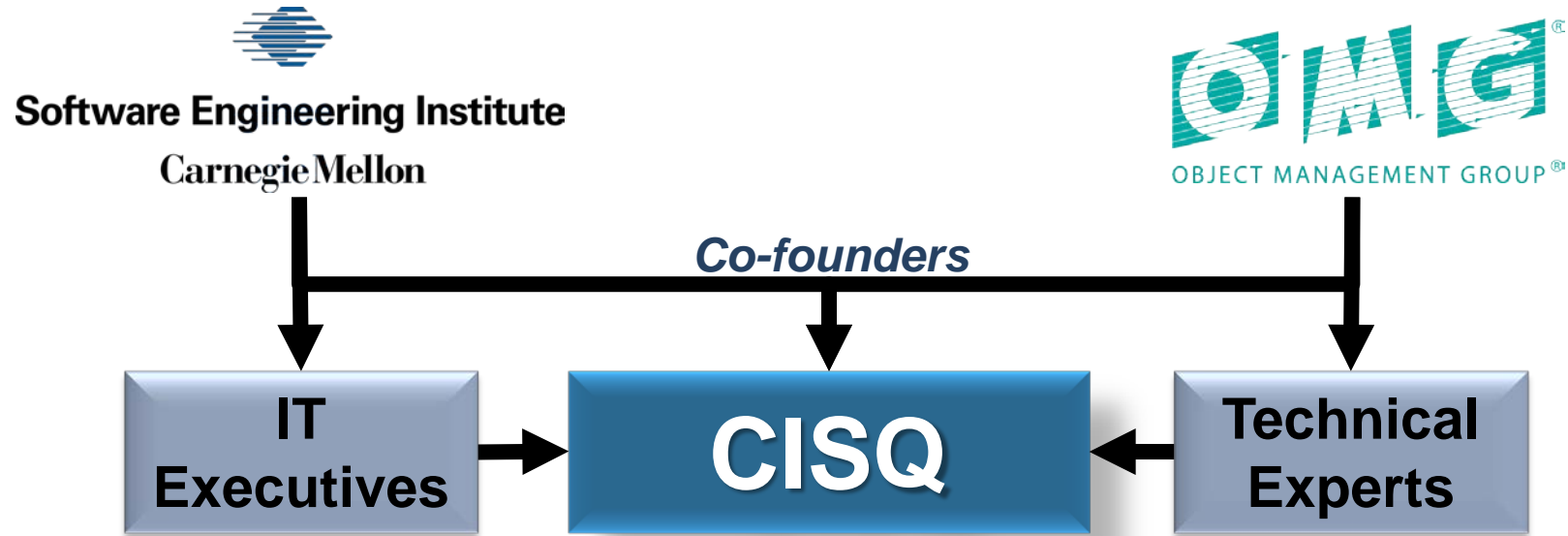**WEBINAR**

Using Software Quality Standards with Outsourced IT Vendor Engagements – a Fortune 100 Case Study

Marc Cohen, Vendor Management practitioner at Fortune 100 institution
Dr. Bill Curtis, CISQ Executive Director

CISQ
Consortium for IT Software Quality

Software Engineering Institute
Carnegie Mellon

OMG
OBJECT MANAGEMENT GROUP®

Co-founders

IT Executives → **CISQ** ← **Technical Experts**

OMG Special Interest Group

CISQ is chartered to define automatable measures of software size and quality that can be measured in the source code, and promote them to become Approved Specifications of the OMG®

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OMG-approved standards developed by CISQ

Software Size

Automated Function Points — based on IFPUG counting guidelines

Automated Enhancement Points — sizes functional & non-functional code

Structural Quality

Automated Reliability Measure — 29 severe weaknesses

Automated Security Measure — 22 of CWE Top 25 weaknesses

Automated Performance Efficiency Measure — 15 severe weaknesses

Automated Maintainability Measure — 20 severe weaknesses

Derivative Measures

Technical Debt — estimates effort to fix CISQ weaknesses detected

There are many advantages to outsourcing IT Labor from a bigger resource pool to choose from and ability to select relevant expertise in a timely manner:

Quick Access for Development Needs

More Knowledgeable Resources

Overall Lower Labor Costs

While there are many benefits to outsourcing from a cost and expertise perspective there can be some challenges:
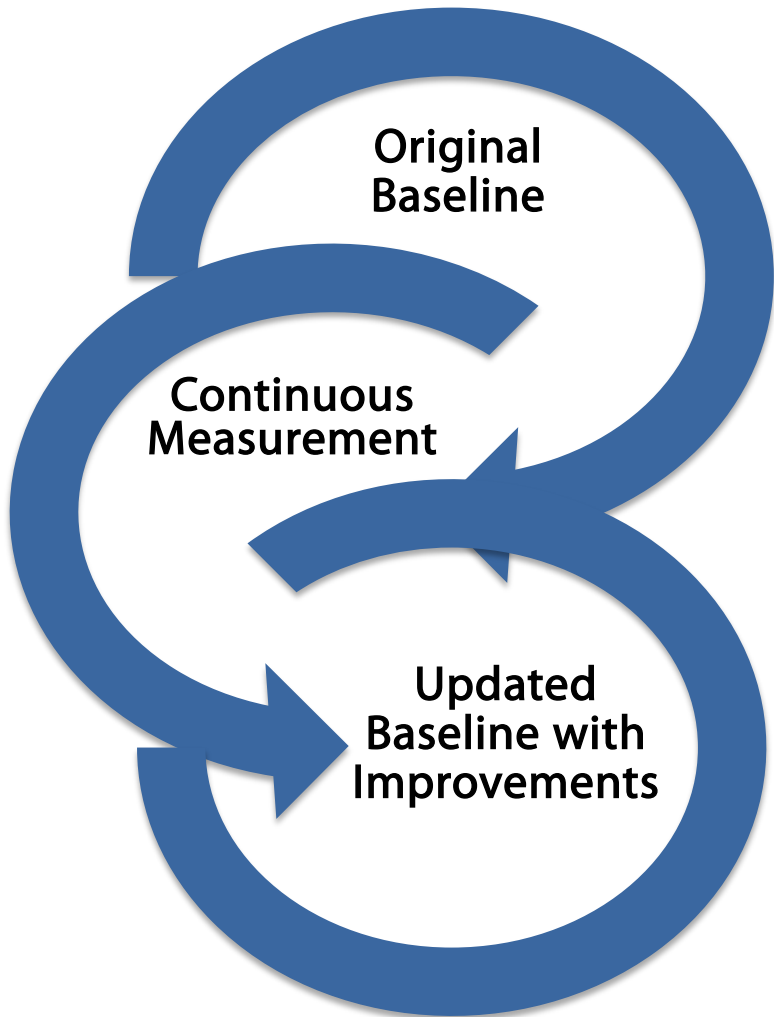
Lack of Direction

Objectivity Challenges

Perceived Challenges with Software Quality

Outsourcing Control

Add software quality requirements to development efforts and set acceptance criteria for software deliverables with Software Quality Standards from CISQ

Bring Software Quality Objectivity into your Vendor Development Efforts

Leverage Your Existing Vendor SLAs for Software Quality Measures

CISQ

Utilize & Consistently Automated Objective Measures from CISQ

Outsourcing Accountability

Establish an iterative process of continuous measurement and improvements

Original
Baseline

Continuous
Measurement

Updated
Baseline with
Improvements

	SECURITY	RELIABILITY	PERFORMANCE EFFICIENCY	MAINTAINABILITY
Original Baseline	**2.77**	**3.05**	**2.85**	**3.12**
1. Dev effort updated baseline	**2.79**	**3.06**	**2.90**	**3.15**
2. Dev effort updated baseline	**2.80**	**3.10**	**2.91**	**3.20**
3. Dev effort updated baseline	**2.86**	**3.18**	**3.02**	**3.27**
4. Dev Effort updated baseline	**2.95**	**3.30**	**3.19**	**3.45**

Scale: 1.0 - 4.0 (low-to-high quality score) a measure of critical violations / software size measured using the CAST Application Intelligence Platform (AIP), a software intelligence technology

Security is inherently linked to good software quality development practices while focusing developments efforts to measure improvements

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Focus Area

"if you can't measure it, you can't improve it"

Prioritize your outsourced IT Labor development efforts based on your organizational objectives

Develop New Functionality

+

Improve Quality & Lower Risk

Development Efforts

Outsourcing Benefits

Utilize the CISQ Software Quality Standards to drive your development efforts to meet your objectives and goals

 Improved Governance

 Better Control

 Measurable Improvements

CISQ
Consortium for IT Software Quality

For more info on Vendor Accountability & Performance
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For more info on CISQ Software Quality Standards
- Consortium for IT Software Quality – 'info@it-cisq.org'