

A Broader Update

The Industrial Internet Consortium (IIC) is advancing on many fronts, so this seems a good time to broaden the focus of our quarterly reports towards other activities we are pursuing. But let's begin, as usual, with a technical publication, the <u>Business Strategy and Innovation Framework</u>, published on 2016-11-14, with a <u>press release</u> released shortly thereafter.

BUSINESS STRATEGY AND INNOVATION FRAMEWORK

Here are the key talking points.

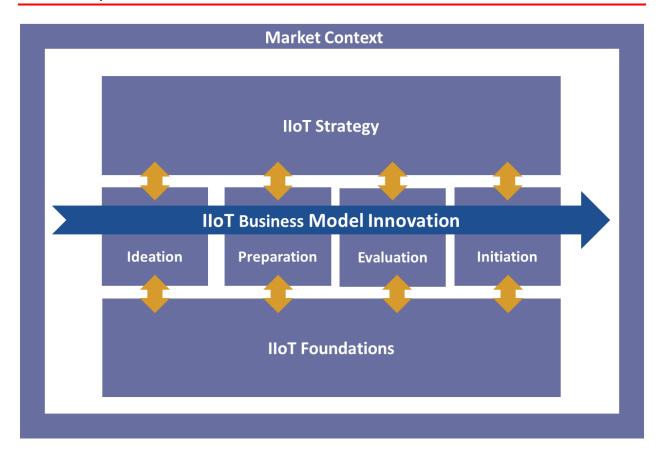
What is it? This document is a deliverable of the Business Strategy Task Group, commissioned by the IIC's Business Strategy and Solution Lifecycle (BSSL) Working Group. It provides a high-level identification and analysis of issues that an enterprise needs to address in exploiting Industrial Internet of Things (IIOT) concepts for commercial (or other) gain.

Who is the audience? The two prime audiences for this document are CxOs (or equivalent) actively engaged in specifying and deploying IIoT initiatives and CxO staff (or equivalent) in the early stages of considering the deployment of IIoT initiatives. Subsequent publications may be more suitable for CxO's who are in the early stages of contemplating IIoT initiatives, or other senior managers who may benefit from a more comprehensive analysis of pertinent issues.

What problem does it solve and why is it needed? Uncertainly and flux characterize much of the IIoT market, so the primary objective is to act as a reference document for any enterprise planning to engage with IIoT concepts. The adoption of frameworks and concepts documented here accelerate gain by de-risking any decision to deploy IIoT technologies. It provides a single-source compendium of issues and challenges to consider before deployment of IIoT initiatives.

How does it solve this problem? It sets out a robust approach, applicable for any company seeking to engage in IIoT. It is a comprehensive and relatively 'heavy' approach since we have taken the view that it is preferable to present a more-or-less complete view of 'best practice' and so allow the reader to draw inspiration from collective thinking among IIC membership. Clearly, any executive drawing from the document is free to adopt an appropriate 'lighter touch' or existing internal project model, especially within smaller companies. Alternatively, and particularly in the case of larger companies, a range of project support processes will be in place and the approach documented in the document should be used to inspire the enhancement of existing infrastructures to address the IIoT opportunity efficiently. Many of the techniques and approaches are also applicable to consumer IoT initiatives and, where relevant, we welcome the application of IIoT concepts in consumer IoT environments.

What's the big picture? The main topics covered are depicted in this diagram:



Each one of the boxes on the diagram deserves a chapter to describe both each step and how it all fits together.

Anything missing? Of necessity, the scope of this document is wide ranging and high level. Subsequent documents will build on this incrementally and are likely to take one of two forms:

- Detailed documents that unpick and analyze major business strategy to provide greater insight into identified topics, while being consistent with the approach and framework.
- Action-oriented documents that highlight 'next steps' for organizations considering deploying IIoT initiatives building on the analysis here and subsequent documents.

The production of this deliverable was led by Jim Morrish (Machina Research) amply supported by Ken Figueredo (Interdigital), Veronika Brandt (Bosch Software Innovations), Steve Haldeman (HPE) and the members of the Business Strategy Task Group. Author-pairs also provided briefings to several analyst firms that wished to learn more about the document.

UPCOMING PUBLICATIONS

In rough order of expected publication date, the following publications are in the pipeline:

The latest version (version 1.8) of the 'Industrial Internet Reference Architecture' (IIRA) has been approved by the membership. This is presently under review by the Steering Committee and should be available by the time you read this. The IIRA is a standards-based architectural

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template and methodology enabling IIoT system architects to design their own systems based on a common framework and concepts. This new version represents the latest thinking of the IIoT community in IIC, to reflect new technologies, concepts and applications, to clarify existing concepts and models for the purpose of providing practical and implementable deliverables to the community.

<u>The 3rd edition of the Journal of Innovation</u> theme is Smart Factory. This edition was published on 2017-01-26 and is available for free download. The June 2017 4th Edition theme is Smart Cities. The Thought Leadership Task Group has decided to support quarterly publications starting June 2017.

The Connectivity Framework has entered membership-wide review that should end (if there are no substantive comments) on 2017-01-26. It then goes to the Steering Committee.

Version 2.0 of the Industrial Internet Vocabulary had been released to the general membership for review. The document received a substantive comment that will need to be resolved by the Technology Working Group. If the member(s) who raised the issue is not satisfied, they may raise an objection, in writing, to the leads of the Working Group who then pass the deliverable and the objection to the Steering Committee for final resolution.

The Smart Factory Task Group has a white paper "Smart Factory Applications in Discrete Manufacturing" is out for comment too.

AWARDS

The Steering Committee instituted an award program to recognize some of the great work you can see is being carried out in the IIC.

The IIC awards program category for the fourth quarter was Testbeds. The award was won by Brett Murphy, Director, Business Development, IIoT at Real-Time Innovations (RTI). Congratulations, Brett!

Nominations are now open for the first quarter, Individual Contributor Award. The group leads vote in early February. The award is presented at the first quarter meeting in Reston, VA, USA.



MEETINGS AND TRADE SHOWS

The next IIC Members' Meeting will take place at the Hyatt Regency Town Center Hotel in Reston, Virginia from March $20^{th} \sim 23^{rd}$. The Industrial Internet Innovation Forum will take place on Thursday, March 23rd in Reston, VA (USA), adjacent to the member meeting. This is now open to the public. Please register <u>here</u>.

The prior Members' Meeting was in Coronado, CA (USA), December 5th ~ 9th. We hosted a complimentary Smart Factory Forum on December 7th during the Members' Meeting. It included guest speakers from Nestlé, General Mills and our global team of experts discussing Smart Factory challenges and opportunities, followed by a Security Panel of experts from our Security Working Group.

<u>IoT Solutions World Congress (IoT SWC)</u> took place from October 25th ~ 27th at the Porta Fira Hotel in Barcelona. We had a pavilion on the exhibit floor where ten members exhibited. We also hosted two events on October 24th: "<u>Accelerating the Industrial Internet Adoption</u>" (open to the public) and a "<u>Testbed Updates and Networking</u>" (member only) event and a member reception co-sponsored by member, IoT Institute.

We will be exhibiting at <u>IoT Evolution Expo</u>, February 7th ~ 10th in Ft. Lauderdale, FL, USA. We will have a booth at <u>Industry of Things World USA</u>, February 20th ~ 21st in San Diego, CA, and another at <u>Internet of Things World</u>, May 16th ~ 18th in Santa Clara, CA.

We will exhibit at Mobile World Congress, Barcelona, (February $27^{th} \sim March \ 2^{nd}$), at CeBIT, Hannover (March $20^{th} - 24^{th}$) and at Hannover Messe (April $24^{th} \sim 28^{th}$). We will repeat our partner role in the "Industrie 4.0 Meets the Industrial Internet Forum" at Hannover Messe too.

Our first webinar series kicked off on January 26th, with "Building Blocks for Securing the Industrial Internet". It featured the <u>Industrial Internet Security Framework</u> (IISF) and learnings from the <u>Security Claims Evaluation Testbed</u>. See the event page for details and registration for upcoming events in the series.

For a summary of IIC's other accomplishments in 2016, see our short SlideShare presentation.

Press Releases

In addition to these events, the Marketing teams has been hard at work with press releases. Here are a few:

- The <u>Industrial Internet Consortium Signs MoU with China Academy of Information and</u> Communications Technology, 2016-12-15
- The Industrial Internet Consortium Hosts Smart Factory Forum, 2016-11-28
- IoT Solutions World Congress Paves Way for Industrial IoT, 2016-11-04
- <u>Industrial Internet Consortium Signs Memorandum of Understanding with IoT</u>
 Acceleration Consortium, 2016-11-03
- <u>TE Connectivity, SAP, ifm and the OPC Foundation Announce New IIC Testbed on Sensor-to-the-Cloud Connectivity</u>, 2016-10-12
- The Industrial Internet Consortium Announces the Industrial Internet Security Forum, 2016-09-27

You can always find the latest record of IIC members featured in the news here.

NEW MEMBERS

We are pleased to announce the following new members.

- Pegasystems
- CENTRI Technology
- Thematic Partners
- Applied Risk
- Sensify Security
- IGnPower
- Parallel Machines
- PricewaterhouseCoopers
- SPAWAR
- LUT School of Business & Management
- Wipro Limited
- Mitsubishi Heavy Industries
- Advansys ESC
- Smart Connect Technologies
- SICK AG
- Fluke Corporation
- Keysight Technologies, Inc.
- Savigent Software
- Ascent Intellimation Pvt
- Sensogram Technologies
- Midokura

Come and join us!

The Industrial Internet Consortium is an open membership organization with 250 members from 30 countries, formed to accelerate the development, adoption and widespread use of interconnected machines and devices, intelligent analytics, and people at work. Founded by AT&T, Cisco, General Electric, IBM and Intel in March 2014, the Industrial Internet Consortium catalyzes and coordinates the priorities and enabling technologies of the Industrial Internet. The Industrial Internet Consortium is managed by the Object Management Group® (OMG®). Visit www.iiconsortium.org.