Twentieth Practical Software and Systems Measurement (PSM) Users' Group Workshop Call for Speakers



"Aligning Measurement with System Life Cycle Realities"

Crystal City, Virginia 16-20 September 2019

As the Department of Defense changes how systems and software are procured, developed, deployed, and sustained, there is an ever increasing need for measurement to ensure that we can accurately estimate, measure progress, and evaluate performance of our systems. As we change to a continuous iterative development for both systems and software (also called agile, DevOps, DevSecOps, or some other variant), the information needs and measures must also change. In addition, today's systems are larger, more complex, more interoperable, and must address needs for agility, resiliency, and digital environments. At this year's PSM Users' Group, attendees will have the opportunity to share measurement experiences and ideas in the areas of agile, cybersecurity and resiliency, modular open system approaches, digital engineering and artifacts, system-of-systems, affordability, data analytics, software sustainment, and cost estimation.

The PSM Users' Group provides the opportunity for PSM users and measurement practitioners to share experiences in issue-driven measurement and learn about changes in the measurement community through attendee presentations. Attendees will also participate in workshops that provide a foundation for measurement in the topic areas identified above. Measurement users and measurement professionals from DoD, government, and industry are encouraged to attend.

Location: Lockheed Martin Global Vision Center, 2121 Crystal Drive, Arlington, VA 22202

Registration Fee: \$295 per attendee (if received by 23 Aug) / \$395 after

Preliminary Agenda

Monday Registration, PSM Training

Tuesday Welcome, Keynote, User Presentations (a.m.), Workshops (p.m.) Wednesday Keynote, User Presentations (a.m.), Workshops (p.m.), Group Dinner

Thursday User Presentations (a.m.), Workshops (p.m.)

Friday User Presentations (a.m.), Workshop Outbriefs (a.m.), Wrap-Up at noon

If you use measurement in your organization or have a measurement-related experience that could benefit others, you are encouraged to propose a presentation and/or workshop. **Please provide an abstract by 31 May 2019 to** <u>PSMUG2019@psmsc.com</u>. More details are provided later in this file.

All speakers must submit a registration form. Registration information is available http://www.psmsc.com/Events.asp.

Presentations

We are particularly interested in the experiences of measurement practitioners in areas related to the theme, "Aligning Measurement with System Life Cycle Realities". We are particularly interested in presentations addressing how to accurately estimate, measure progress and cost impacts, evaluate performance, and assess risk.

We welcome submittals about measurement related to emerging technologies and trends, including the workshop topics, along with:

- Technical or mission debt
- Cost measurement and modeling
- IT Measurement Infrastructure, Services, Cloud Computing, Help Desks and Administration
- Analytics and big data
- Measurement for model-based system engineering digital engineering digital artifacts
- Critical infrastructure
- Measuring affordability of systems and software
- Measurement for mission engineering (across portfolios)

Presentations should last 45 minutes and should provide experience-based guidance and information for participants. As always, actual implementation experience with real data is highly valued. Presentations may provide:

- Examples of measurement implementations in specific projects, programs, or processes
- Case studies, trends, or other *experiences* with organization and enterprise measurement
- Current initiatives and progress with *industry standards* or *best practices* in measurement
- Recent developments and *lessons learned* with respect to measurement driven by information needs.

Workshops

Workshops should focus on developing guidance for specific areas of measurement. Attendees will be asked to bring specific materials to share. Participants will discuss measurement needs and solutions, and practical guidance and examples will be developed. All workshop results will be posted on the web site. Workshops will last $3\frac{1}{2}$ hours. We welcome abstracts for additional workshops related to the topics below, or new ideas.

We are currently planning the following workshops:

- Measurement for Continuous Iterative Developments (e.g. Agile, DevOps, DevSecOps, evolutionary development approaches)
- Leading Indicators for Systems Engineering Effectiveness in Model-Centric Programs
- Modular and openness measurement
- System-of-Systems measurement
- Measures of cybersecurity
- Estimating software maintenance and sustainment
- COCOMO 3 (Software Cost Estimation)

Important Dates

Speaker abstracts and biographies due: May 31, 2019
Notice of selection: June 14, 2019
Presentation due: September 16, 2019

Sponsored by the PSM Support Center and the International Council on Systems Engineering (INCOSE)

Please send your abstract(s), via email, to: PSMUG2019@psmsc.com

Abstract and Biography:

In your submittal, please include your name, title, organization, address, phone, and email. In addition, include the following information for the type of session that you wish to offer.

For Presentations: Please provide an abstract and a biography. The abstract should be one-half page or less, and it should include your presentation title, a short description of your proposed presentation and the key lessons or concepts that will be conveyed. The biography should be no more than one-half page in length.

For Workshops: Please provide a workshop description and a biography. The description should include:

- Prerequisites (materials attendees should review ahead of time)
- Materials to bring (from their organization or project)
- Discussion (what will be accomplished)
- Goals and products (what will be produced as a result of the workshop)

The workshop description template can be downloaded on the PSM Events page, http://www.psmsc.com/Events.asp. The biography should be no more than one page in length.