USQ AUSTRALIA

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Integration of Service Management with CMMI ® and SPICE

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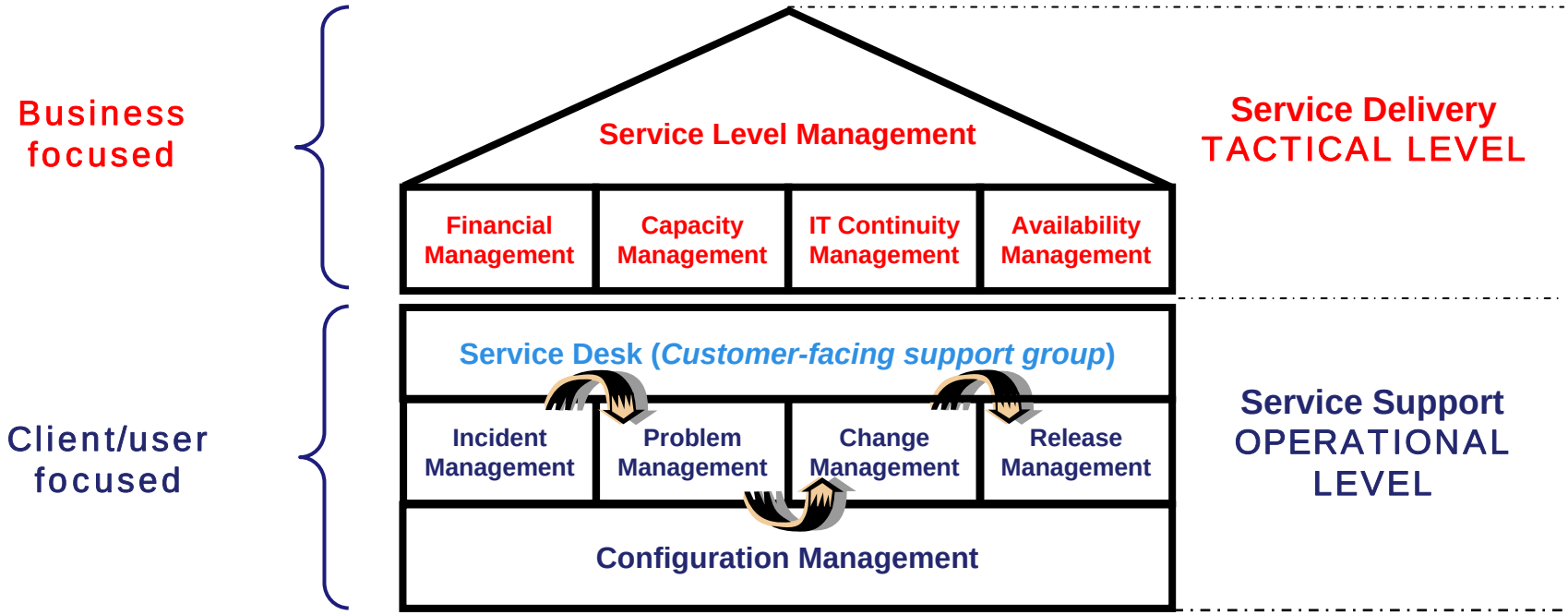
Agenda

- IT Service Management standards
- ITIL – IT Infrastructure Library
- ISO/IEC 20000
- ISO/IEC 15504 – Spice
- CMMI-SVC ®
- Conclusion
- Questions

ITIL in a Nutshell (OGC 2005)

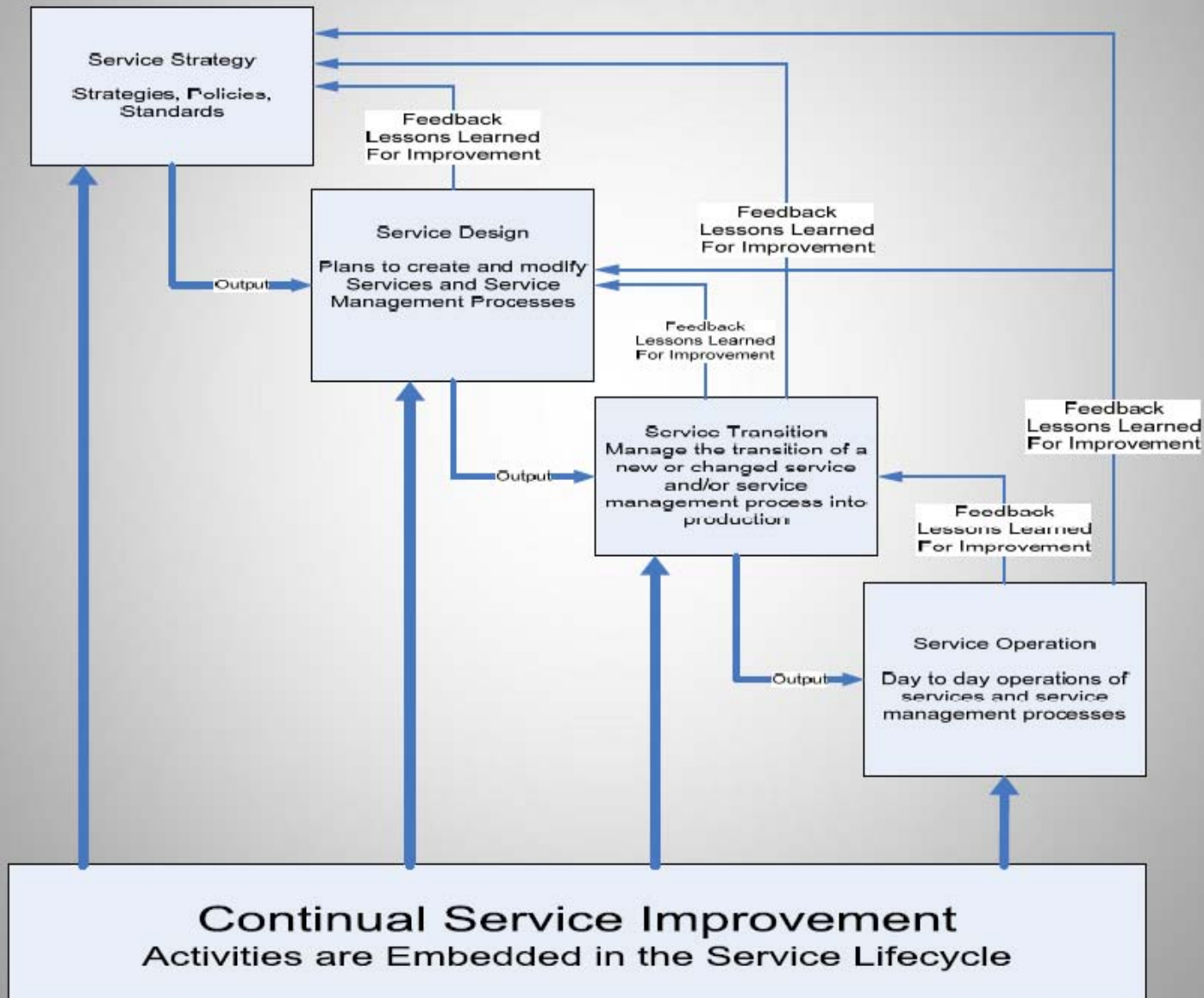
- **IT I**nfrastructure **L**ibrary (ITIL) was developed by UK's Office of Government Commerce (OGC) to provide a set of comprehensive and cohesive set of templates and best practices for core IT operational processes
- Defines quality as "matched to business needs and user requirements as these evolve"
- Core of ITIL comprises: 6 service support processes + 5 service delivery processes

Core ITIL Components v.2



itSMF International
The IT Service Management Forum

Non-linear process



OGC, ITIL, itSMF, training providers, exam institutes

OGC
Office of Government Commerce

ITIL

itSMF AUSTRALIA

Examination institutes*

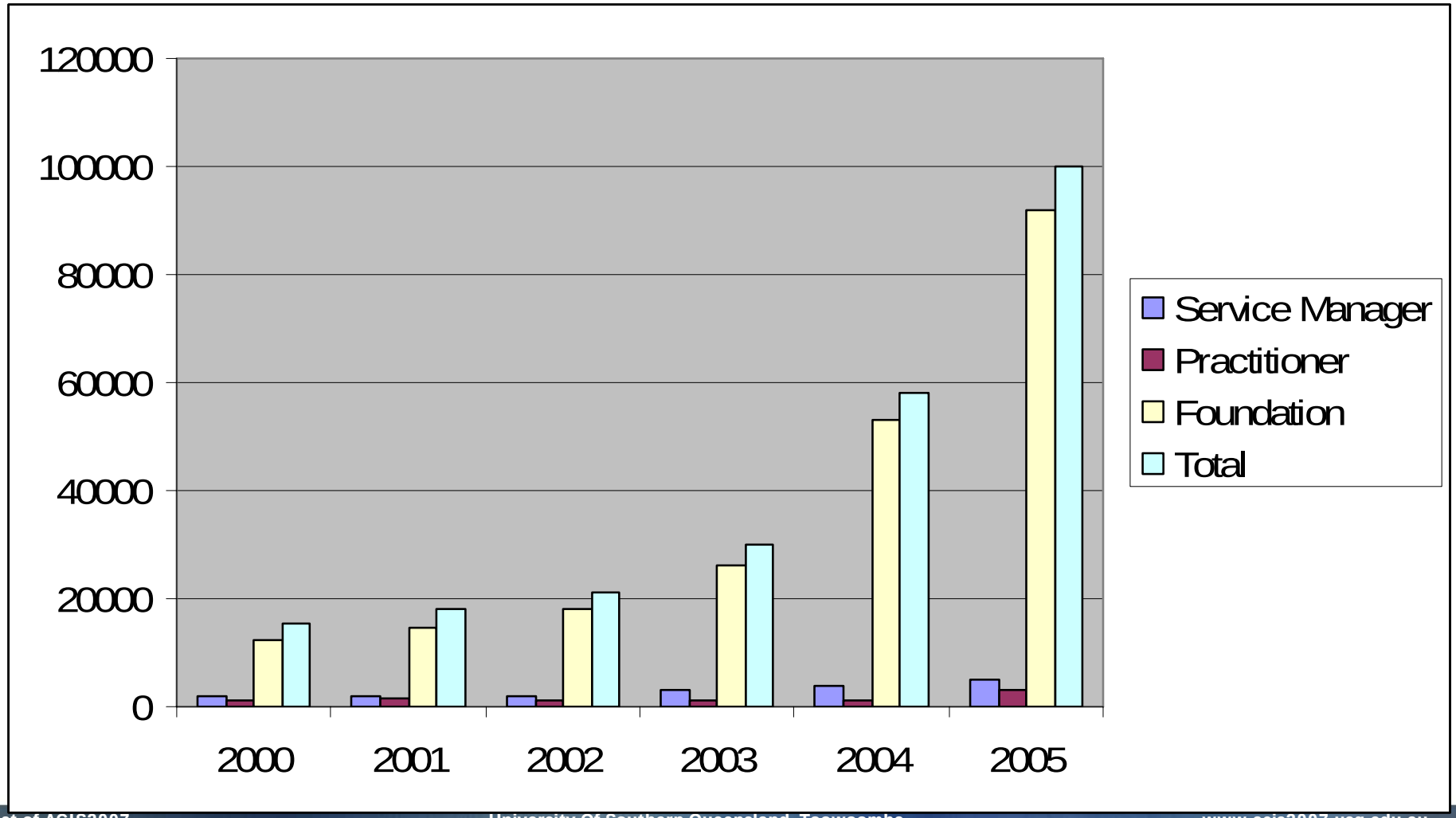
exin

iseb

Accredited course providers

* from July 2007, exam institutes licensed through APM Group

Demand for training – worldwide Exin

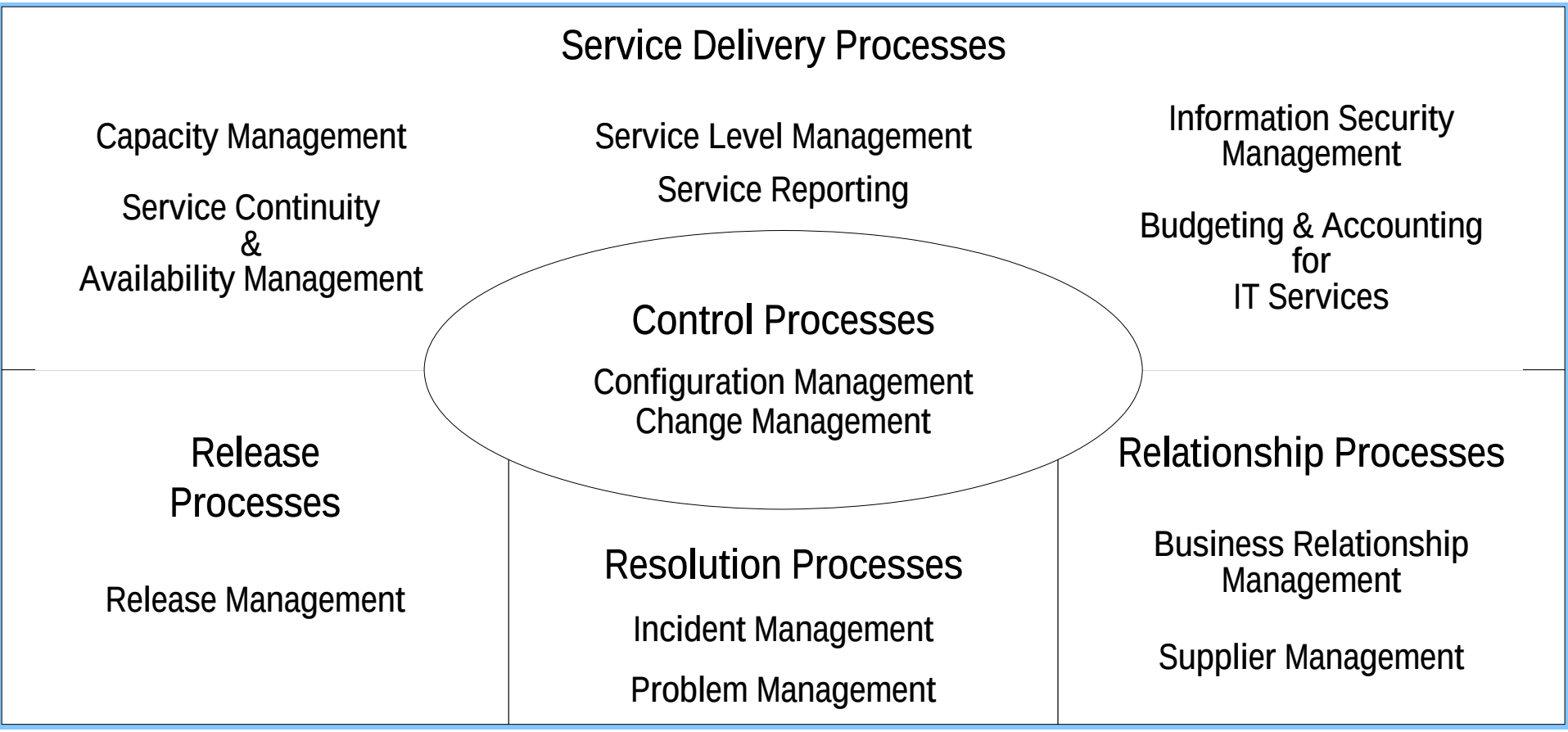


Demand for ITIL qualified staff

seek.com.au

- 771 Australian jobs requesting ITIL skills posted within the last 30 days
- Help desk/support, project management, business analysis, software engineering, networking, and training
- May 2004: Seek listed 25 jobs with ITIL skills

Components of ISO/IEC 20000 (ISO/IEC 2005)



Organisations in ISO/IEC 20000 certification

ISO/IEC 20000

ISO International Organization for Standardization

audit

UKAS UNITED KINGDOM ACCREDITATION SERVICE

JAS-ANZ

accredit

National Accreditation Bodies

Conformity Assessment Body (CAB)

AIDA = ITIL + ISO 15504 (AIDA Project 2005)

- Assessment and Improvement integrateD Approach (AIDA) - Beatrix Barafort and her team at the Henri Tudor Research Institute in Luxembourg
- Developed SPICE-compliant PRM and PAM based on ITIL
- Includes Primary Life Cycle process descriptions
  - Service Support Group
    - incident management, problem management, configuration management, change management, release management
  - Service Delivery Group
    - Service level management, IT finance management, capacity management, IT service continuity management, availability management

ISO/IEC 20000 + ISO/IEC 15504

- New work item proposals - June 2007
  - JTC 1/SC7 WG25
  - ISO/IEC 15504-8: an exemplar process assessment model for IT service management
  - ISO/IEC 20000-4: process reference model

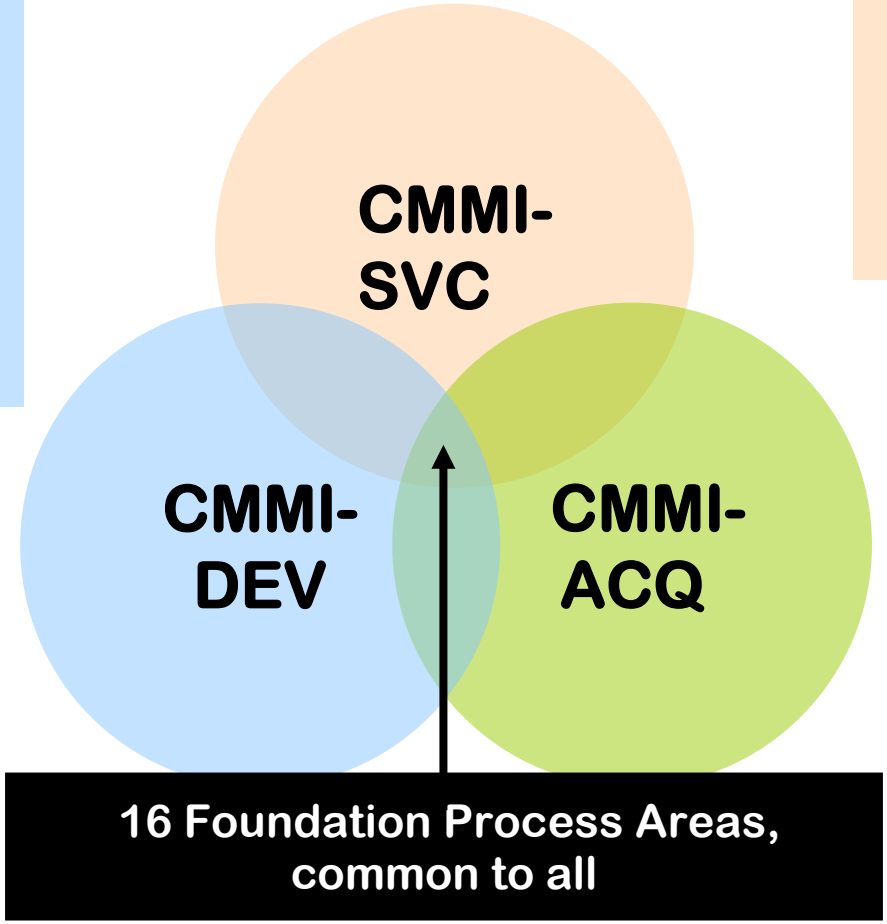
CMMI + ITIL (Kopcho 2006)

- Capgemini case study/presentation
- Mapped ITIL process to CMMI
- ‘With CMMI describing our process framework (the "what") and ITIL as the basis of our best practices (the "how"), we were able to:
  - Achieve CMMI Maturity Level 2 just nine months after the initiation of the improvement program
  - Address the needs of developers, support staff, and managers within the same broad lifecycle framework
  - Lay the groundwork for accelerated future process improvement and service delivery optimization’

CMMI Constellations (Hollenbach & Buteau 2006)

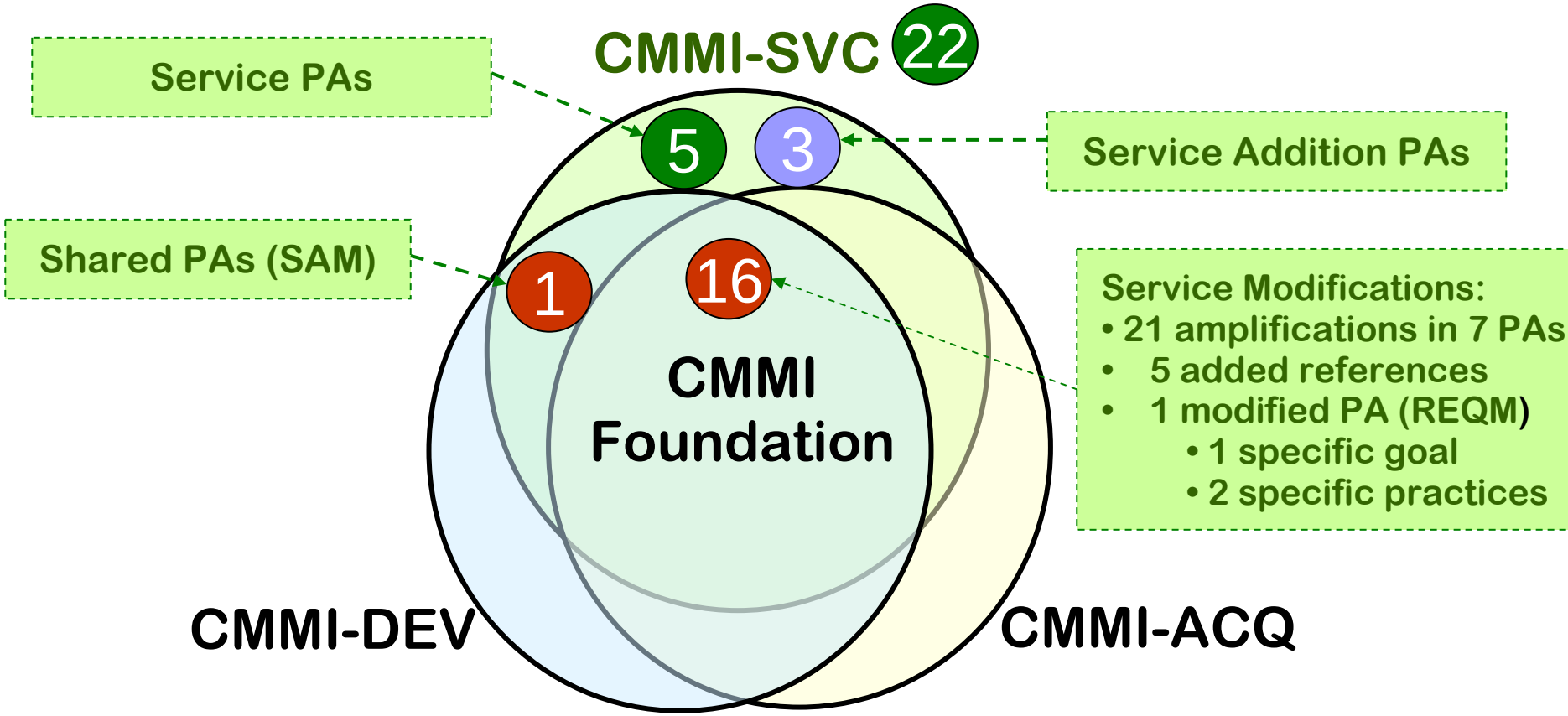
CMMI-DEV provides guidance for measuring, monitoring and managing development processes

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



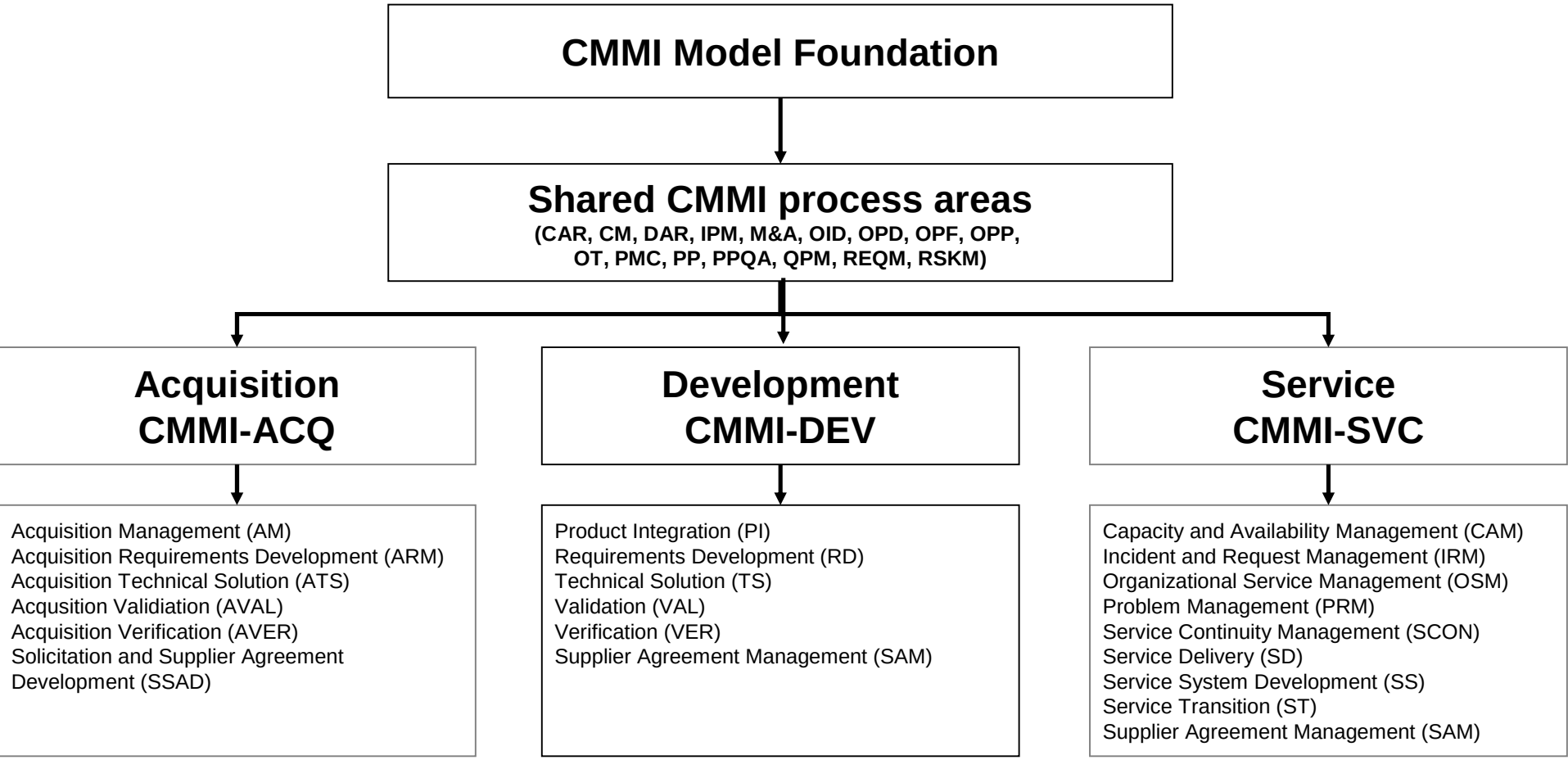
CMMI-ACQ provides guidance for enabling informed and decisive acquisition leadership

CMMI-SVC Process Areas (Hollenbach & Buteau 2006)



CMMI-SVC: 22 PAs + 3 Optional PAs

Constellations and process areas (Malzahn 2007-8)



CMMI for Services categories

- Process management
  - Organisational service management*
- Project management
  - Capacity and availability management
  - Service continuity*
- Service establishment & delivery
  - Incident and request management
  - Service delivery
  - Service system development*
  - Service transition
- Support
  - Problem management

Decision: CMMI SVC or ISO/IEC 20000?

- ITIL has strong support in Australia and Europe and adoption is growing in the USA
  - Fostered by IT Service Management Forum – itSMF
  - Demand for ITIL skills is growing - evidenced by job specs and increased training for individuals
  - Mature in terms of training courses, documentation and support tools
- ISO/IEC 20000 will shift the emphasis from certification of individuals (ITIL) to organisation audit and certification
- As an international standard, ISO/IEC 20000 is easily accessible to organisations, consultants, …

Comparison ITIL/CMMI Adoption (Cater-Steel et al.)

Survey results: itSMF National Conference	Starting	Partially	Largely	Fully	TOTAL
2005					
ITIL	26	64	17	3	110
CMMI	10	12	0	1	23
2006					
ITIL	21	39	17	2	79
CMMI	4	2	2	0	8

Decision: CMMI SVC or ISO/IEC 20000?

- CMMI-DEV process assets can be reused in adopting CMMI-SVC
- Substantial overlap between CMMI-SVC process areas and ISO/IEC 20000 processes
- CMMI-SCV will be supported by SEI Partners (SEI 2007)
  - 226 Partners offer Introduction to CMMI
  - 248 Partners offer SCAMPI appraisal services
  - 54,460 Introduction to CMMI courses since 2000
- CMMI-SVC initial draft distributed March 2007 for comment. Scheduled for release ??

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- For Aileen' publications: http://eprints.usq.edu.au/