### **BUILDING TECH COMMUNITIES**

By you / For you / About you







OMG communities have been leading technological advancements since our inception. Beyond our work in technology standards development, OMG consortia are delivering standards that ensure software quality, best practices for clinical pathways for healthcare organizations, and digital transformation across industries. We are furthering the adoption of critical technologies such as augmented reality and digital twins. And we are even working to help IT organizations contribute to our planet's sustainability goals. We are ready to tackle new industry challenges, working hand in hand with our members.



# OMG® was founded to create technology standards.

Standards drive innovation and industry. Industry drives our economy and world.

OMG's mission is to develop standards that provide real-world value for thousands of vertical industries. We bring together an international community of endusers, vendors, government agencies, universities, and research institutions. They collaborate to build and revise these standards as technologies change throughout the years.

Over the years, we perfected a time-tested formula in which problems are identified and solutions are solicited, debated, revised and opened for comments. The process is repeated until the most technically and commercially sound ideas are ready to be integrated into products and systems.

In parallel, the parent OMG organization now focuses its efforts on building new consortia. We have a timetested organizational development, level-playing-field governance model, and access to the expertise of a pantheon of who's who in the technology realm.

OMG's standards work is continued today by the OMG° Standards Development Organization (SDO). SDO maintains and owns the standards for the benefit of industry, thanks in large part, to the passion of individual SDO members and the organizations that sponsor them.

We value OMG oversight and experience in creating simple, flexible, and extensible data model standards.

We envision these standards as the basis for supply chain data exchange across globally distributed networks in the future.

– Ron Zahavi @ Microsoft

### Land. Sea. And 254 miles above.

#### Our consortia have standards everywhere.

Standards developed under the OMG umbrella are pervasive and used across many industries and diverse applications. The communication protocols for the International Space Station, the receipt function in your grocer's point-of-sale terminal. This is the real excitement of OMG, where the work gets done and the breakthroughs happen.

We develop enterprise integration standards for a wide range of technologies and an even wider range of industries. OMG's modeling standards, including the Unified Modeling Language® (UML®) and Model Driven Architecture® (MDA®), enable powerful visual design, execution and maintenance of software and other processes.

At OMG, specification adoption is the starting point rather than the end of the process. Our "No Shelfware" policy bars all proposed specs that do not have an implementation plan from being adopted by OMG. This guarantees that all OMG specs are immediately useable. Many OMG specs have also been adopted in their entirety as ISO standards.



OMG membership has enabled us to establish leadership positions in creating specifications in different domains, including but not limited to, data ontologies, cloud, IoT, banking, artifical intelligence, cybersecurity, retail, regulations, and higher education.

– Sumeet Malhotra @ Tata Consulting Services



# Big, small and startup companies are here.

### Discussing common interests. Solving common problems.

We build communities—some call them ecosystems, some call them sandboxes. Many consider our consortia to be innovative think tanks with the most accommodating open swim rules anywhere. Our founding members are a roster of tech icons: Hewlett-Packard, American Airlines, Canon, to name but a few.

Today, four out of five OMG members are from small companies. They include hundreds of organizations including software end-users in vertical markets – from healthcare to automotive and insurance – and virtually every large organization in the technology industry. OMG's "one organization/one vote" policy ensures that every member's voice is heard.

Significantly, our consortia don't just focus on the specification itself. Our focus is on delivering an entire product that benefits the market: seminars, workshops, certification, white papers, books and more.

# Where's technology going? You decide.

#### OMG consortia are specialized, technical, and focused.

For our OMG consortia, we guide day-to-day operations and provide clear governance that addresses anti-trust regulations and intellectual property protection. For the OMG Standards Development Organization, we are responsible for the operation of specification development, operational practices, certification programs, and training deployment.

Here's what diligent work, innovation, and intelligence are delivering today:



#### Established 1989

A forum where vendors and end users across industries work together to generate specifications and standards that drive the adoption of innovative technologies.



**Established 2010** Develops standards to automate software quality measurement and promote secure, reliable, and trustworthy software.



**Established 2014** Dedicated to helping accelerate the adoption of Enterprise Augmented Reality by supporting the growth of a comprehensive ecosystem.



– Chris Schreiber @ Lockheed Martin



**Established 2020** Drives the awareness, adoption, interoperability, and development of digital twin technology through collaborative partnerships with industry, academia, and government.



www.omg.org

### OMG SDO delivers real-world value for thousands of vertical industries.

The OMG® Standards Development Organization's (SDO) process has been successfully used to create and update technical specifications over 1,000 times across virtually every industry domain to produce architecture, interoperability and modeling standards that make businesses more efficient and responsive in the marketplace at reduced cost. Our members contribute expertise to expedite high-quality technical standards, providing a foundation for competitive markets which benefit both customers and vendors. In the end, customers purchase from companies able to anticipate

and drive market needs because those companies refresh their products with standards-based upgrades, which extend IT investment lifetimes.

#### **OMG SDO** member benefits:

- Establish customer confidence
- Expedite solutions development and technology adoption
- Influence thought leadership and innovation awareness
- Drive market growth
- Enhance technology resources



#### **MEMBERSHIP**

**29** Countries

**52** Industries

**241** Member Organizations

**11**\* Member Representatives



#### **CERTIFICATIONS**

**91** Countries

**13**<sup>+</sup> Certifications



#### SPECIFICATIONS/STANDARDS

**13** ISO Adopted Standards

**253** Specifications/Standards



www.it-cisq.org

### CISQ provides open-source, freely available standards that measure software risk.

The Consortium for Information & Software Quality™ (CISQ™) was co-founded by OMG and the Software Engineering Institute at Carnegie Mellon University. The organization collaborates with the world's top software engineering experts to create standards for automating the measurement of software size and structural quality from the source code. CISQ standards enable organizations developing or acquiring software-intensive systems to measure the operational risk software poses to the business and estimate the cost of ownership.

#### CISQ's goals are to:

- Develop standards that automate software quality measurement
- Promote and sustain secure, reliable, and trustworthy software
- Share insight to software standards development
- Create cross-industry software quality weaknesses and definitions
- Educate, evolve, and refine software standard deployment and adoption



#### **ISO 5055**

Measures the internal, structural quality of software



#### **AUTOMATED FUNCTION POINTS**

Estimates the size of a software application or component



#### **TECHNICAL DEBT**

Estimates the effort to correct software weaknesses



www.thearea.org

## The AREA helps enterprises achieve greater operational efficiency.

The Augmented Reality for Enterprise Alliance™ (AREA™) ecosystem comprises cross-industry players that work together to deliver on the promise of enterprise AR. These include enterprises (the users of AR technology), AR solutions providers, academic institutions, and industry groups. This collaboration drives widespread adoption of interoperable AR-assisted enterprise systems. The AREA provides factual, neutral, and relevant information about the tools available, application possibilities, methods of implementation, and return on investment.

#### **AREA helps members:**

- Accelerate AR adoption through a comprehensive ecosystem.
- Produce high-quality content that fosters a fruitful dialogue around AR.
- Help enterprises maximize their investment in AR
- Provide up-to-date resources and neutral, reliable guidance
- Clear a path to interoperable AR-enabled enterprise systems



#### **AR INDUSTRY SHOWCASES**

- Remote Assistance and Navigation
- Simulation and Situational Awareness
- Visualization and Virtual User Interface
- Assembly, Maintenance, and Inspection
- Collaboration, Guidance, and Training



- **228** Thought Leadership Articles
- **9** Member Research Projects
- 4 Global Workshops
- **2** Infographics



#### AR ROI CALCULATOR

An easy-to-use online tool that helps organizations:

- Understand the value of Enterprise AR use cases
- Provide data to support investment decisions
- Benefit from a broader view of aggregated data



www.digitaltwinconsortium.org

## Digital Twin Consortium is focused on propelling innovation in the digital twin market.

Digital Twin Consortium® drives the awareness, adoption, interoperability, and development of digital twin technology. Through a collaborative partnership with industry, academia, and government expertise, the consortium is dedicated to the overall development of digital twins. We accelerate the market by propelling innovation and guiding outcomes for technology endusers. Our members are committed to using digital twins throughout their global operations and supply chains. The consortium is open to any business, organization, or entity with an interest in digital twins.

#### The consortium is working to:

- Build and establish an extensive multi-faceted ecosystem
- Identify and fill gaps in technology development
- Drive interoperability through frameworks and open-source code
- Develop and advocate consistent best-practice methodologies
- Work to influence policy and standards requirement



MARKET SIZE by 2035\*



#### **OUR CONSORTIUM**

225\* Member Organizations36 Countries Represented



#### **INNOVATION HUBS**

- Academia & Research
   Aerospace & Defense
- FinTech, Healthcare & Life Sciences
- Infrastructure, Manufacturing Natural Resources
- Security & Trustworthiness
- Technology, Terminology, & Taxonomy

\*Source: researchandmarkets.com

# Performance & Experience: OMG Certifications Validate Both

### Last year, OMG announced its 250<sup>th</sup> specification and certified 816 individuals.

While we continue to generate specifications and standards that drive the adoption and innovation of cutting-edge technology, those same 816 individuals continue to define the very fabric of innovation which drives industry worldwide.

**Business Process Modeling (BPM) certification exams** validate a candidate's knowledge and skills in the way BPM is used in today's complex business environment. From basic business concepts and terms to process simulation and optimization.

Systems Modeling Language (SysML) certification exams validate a candidate's knowledge and skills in SysML as applied to model-based systems engineering (MBSE). Covers the fundamental concepts and elements of all 9 SysML diagram types to metamodeling, integrating SysML and tools with other modeling languages and engineering tools.

**Unified Modeling Language 2 (UML 2) exams** validate an individual's ability to properly interpret and construct UML model diagrams in the way UML is used to implement real, practical and everyday systems.



"I am the only one in my workplace who is BPM 2 certified so I often help my colleagues model business processes correctly."

- Giedrius Galvydis (Business Analyst)



"...the SysML credentials have definitely opened new pathways for me..."

- James Landreth (Systems Engineer @ Naval Information Warfare Center Atlantic)



"The skills I acquired through [the UML 2] program greatly influenced how I analyze, design and implement complex software systems..."

- Ali Adnan Malik (Senior Consultant @ ALTEN)





CONTACT











**LEARN MORE** about the OMG Communities