

Seminar on *Smart Manufacturing & Automation Technology 2017*

12 January 2017

Level 10, Perdana Hall, MIDA



PAVING THE WAY FOR SMART MANUFACTURING

Presented by DK

Sophic



IBM Bluemix™



industrial internet
CONSORTIUM



Alliance
Partner



Sophic aims to be a global system integration specialist in enabling Smart Manufacturing implementations for factories worldwide via our integrated Industrial Internet of Things solutions. A pure play TECHNOLOGY company, we have delivered proven automation solutions to more than 40 MNCs & SMEs in South East Asia.



Although already into it's 9th years, **Sophic** is still very much a startup deep down. despite the volatile economic climate, we've been able to maintain a CAGR growth of 30% for the 8 years since establishment. In the past 3 years, we expanded our presence into KL and Ho Chi Minh, beyond Penang island, beyond Malaysia, and beyond semiconductor.

The Connected Factory in Action



INNOVATION

TAP COMMERCIAL INNOVATION

Mobilize employees and supervisors to move across the factory floor and access data wherever they are. The iPad and other like devices are making their way into industrial settings – along with an expectation that much of the commercial innovation it brings will also apply to industrial activities.

CONNECT ENGINEERS WITH MACHINES (M2M)

Apply predictive maintenance. Gain early warnings when production, machinery or network performance is about to degrade.



EFFICIENCY

LINK INFORMATION & OPERATIONAL TECHNOLOGY

Bridge the gap from data center to control room to collaborate and share best practices and common goals between manufacturing and IT.

OPTIMIZE ASSETS

Identify where your people, equipment, works in process and finished goods are in real-time. Adjust the schedule and inventory on the fly.



"I see the fix!"



AGILITY

CONNECT & COLLABORATE EXTERNALLY

Extend visibility beyond your four walls. Link the extended supply chain and distribution to create dynamic workflows. Help and expertise are available in an instant.

EXPANDABLE INFRASTRUCTURE

Design and build an Industrial Ethernet infrastructure to minimize cost and effort to expand or improve processes. One infrastructure for safety, control, SCADA, Physical Security, and LAN.



RISK

SECURE PHYSICAL & CYBER ASSETS

Traditional security devices, like keypad entry systems, call boxes and security cameras, need power from Industrial Ethernet cables, with secure networks, to protect your processes, people, and plans from cyber sabotage.

MAXIMIZE UPTIME

Design ruggedized industrial networking infrastructure that will endure in harsh environments with redundant communications, power and configuration backup – especially for business processes under extreme conditions.

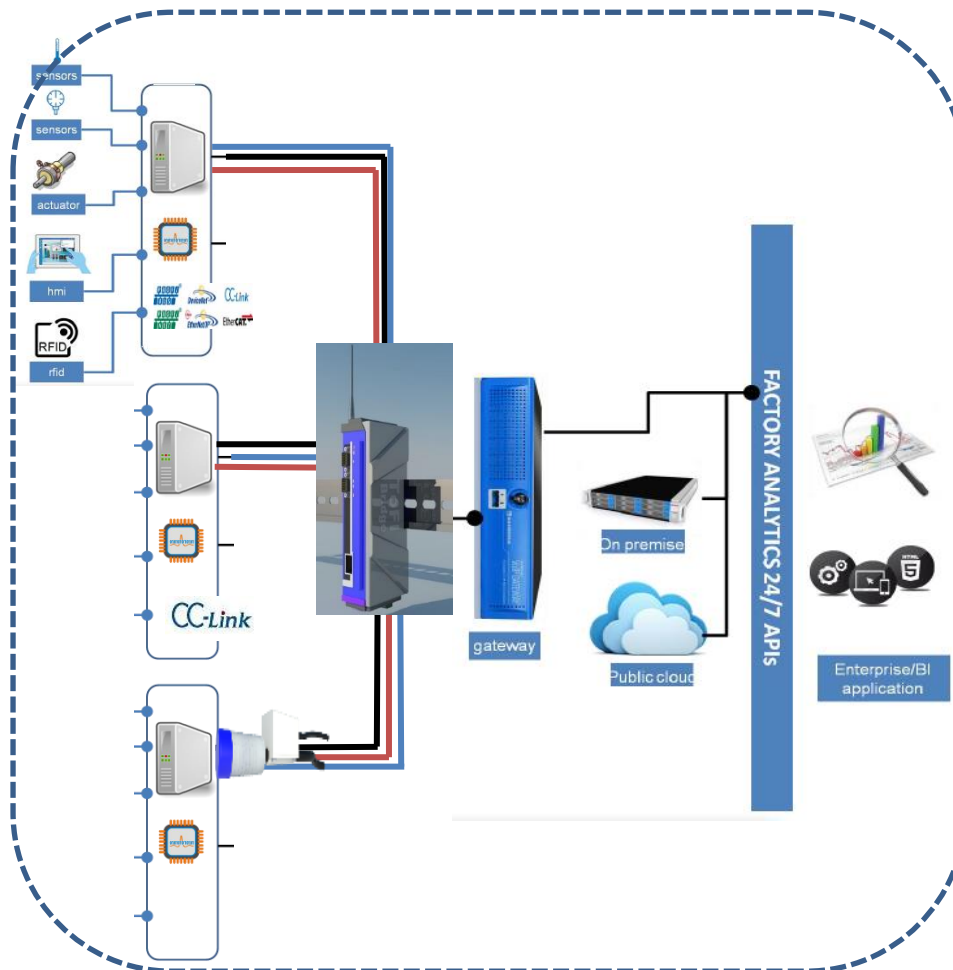
BELDEN
SOLUTIONS FOR THE SMART MANUFACTURE

INTEGRATION AND AUTOMATION CHALLENGES

CURRENT



AFTER



BENEFITS

CONNECTING SILO
DEVICE/CONTROLLER
FROM VARIOUS
PROTOCOLS IN OT TO
IT:

- Accurate equipment health monitoring
- Allow remote control
- Eliminate human errors, downtime, provide safety.



INNOVATION



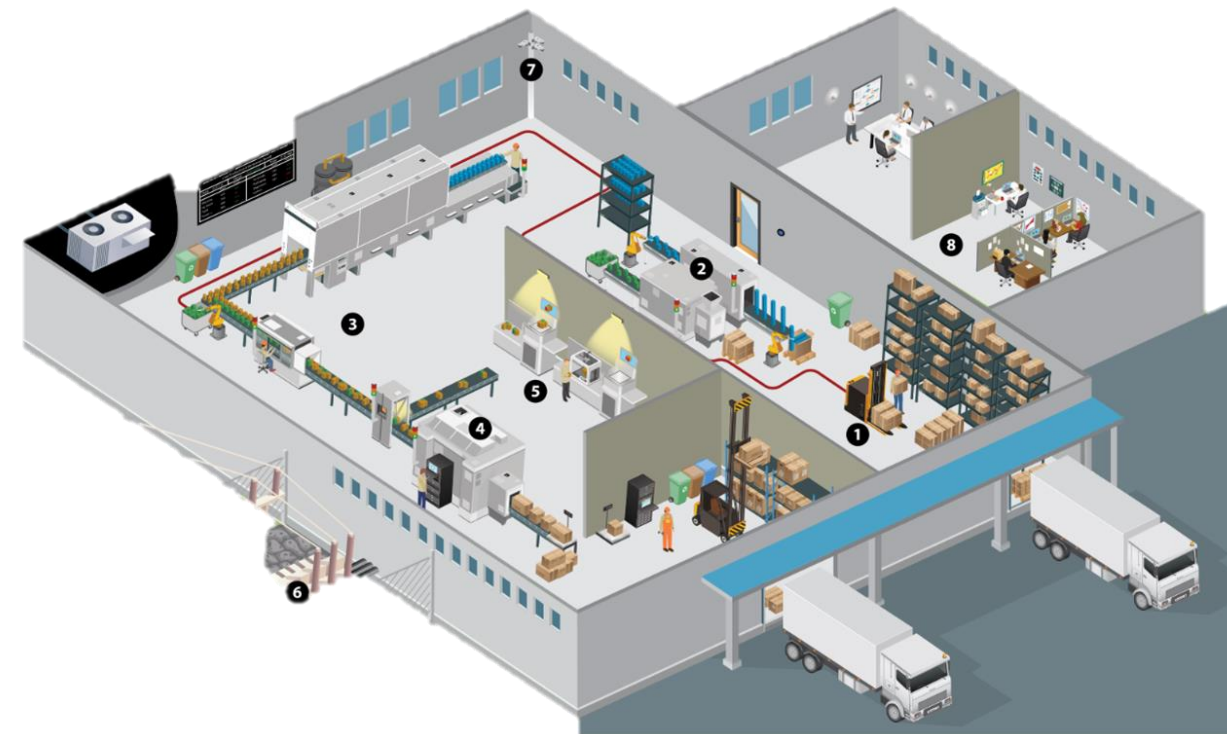
AGILITY



EFFICIENCY



RISK



Legend

- | | |
|------------------------------------|--------------------------------|
| ① Warehouse / Inventory Management | ⑤ Quality and Testing |
| ② Material Preparation / Machining | ⑥ Facility & Energy Management |
| ③ Process, Assembly, Robotics | ⑦ Safety and Security |
| ④ Packaging and Material Handling | ⑧ Enterprise Applications |

- ✓ Set strategic direction at the executive level, make OT/IT convergence a strategic priority
- ✓ Use Industrial IoT as a catalyst for convergence between OT & IT organizations
- ✓ Form a special working group committee to share knowledge and align business practices
- ✓ Start with a pilot program, from field to cloud
- ✓ Find the right partner, who else?

PRODUCTION SHOP FLOOR MONITORING SHOWCASE



Description:

Production shop floor monitoring is an effective application for both operation and management to monitor and manage production processes and lines

- Hardware & software implementation
- Open standard OEE alignment

Module list

- Andon
- OEE Dashboard
- Alarm / Alert Triggering
- Traceability & Pokayoke
- Machine interface (Gateway and Industrial Protocol)



THANK YOU

Sophic

Visit our webpage:
www.sophicautomation.com

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