

CISQ



CONSORTIUM FOR IT SOFTWARE QUALITY

CISQ Launches in Europe

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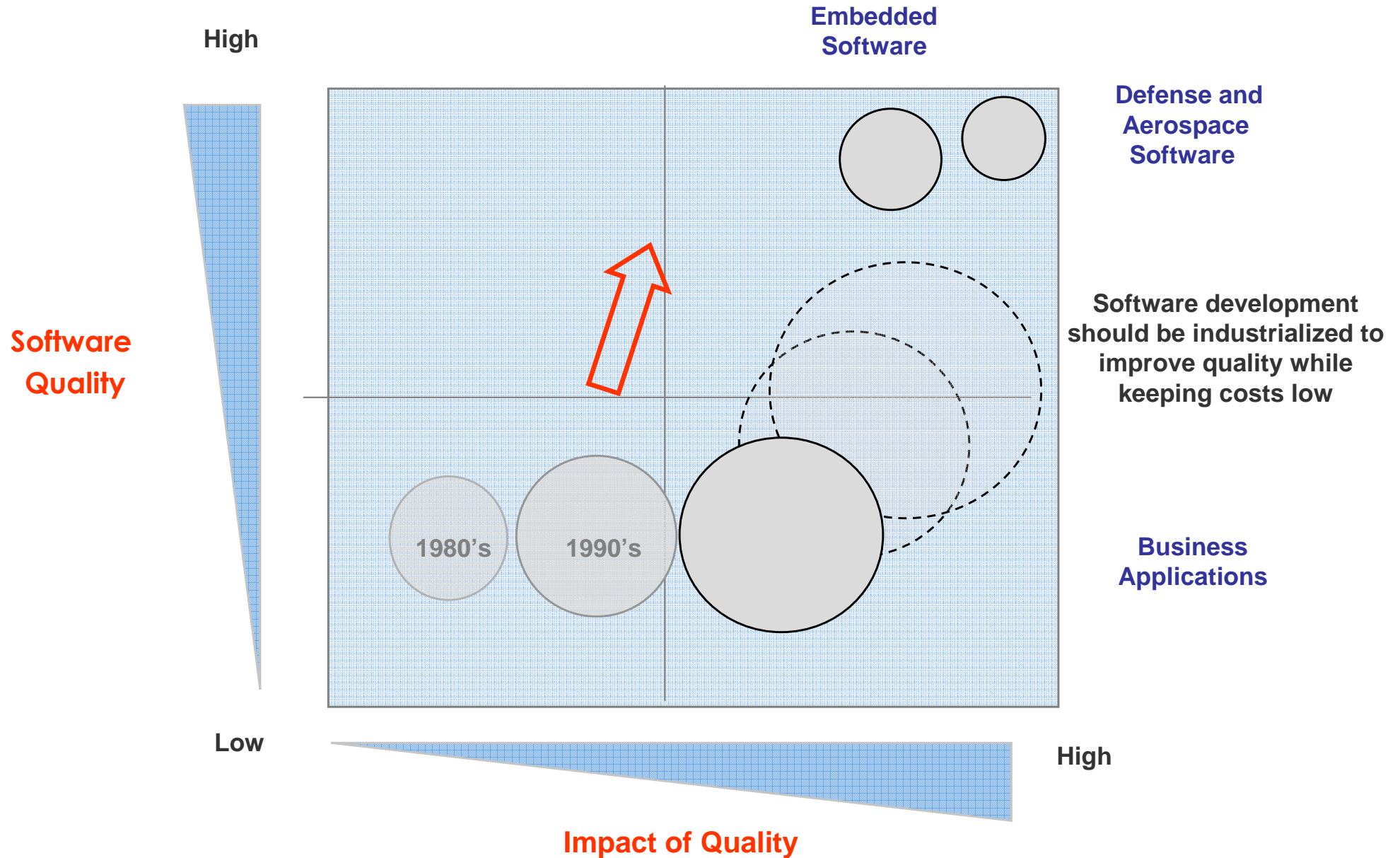
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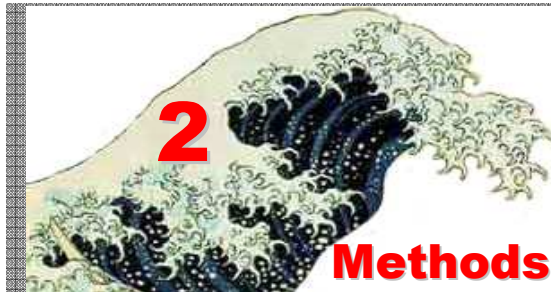
○ Size of bubble indicates overall size of market



What: Architecture, Quality characteristics, Reuse
When: 2002→
Why: Ensure software is constructed to standards that meet the lifetime demands placed on it



What: CMM/CMMI, ITIL, PMBOK, Agile
When: 1990-2002
Why: Provide a more disciplined environment for professional work incorporating best practices



What: Design methods, CASE tools
When: 1980-1990
Why: Give developers better tools and aids for constructing software systems



What: 3rd & 4th generation languages, structured programming
When: 1965-1980
Why: Give developers greater power for expressing their programs



- **Industry needs software quality measures:**
 - Visibility into business critical applications
 - Control of outsourced work
 - Benchmarks
- **Current limitations:**
 - Manual, expensive → infrequent use
 - Subjective → not repeatable or comparable
 - Inconsistent definitions → burdens usage



**Carnegie Mellon
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Partnership

**IT
Executives**

CISQ
**IT organizations,
Outsourcers,
Government,
Experts**

**Technical
experts**

**Define industry issues
Drive standards adoption
Create assessment
infrastructure**

**Application quality standard
Other standards, methods
Technical certification**

**1**

Raise international awareness of the critical challenge of IT Software Quality

2

Develop standard, automatable measures and anti-patterns for evaluating IT software quality

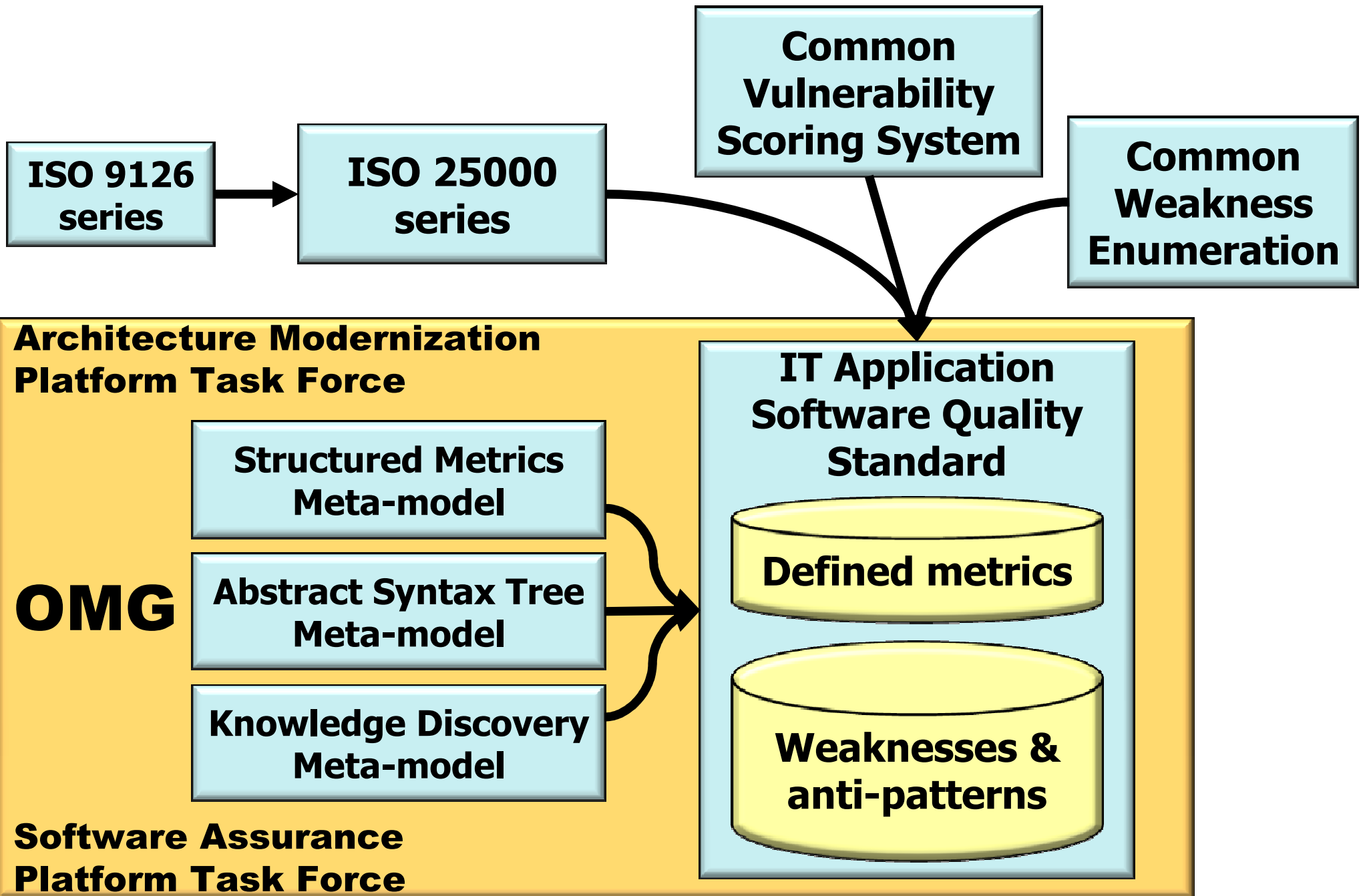
3

Promote global acceptance of the standard in acquiring IT software and services

4

Develop an infrastructure of authorized assessors and products using the standard







IT Customers	System Integrators	Package Vendors
<p> Alcatel-Lucent Amadeus Airbus Allianz AXA BNP Paribas EDF France Telecom Morgan Stanley Mac Keyson Siemens US Homeland Secur. CIGREF </p>	<p> Atos Origin Capgemini CSC DCG IBM Sopra Stéria TCS <i>Not confirmed</i> Accenture </p>	<p> Actéos Aldata CAST Cegedim </p>



Frankfurt	Arlington
Amadeus	ADA Software
AXA	AXA
BNP Paribas	Benchmark Consulting
Capgemini	Booz Allen Hamilton
CAST	CAST
CIGREF	Capers Jones Consulting
Daimler	David Consulting Group
Deutsche Bundesbank	US Health & Human Services
DNV-ITGS	US Homeland Security
First Data	Fannie Mae
France Telecom--Orange	FedEx
Fraunhofer IESE	General Motors
Intellinova	IBM
Itestra	McKesson
Johannes Kepler Univ.	Morgan Stanley
Kugler Maag	US Air Force
Siemens	Tata Consultancy Services
SIGS Datacom	
Société Générale	
T-Systems	
Technical Univ. Munich	



Primary uses	#
Benchmarking	2
Outsource control	19
Managing development	22
Risk management	5
Innovation	1
Estimating size	9
Portfolio management	9

Software attribute	# of votes	
	Frankfurt	Arlington
Functional suitability	5	
Reliability	15	14
Usability	3	2
Performance efficiency	13	3
Maintainability	19	15
Portability	0	1
Security	4	12
Compatibility/interoperability	0	1
Size	2	unanimous



Size	Develop a definition for automating Function Points
Maintainability	Measure elements affecting maintenance cost, effort, & time
Reliability & Performance	Measure elements affecting availability and responsiveness
Security	Measure elements affecting vulnerability to attack and loss
Best Practices for Metrics Use	Define methods for using code measures internally and externally



- **CISQ will pursue member-driven objectives**
 - Determined by CISQ Executive Forum
 - Consensus among CISQ members of problem to be addressed
- **Early requests for additional objectives:**
 - Defect and failure-related definitions
 - Business value measures related to application quality
 - Productivity/Size measurement
- **Use of Executive Forum for addressing industry issues**
 - Outsourcing quality SLAs
 - Benchmarking
 - Industry response to regulatory