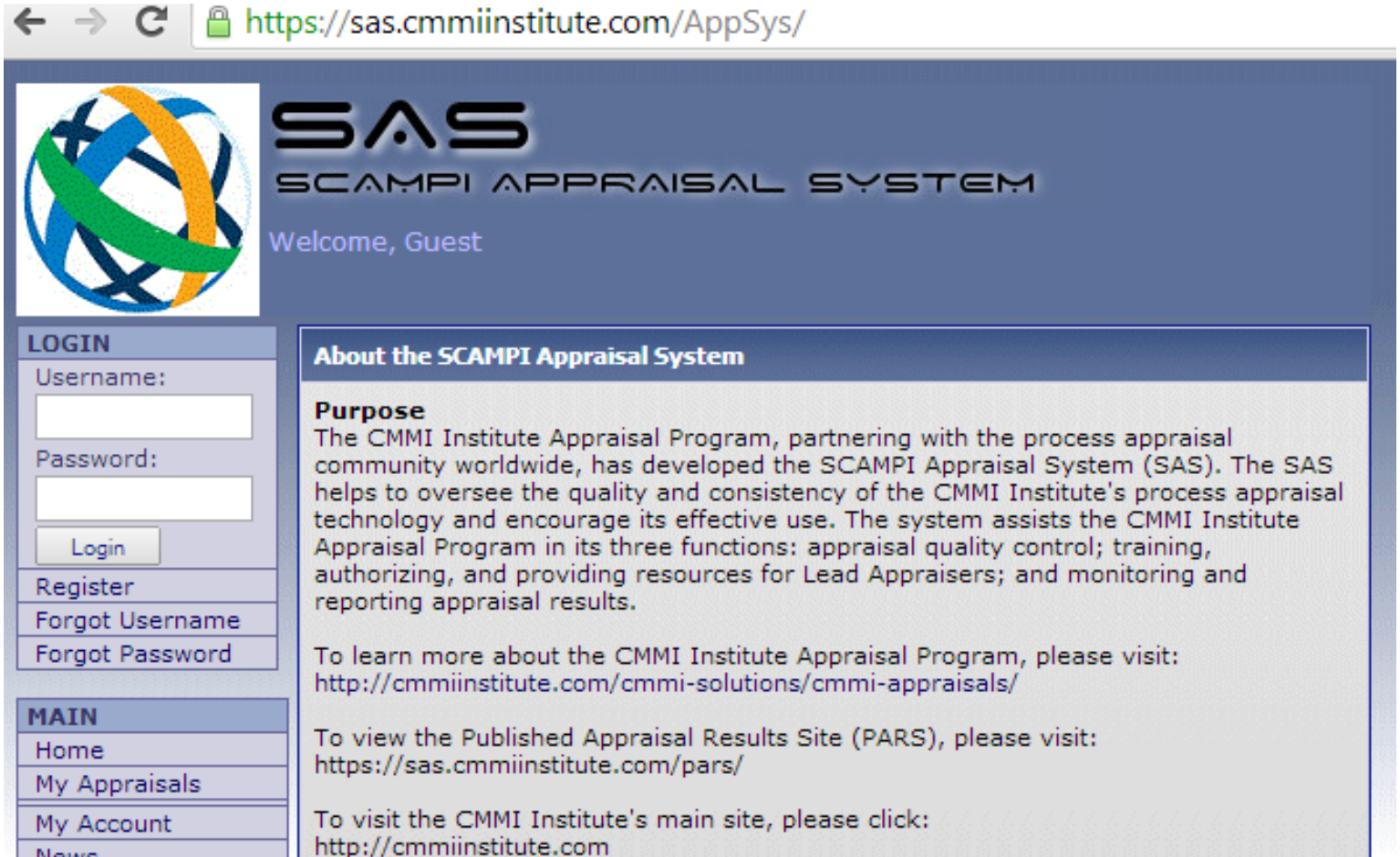
NOTICE: We have made a change to the Published Appraisal Results website (sas.cmmiinstitute.com/pars). Due to wide variation in the material previously posted involving the descriptions of the organizational unit's maturity level 4 and 5 activities, we will be modifying SAS to better portray the needed information, and reduce the variation and volume of material depicted. Because of this, we have removed the existing level 4 and 5 descriptions from the PARS site. The remainder of the provided ADS is not affected by this deletion, and will remain on the PARS website. We will work with the SCAMPI High Maturity Lead Appraisers once we have an improved design so that a better set of information can be posted to PARS for all V1.2 High Maturity appraisals regarding level 4 and 5 descriptions. Thank you for your understanding in this matter.

Click here to view the Published Appraisal Results List

If you have conducted a SCAMPI Class A appraisal in your organization and would like to see your results published here, please contact your SCAMPI Lead Appraiser℠ The Lead Appraiser will collect the appropriate data and authorizations from your organization and initiate the posting process.

If you would like to search for a specific lead appraiser, or if you would like to contact a specific Partner, see Partner Directory.

If you would like to comment on this Published SCAMPI Appraisal Results webpage, please send email to appraisal-info@cmmiinstitute.com.


https://sas.cmmiinstitute.com/AppSys/
SAS
SCAMPI APPRAISAL SYSTEM
Welcome, Guest
LOGIN
Username:
Password:
Login
Register
Forgot Username
Forgot Password
MAIN
Home
My Appraisals
My Account
News
System FAQ
Discussion
Partners Directory
Support
Feature Requests
About the SCAMPI Appraisal System
Purpose
The CMMI Institute Appraisal Program, partnering with the process appraisal community worldwide, has developed the SCAMPI Appraisal System (SAS). The SAS helps to oversee the quality and consistency of the CMMI Institute's process appraisal technology and encourage its effective use. The system assists the CMMI Institute Appraisal Program in its three functions: appraisal quality control; training, authorizing, and providing resources for Lead Appraisers; and monitoring and reporting appraisal results.
To learn more about the CMMI Institute Appraisal Program, please visit:
http://cmmiinstitute.com/cmmi-solutions/cmmi-appraisals/
To view the Published Appraisal Results Site (PARS), please visit:
https://sas.cmmiinstitute.com/pars/
To visit the CMMI Institute's main site, please click:
http://cmmiinstitute.com
Registration Information
You must have an affiliation with the CMMI Institute in order to register with the SAS.
In order to register as a Lead Appraiser, you must have an emailed invitation from the SAS Administrator.
To register in the SAS Appraisal Team Member Group, you must have completed the appropriate introduction course (i,e. Intro to CMMI-Dev, Intro to CMMI-SVC, Intro to People CMM).

บริษัทที่ได้รับการประเมินผ่านมาตรฐาน CMMI

- **ML5: (4 บริษัท)**
  1. Avalant Co., Ltd.
  2. SMARTERWARE CO.,LTD.
  3. Wealth Management System Limited
  4. Yip In Tsoi & CO.,LTD.
- **ML3: (33 บริษัท)**
  - ❑ 2 หน่วยงานภาครัฐ
    - ❑ NECTEC-NSTDA
    - ❑ Faculty of Medicine Ramathibodi Hospital
  - ❑ 1 หน่วยงานรัฐวิสาหกิจ
    - ❑ ธนาคารเพื่อการเกษตรและสหกรณ์การเกษตร
- **ML2: (7-> 7 บริษัท)**

ข้อมูลจาก: ณ วันที่ 22 เมษายน 2559

https://sas.cmmiinstitute.com/pars/pars.aspx

CMMI Institute

Published Appraisal Results

Filter Results

Model/Constellation: CMMI-DEV v1.3
Maturity Level: Maturity Level 5
Year:
Country: Thailand
Organization:
Apply Filter | Clear Filter

Organization / Organizational Unit	Team Leader / Sponsor	Appraisal End Date	Model (Representation): Maturity Level
Avalant Co., Ltd. Software Department Bangkok	Rajarshi Kumar Das Akarapol Bunworaset	03/27/2013	CMMI-DEV v1.3(Staged):Maturity Level 5
SMARTERWARE CO.,LTD. Software Implementation Department	Sankaran Venkataramani Suchart Duangtawee	08/16/2013	CMMI-DEV v1.3(Staged):Maturity Level 5
Wealth Management System Limited Software Development and Services	Stephen Fletcher Somkiat Chinthammit	05/15/2015	CMMI-DEV v1.3(Staged):Maturity Level 5 CMMI-SVC v1.3(Staged):Maturity Level 3
YIP IN TSOI & CO., LTD. Software development unit	Pieter van Zyl THIENCHAI LAILERT	01/15/2016	CMMI-DEV v1.3(Staged):Maturity Level 5

Source: https://sas.cmmiinstitute.com/pars/pars.aspx

CMMI partner 7 บริษัทในประเทศไทย

- Asian Intelligent Information Technology Co., Ltd. (India)
- ISEM Co., Ltd. (TH)
- KPMG (India)
- PKT Consultant Co., Ltd. (TH)
- QAI India Limited (India)
- SGCMC Co., Ltd. (Korea)
- Software Park Thailand – NSTDA (TH)

ข้อมูลจาก: ณ วันที่ 4 กุมภาพันธ์ 2559

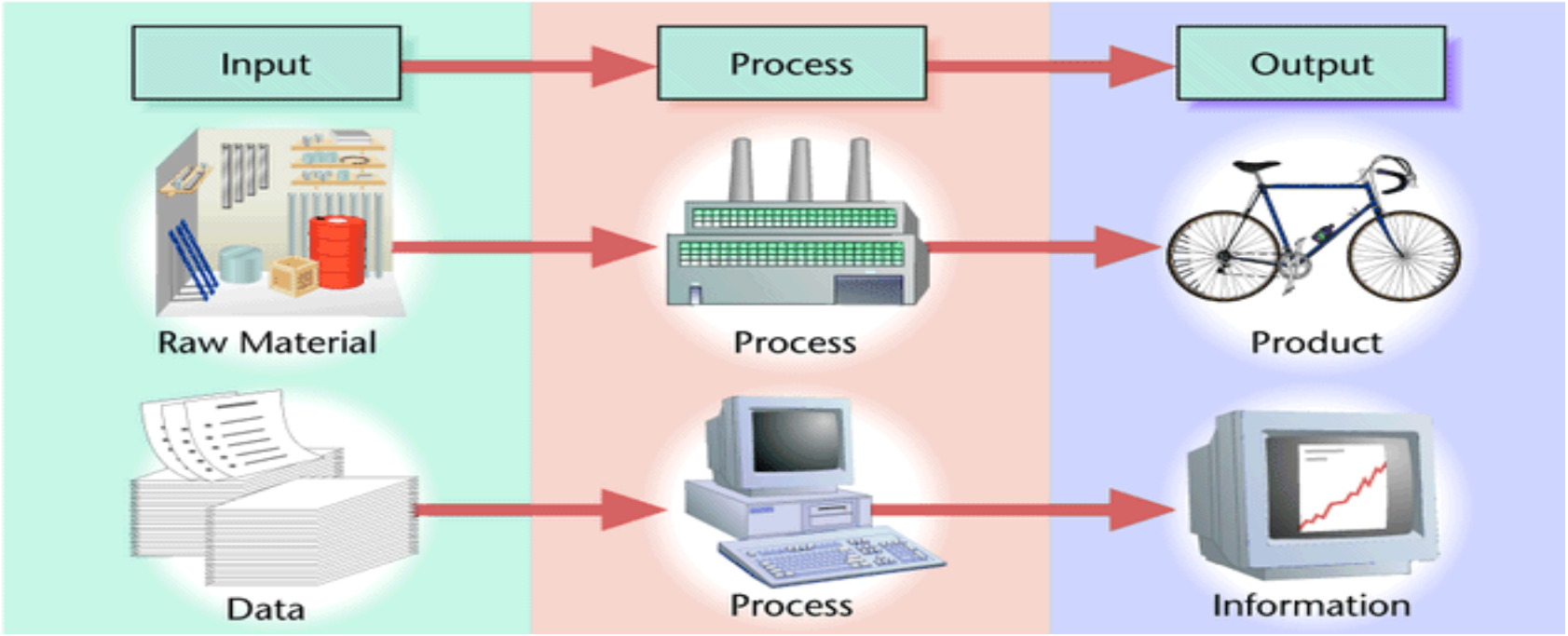
http://partners.clearmodel.com/partner

3. Knowledge Area of CMMI

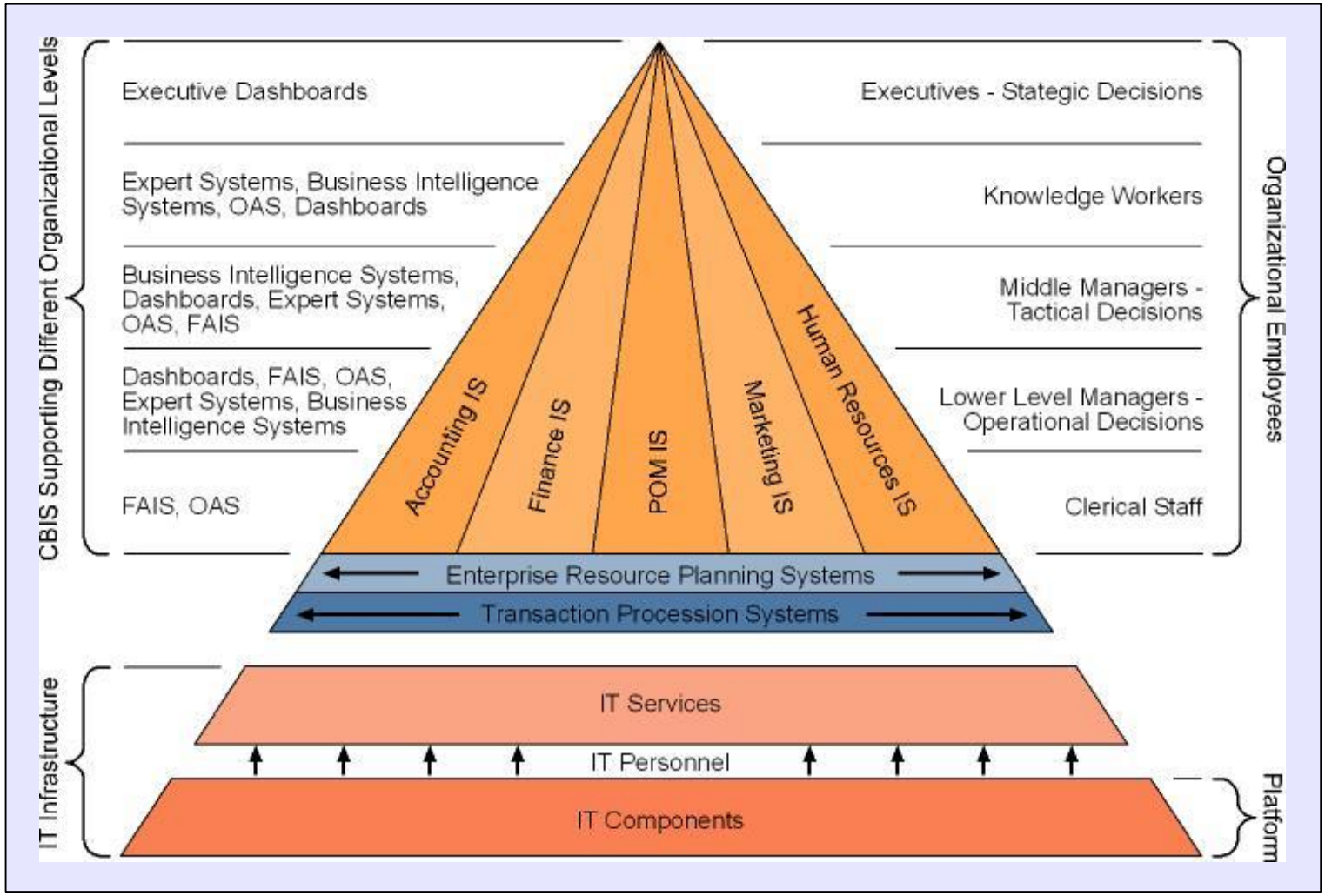
Data vs. Information

Generating Information

Computer-based IS take data as raw material, process it, and produce information as output.

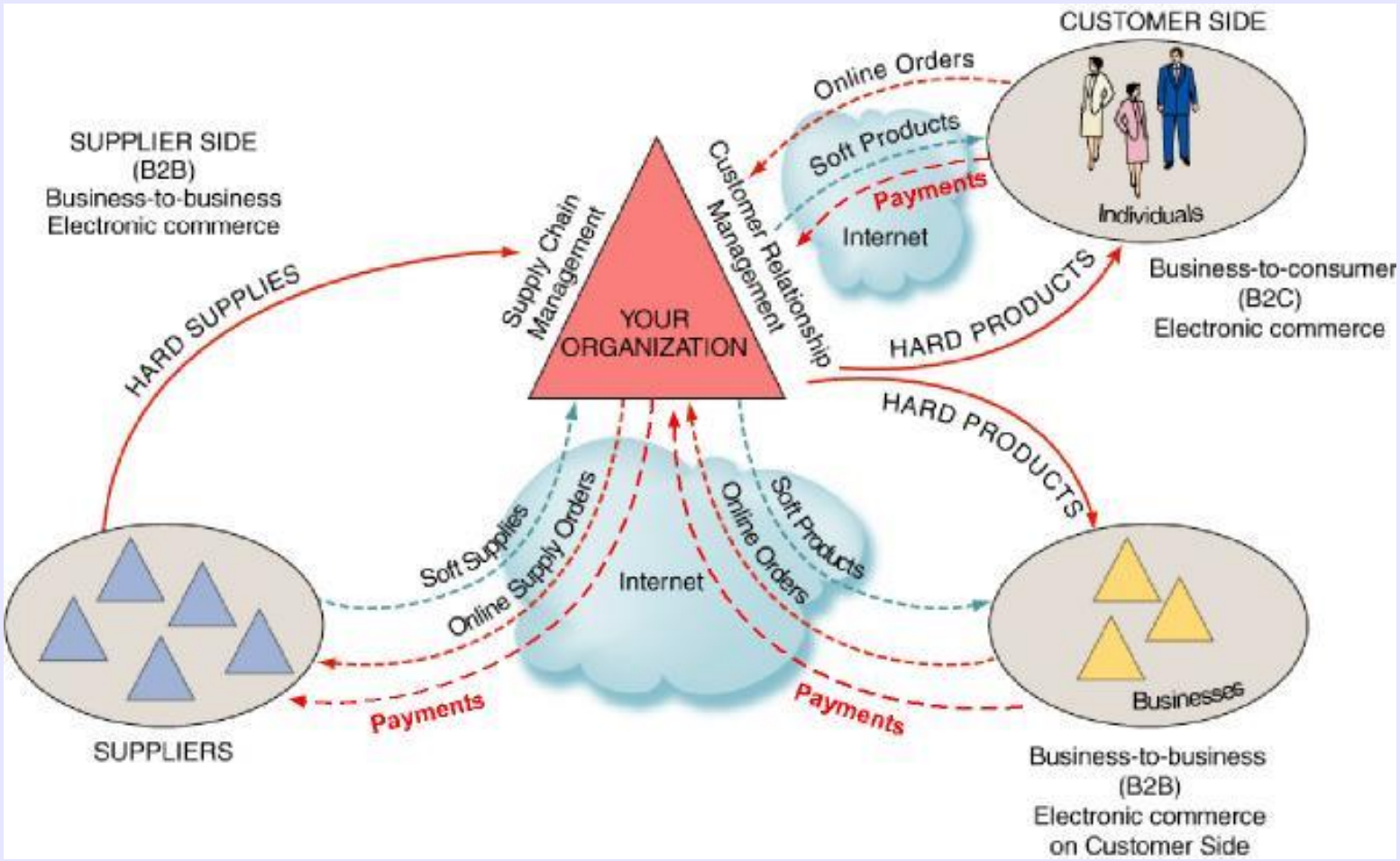


Information Systems Inside Organization



Recommended Standards for Water Works
http://10statesstandards.com/waterstandards.html

Information Systems Outside Organization



Recommended Standards for Water Works
http://10statesstandards.com/waterstandards.html

What: CMMI Standard Model

CMMI® Institute

CMMI® Institute helps organizations discover the true value they can deliver by building capability in their people and processes.

Learn More

94

COUNTRIES

Organizations use CMMI to elevate performance in 94 countries.

12

NATIONAL GOVERNMENTS

- Colombia
- US
- Bulgaria
- India
- South Africa
- Japan
- Mexico
- UK
- Qatar
- Kenya
- China
- Malaysia

12 governments invest in CMMI to support economic development in their countries.

10

LANGUAGES

- Chinese, Simplified
- Arabic
- French
- Japanese
- Spanish
- Chinese, Traditional
- Dutch
- German
- Portuguese
- Korean

CMMI models have been translated into 10 languages.

Capability Maturity Models - Overview

- A representation of the engineering and management “world”
- Focuses on elements of essential practices and processes from various bodies of knowledge
- Describes common sense, efficient, proven ways of doing business (which you should already be doing) - not a radical new approach
- Presents a minimum set of recommended practices and leverage points that have been shown to enhance organizational maturity and project capability
  - ❑ It defines the expectation (the “what”)
  - ❑ Without overly constraining the implementation (the “how”)
- Example implementations of CMMs:
  - ❑ People CMM: develop, motivate and retain project talent
  - ❑ Software CMM: enhance a software-focused development and maintenance capability
  - ❑ CMMI: focuses on systems and software engineering process development

Who Needs CMMI?

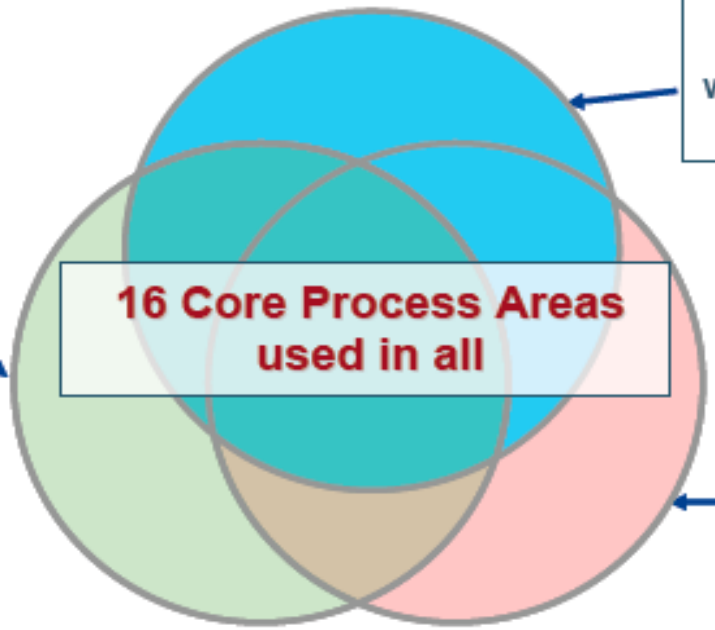
- CMMI is for projects or organizations that:
  - ❑ Need to manage the acquisition, development, and maintenance of products or services
  - ❑ Are concerned about cost and schedule overruns or unhappy users / stakeholders
  - ❑ Are concerned about costs of quality and rework
  - ❑ Are seeking a competitive advantage
- It is a process improvement method that provides a set of best practices to address productivity, performance, costs, and stakeholder satisfaction. CMMI focuses on the total system problem unlike:
  - ❑ Single-discipline models that can result in confusion and higher costs. CMMI facilitates enterprise-wide process improvement
  - ❑ Asynchronous initiatives that result in bolt-ons that last only as long as the squeaking.
    - » CMMI provides a consistent, enduring framework that can accommodate new initiatives
    - » CMMI integrates well with current best practices, process improvement, or quality management strategies (ISO-9001, PMBOK, Lean Six Sigma, etc.)

Capability Maturity Model Integration - Current

- Multiple models, based on disciplines addressed
  - CMMI - ACQ: Acquisition
  - CMMI - DEV: Systems Engineering
  - CMMI - SVC: Technical Support Services
- CMMI V1.2 incorporates lessons learned from using other standards and models (Software CMM, EIA-731, IEEE-12207)
- Developed at the DoD-sponsored Software Engineering Institute (SEI)
  - ❑ CMMI-ACQ in draft, expect release in 2007
  - ❑ CMMI-SVC in development, expect release in 2007
  - ❑ Models and information at http://www.sei.cmu.edu/cmmi/

CMMI

MUTUALLY SUPPORTIVE CMMI MODELS



CMMI-DEV
provides guidance for managing, measuring, and monitoring development processes

CMMI-SVC
provides guidance for delivering services within organizations and to external customers

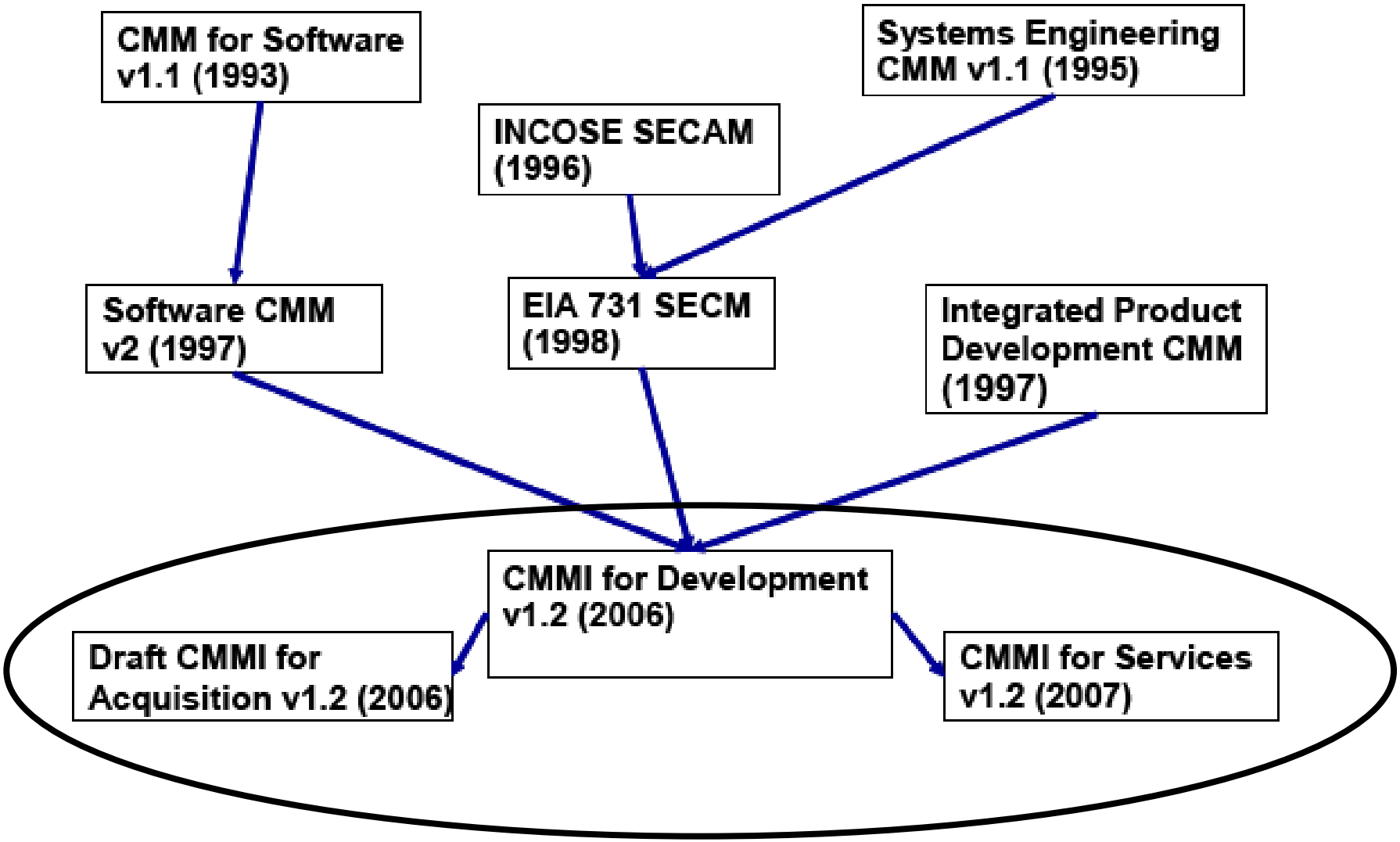
CMMI-ACQ
provides guidance to enable informed and decisive acquisition leadership

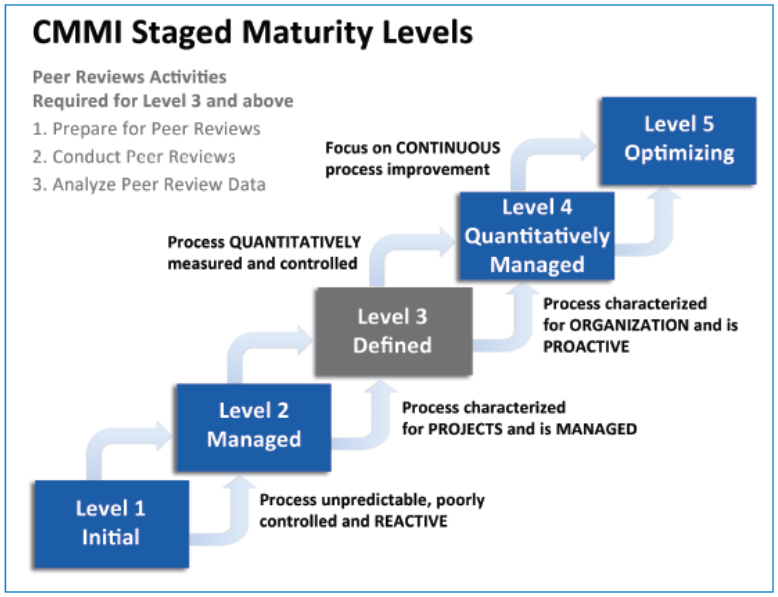
CM , CAR,
DAR,IPM,MA,
OID,OPD,OPF,OPP,OT,
PMC,PP,PPQA,
QPM,
REQM,RSKM

SAM (shared PA)

Ref: Software Engineering Process Office, SPAWAR System Center San Diego

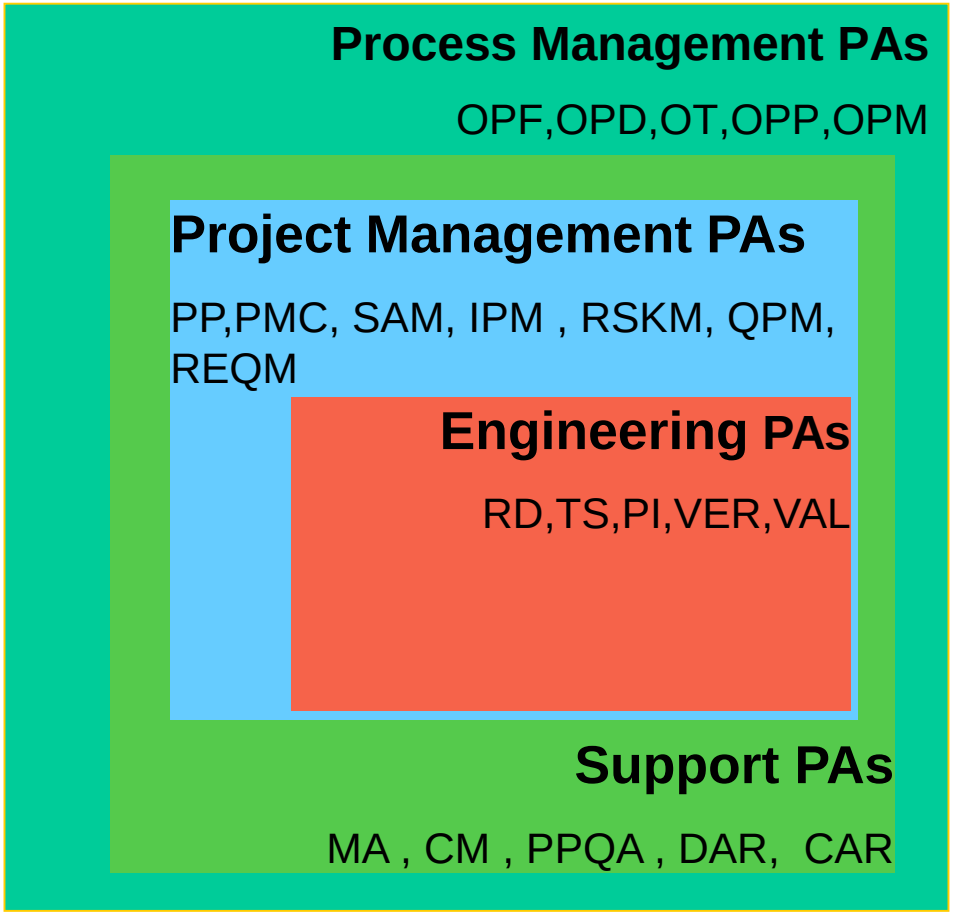
History/Relationship of CMMI Models





5 Optimising	The previously described predictable process is continuously improved to meet relevant current and projected business goals.
4 Predictable	The previously described established process now operates within defined limits to achieve its process outcomes.
3 Established	The previously described managed process is now implemented using a defined process that is capable of achieving its process outcomes.
2 Managed	The previously described performed process is now implemented in a managed fashion (planned, monitored and adjusted) and its work products are appropriately established, controlled and maintained..
1 Performed	The implemented process achieves its process purpose..
0 Incomplete	The process is not implemented or fails to achieve its process purpose. At this level, there is little or no evidence of any systematic achievement of the process purpose

Relationships Among 22 PAs (CMMI)



Use CMMI in process improvement activities as a

- collection of **best practices**,
- **framework** for organizing and prioritizing activities,
- support for the coordination of **multi-disciplined activities** that might be required to successfully build a product, and
- means to emphasize the alignment of **the process improvement objectives** with organizational business objectives.

CMMI incorporates lessons learned from the use of the SW-CMM®, EIA-731, and other standards and models.

CMMI-DEV PAs: Maturity Level and Continuous Representation: PAs by Category

	Process Management	Project Management	Engineering	Support
ML5	Organizational Performance Management			Causal Analysis and Resolution
ML4	Organizational Process Performance	Quantitative Project Management		
ML3	Organizational Process Focus Organizational Process Definition Organizational Training	Integrated Project Management Risk Management	Requirements Development Technical Solution Product Integration Verification Validation	Decision Analysis and Resolution
ML2		Project Planning Project Monitoring and Control Requirements Management Supplier Agreement Management		Configuration Management Process and Product Quality Assurance Measurement and Analysis

CMMI Level 2 มี 7 PA

1. CM - Configuration Management
2. MA - Measurement and Analysis
3. PMC - Project Monitoring and Control
4. PP - Project Planning
5. PPQA - Process and Product Quality Assurance
6. REQM - Requirements Management
7. SAM - Supplier Agreement Management

CMMI Level 3 มี 11 PA แต่ต้องทำทั้งสิ้น 18 PA

(รวม PA ของ Level 2 ด้วย)

1. DAR - Decision Analysis and Resolution
2. IPM - Integrated Project Management +IPPD
3. OPD - Organizational Process Definition +IPPD
4. OPF - Organizational Process Focus
5. OT - Organizational Training
6. PI - Product Integration
7. RD - Requirements Development
8. RSKM - Risk Management
9. TS - Technical Solution
10. VAL - Validation
11. VER - Verification

CMMI Level 4 มี 2 PA แต่ต้องทำทั้งสิ้น 20 PA

(รวม PA ของ Level 2 และ 3 ด้วย)

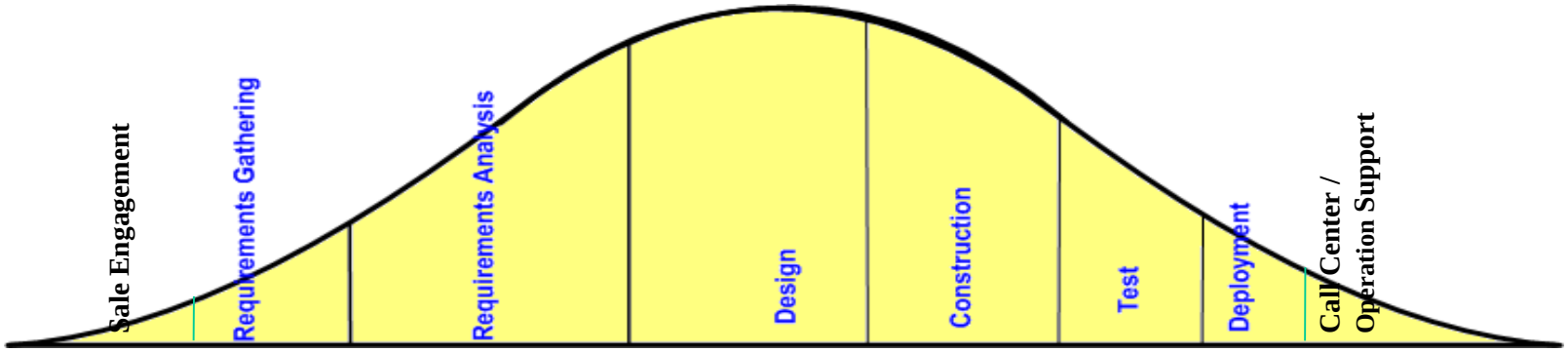
1. QPM - Quantitative Project Management
2. OPP - Organizational Process Performance

CMMI Level 5 มี 2 PA แต่ต้องทำทั้งสิ้น 22 PA

(รวม PA ของ Level 2, 3 และ 4 ด้วย)

1. CAR - Causal Analysis and Resolution
2. OID - Organizational Innovation and Deployment

SDLC VS Roles & Responsibilities



Sale	Business Analyst	System Analyst , Architecture designer	System Analyst , Copy-writer	Developer, Multimedia , Network Installer	Test Engineer, QC	Implementer, Trainer	Helpdesk , Customer services , IT Support

Program Manager , Project Manager , Project Coordinator

Quality Assurance Manager , IT Auditor , **Configuration Manager**

Metrics Group

Process Specialist , Consultant

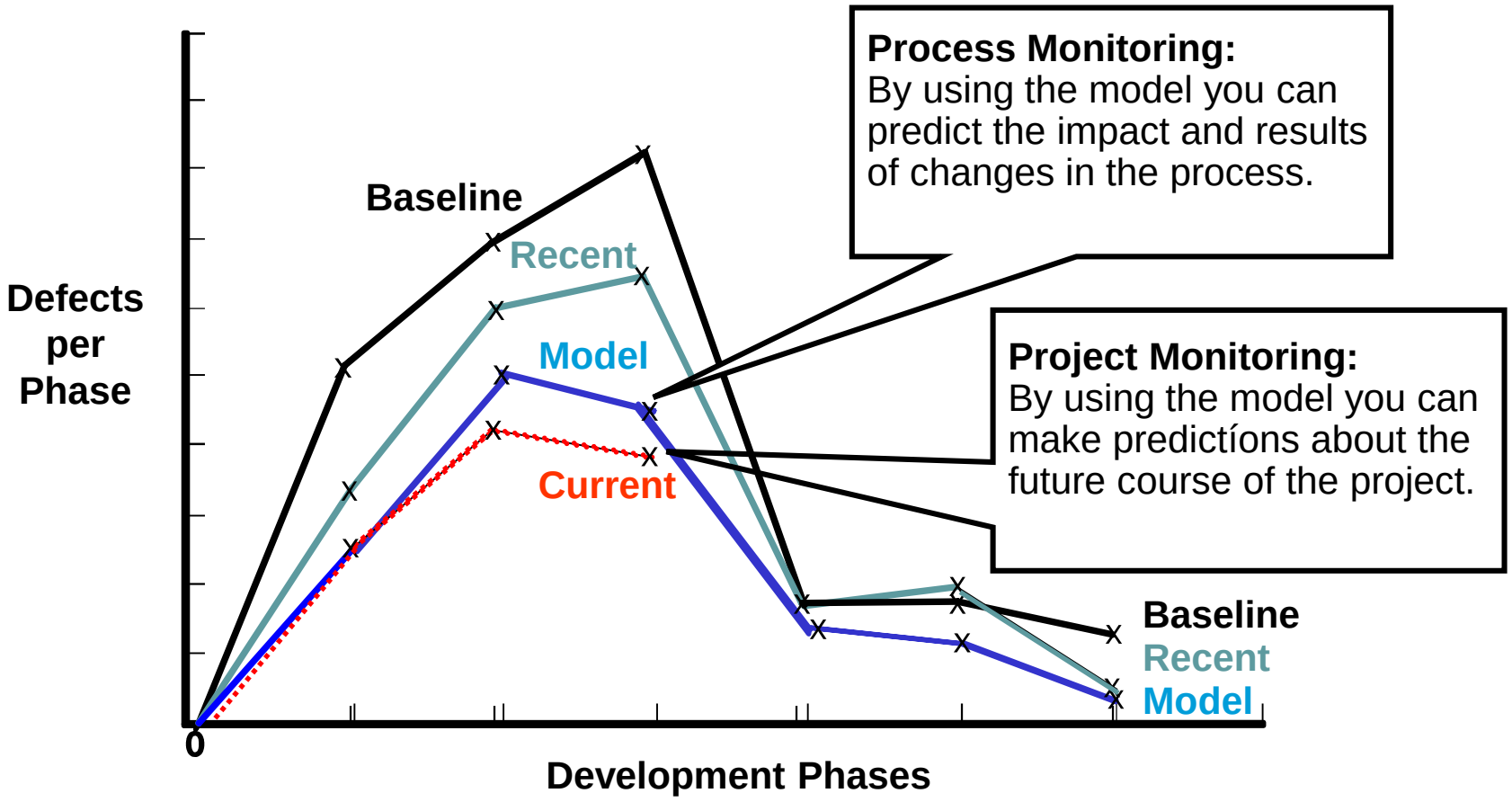
CMMI Appraiser , Instructor

Performance Measures

The performance results in the following table are from 30 different organizations that achieved percentage change in one or more of the six categories of performance measures below.

Performance Category	Median Improvement
Cost	34%
Schedule	50%
Productivity	61%
Quality	48%
Customer Satisfaction	14%
Return on Investment	4:1

Process Performance Model

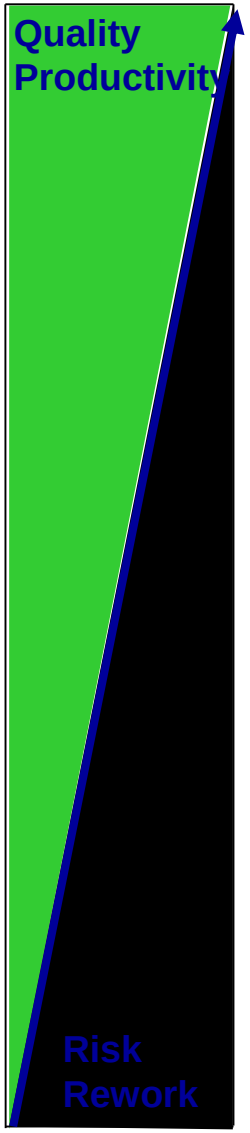


(From Kan, Stephen H. *Metrics and Models in Software Quality Engineering*, 2nd ed. Boston: Addison-Wesley, 2003.)

CMMI for Development

CMMI DEV Staged Representation

Level	Focus	Process Areas
5 Optimizing	Continuous Process Improvement	Organizational Innovation and Deployment Causal Analysis and Resolution
4 Quantitatively Managed	Quantitative Management	Organizational Process Performance Quantitative Project Management
3 Defined	Process Standardization	Requirements Development Technical Solution Product Integration Verification Validation Organizational Process Focus Organizational Process Definition (+ IPPD extras) Organizational Training Integrated Project Mgmt (+ IPPD extras) Risk Management Decision Analysis and Resolution
2 Managed	Basic Project Management	Requirements Management Project Planning Project Monitoring and Control Supplier Agreement Management Measurement and Analysis Process and Product Quality Assurance Configuration Management
1 Initial		



Ref: Software Engineering Process Office, SPAWAR System Center San Diego

CMMI-DEV Process Areas

16 + 6 PAs (22 process areas)

- Causal Analysis and Resolution (CAR)
- Configuration Management (CM)
- Decision Analysis and Resolution (DAR)
- Integrated Project Management + Integrated Process and Product Development (IPM + IPPD)
- Measurement and Analysis (MA)
- Organization Innovation and Deployment (OID)
- Organization Process Definition + IPPD (OPD + IPPD)
- Organization Process Focus (OPF)
- Organization Process Performance (OPP)
- Organizational Training (OT)
- Product Integration (PI)
- Project Monitoring and Control (PMC)
- Project Planning (PP)
- Process and Product Quality Assurance (PPQA)
- Quantitative Project Management (QPM)
- Requirements Development (RD)
- Requirement Management (RM)
- Risk Management (RSKM)
- Supplier Agreement Management (SAM)
- Technical Solution (TS)
- Validation (VAL)
- Verification (VER)

CMMI for Acquisition

CMMI For Acquisition Organizations (CMMI-ACQ)

- CMMI-ACQ is being developed as a joint effort between General Motors and the Software Engineering Institute
- Provides process improvement guidance for organizations engaged in acquisition
- “Adopting CMMI for Acquisition Organizations: A Preliminary Report” published in June 2006
  - ❑ Contains the draft CMMI-ACQ model
- Model will be piloted and further developed before official acceptance by Government and industry
- Based on CMMI V1.2 architecture and model framework
- SEI developing CMMI V1.2 for Acquisition Organizations, Development Organizations, and Services Organizations

CMMI-ACQ Process Areas

16 + 6 PAs (22 process areas)

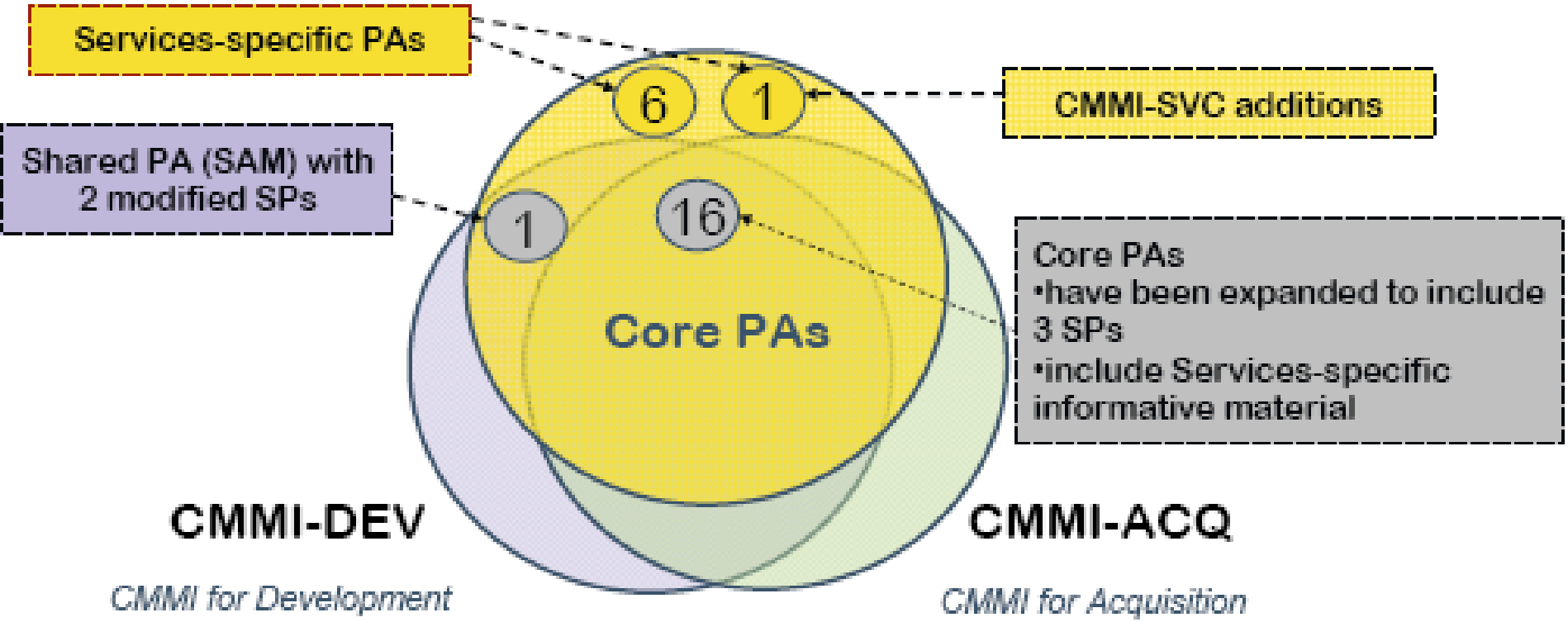
- Acquisition Management (AM)
- Acquisition Requirement Development (ARD)
- Acquisition Technical Solution (ATS)
- Acquisition Validation (AVAL)
- Acquisition Verification (AVER)
- Causal Analysis and Resolution (CAR)
- Configuration Management (CM)
- Decision Analysis and Resolution (DAR)
- Integrated Project Management (IPM)
- Measurement and Analysis (MA)
- Organization Innovation and Deployment (OID)
- Organization Process Definition (OPD)
- Organization Process Focus (OPF)
- Organization Process Performance (OPP)
- Organizational Training (OT)
- Project Monitoring and Control (PMC)
- Project Planning (PP)
- Process and Product Quality Assurance (PPQA)
- Quantitative Project Management (QPM)
- Requirement Management (RM)
- Risk Management (RSKM)
- Solicitation and Supplier Agreement Development (SSAD)

CMMI for Service

Relationships to Other Constellations

16+6+1+1 PAs

CMMI-SVC (24 PAs)

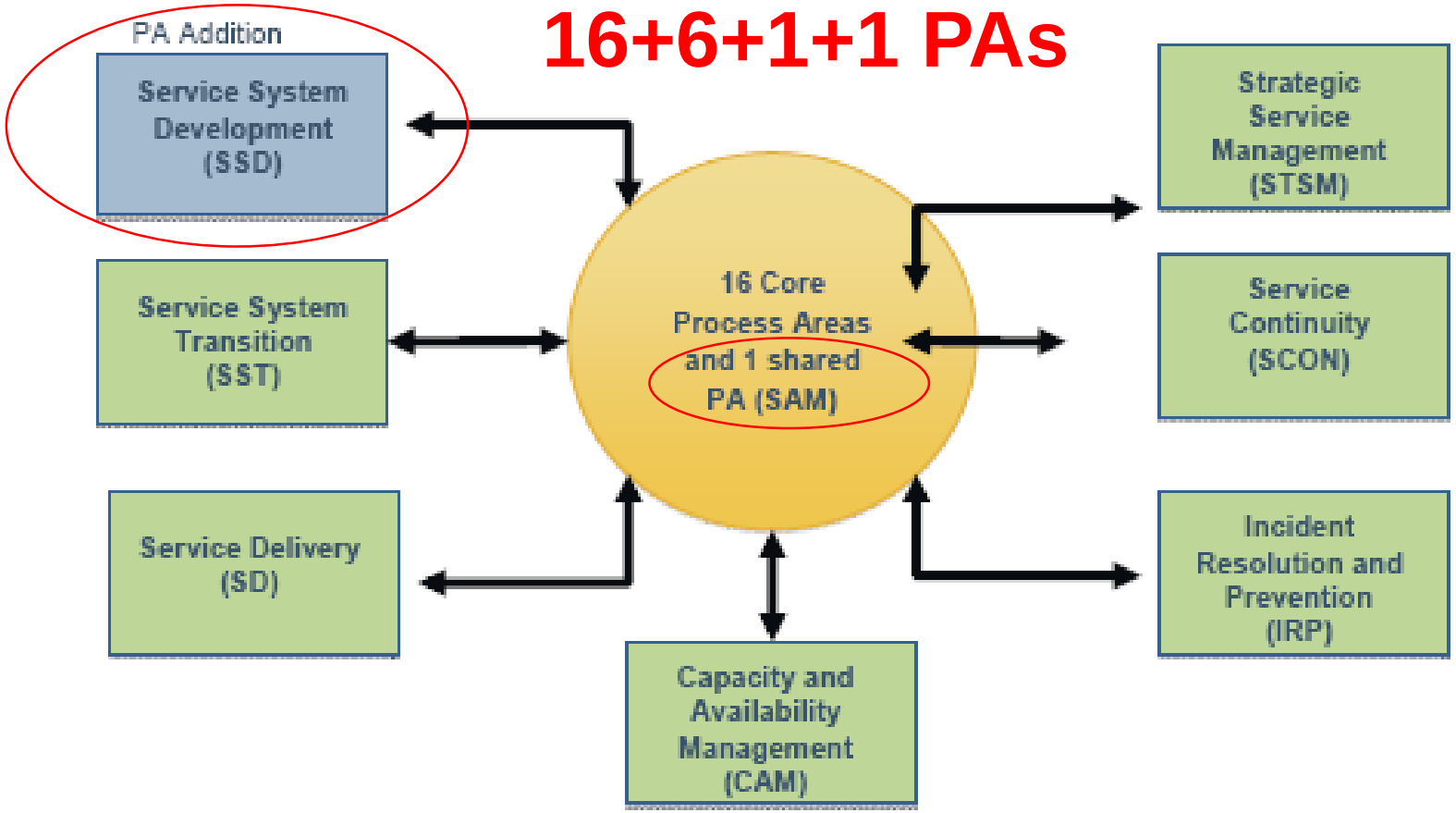


Carnegie Mellon Software Engineering Institute

CMMI

CMMI-SVC v1.2 Process Areas

16+6+1+1 PAs



How: Agile Methodology


Manifesto for Agile Software Development
We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:
Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan
That is, while there is value in the items on the right, we value the items on the left more.

Golden Rules for Agile Process Improvement

- **Dare to share** – As early as possible and frequently
- **The result depends on the team** – Not the individual members
- **The one who checks out a task is not necessarily the one who has to finish it**
- **The one's working on a task are the right people**
- **You may critique anything, but you may never criticize anyone**

Conclusions

These golden rules are something that my team members have learned in the project, and are still using in their current work. For them it is a way to collaborate effectively and efficiently in a team. Your rules will (and should) be different, depending on your needs and the situation at hand. But my expectation is that you can re-use from the principles that we have used to define our rules:

- **The Agile Manifesto, EVO, Open Space Technology, Solution Focused, and Retrospectives.**

ข้อมูลจาก: http://www.benlinders.com/2011/golden-rules-for-agile-process-improvement

Agile SDLC

1 .Agile SDLC Agile aims to **reduce risk** by breaking projects into small, time-limited modules or timeboxes ("iterations")

2. **Each iteration** being approached like a small, self-contained mini-project, each lasting **only a few weeks**. Each iteration has it own **self-contained stages** of analysis, design, production, testing and documentation.

3. **In theory**, *a new software release could be done at the end of each iteration*, but **in practice** the progress made in one iteration may not be worth a release and it will be carried over and incorporated into the next iteration.

4. The project's priorities, direction and progress are *re-evaluated at the end of each iteration*.

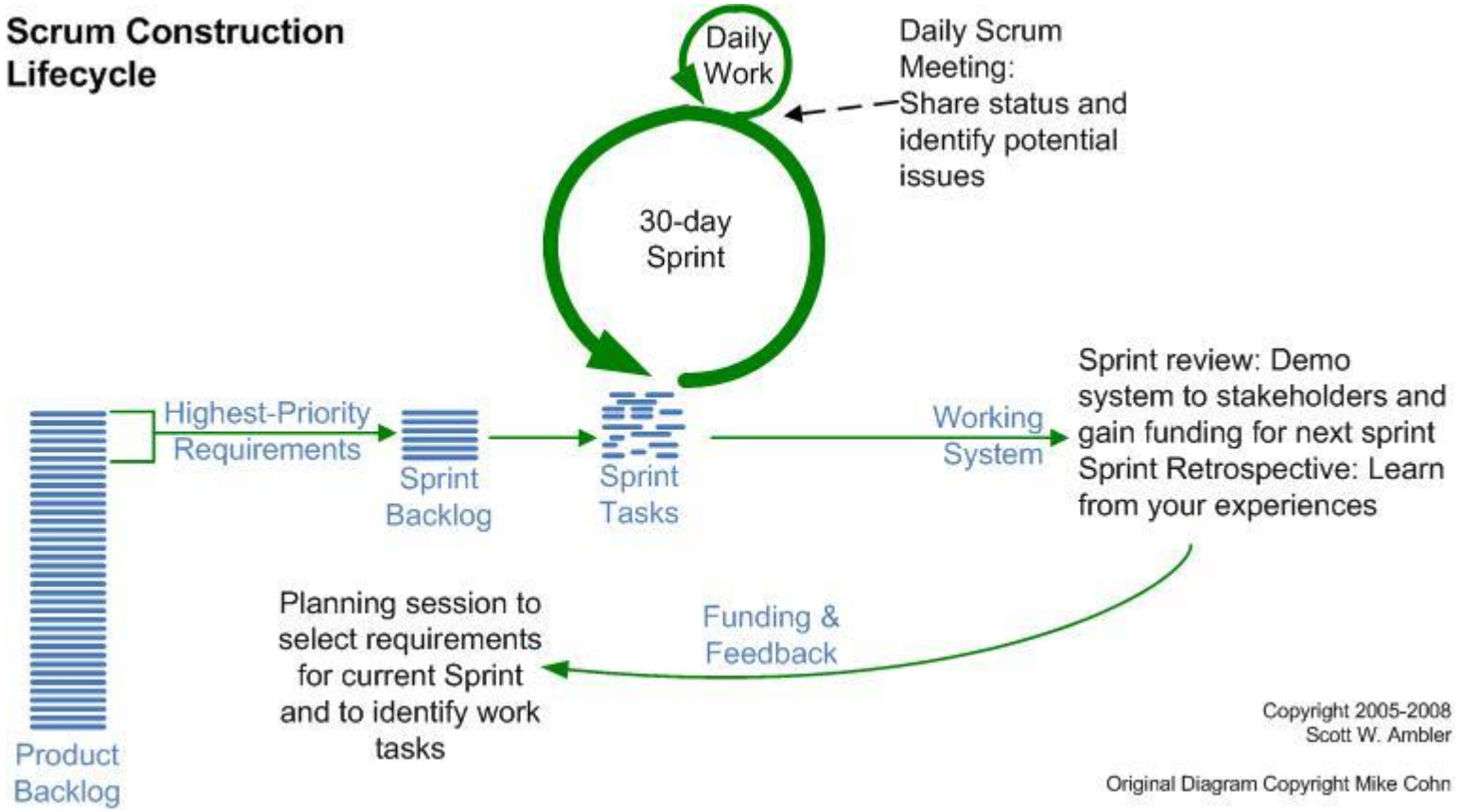
Agile SDLC property

- ***Speed up*** or bypass one or more life cycle phases
- Usually ***less formal and reduced scope***
- Used for ***time-critical*** applications
- Used in organizations that ***employ disciplined method***

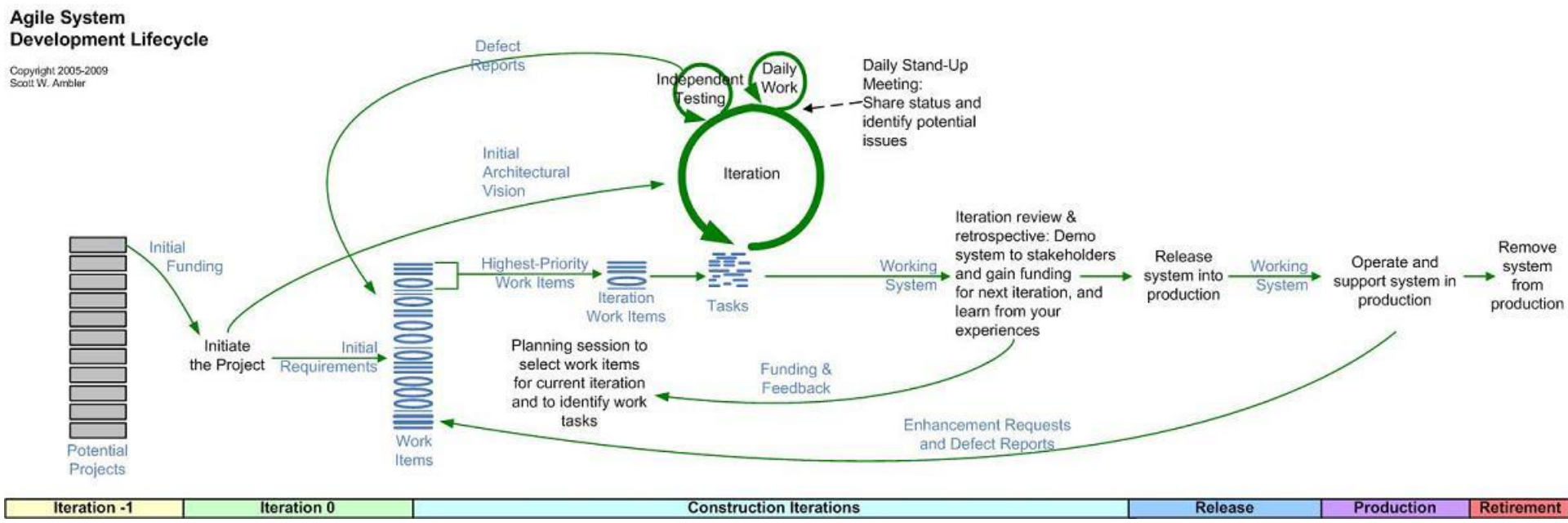
Agile Methods

- Adaptive Software Development (ASD)
- Feature Driven Development (FDD)
- Crystal Clear
- Dynamic Software Development Method (DSDM)
- Rapid Application Development (RAD)
- Scrum
- Extreme Programming (XP)
- Rational Unify Process (RUP)

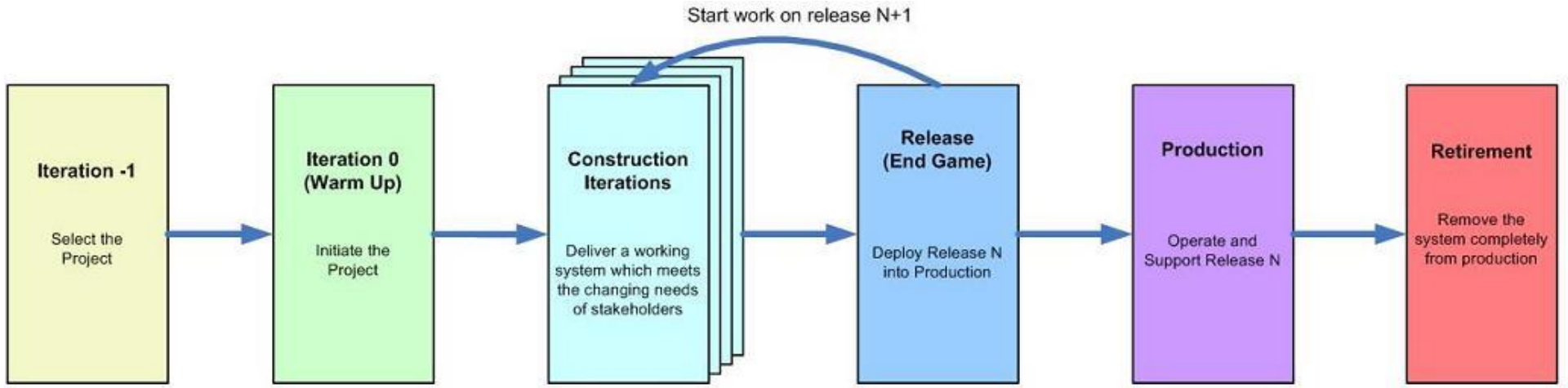
Agile SDLC: The Scope of Life Cycles



Agile SDLC: The Scope of Life Cycles



Agile SDLC: The Scope of Life Cycles



- Identify potential projects
- Prioritize potential projects
- Develop initial vision
- Consider project feasibility

- Active stakeholder participation
- Obtain funding and support
- Start building the team
- Initial requirements envisioning
- Initial architecture envisioning
- Setup environment

- Active stakeholder participation
- Collaborative development
- Model storming
- Test driven design (TDD)
- Confirmatory testing
- Evolve documentation
- Internally deploy software

- Active stakeholder participation
- Final system testing
- Final acceptance testing
- Finalize documentation
- Pilot test the release
- Train end users
- Train production staff
- Deploy system into production

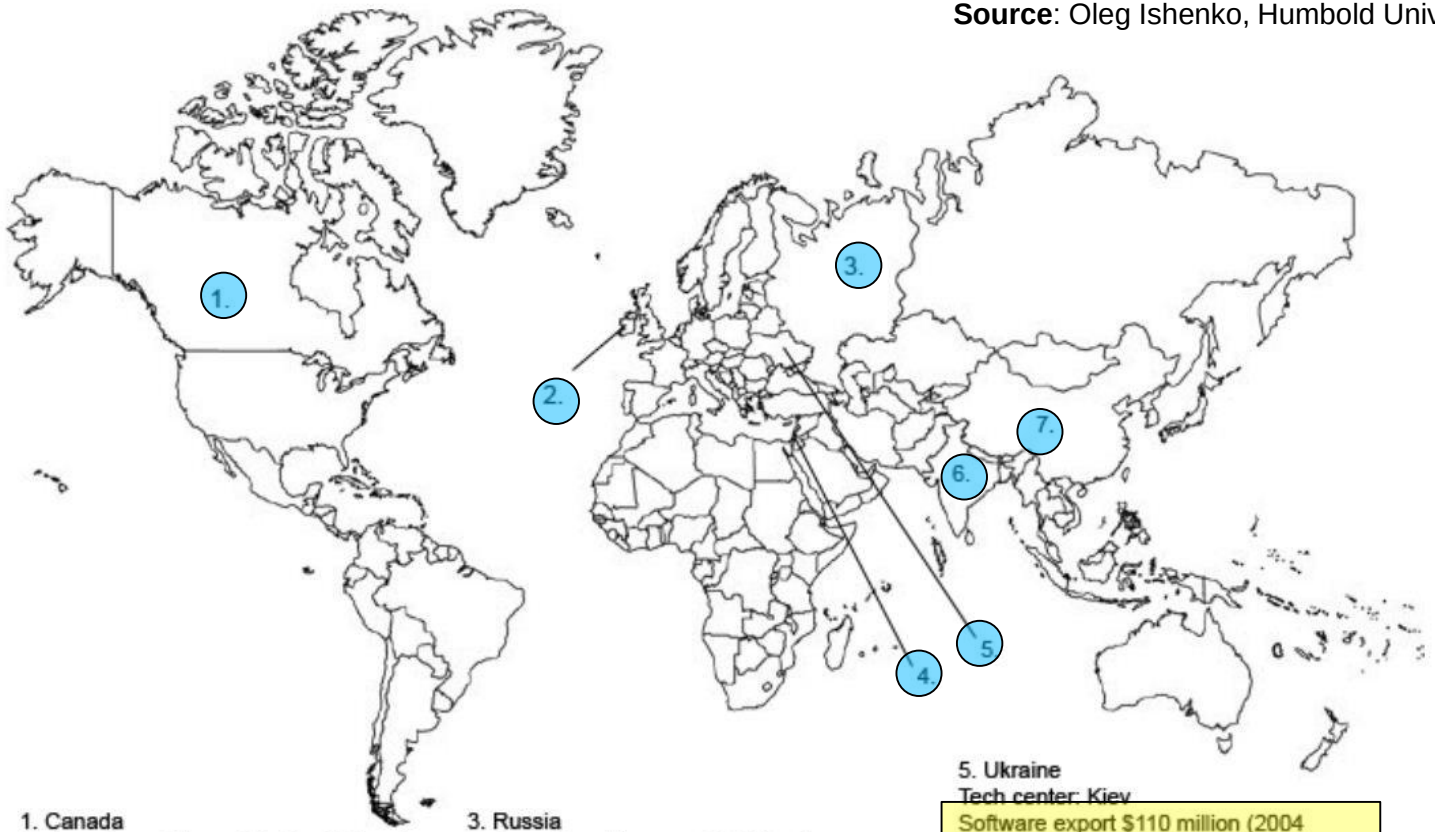
- Operate the system
- Support the system
- Identify defects and enhancements

- Remove the final version of the system-Data conversion
- Migrate users
- Update enterprise models

4. CMMI in practices

International IT Outsourcing

Source: Oleg Ishenko, Humbold Universität zu Berlin



1. Canada
Tech centers: Ottawa, Montreal, Toronto Vancouver
Software exports approx. $6 billion (2004)

2. Ireland
Tech centers: Dublin
Software exports $18.2 billion (2004)
Annual growth 20%

3. Russia
Tech centers: Moscow, St. Petersburg Novosibirsk, Nizhny Novgorod
Software exports $500 millions (2004
Anual growth 60-70%

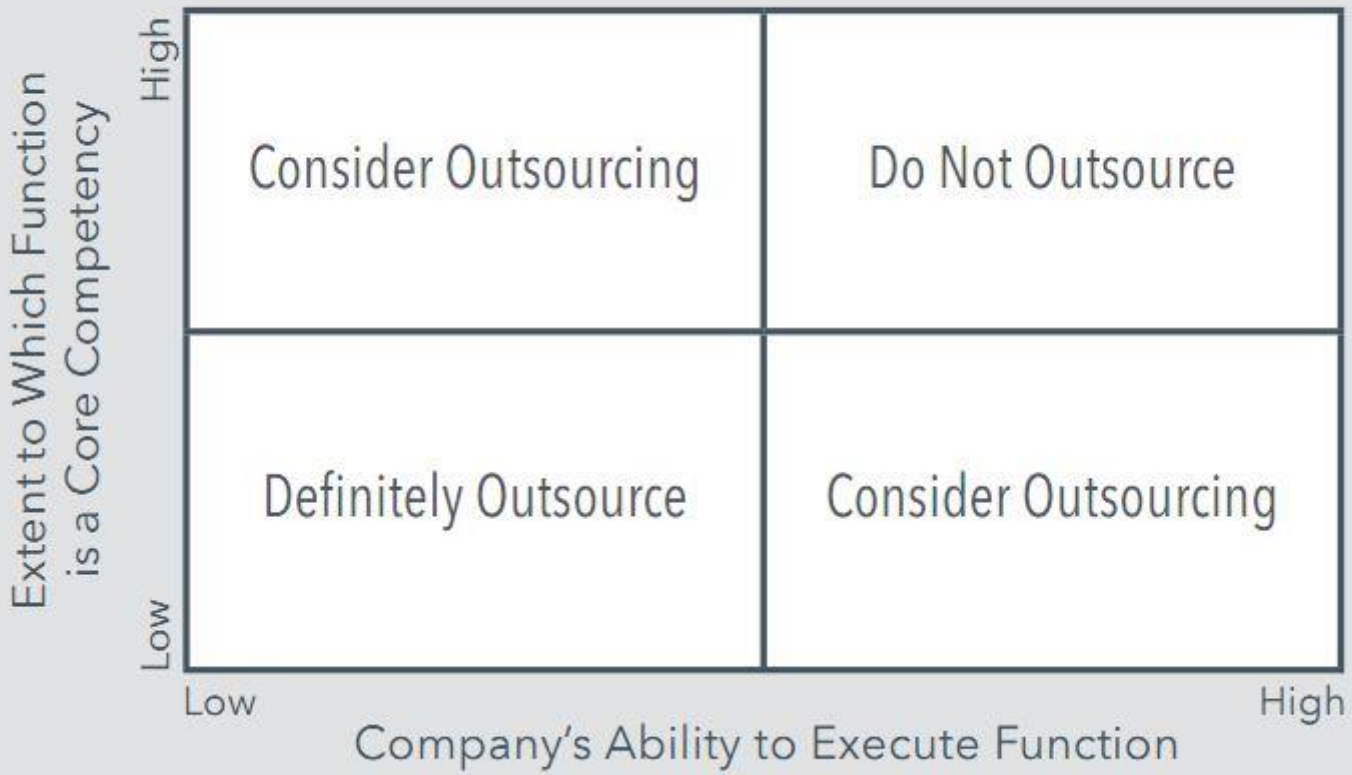
4. Israel
Tech centers: Tel-Aviv, Haifa, Jerusalem
Softare exports $3 billion (2004)
Annual growth 40%

5. Ukraine
Tech center: Kiev
Software export $110 million (2004

6. India
Tech centers: Delhi, Bangalore, Haidarabad, Mumbai etc.
Software exports: $12 billion (2004)
Annual growth: 40%

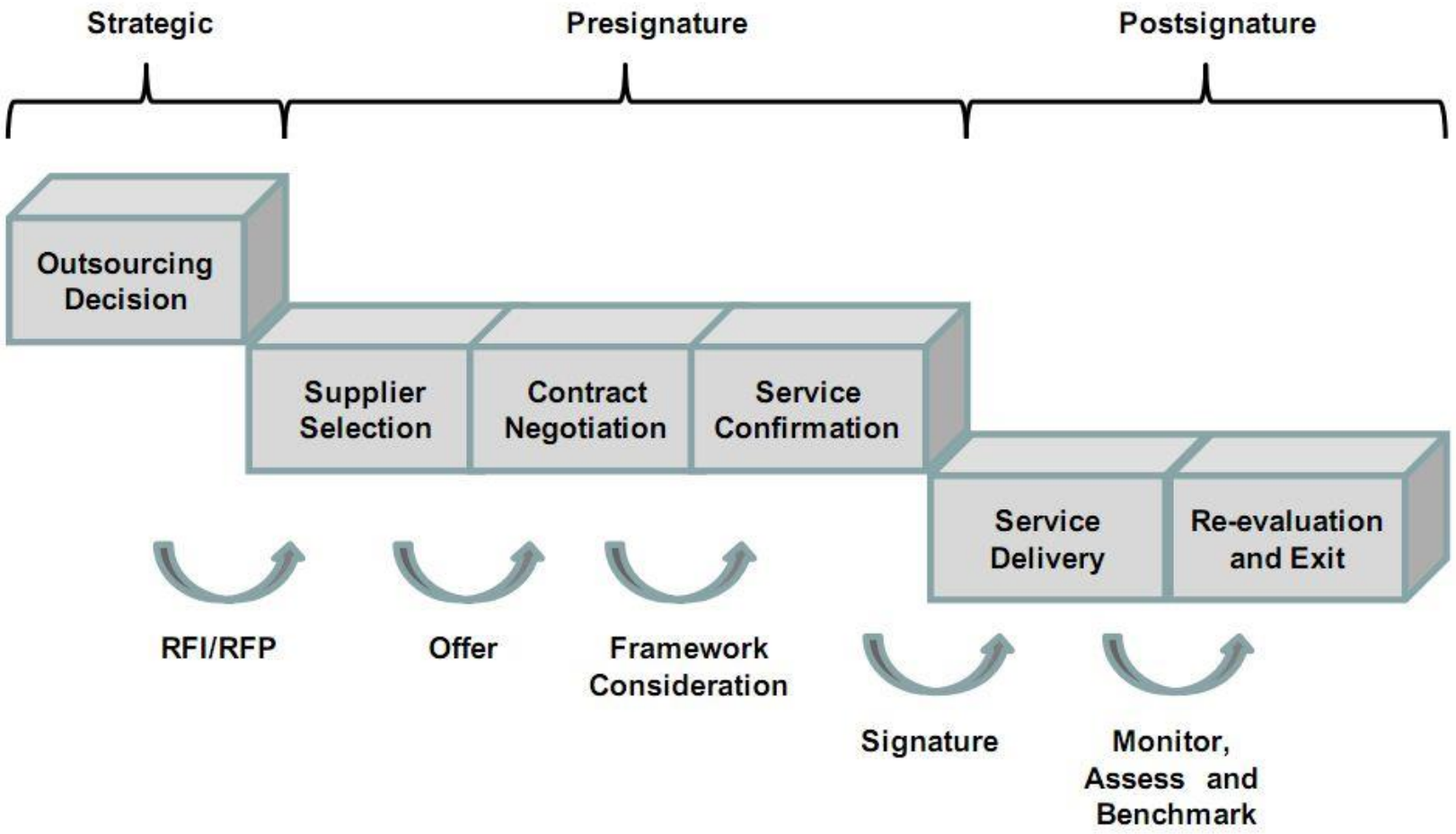
7. China
Tech centers: Beijing, Dalian, Shanghai etc.
Software exports $2.8 billion (2004)
Annual growth: over 30%

When to Outsource a Function



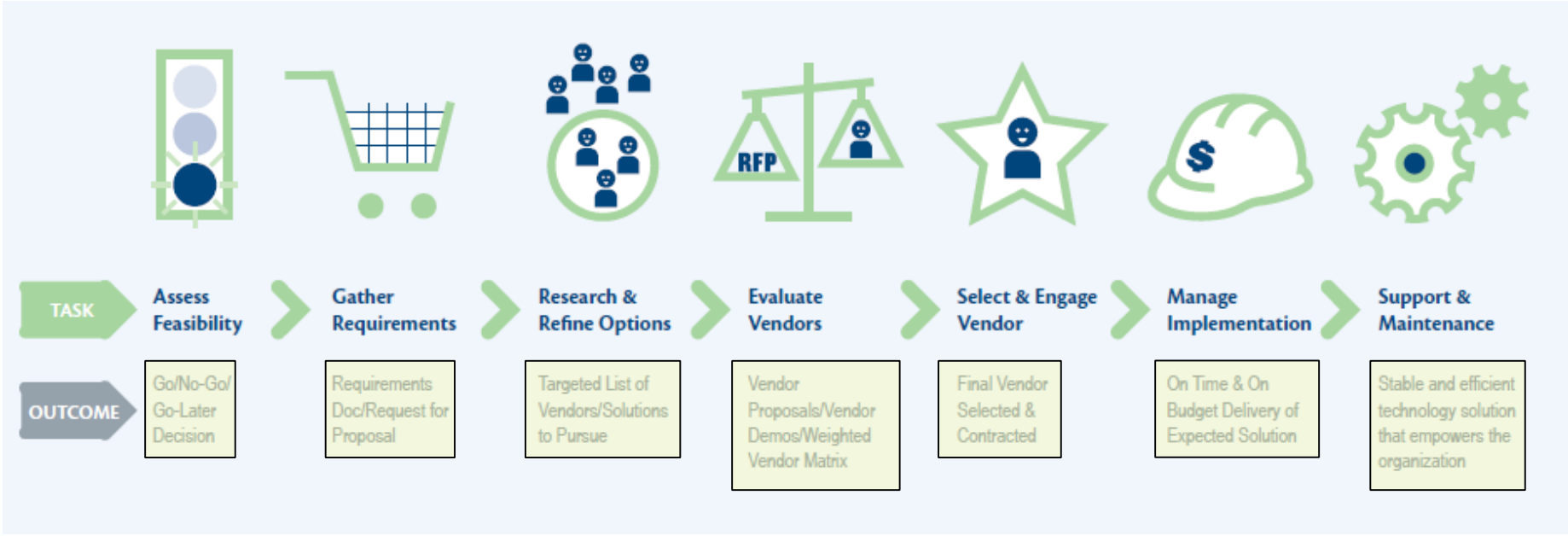
Source: © 2009 Total System Services, Inc

Outsourcing Lifecycle



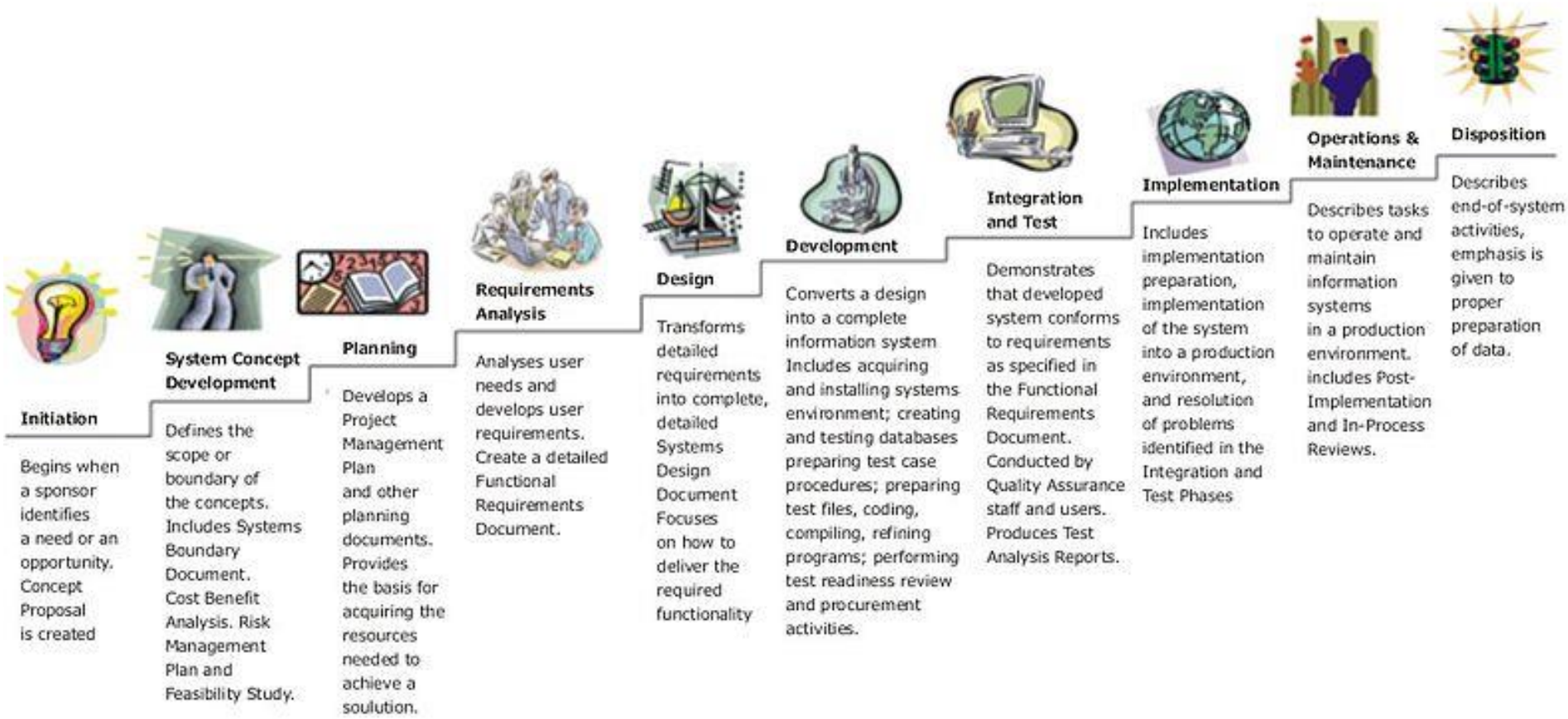
Source: ITGI-2005

Select the right technology vendor

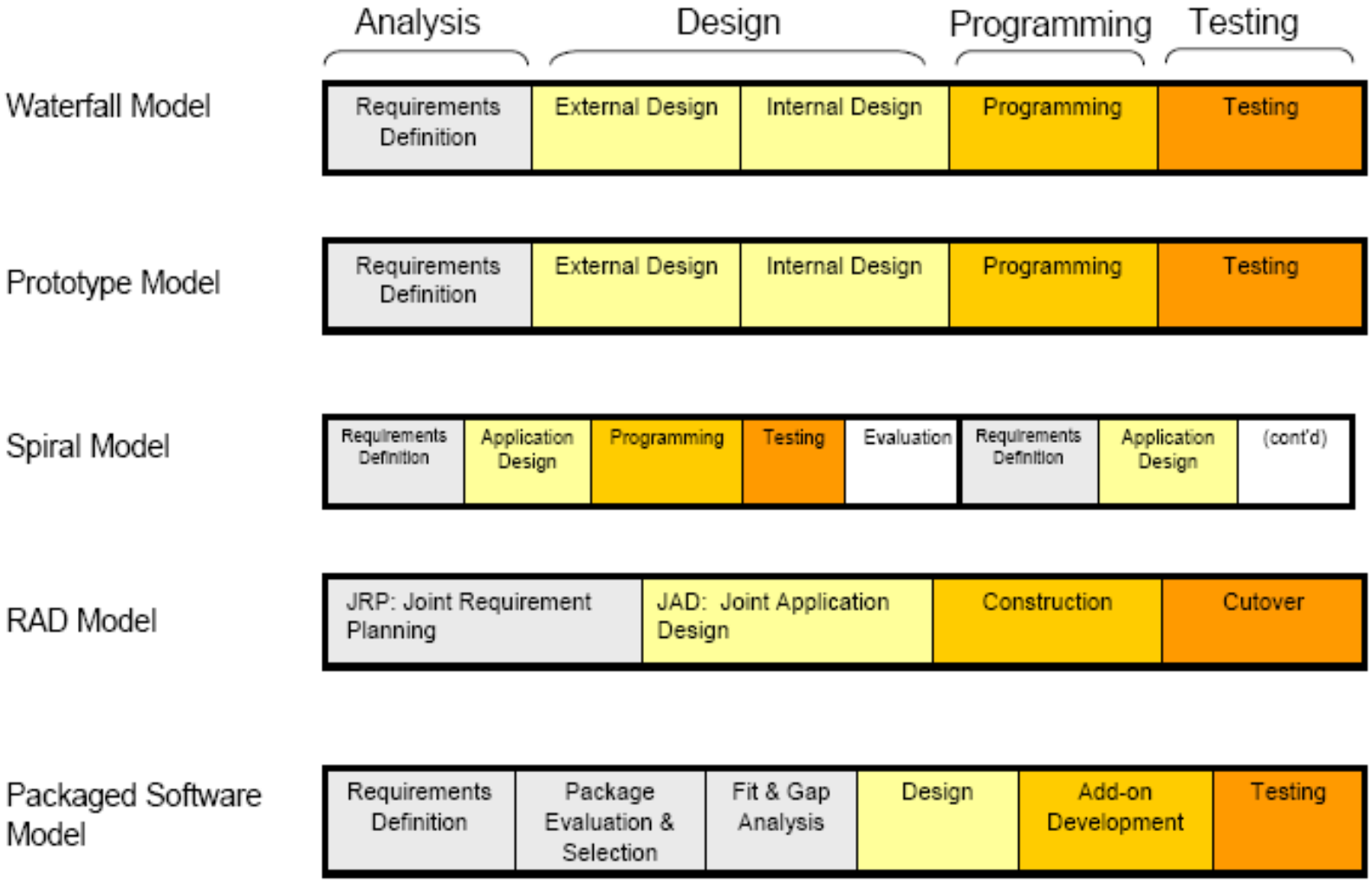


1. Go/No-Go/Go-Later Decision
2. Requirements Doc/Request for Proposal
3. Targeted List of Vendors/Solutions to Pursue
4. Vendor Proposal/ Vendor Demos/ Weighted Vendor Matrix
5. Final Vendor Selected & Contracted
6. On Time & On Budget Delivery of Expected Solution
7. Stable and Efficient technology solution

Systems Development Life Cycle (SDLC)
Life-Cycle Phases



System Development Methodology



CMMI Asia conference 2014-2015 organized by CMMI Institute

CMMI® Institute Conference China 2014

10-11 December 2014
Shenzhen, China
JW Marriott Hotel

More information

CMMI® Institute Conference EMEA 2015

26-27 March 2015
London, England

More information

CMMI® Institute Global Congress Seattle 2015

12-13 May 2015

Seattle, Washington, USA
The Westin Seattle Hotel

More information

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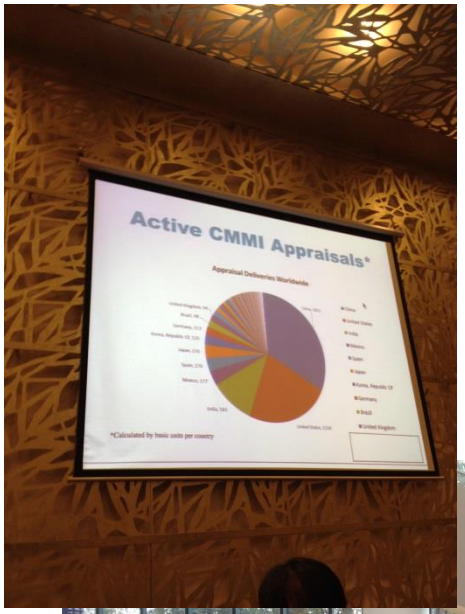


CMMI conference 2014-china

Case Study
For CMMI Development V1.3

CMMI Implementation Guideline & Roadmap

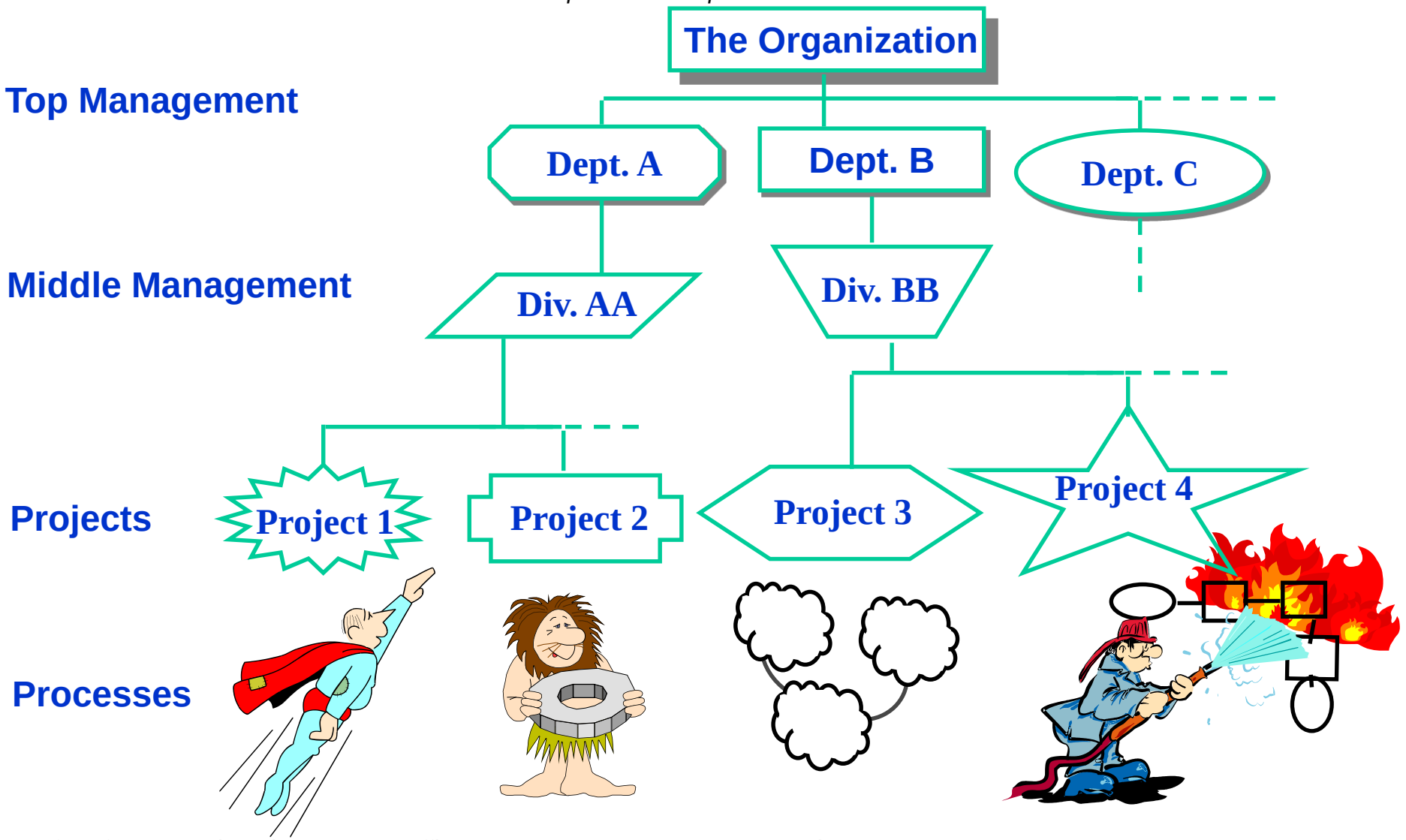
ลำดับ	กิจกรรม	ระยะเวลา
1	วินิจฉัยเบื้องต้น(Gap Analysis)	3 เดือน
2	จัดทำกระบวนการและเอกสารที่เกี่ยวข้อง(Process Defintion)	4-5 เดือน
3	นำกระบวนการไปใช้จริง	5-6 เดือน
	3.1 นำกระบวนการไปทดลองใช้ในโครงการนำร่อง (Pilot Project)	1 เดือน
	3.2 Mini Appraisal สำหรับโครงการนำร่องและปรับแก้กระบวนการให้เหมาะสม	0.5 เดือน
	3.3 นำกระบวนการไปใช้ในโครงการที่จะนำมาประเมินCMMI (Candidate Project Implementation)	3-4 เดือน
	3.4 Mini Appraisal สำหรับโครงการที่จะนำมาประเมินและปรับแก้กระบวนการให้เหมาะสม	0.5 เดือน
4	Mini Appraisal เพื่อตรวจสอบความพร้อมในการเข้าประเมินจริง(Appraisal Readiness Check)	0.5 เดือน
5	Format Appraisal	1 เดือน

หมายเหตุ : สำหรับ CMMI Level 3-5 จะมีกิจกรรมที่คล้ายกันแต่จะใช้ระยะเวลาดำเนินการนานกว่าขึ้นอยู่กับวุฒิภา วะของแต่ละบริษัทและจำนวน Process Area (PA) ที่เพิ่มขึ้นด้วย

Level 2 ใช้เวลาประมาณ 12 เดือน Level 3 ใช้เวลาประมาณ 16 เดือน Level 4 และ 5 ใช้เวลาประมาณ 24 เดือน

Sample Level 1 Organization

few processes in place



Ref: Software Engineering Process Office, SPAWAR System Center San Diego

Level 1: the “Initial” Level
Success depends on heroes

Good performance is possible - but

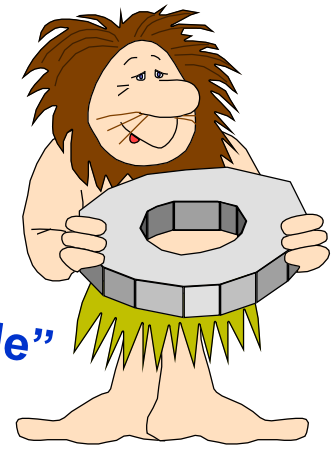
- Requirements often misunderstood, uncontrolled
- Schedules and budgets frequently missed
- Progress not measured
- Product content not tracked or controlled
- Engineering activities nonstandard, inconsistent
- Teams not coordinated, not trained
- Defects proliferate

“Schedules run everything”

“Just send in the Tiger Team”

“Processes limit my creativity”

“Processes don’t help my delivery schedule”



Ref: Software Engineering Process Office, SPAWAR System Center San Diego

Benefits of ML1

If you are the hero:

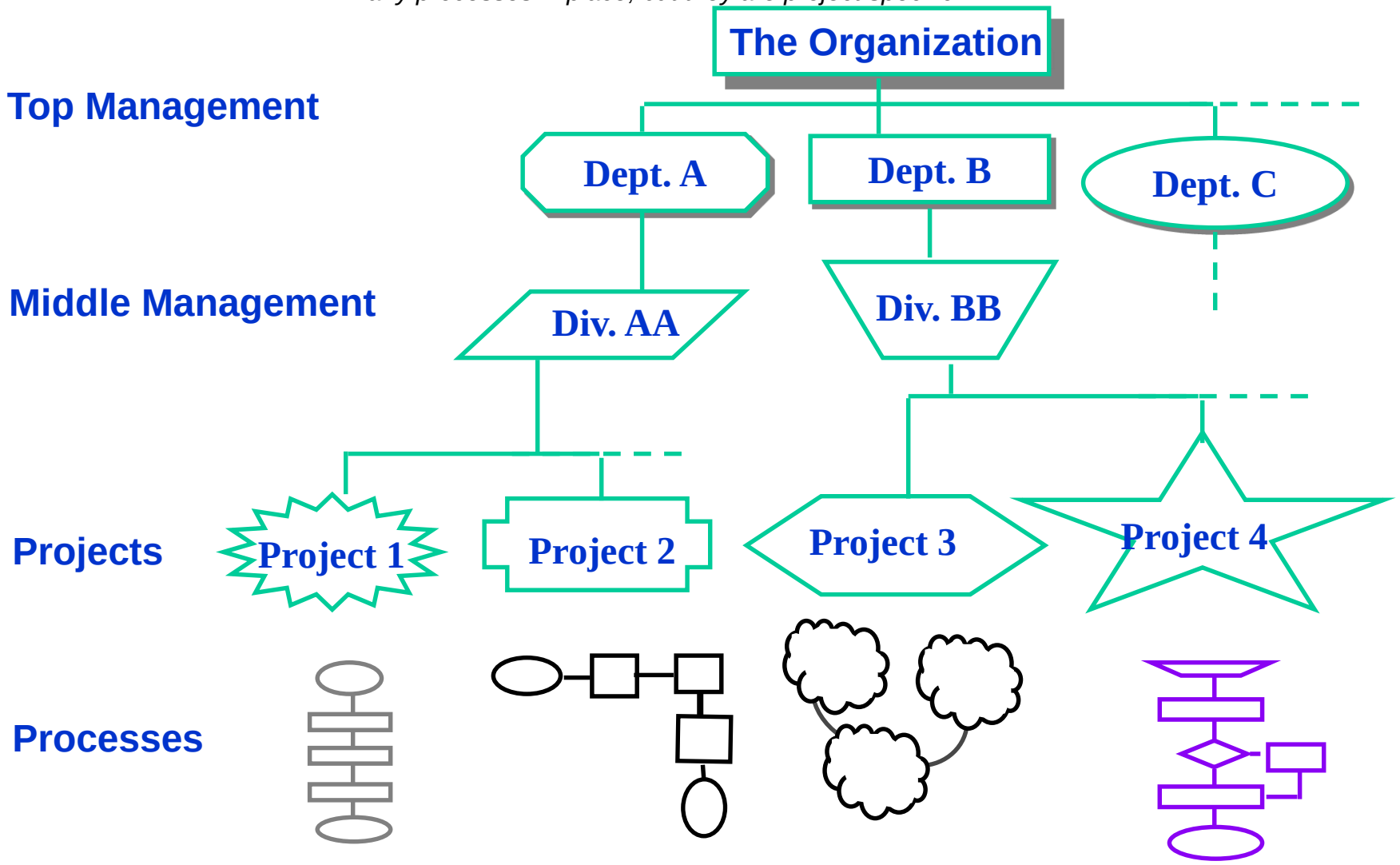
- ❑ you are worshiped as a deity
- ❑ in reality your manager reports to you
- ❑ constantly doing the impossible is addictive
- ❑ large crowds attend your funeral (pre-mature heart attack)

If you are not the hero:

- ❑ company buys most of your dinners (you love pizza)
- ❑ you can work any way you want
- ❑ you are not a guru, but you can get away with acting like one
- ❑ amidst the chaos no one notices your mistakes
- ❑ you are relieved of planning your weekends

Sample Level 2 Organization

many processes in place; but they are project-specific



Ref: Software Engineering Process Office, SPAWAR System Center San Diego

CMMI Level 2: the "Managed" Level - Establishing basic project management controls

7 Process Areas

DETERMINE REQUIREMENTS
- Baseline the product requirements – Requirements Management (REQM)

DOCUMENT PLANS
- Estimate project parameters,
- Develop plans and processes

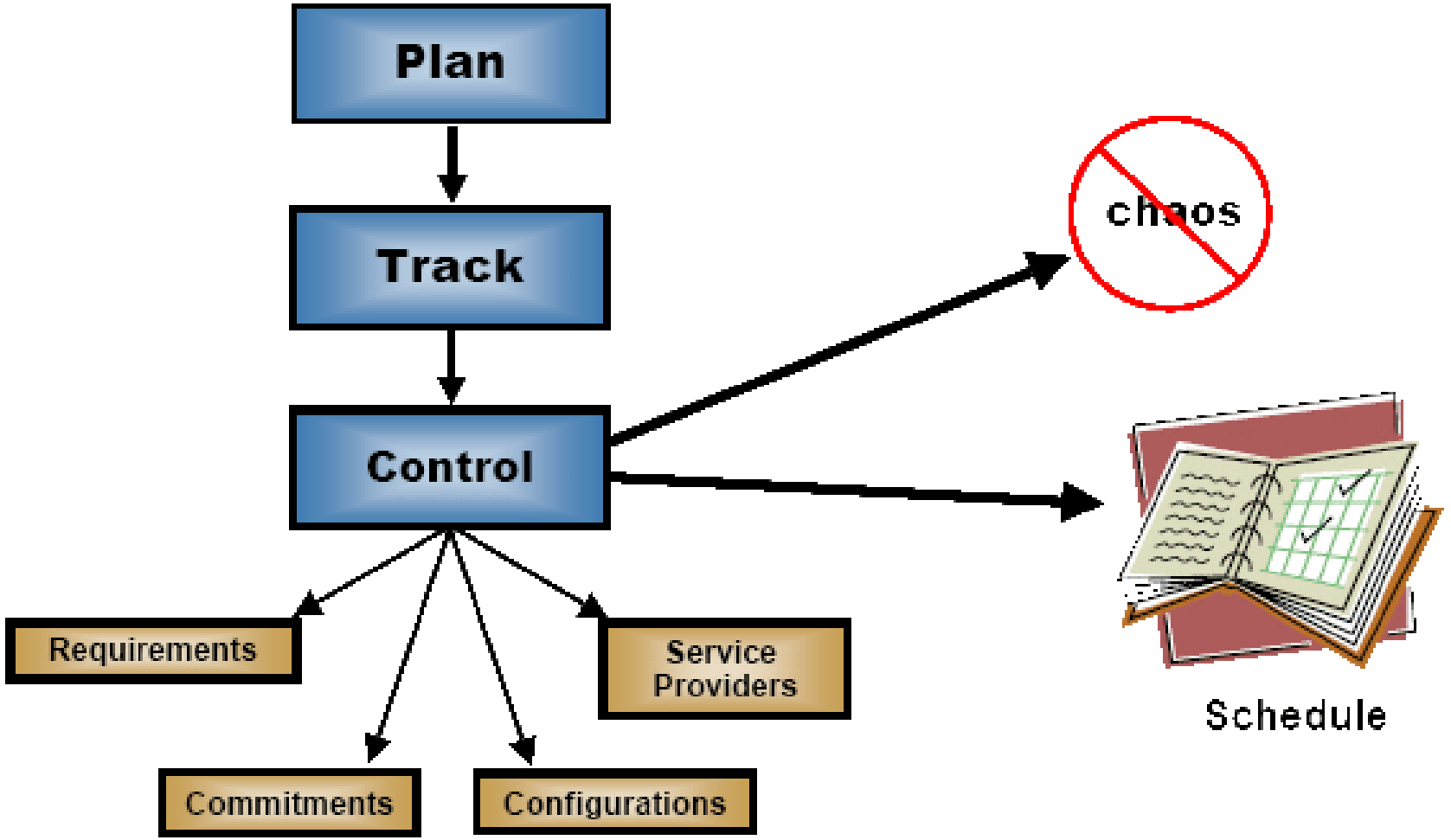
} Project Planning (PP)

TRACK PROGRESS
- Measure actual progress to enable timely corrective action – Project Monitoring and Control (PMC)
- Measure for mgmt. info needs – Measurement & Analysis (M&A)
- Verify adherence of processes and products to requirements – Process & Product Quality Assurance (PPQA)

CONTROL PRODUCTS
- Identify and control products, changes, problem reports – Configuration Management (CM)
- Select qualified suppliers / vendors; manage their activities – Supplier Agreement Management (SAM)

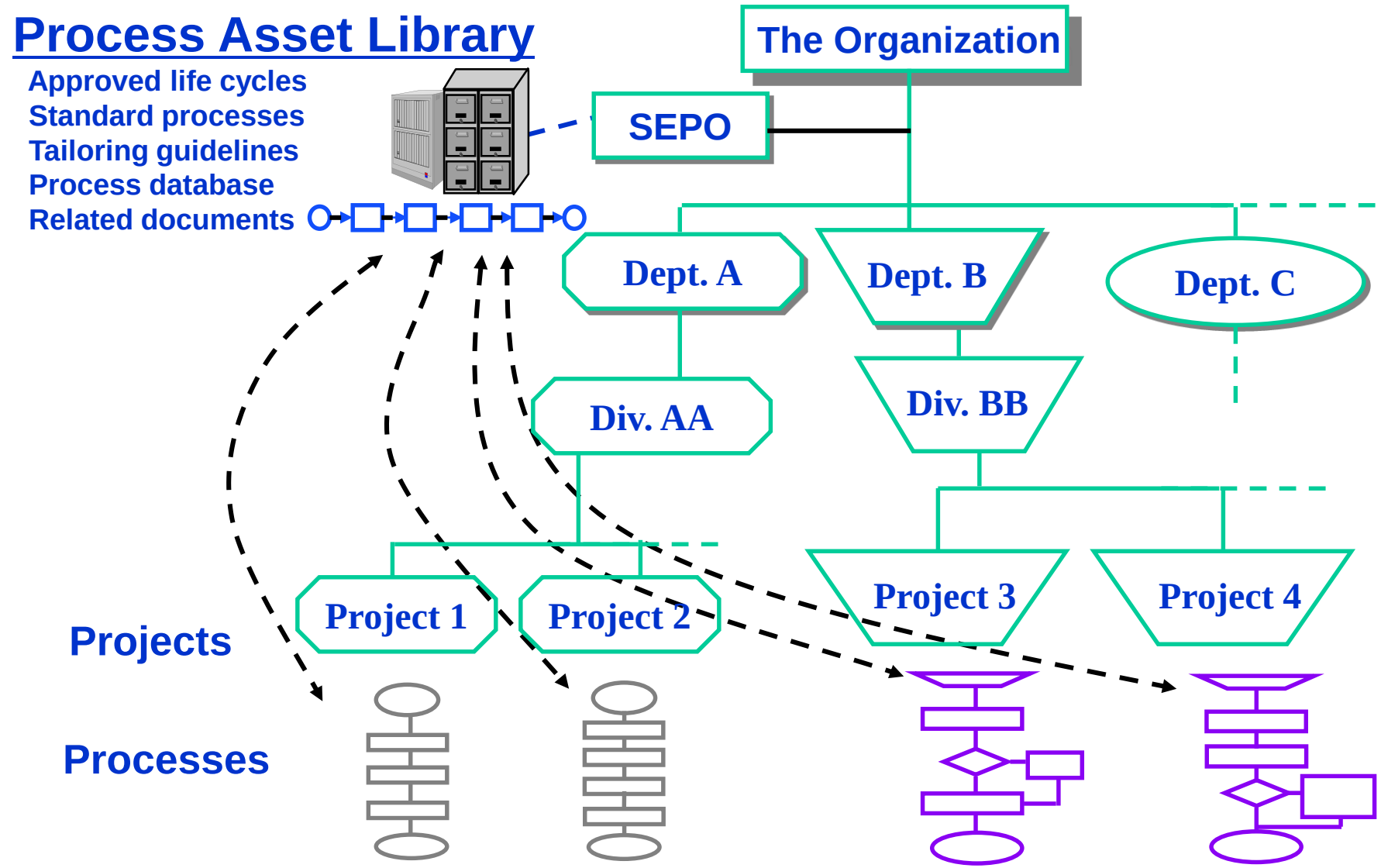
Ref: Software Engineering Process Office, SPAWAR System Center San Diego

ML2


Plan
Track
Control
chaos
Requirements
Service Providers
Commitments
Configurations
Schedule

Sample Level 3 Organization

processes based on organization's Process Asset Library (PAL)



Ref: Software Engineering Process Office, SPAWAR System Center San Diego

CMMI Level 3: the "Defined" Level - Standardizing the organization's process

11 Process Areas*

ENGINEER THE PRODUCT

- Clarify customer requirements
- Solve design requirements; develop implementation processes
- Assemble product components, deliver
- Ensure products meet requirements
- Ensure products fulfill intended use
- Analyze decisions systematically

– **Requirements Developmt (RD)**
– **Technical Solution (TS)**

– **Product Integration (PI)**
– **Verification (Ver)**
– **Validation (Val)**
– **Decision Analysis & Resolution (DAR)**

MANAGE THE PROJECT

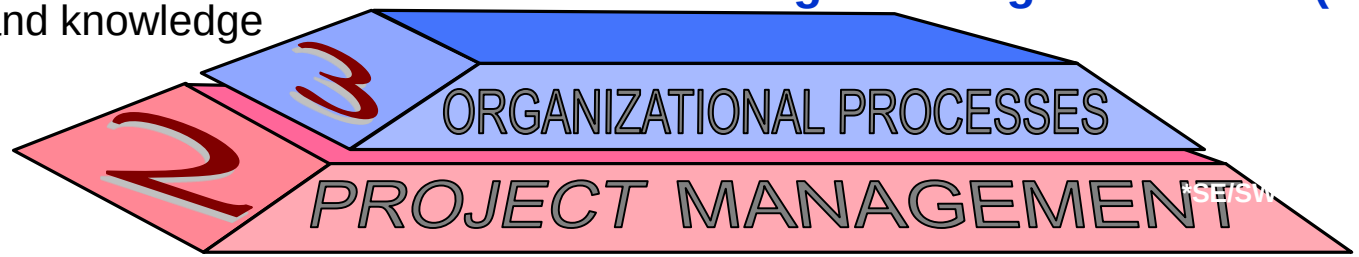
- Follow integrated, defined processes
- Identify and control potential problems

– **Integrated Project Mgmt (IPM)**
– **Risk Management (RSKM)**

PROVIDE ORG. INFRASTRUCTURE

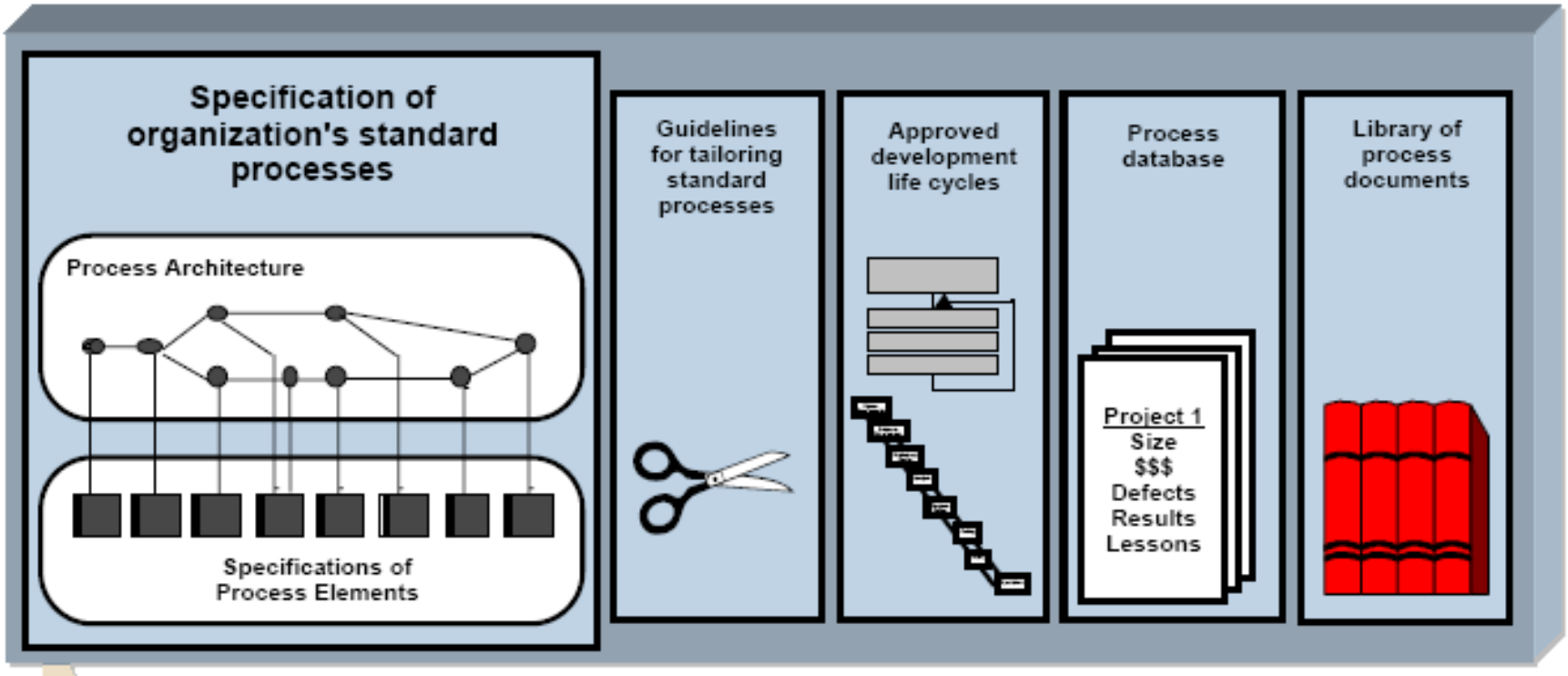
- Establish org. responsibility for PI
- Define the org's best practices
- Develop skills and knowledge

– **Org. Process Focus (OPF)**
– **Org. Process Definition (OPD)**
– **Org. Training (OT)**



Ref: Software Engineering Process Office, SPAWAR System Center San Diego

ML3



- best practices
- consistent work products
- comparable measurements
- transfer of learning

Cost
Function
Quality

Benefit ML3 -Managers

Organization supports managers

- ❑ processes already defined from best practices
- ❑ templates for planning and managing
- ❑ history from similar projects

Estimates are more accurate

- ❑ common measures across projects
- ❑ better negotiating position—data on a defined process

Cost, schedule, and functionality in control

Quality improves

- ❑ most defects detected before the start of integration test
- ❑ large reductions in defects delivered to customers

Benefit ML3 -Developers

Common foundation for professional work

- ❑ processes built from best practices
- ❑ well understood roles

Foundation for technology benefits

- ❑ more effective selection of tools
- ❑ trusted processes produce reusable components

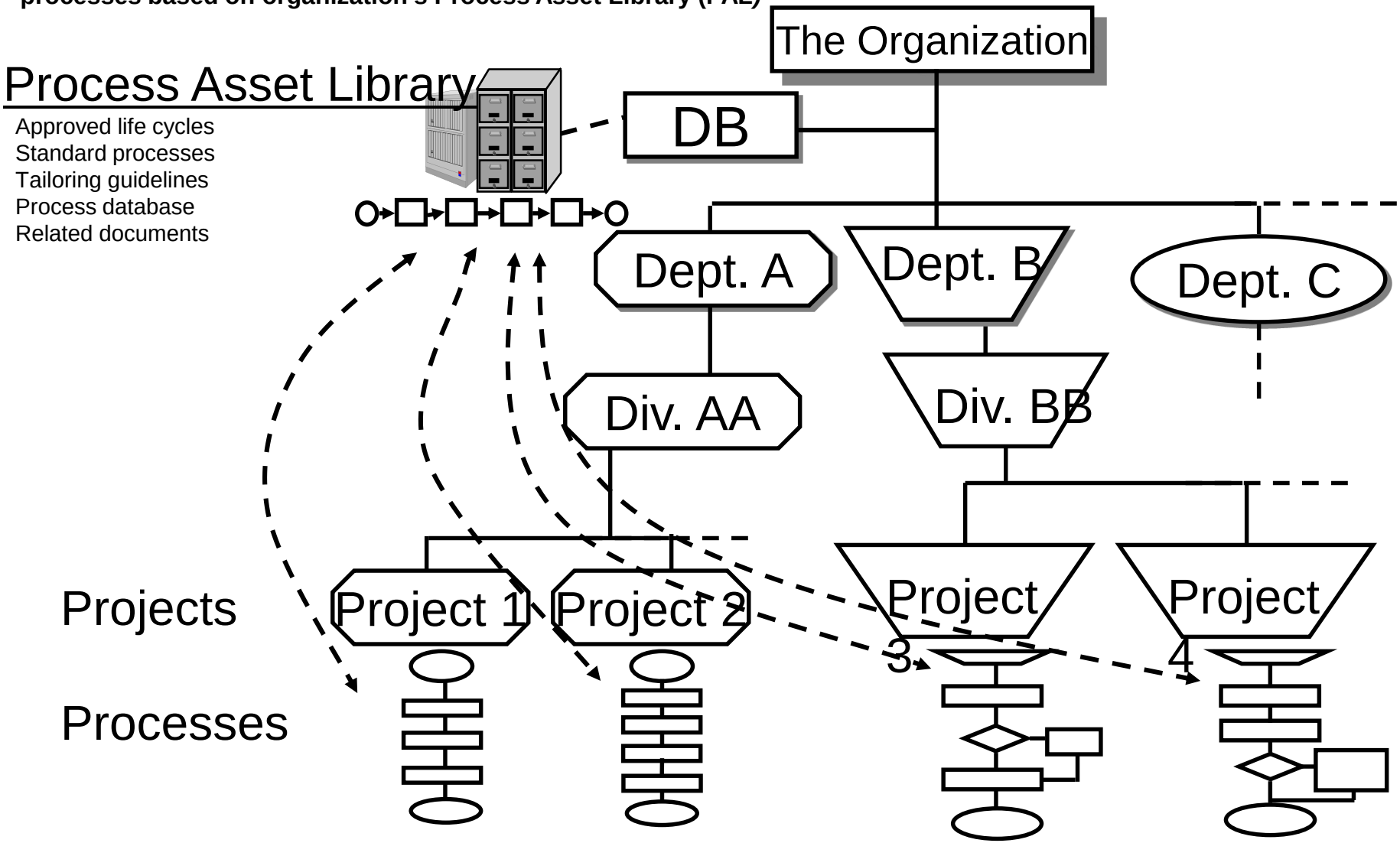
Transfer among projects is enhanced

- ❑ lessons learned
- ❑ people

A common engineering culture emerges

Sample Higher-Level Organization

processes based on organization's Process Asset Library (PAL)



CMMI Higher Maturity Level Concepts

OPTIMIZE PERFORMANCE

- **Identify and eliminate the cause of defects early**

ADOPT IMPROVEMENTS

- **Identify and deploy new tools and process improvements to meet needs and business objectives**

MANAGE PROJECTS QUANTITATIVELY

- Statistically manage the project's processes and sub-processes

MANAGE THE ORGANIZATION QUANTITATIVELY

- Understand process performance; quantitatively manage the organization's projects

Level 5 Process Areas

- **Causal Analysis and Resolution (CAR)**
- **Organizational Innovation and Deployment (OID)**

Level 4 Process Areas

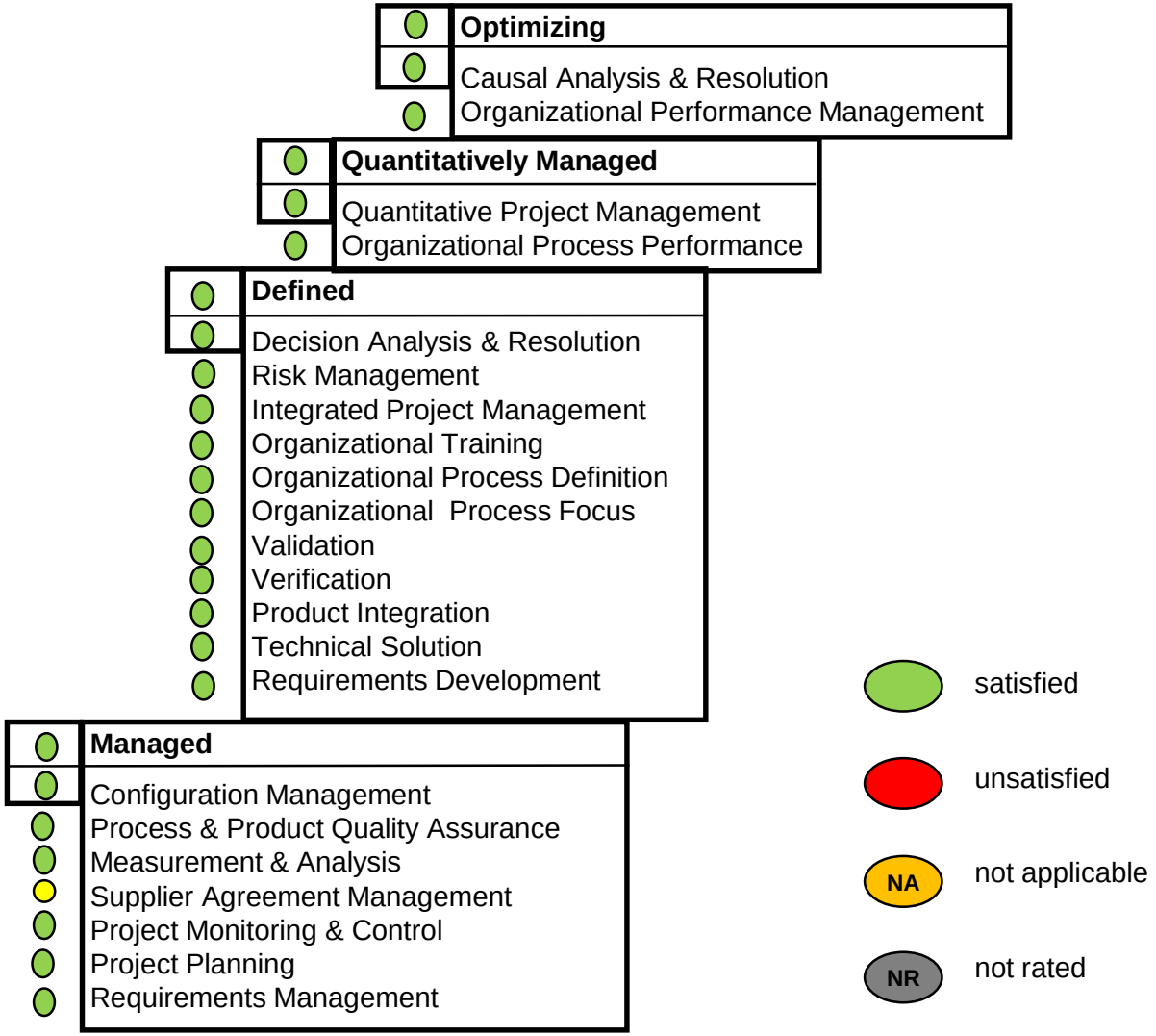
- **Quantitative Project Management (QPM)**
- **Organizational Process Performance (OPP)**

Ref: Software Engineering Process Office, SPAWAR System Center San Diego

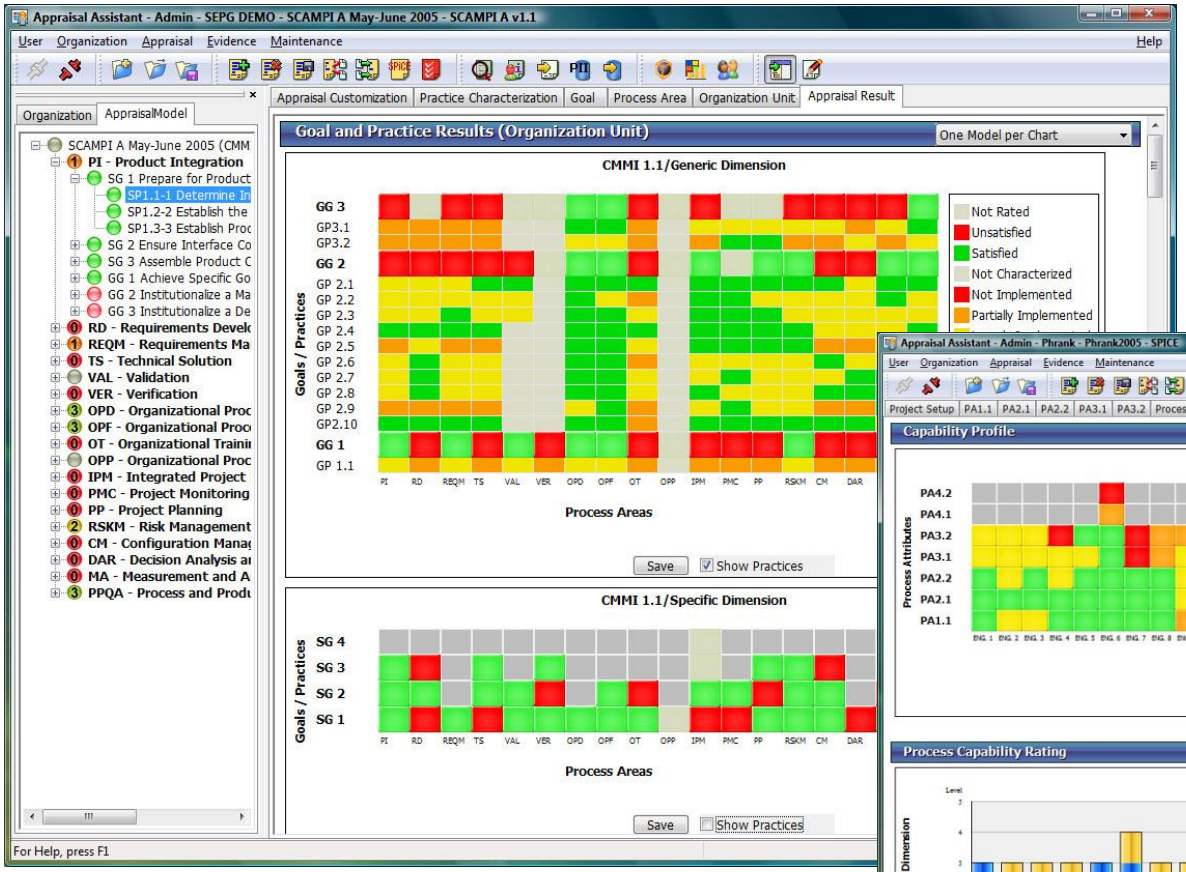
Process Area Profile (Staged)

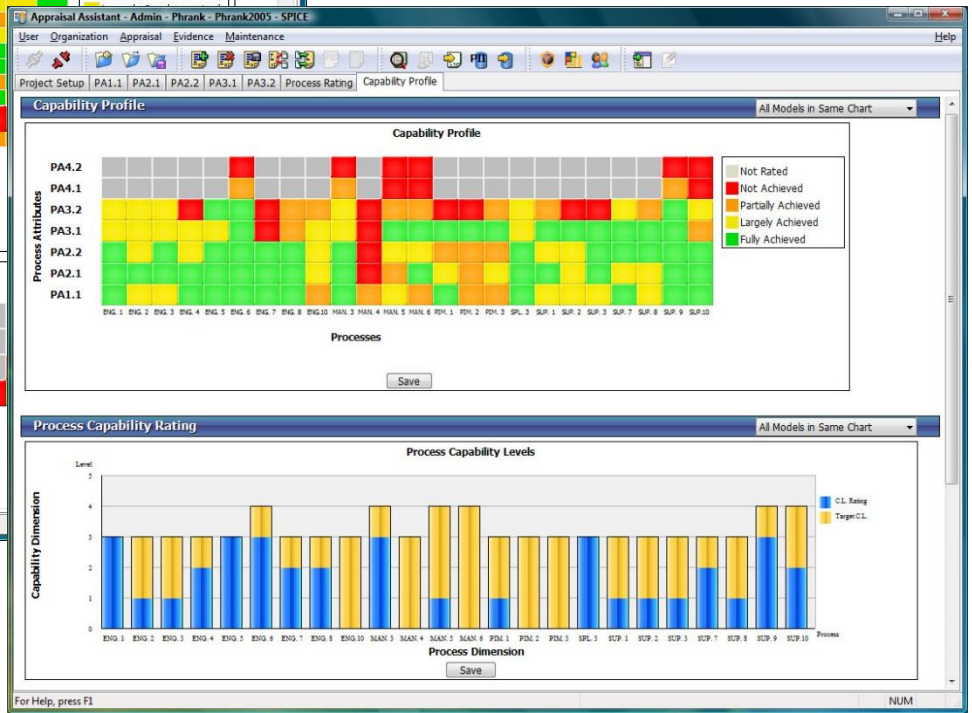
Maturity Level:

5



Software for Appraisal





5. CIO in ICT Standard

(ร่าง)

แผนแม่บทเทคโนโลยีสารสนเทศและการสื่อสาร (ฉบับที่ ๓) ของประเทศไทย

พ.ศ.๒๕๕๗-๒๕๖๑

(Draft) The Third Thailand Information and Communication Technology

Master Plan 2014-2018

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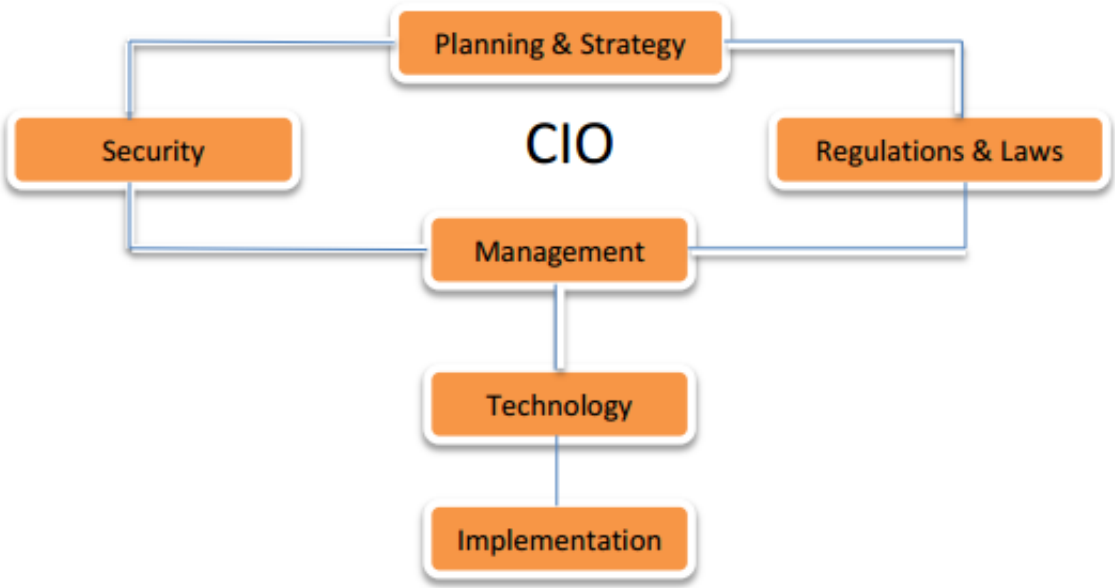

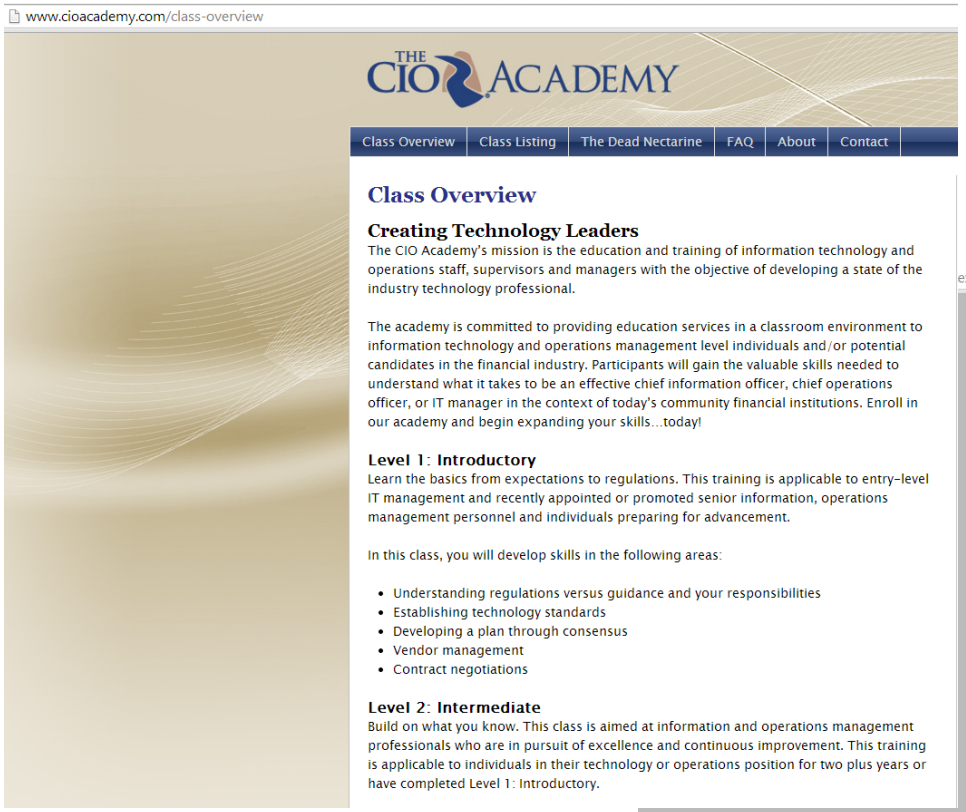

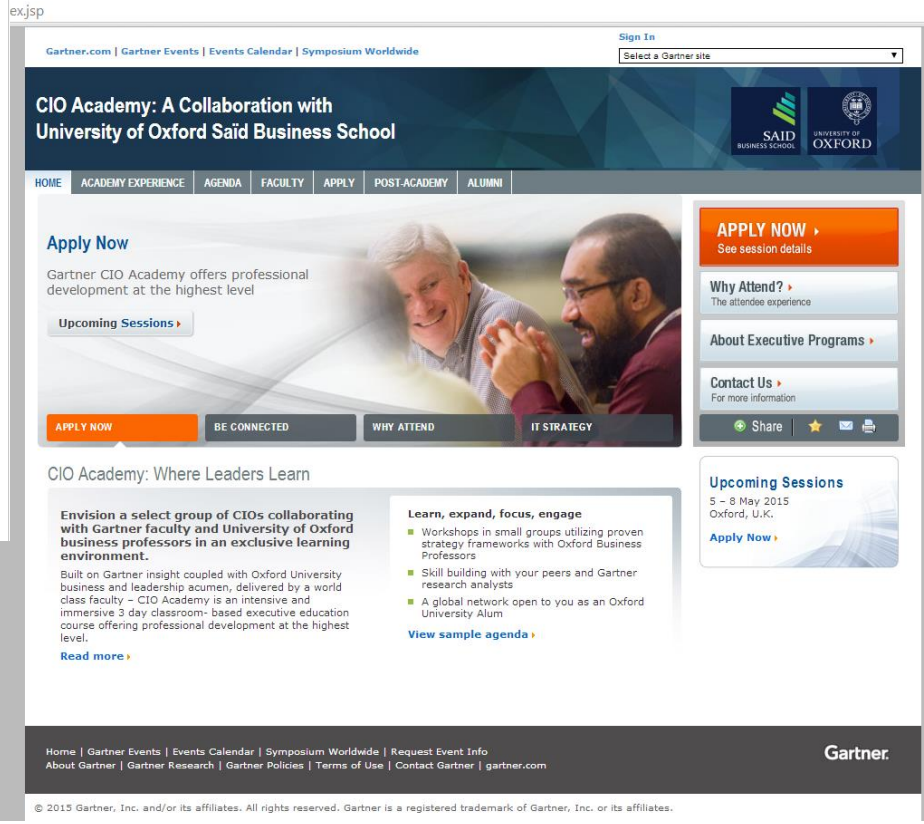

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U.S.-U.K. Digital Government Partnership
January 16th, 2015
Adam Hughes
Shaun Donovan is the Director of the White House Office of Management and Budget.
Megan Smith is the U.S. Chief Technology Officer in the White House Office of Science and Technology Policy.
Today, we are building on a long history of innovation and collaboration on digital technologies with the United Kingdom. The President and Prime Minister Cameron just announced a commitment to strengthen and expand the ongoing digital partnership between our two countries. Both countries have made real progress in working to improve how our governments use digital services to better serve citizens and businesses, and to build a stronger digital economy. We will expand our already existing collaborations in these areas as well as continue to support open data and open government initiatives for our own countries as well as for all countries.
U.S.-U.K. innovation and collaboration on digital technology dates back to WWII, when both countries were in need of extraordinary amounts of mathematical computation capacity. Teams from both countries did the seminal work that created modern digital computing. Breakthrough work included the United Kingdom's Bletchley Park code breakers, the ENIAC ballistics calculation advances in the United States, and many other groundbreaking programs in both countries.
The U.S. and U.K. have also been ongoing innovators of open government and open data; from very early releases and collaborations on weather and mapping data to full data portals now hosted at the United Kingdom's data.gov.uk, and data.gov in the United States, which host hundreds of thousands of government data sets released to the public. And for decades, United States and United Kingdom innovators have been at the forefront of including children in learning computer coding – from early work at Dartmouth to MIT Media Lab's Seymour Papert's seminal work on Logo in the 1970s and 80s, to the UK's BBC Micro from Acorn, a computer designed with an emphasis on education created during those same early years.
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Message from the President
Firstly I would like to thank all chapter members of IAC for honoring me to be President of IAC. From now on, I think, we will have to meet more often since I will need closer cooperation from all of you. Our mission we have resolved in Tokyo, Japan in late June 2006 will not be able to accomplish without chapter members' uniqueness.
Read More Details
About IAC
IAC or International Academy of CIO was founded in 2006 in Japan by co-founders included Japan, USA, Indonesia, Philippines, Switzerland and Thailand. Members and alliances are evolving to include economies in all regions such as China, Cambodia, Holland, India, Korea, Laos, Hong Kong, Macao, Peru, Singapore, South Africa, Taiwan, UK, Viet Nam, Italy, Russia and etc. Its missions includes, firstly to establish academic standards based on its research on ...
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On this the seventh anniversary of founding of the International Academy of CIO, I would like to briefly look back on the IAC's history and some of IA...
APEC-OECD Workshops were concluded successfully
The APEC workshop "Information Communication Technology (ICT) Applications for People with Special Needs
IAC Meeting and Activities During APEC-OECD Workshops
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Ministry of Technology, Innovation and Citizens' Services

CIO Council

The Chief Information Officer Council (CIO Council) of the Province of British Columbia offers strategic advice and recommendations regarding the management of information and technology (IM/IT). The council is chaired by Bette-Jo Hughes, Chief Information Officer (CIO) for the Province of British Columbia, and its members include ministry representatives.

Purpose

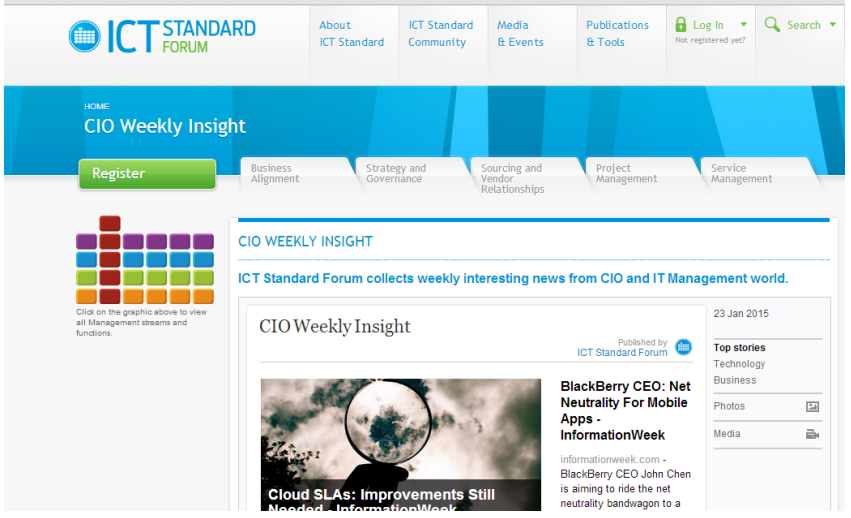
The purpose of the CIO Council is to support the Chief Information Officer's authority for standards setting, oversight and approvals for the Province's information and communications technology, including the implementation of the direction and evaluation measurements as described in Chapter 12 of the Core Policy and Procedures Manual. For more information about IM/IT policies, please visit our related legislation, policy and standards web pages.

Mandate

The CIO Council:

- Provides cross-government leadership and maximizes investments
- Provides structure and processes for related areas of accountability, authority and responsibility
- Provides an effective business and IM/IT environment
- Promotes the Ministry Chief Information Officer's as executive business and service leaders
- Provides advice on major IM/IT strategic planning and policy issues

https://www.ictstandard.org/weekly-insight



http://www.csc.com/cio_survey_2014_2015

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Leading Your Organisation's Digital Transformation

CIO SUMMIT 2015

Programme

CIO Summit 2015 Advisory Panel

The agenda and theme of the CIO Summit are drawn up in close consultation with a panel of Asia's leading enterprise IT leaders assembled by Executive Networks Media and IDC Asia/Pacific. In short, it's a programme for CIOs by CIOs.


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CIO, Allied World Assurance Company, Ltd


ALAIN BOEY
SVP, Head of Transformation Dept, Bank Simpanan Nasional


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CIO and Director, e-Strategies, BH Global


KOH KOK TIAN
IT Director, Borneo Motors, Inchcape


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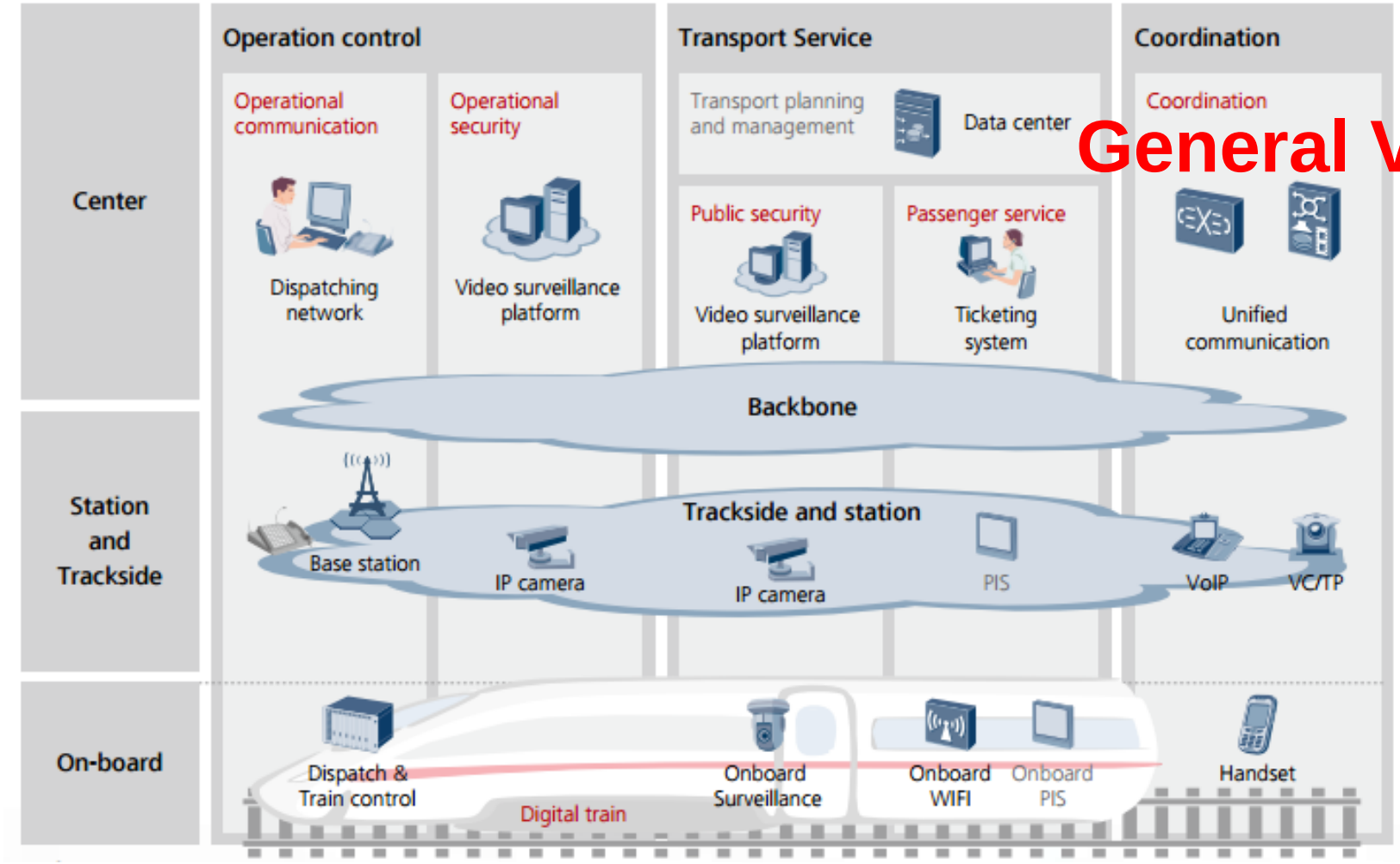
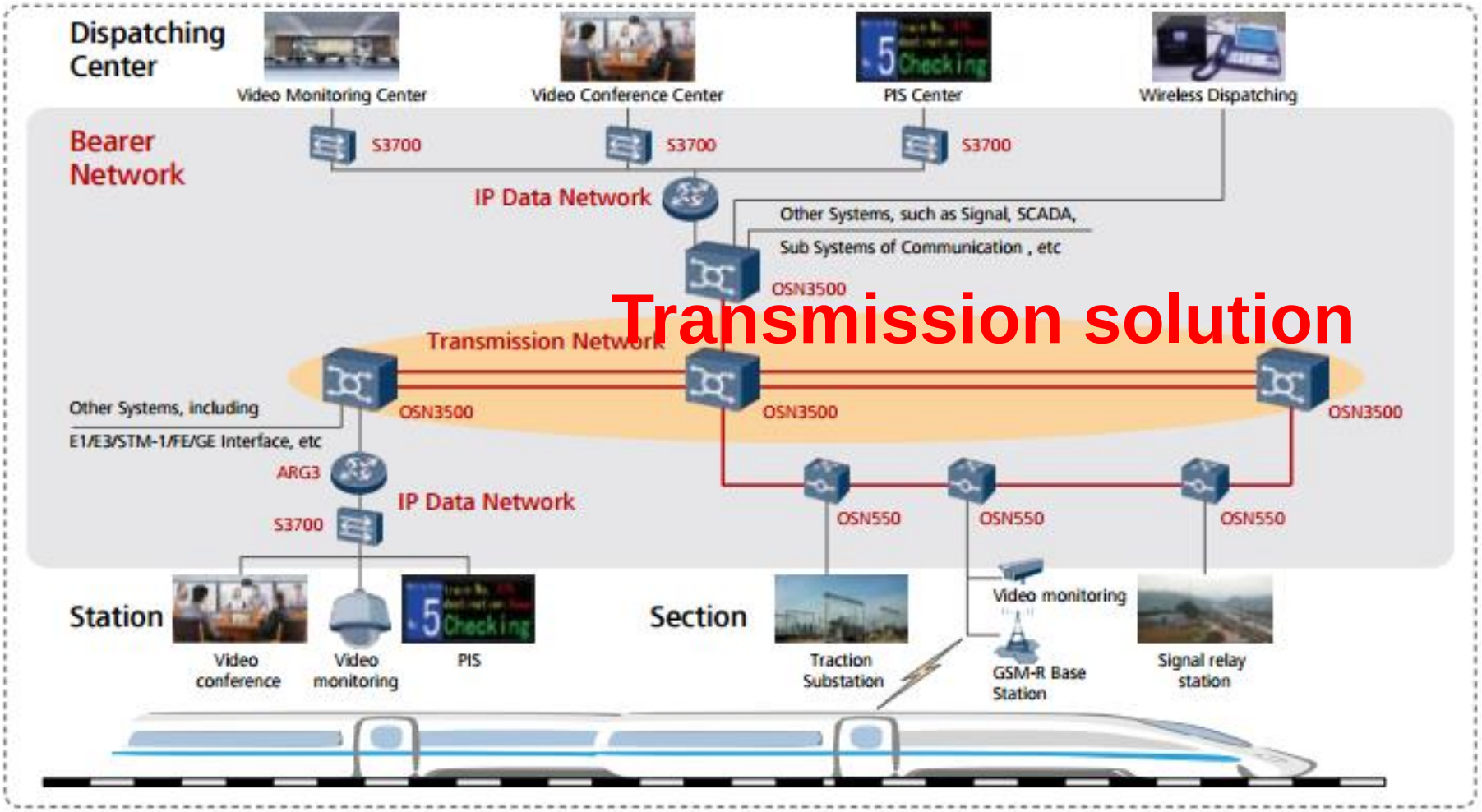
ICT Solution for Railway #1



Source: HuaWei Technologies Co.,Ltd. http://e.huawei.com/th/solutions/industries/railway

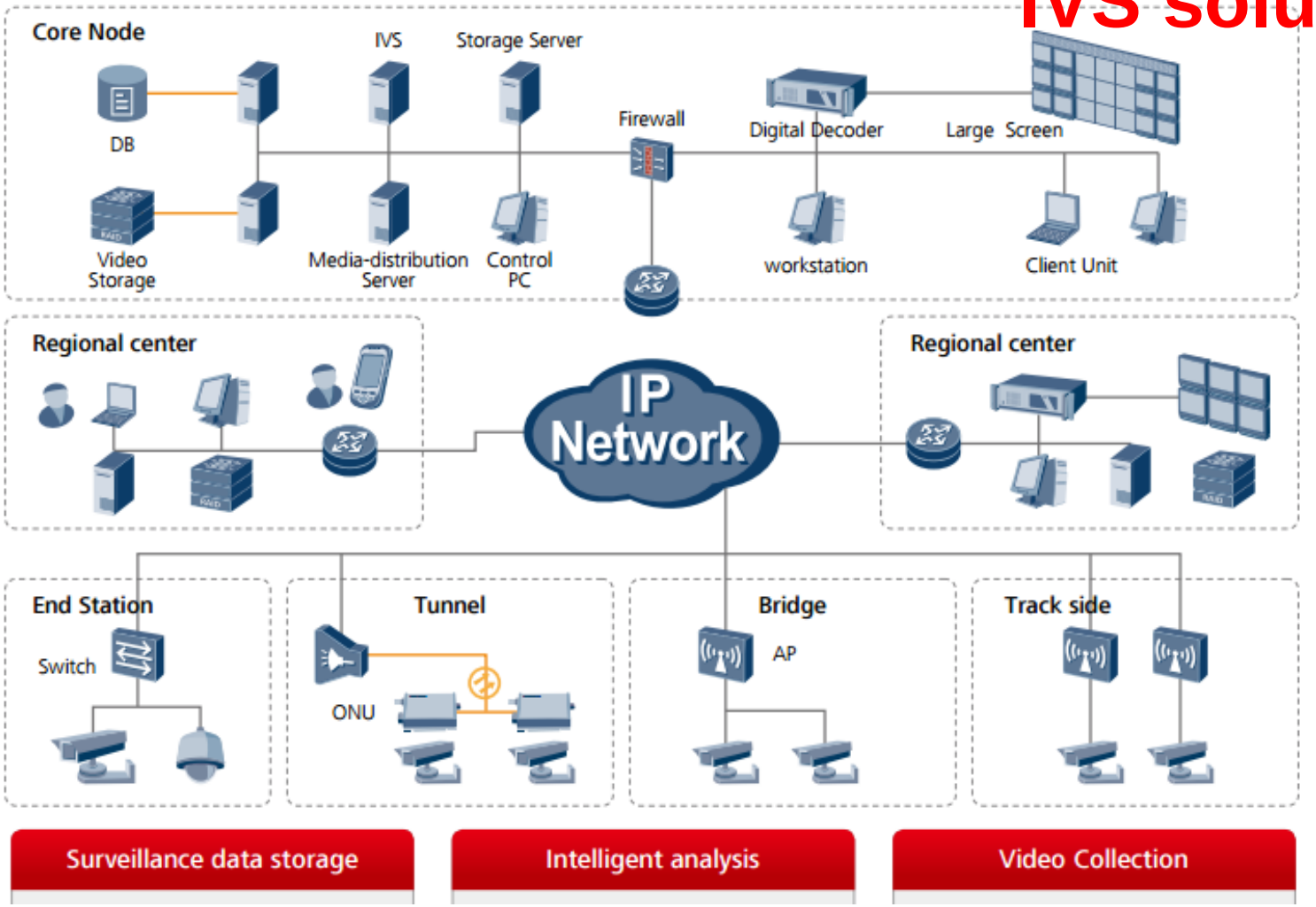
ICT Solution for Railway #2



Source: HuaWei Technologies Co.,Ltd. http://e.huawei.com/th/solutions/industries/railway

ICT Solution for Railway #3

IVS solution



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ICT Project Management
(บริหารจัดการโครงการด้าน ICT: กรณีศึกษา)

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