NAFEMS Technical Working Group Overview

Simulation Data Management (SDMWG)
2019

NAFEMS

Simulation Data Management

- The mission of the NAFEMS Simulation Data Management Working Group (SDMWG) is to provide a vendor-neutral, end-user driven consortium that promotes the advancement of the technology and practices associated with the management of engineering simulation data management and processes. This includes education, communication, promotion of standards, and development of requirements that will have general benefits to the simulation and analysis community with the identification of benchmarks and major strategic issues (grand challenges).

- Monthly online meeting via WebEx on the second Thursday of each month.

- **Chair:** Laura Michalske, The Procter & Gamble Co.
- **Vice Chair:** Robert Clay, Sandia National Laboratories

- Information about the Simulation Data Management Working Group can be found on the NAFEMS website at **www.nafems.org/community/working-groups/simulation-data-management**

- To enquire about joining this working group complete the online form at **www.nafems.org/community/working-groups/simulation-data-management/getinvolved**

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- **Topics of interest include:**
  - SDM and SPDM systems vary depending on the end users need for work flow. Guest speakers have been sharing various approaches to capture models and work flow including PIDO tools.
  - Deployment of SDM & SPDM.
  - Ongoing focus on the breath of models including spreadsheets to be included in SDM & SPDM solutions.
  - Standards or lack of standards utilization and their implication to SDM & SPDM systems

- **Current activities:**
  - A **"Spreadsheet Management"** survey has been completed to understand the ramifications of unmanaged/managed spreadsheets. A paper is in progress based on the survey results & CAASE 2018 presentation.
  - **"How to Implement a Simulation Process and Data Management Capability"** paper is in the process of being written.
  - **NAFEMS SPDM Congress** – held in conjunction with the NAFEMS World Congress.

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Recent Outputs:

- The Simulation Data Management Working Group have produced an introductory flyer explaining the basic principles of SDM.

- With SDM implementation proving difficult and time-consuming to implement the working group produced a publication to show case the Business Value that can be produced by effectively implementing an SDM capability.

- In order to provide a baseline set of user requirements against which the roadmap of the SDMWG could be set, the working group conducted a user survey. The results of the survey were published in the "Simulation Data Management Survey Report".

Future plans:

- **SDM PSE** – SDM competencies have been identified and the team is about to embark on populating the PSE with the relevant books, training courses, and documents.

- Working with the Systems Modeling & Simulation Working Group and the Systems Modeling & Simulation Working Group to help understand and drive standards adoption.

- Maintain the SDM publications List (link below):
https://www.nafems.org/about/technical-working-groups/simulation-data-management/publications/

www.nafems.org

Chair Bio

Laura Michalske is a Procter & Gamble Section Head for Health Care Modeling & Simulation. She has a Bachelor of Science in Chemical Engineering from the University of Cincinnati. Laura has 29 years of experience in the consumer goods industry working in engineering and manufacturing. Laura is a recipient of Procter & Gamble's PRISM award given to engineering masters who have made a real difference in Procter & Gamble through their sustained and exceptional technical contributions.

Laura is the chair for the NAFEMS Simulation Data Management Working Group and is a member of the NAFEMS Americas Steering Committee. She also represents Procter & Gamble on the ASSESS Initiative Advisory Committee. Laura is involved in inspiring students to pursue STEM degrees through her involvement as an engineering mentor with Batavia Middle School's Future City team for the past 12 years.