Good IoT / OT architectures are all about encapsulating the complexity of IoT distributed systems to:

• Reduce development time and risk
• Ensure optimum investment protection
• Avoid creating dependencies between the Things in the field and the applications
• Leverage world-class, proven and standards-based architectures, protocols and technologies
• Dramatically reduce the TCO (Total Cost of Ownership)
• Rapidly implement innovative, new business models and processes

And:

Preserve and extend the customers value proposition by leveraging computational power also at the edge of the IoT infrastructure for data management, analytics and applications. It is essential that the software architecture also at a remote device or asset level provides flexibility and agility to design and manage the embedded applications as required.

IoT Architectures have to be Flexible, End-to-End and Open

Enabling real-time business decisions – real-time aggregated data for applications, historical data, fast write speeds, CEP (Complex Event Processing) front end

Preserving and extending value props – no "business normalization" but encapsulating complexity, allowing to focus on core functionality

Open & Industry Standards based in technology, architecture, ecosystem and attitude, IT-centric by design, no-vendor lock-in by proprietary in approach and technology

Supporting diversity – down to the edge – HW, SW, type of applications, business models

"No-Silo-Approach" – readiness for current and future requirements – ESB (Enterprise Service Bus) for machines concept – integration of field and IT applications without creating dependencies – different from "classic telemetry"

Including development, deployment, management, infra -structure, communication, investment protection, future-proving, certifications

Complete approach in architecture and elements

Continuous testing, validation, feedback and improvement ensured, strong ecosystem

Not just scale up but "out", volume and diversity

End-to-End complete OT stack, IT/OT integration, security, flexibility and efficiency requires holistic approach, operating system for the IoT / IIoT

IoT Architecture and Building Blocks Checklist

If, as part of your IIoT / IoT solution you require one or more of the following requirements to be met …

Agility
Value-driven
Openness
Flexibility
Versatility
TCO-focused
Security
Validation
Scalability
Completeness

Note: The information in this document is subject to change without notice and should not be construed as a commitment by Eurotech. While reasonable precautions have been taken, Eurotech assumes no responsibility for any errors that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.

© Copyright Eurotech 2017. All rights reserved.