The Automation Tsunami
Automation Technology Beyond The Plant Floor

Theme: The Next 50 Years: Capturing Transformational Possibilities

Year: 2018
Date: Sept. 5-8
Location: JW Marriott Hill Country
San Antonio, TX
The Digitalization Trend…

- The concept of **digitalization** is the implementation of technology into everyday functions of manufacturing which will increase the reach of automating of operational processes to improve efficiency.

- To what extent has your Company increased investments to embrace Digital Technologies?

  1) Fully implemented

  2) In the Process of being Implemented

  3) Under Discussion, but not yet funded

  4) Not being Considered
Automating Design and Engineering Tasks…

- From the Department of Defense (www.acq.osd.mil) “Digital engineering (DE) is a Department of Defense (DoD) initiative that will transform the way the DoD designs develops, delivers, operates, and sustains systems. DoD defines digital engineering as an integrated digital approach that uses authoritative sources of system data and models as a continuum across disciplines to support lifecycle activities from concept through disposal”

- Is your company looking at the digitalization movement in the same way?

  1) Fully implemented

  2) In the process of being implemented

  3) Under discussion, but not yet funded

  4) Not being considered
Automating Design and Engineering Tasks…

To what extent is your company leveraging digital technologies to establish virtual work teams and perform multi-office Engineering Design, including overseas HVE centers?

1) Fully implemented

2) In the process of being implemented

3) Under discussion, but not yet funded

4) Not being considered
Automating Design and Engineering Tasks…

- Is your company developing programs and procedures for computational engineering, i.e. authoring software code to solve engineering problems versus traditional problem-solving methods with calculations?

  1) Fully implemented

  2) In the process of being implemented

  3) Under discussion, but not yet funded

  4) Not being considered
Automating Design and Engineering Tasks…

- Is your company moving to digitalizing its engineering libraries to allow for virtualizing plant equipment such as pumps, robots, conveyors, instrumentation, piping for more rapid deployment of projects?

  1) Fully implemented

  2) In the process of being implemented

  3) Under discussion, but not yet funded

  4) Not being considered
Are your company’s engineering departments moving to a data-driven design process from the older model-driven classic methods?

1) Fully implemented

2) In the process of being implemented

3) Under discussion, but not yet funded

4) Not being considered
Is Real-time data sharing and integration with cloud based applications something your company is using to coordinate across engineering departments (including HVE centers)?

1) Fully implemented
2) In the process of being implemented
3) Under discussion, but not yet funded
4) Not being considered
Automating Design and Engineering Tasks…

- Is Virtual Construction (simulation, sequencing, and commissioning) something your company is considering to reduce project costs and improve efficiency?

1) Fully implemented

2) In the process of being implemented

3) Under discussion, but not yet funded

4) Not being considered
Automating Design and Engineering Tasks…
With Industrial Automation

- Is your company performing virtual commissioning for new projects or planning on implementing virtual commissioning in the future?

  1) Fully implemented

  2) In the process of being implemented

  3) Under discussion, but not yet funded

  4) Not being considered
Automating Design and Engineering Tasks…
With Industrial Automation

- Industry 4.0 is the name given to the new trend in automation and data exchange in manufacturing technologies. This will affect all the groups here differently, thus…to Suppliers are you supporting and developing Industry 4.0 products? To Owners are you implementing Industry 4.0 technologies in your facilities? Contractors, are you developing Industry 4.0 skillsets to support your clients?

1) My company is fully committed to Industry 4.0 technologies

2) My company is in the process of implementing

3) My company is thinking about Industry 4.0

4) Industry 4.0 is not a consideration