Great Standards Debate of 2024!

Dialogue Sessions

2014

Session 1→Debate: Standardization must give way to proprietary innovation?

Session Chairs: Jeff Bird–TECnos, David Alexander–SAE.

One of the PHM Society's objectives is the advancement of PHM as an engineering discipline which includes standards and education. Panels on standards in development and what is needed have been conducted and documented in past annual conferences and a Society forum exists for exchanges: http://www.phmsociety.org/forums/forum/phm-business/standards/. SAE International as a Technical Co-sponsor has greatly contributed to these activities.

This year we have organized a formal team policy debate to explore the impact of standards on technology development and commercialization across the diverse domains of PHM and identify improvements that may be sector specific:

Agenda
Conference Photos
Proceedings
Key Dates
Call for Papers
Author Instructions
Registration and Hotel
    Travel and Activities
Our Sponsors
    Sponsorship Opportunities
    Sponsors Table Arrangement
Tutorials
PHM Data Challenge
Doctoral Symposium

➤ 1-on-1: Tom Mooney (SOAR Engineering) vs. Nils Propes (GTC)

➤ Audience vote: For-7, Against-4, and Undecided-14

https://phmsociety.org/conference/annual-conference-of-the-phm-society/annual-conference-of-the-prognostics-and-health-management-society-2014/dialogue-sessions/

"Standards are needed for building PHM consortiums?"

➢ ***Do you agree more with, or disagree more with, the statement that "standards are needed for building PHM consortiums"?***

➢ Are existing standards needed "significantly" for use by consortia (academia, industry, and/or government working together) that are focused on PHM applications?

➢ Examples of consortiums:

- ▪ [PHM Consortium](#) at CALCE at UMCP
- ▪ [Integrated Vehicle Health Management Centre](#) at Cranfield University
- ▪ [Center for Intelligent Maintenance Systems (IMC Center)](#) at UC
- ▪ [Stanford Computer Forum](#)
- ▪ [Independent Data Consortium for Aviation](#)

Debate Layout

➢ 3:45 pm – 5:15 pm

- 3:45 – 3:55: Welcome, introductions, and debate layout

- 3:55 – 4:15: **Debate begins!** 2 "For" debaters and 2 "Against" debaters quickly present their points followed by rebuttals

- 4:15 – 4:35: **Debaters switch sides!**... 2 "Against" debaters and 2 "For" debaters quickly present their points followed by rebuttals

- 4:35 – 5:00: **Interaction with audience** to add opinions & experiences

- 5:00 – 5:15: Slide summarizing the points & **audience votes** (for, against, and undecided).

Fun is encouraged!

Steve Holland

Principal Consultant

VHM Innovations, LLC

Sara Lukens

Fellow, Data Science

LMI

Ed Manns

Managing Director,
External Relations

International Society of
Automation (ISA)

Ravi Rajamani

Principal Consultant

drR2 consulting

"Standards are needed for building PHM consortiums?"

FOR

1. Stds and proprietary mix are healthy over time
2. Allows synergy across sectors and applications
3. Health ready components consortium produced a std and implementation process
4. Stds from consortia can provide consensus basis for regulations
5. Stds are essential for transferring data within teams
6. Consortia develop implementation processes based on stds
7. Need a structured environment (scope, business case) for industry impact- ROI must be in 8+ figure game changers
8. Stds may be best developed by consortia (most SDOs) with the existing standards basis
9. Useful for interfaces and communication to enable key work
10. Need to have a consortium to decide if a std is needed
11. Stds can constrain commercial pressures with consortia
12. Regulations and safety can drive rapid adoption of new technology

AGAINST

1. Majority of stds not supported by consortia after publishing
2. Consortia can be effective without any stds
3. Stds are slow to be developed by volunteers and not comprehensive- could slow consortia and development
4. Consortia and fora are aimed to get good project funded and available for academia and must be industry based which yields licensed tech
5. Only useful for interfaces not key work
6. The number and diversity of stds can hamper work
7. Small companies cannot influence stds or afford to get into consortia
8. Stds can't overpower commercial interests
9. SDOs may not be sustainable given current commercial business models
10. MIMOSA not used

➢ *"Standards are needed for building PHM consortiums?"*

<p style="text-align:center">FOR: 6</p>

<p style="text-align:center">AGAINST: 0</p>

<p style="text-align:center">(new option!) IT DEPENDS: 11</p>

Get informed and get involved:

- IJPHM and free conference (PHME, PHMAP) papers at:
  www.phmsociety.org/journal and https://papers.phmsociety.org/
- Standards Users Group, Portal and Forum at:
  https://phmsociety.org/phm-standards-portal/ and www.phmsociety.org/forum/592
- Education Users Group, Portal and Forum (with Taxonomy) at:
  https://phmsociety.org/phm-education-and-professional-development-portal/
  www.phmsociety.org/forum/577