THE HIVE OF ACTIVITIES

The Industrial Internet of Things (IIoT) is set to transform business models in all markets. Collaboration and mastery of new skills, such as those within IIoT, will be essential to business success. With over 260 member organizations, and growing, the Industrial Internet Consortium (IIC) is a hive of activity. And the hive provides a unique opportunity for collaboration and experiential learning not found anywhere else.

IIC Quarterly Member Meetings (2017: Reston, VA; Berlin, Germany, Singapore, and Burlingame, CA) provide an opportunity to network face-to-face with other members, gain new ideas, and complete work within the groups. Working Groups, Task Groups and Contributing Groups work virtually between quarterly meetings to keep projects and deliverables moving toward completion. This first half of 2017 saw the publication of the Industrial Internet Connectivity Framework (IICF), the Business Strategy and Innovation Framework (BSIF), the latest update to the Industrial Internet Reference Architecture (IIRA) and a technical whitepaper, Industrial Analytics: the Engine Driving the IIoT Revolution.

COMMUNICATIONS & CONNECTIVITY

Connectivity refers to the infrastructure to enable communication between participants. Without connectivity, there is no communication. Learn more about the Industrial Internet Connectivity Framework from this video.

EMERGING OPPORTUNITIES

As the IIoT transforms businesses and changes the competitive landscape, collaboration and mastery of new skills will be essential to business success. The Business Strategy and Innovation Framework (BSIF) provides a high-level identification and analysis of issues that any enterprise will need to address and offers an organized, disciplined approach to moving forward successfully.

REFERENCE ARCHITECTURE

First published in 2015, the IIRA addresses the need for a common architecture framework to develop interoperable IIoT systems for diverse applications across a broad spectrum of industrial verticals in the public and private sectors to achieve the true promise of IIoT. Its importance is summarized by one of our members in this 3-minute video.

ADVANCED ANALYTICS

Additionally, members of the Industrial Analytics Task Group have recently published a technical whitepaper titled, “Industrial Analytics: the Engine Driving the IIoT Revolution.” Advanced analytics is at the core of this next-generation level of integration and, when applied to machine and process data, provides new insights and intelligence to optimize decision making.
significantly and enable intelligent operations leading to transformational business outcomes and social value. If data is the new fuel, data analytics is the new engine.

**SHARING EXPERTISE AND GATHERING NEW IDEAS**

The Liaison Working Group has approved or are pursuing strategic technical relationships with over 64 organizations including Avnu Alliance, ITAC, CAICT, ISO, Industrie 4.0, IEEE, OASIS, OMG, SGIP and many others. Our members showcase their expertise at public-facing events around the globe such as the IIoT World Tour Event Series, Public Forums we host, webinars, Hannover Mess and the premier global IoT event we co-organize – IOT Solutions World Congress. At Hannover Messe 2017, our Joint Task Group 5: Security hosted a joint demonstration in the IIC and Plattform Industrie 4.0 booths. The joint demo showed how the IIC’s [Industrial Internet Security Framework (IISF)](#) and the concepts of secure cooperation in cross-company environments can be applied to solve the challenge of multiple companies needing to work together to ensure security both within a single manufacturer’s plants and across every participant in the value chain.

**TESTBENDS**

[Testbeds](#) continue to be a major focus and activity of the Industrial Internet Consortium and our members. Testbeds provide an environment for companies and multi-disciplinary stakeholders to team up and prove out complex systems and gain real-world experience. With 26 approved testbeds (and more in the pipeline), participants are generating best practices, recommendations and priorities for standards organizations. Learn about our recent [Testbed Showcase Winner: The Time Sensitive Networking Testbed](#). [View video here.](#)

**HOW DO WE KEEP THE HIVE HUMMING?**

What drives IIC [Membership](#)? The value in an IIC membership is in the overall experience. A common theme which emerges is cross-pollination. Woven throughout every working group and task group are activities designed to connect across groups – vertical industry-focused groups to testbeds, liaison organizations to verticals, technology to business strategies, architecture to use cases, and so on. Some of these cross pollination activities benefit members directly and some benefit the industry at large.

The convergence of activities within the IIC is being developed into what will be a forward-facing portal to assist the industry in accessing, by vertical industry, the IIoT use cases, testbed outcomes, architectures and patterns, related standards and the hotspots where interoperability must be addressed to further the IIoT. Testbeds will be leveraged to provide the necessary information to influence the standards and open-source solutions that enable privacy, security and interoperability to accelerate the adoption of IoT in the industrial and enterprise space. The “portal” of the [I3C Initiative](#) is now in the prototype stage, and available internally to IIC members only for evaluation and testing.
The newly launched “IIC Connect” program provides efficient networking. IIC Connect is like “match.com” for member companies. The concept is simple: you enter your profile and a quick description of what might interest you. Then everyone looks at the profiles and requests meetings. You accept the ones you like; software does some automated scheduling, then you have 20-minute networking sessions. It’s fast, easy, efficient, and fun!

As one of the IIC’s veteran members eloquently explained, “Perhaps you don’t need cheap sensors, but how about analytics? Middleware? Deep learning? Ad hoc networking? Security? Services? Tools? It’s pretty clear: every IIoT company or technology end-user on the planet should be able to leverage the world’s largest IIoT ecosystem at the IIC. Just understanding the amazing mix is great education on the breadth and depth of the IIoT.” There is a lot going on within the highly productive IIC hive, and every member has the opportunity to make a difference. (View video here.)

Want to learn more?

- View Membership value video here: https://youtu.be/_HrWDtoPa9Q
- View video on the importance of testbeds here: https://youtu.be/NZp8WgDNzi8
- View membership information and rates here: http://www.iiconsortium.org/become-member.htm

➢ Return to IIC Journal of Innovation landing page for more articles and past editions.

The views expressed in the IIC Journal of Innovation are the contributing authors’ views and do not necessarily represent the views of their respective employers nor those of the Industrial Internet Consortium.

Copyright © 2017 Industrial Internet Consortium. All rights reserved. This document is provided AS-IS and WITHOUT WARRANTIES. Other logos, products and company names referenced in this publication are property of their respective companies.