IT Services Qualification Center and the eServices Capability Model

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Presentation Overview

- Background

  - What is $\mathbf{IT^{sqc}}$?

  - eServices Capability Model $\mathbf{e^{scm}}$

- Capability determination and Certification

  - Evaluations and Appraisals

  - Benefits

- Carnegie Mellon's role

What is the IT^{sqc}?

Information Technology Services Qualification Center is in Carnegie Mellon's School of Computer Science.

Mission: address the emerging need for capability models and qualification methods for organizations involved in the evolving Internet economy.

Capability models: developed to enable organizations to appraise and improve their practices to provide consistently high quality services in the Internet economy.

Three areas: (1) eServices Capability Model (e^{scm}), (2) eCommerce Capability Model, and (3) eSecurity.

IT^{sqc} and Carnegie Mellon

President

Provost

Graduate School of Industrial Administration	School of Computer Science	Heinz School of Public Policy and Management	Software Engineering Institute

Center for Digital Information and Commerce

eCommerce Institute

Institute for Software Research, International (ISRI)

IT Services Qualification Center

CIO Institute

SWIC

Capability Maturity Modeling

Carnegie Mellon Institute for Survivable Systems

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What is e^{scm} ?

Capability model for IT-enabled outsourcing services (IT-eos) that :

- Contains a set of practices for IT-eos providers that

  - address the entire outsourcing process

  - encourage IT-eos providers to innovate

- Provides a tool for clients to evaluate IT-eos providers consistently and comparably

- Provides risk mitigating information to clients about the capabilities of IT-eos providers

- Developed by multi-cultural team[1] with ISO, CMM and quality management backgrounds

(1)Team members are: Elaine Hyder, Bennet Kumar, Vivek Mahendra, Jane Siegel, Rajesh Gupta, Habeeb Mahaboob, Palanivelrajan Subramanian (PVR)

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e^scm Business Case

IT-enabled outsourcing services sector emergence

- Expected annual growth in outsourcing is 25% [1]

- Will exceed $500 billion by 2004 [2]

- Will grow 15 fold by 2008 [3]

- Will exceed 1 trillion dollars in next 20 years [3]

Sources: (1) Dun and Bradstreet report, 2000, (2) Goldman Sachs Asian Technology Report, 2000, (3) McKinsey and Co., 1999.

Need for e^{scm}

Limitations of existing models and standards

Reviewed ISO 9001, SW-CMM, People CMM,
Malcolm Baldrige National Quality Award

These quality models:

- Do not address the entire outsourcing process

- Do not readily provide methods to appraise capabilities and provide guidance for improvement in IT-eos

- Emphasize a level of structure that is either too flexible or too rigid

Comparative model coverage
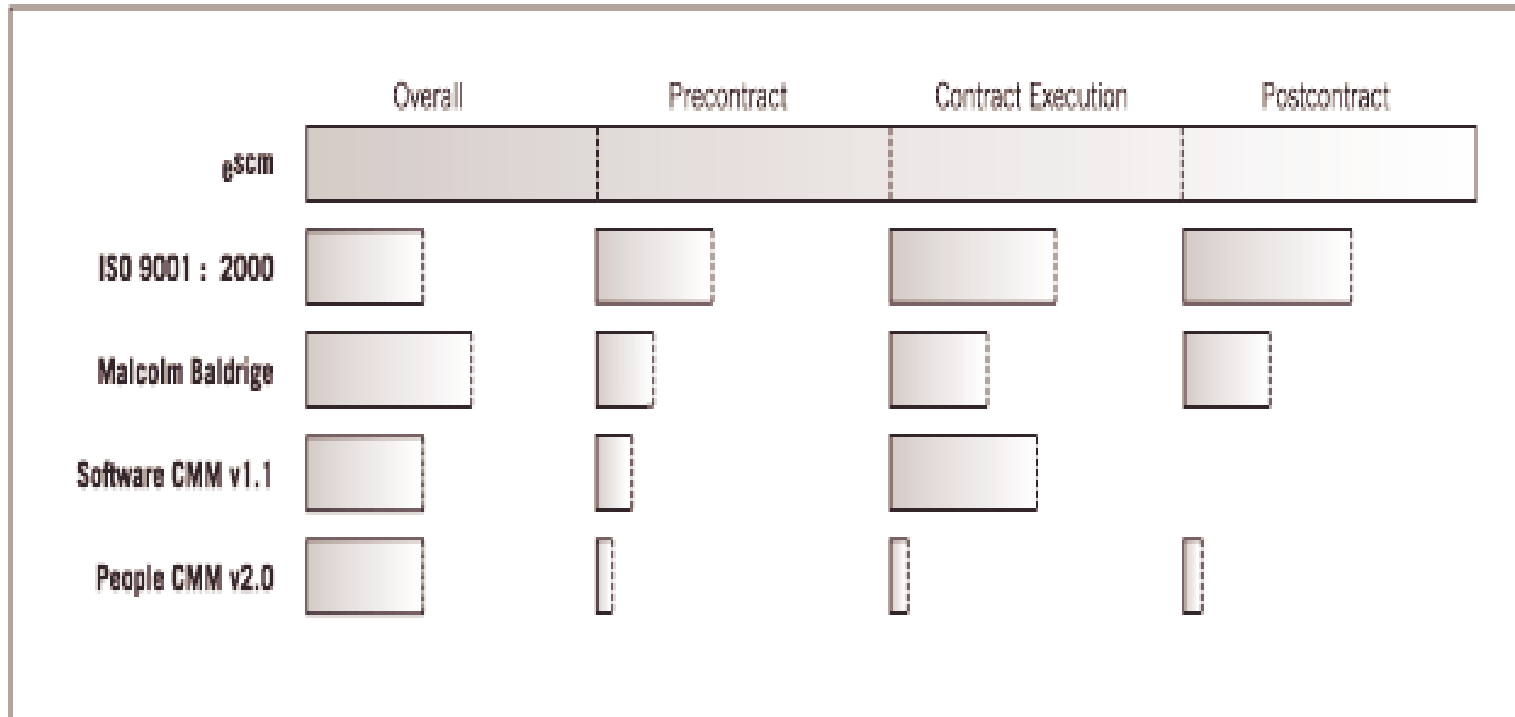
e^{scm} Framework

Organizational Elements

Outsourcing Process

Phase-specific practices

Organizational Management	People	Business Operations	Technology	Knowledge Management
	Overall practices			

Pre-Contract Phase

Contract Execution Phase

Post-Contract Phase

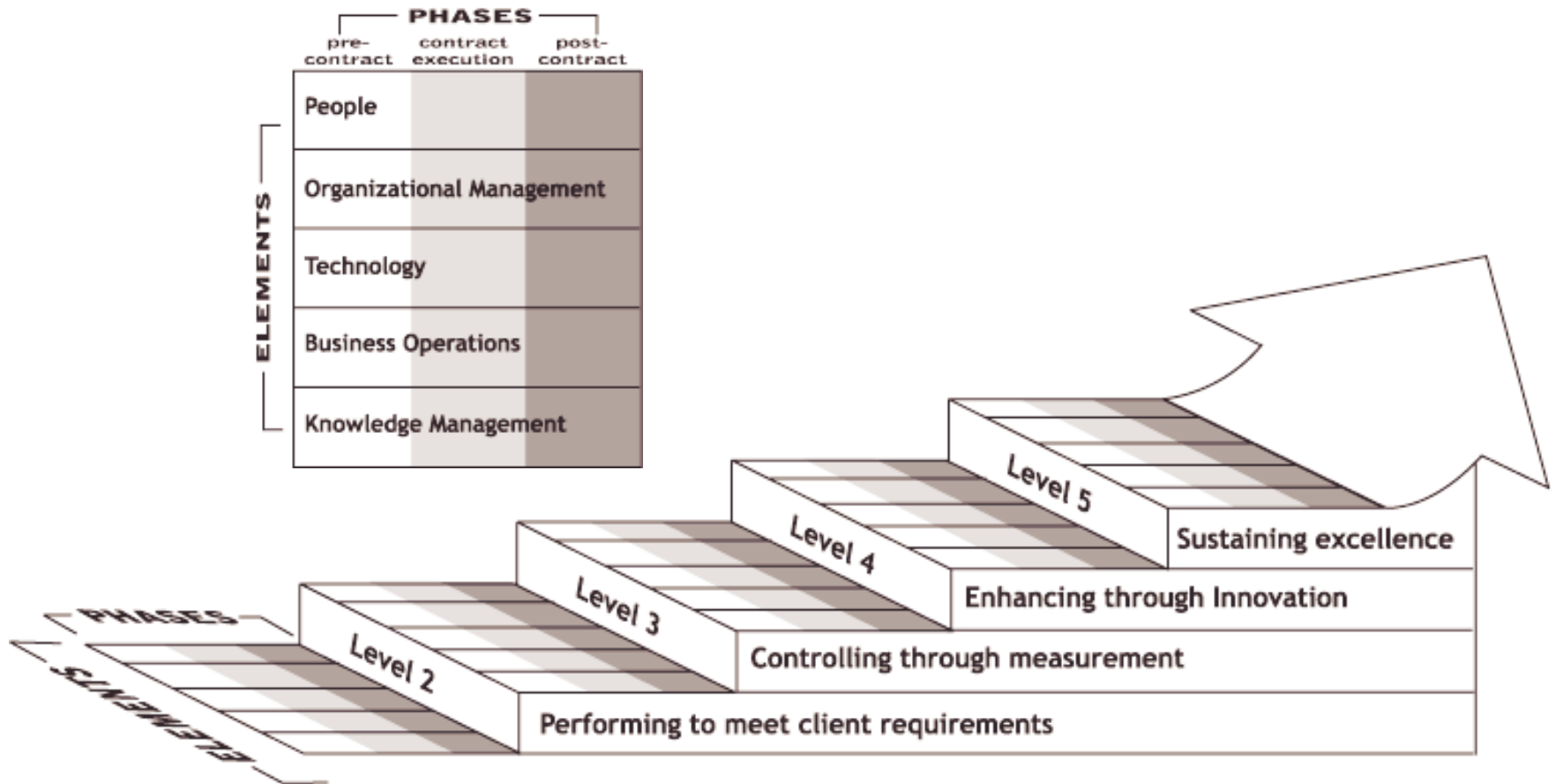|				

e^{scm}**framework** has three dimensions:

- Organizational elements
- Phases of outsourcing
- Capability levels

e^{scm} **practices** are defined for each Organization element as:

- Overall or
- Phase-specific

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Overview of phases, elements, and capability levels

Capability determination methods-1

Purposes

- Support clients in IT-eos provider selection

- Initiate and define a roadmap for continuous self improvement in provider organizations

Types of methods

- Evaluation (external team) or Self-improvement (internal team)

  - In-depth

  - Limited scope / Quick look

Capability determination methods-2

- Teams trained by Carnegie Mellon will conduct evaluations and appraisals:
  - An experienced leader
  - May include domain expert(s)
  - Team members with expertise in quality appraisals

- Methods use organization's capability data:
  - Capability questionnaire, document review, interviews, and verification
  - Result in findings and level rating

- Carnegie Mellon determines and issues certification for evaluations

- Results reported to sponsor, participants and IT^{sqc} repository

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Benefits

For Clients:

- Provides consistent, comparable basis for selection of IT-eos providers

For IT-enabled outsourcing service providers:

- Provides a structured framework for periodic examination of status and improvement areas.

- Helps to focus the improvement efforts and demonstrate management commitment.

- Builds a foundation for sustained improvement of capabilities.

- Will provide an indication of an organization's capabilities with respect to the rest of the industry.

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Carnegie Mellon's role

Education

- Provide executive education for clients and service providers
- Train and qualify evaluators and appraisers
- Train service providers with model and methods

Research

- Address these questions
  - What are the key capabilities for successful outsourcing?
  - Can one model apply to a broad set of service segments?
  - What are the most effective qualification / appraisal method(s)?
- Make repository available to research community

For more information

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