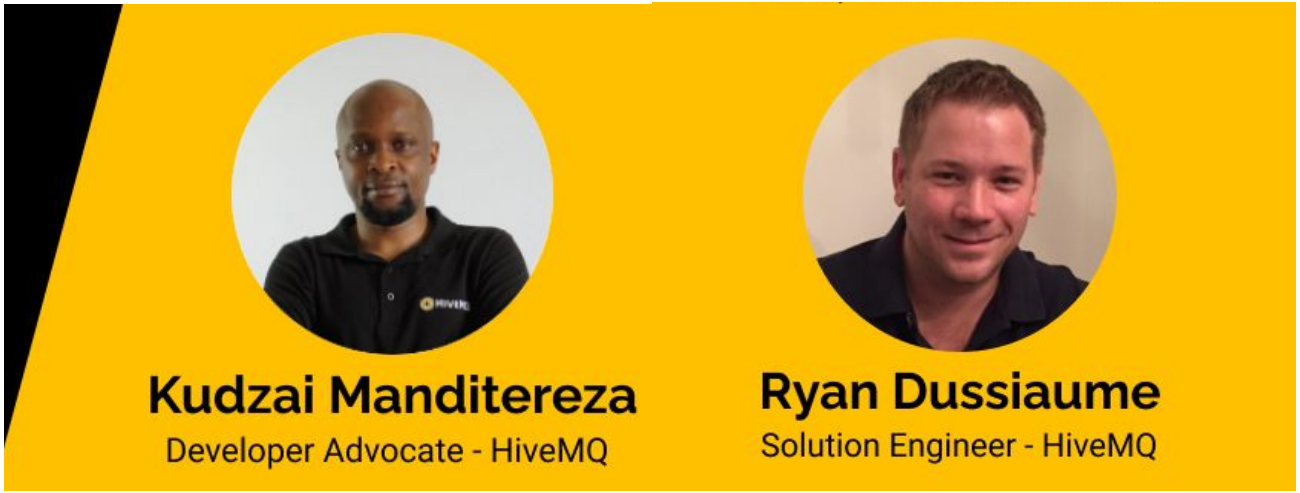

HIVEMQ
Architecting a
Unified Namespace
for IIoT

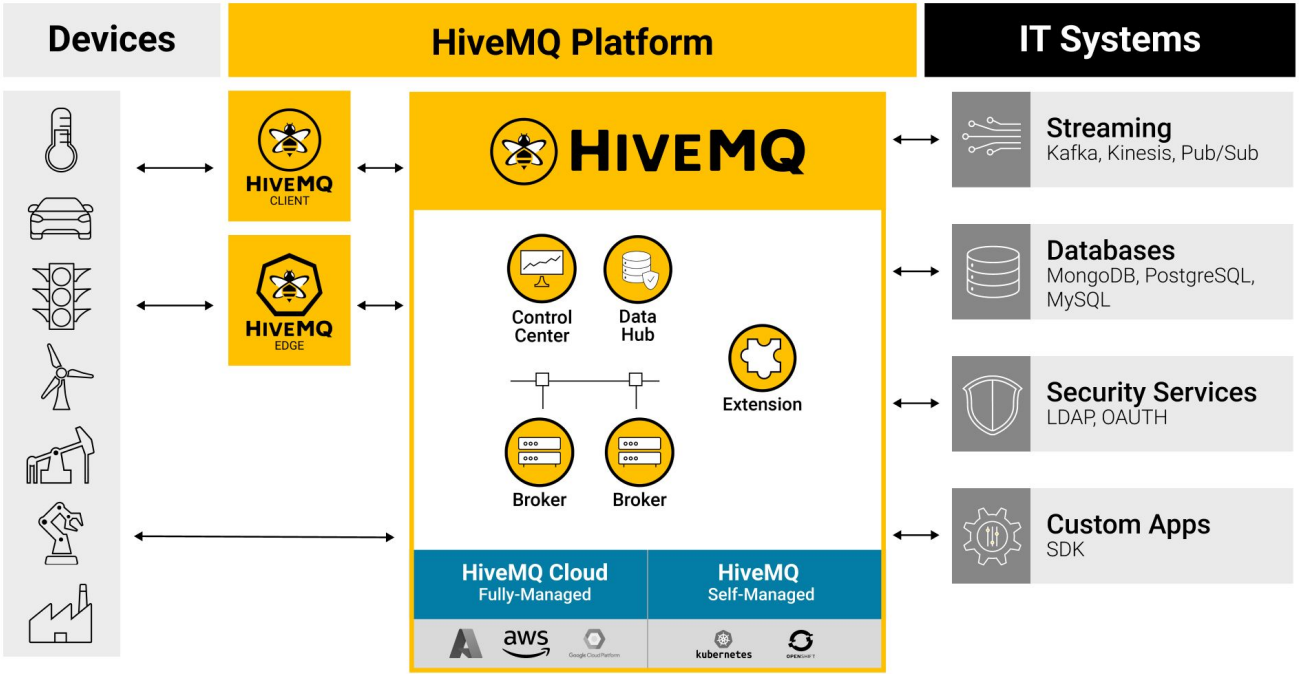
# Speakers



# Agenda

- Introduction
- UNS Principles
- Case Study
- Demo: Live UNS
- Q&A

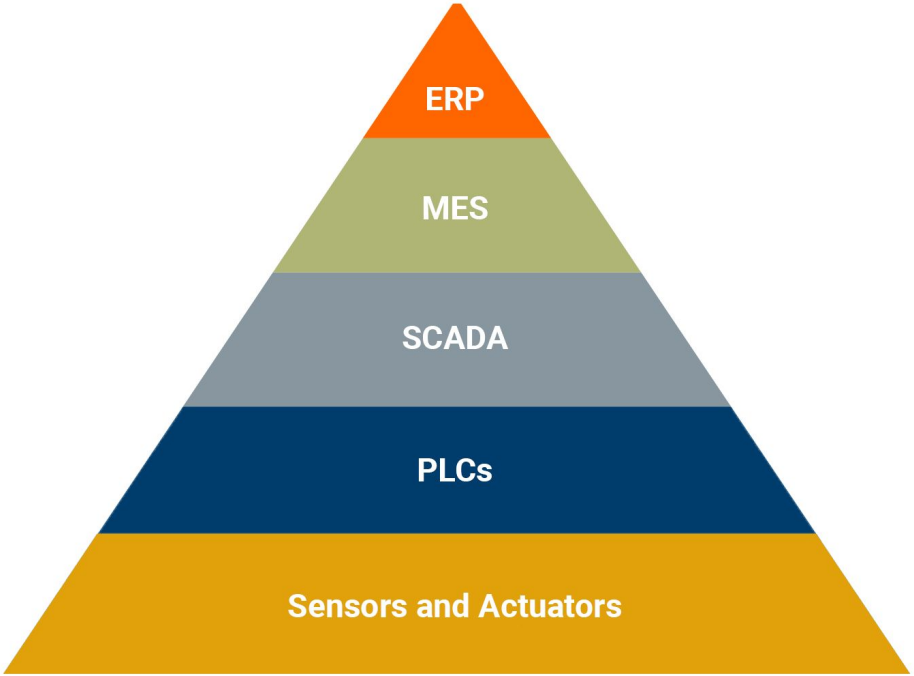
# HIVEMQ | The Enterprise MQTT Platform



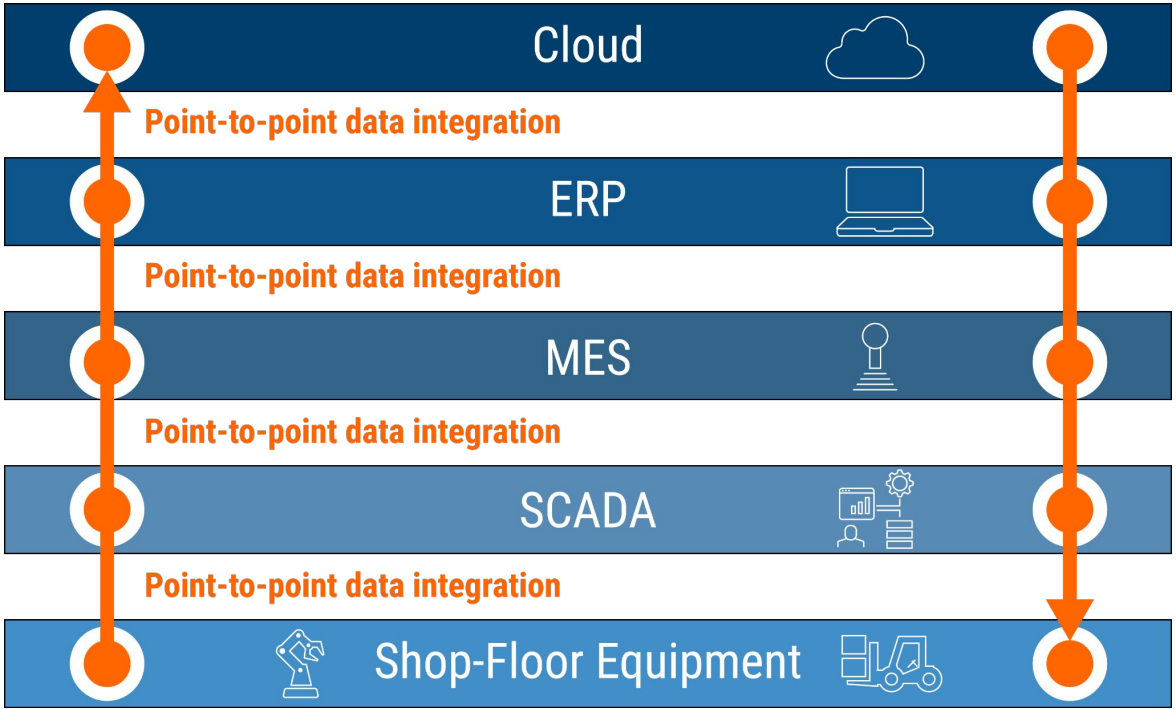
# Key Industries



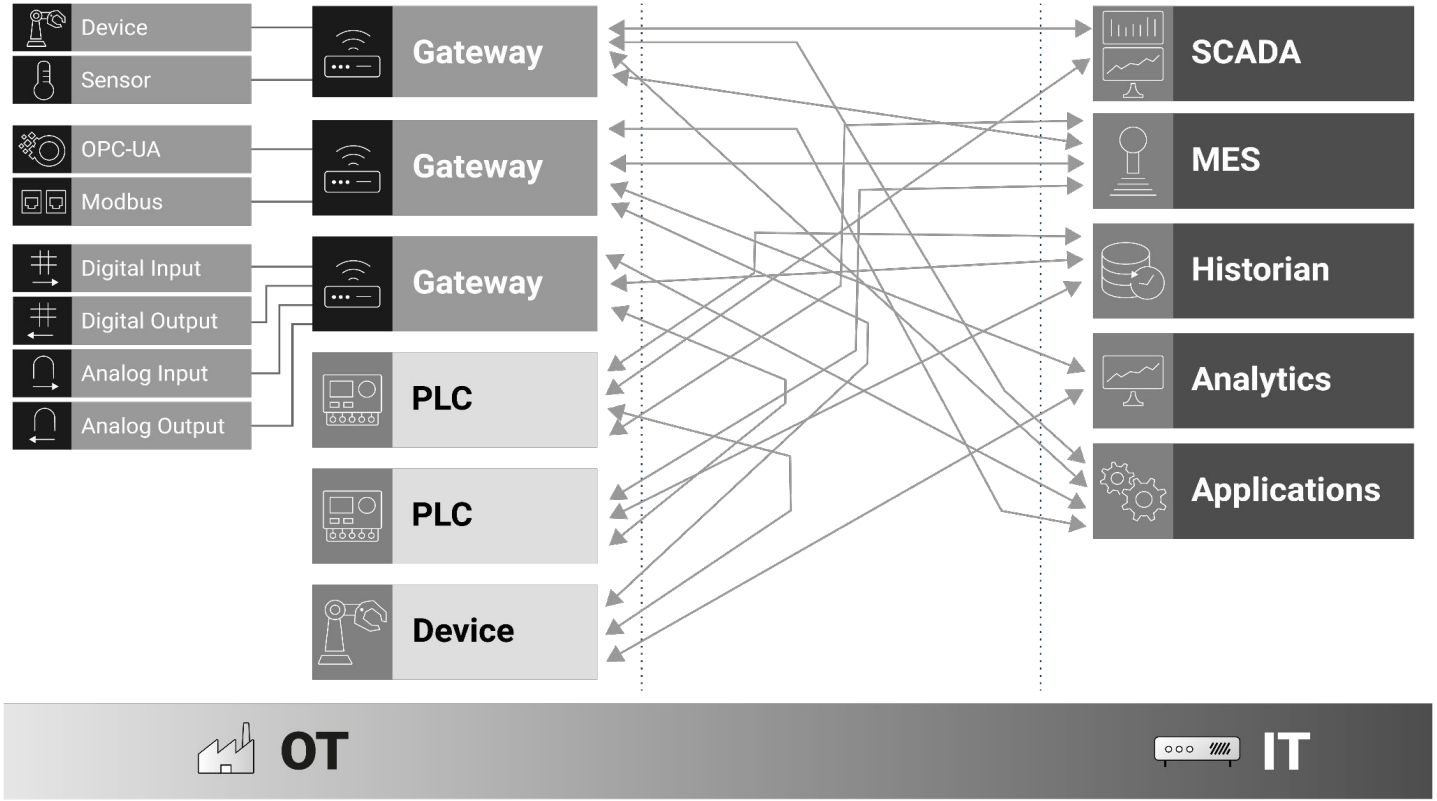

# Computer Integrated Manufacturing (CIM) pyramid



# Traditional Industrial Data Integration



# Traditional Industrial Data Integration

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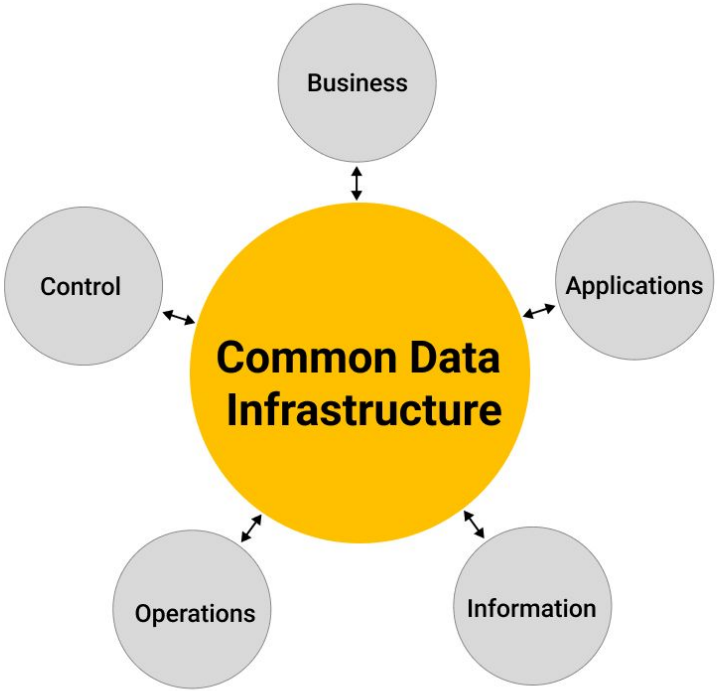
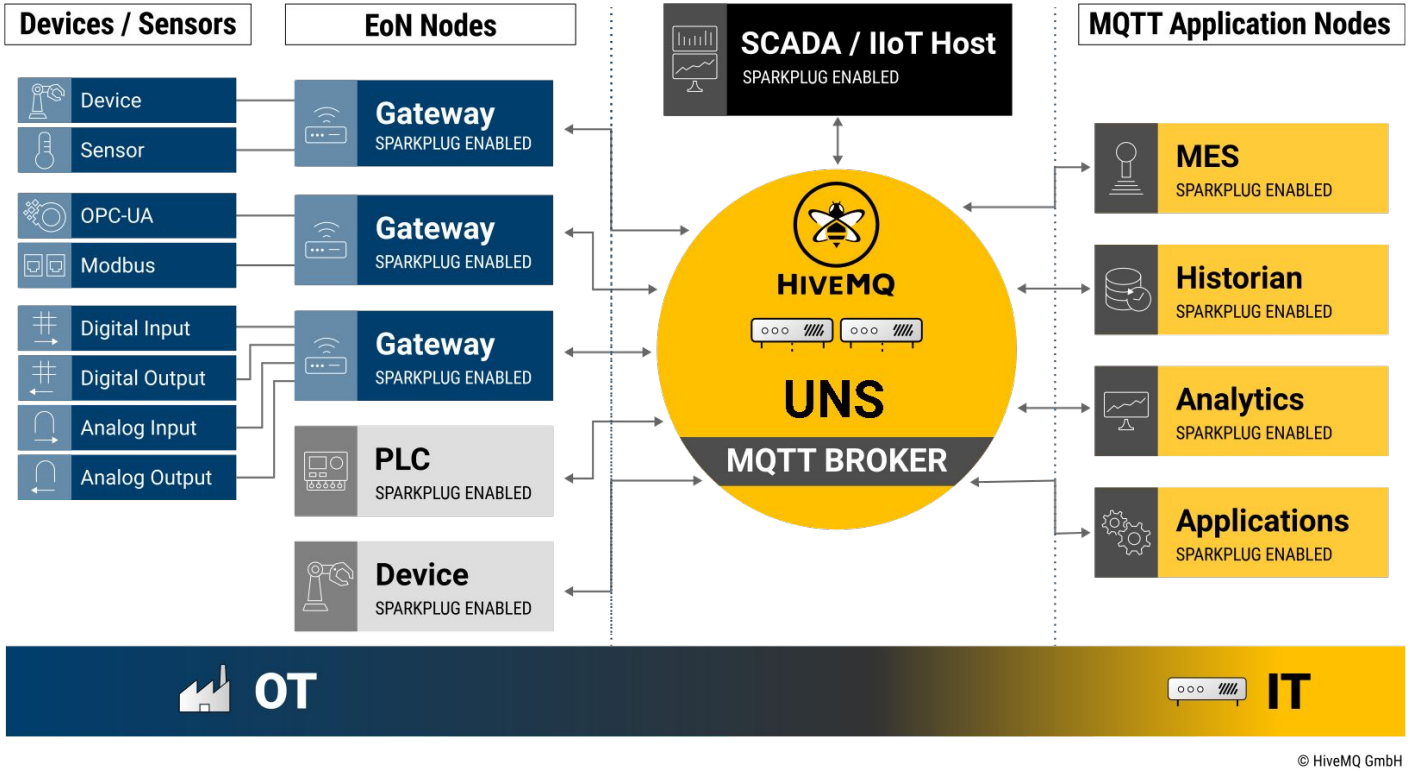
# Foundations of Unified Namespace

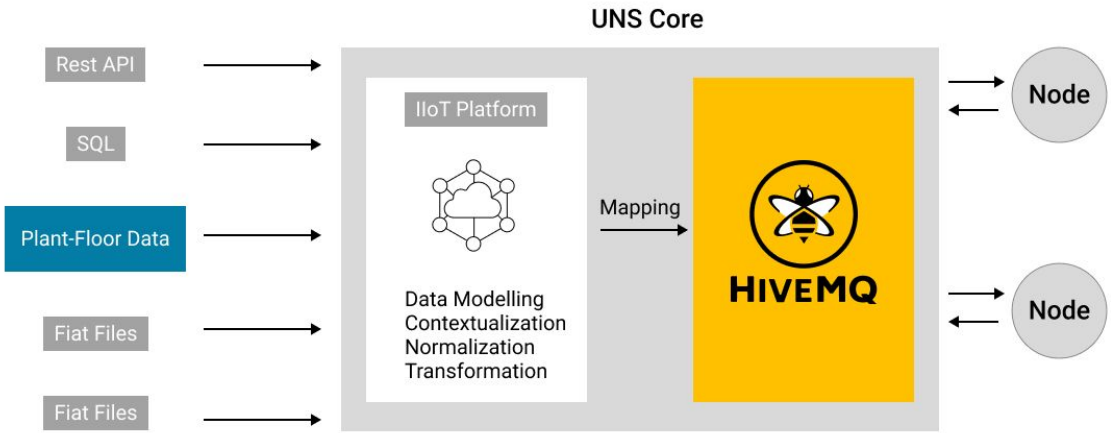
- Edge Driven
- Open Architecture
- Lightweight
- Report by Exception



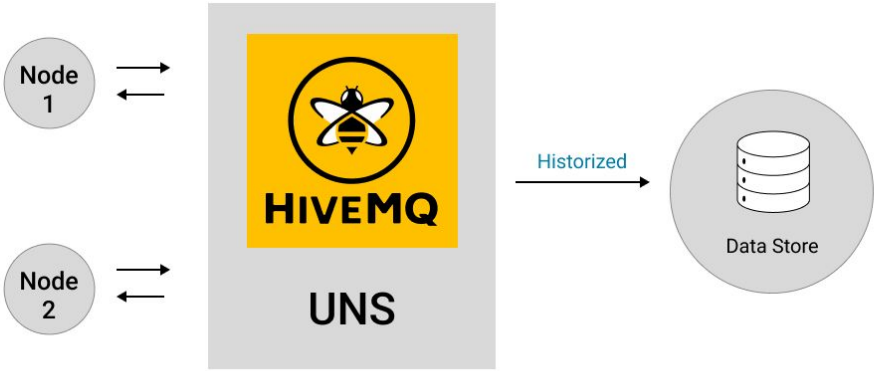
# Where Does The Unified Namespace Live?



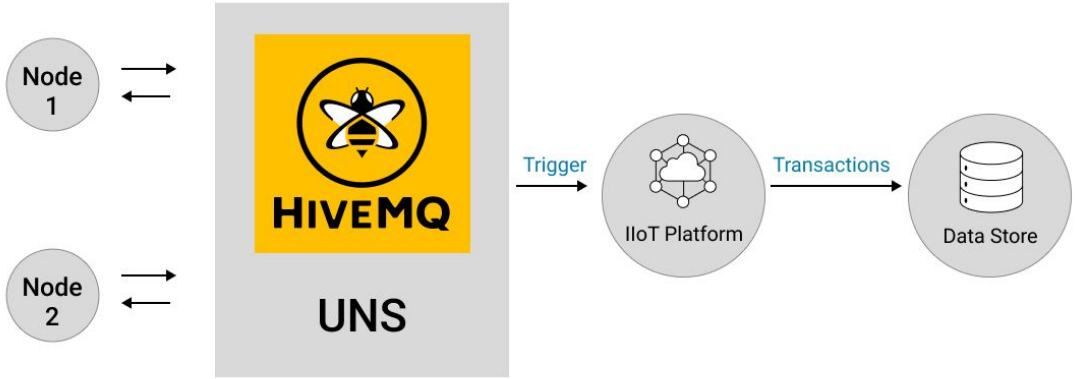
# The Core of Unified Namespace



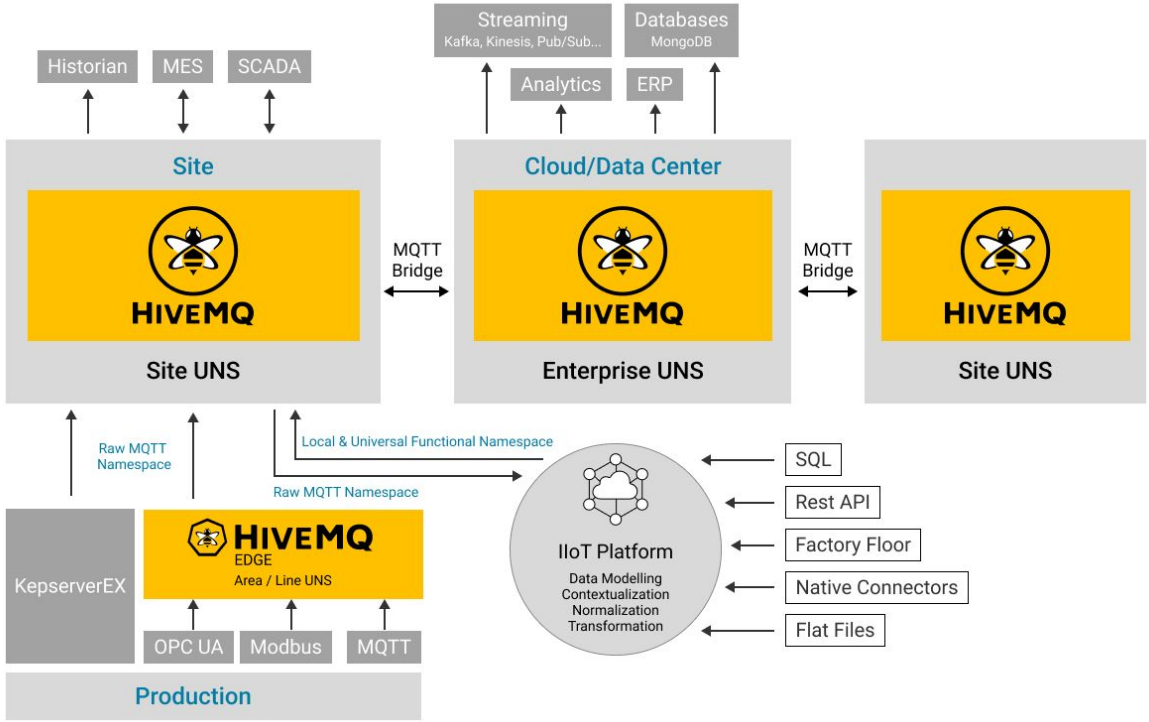
# Data Historization in Unified Namespace



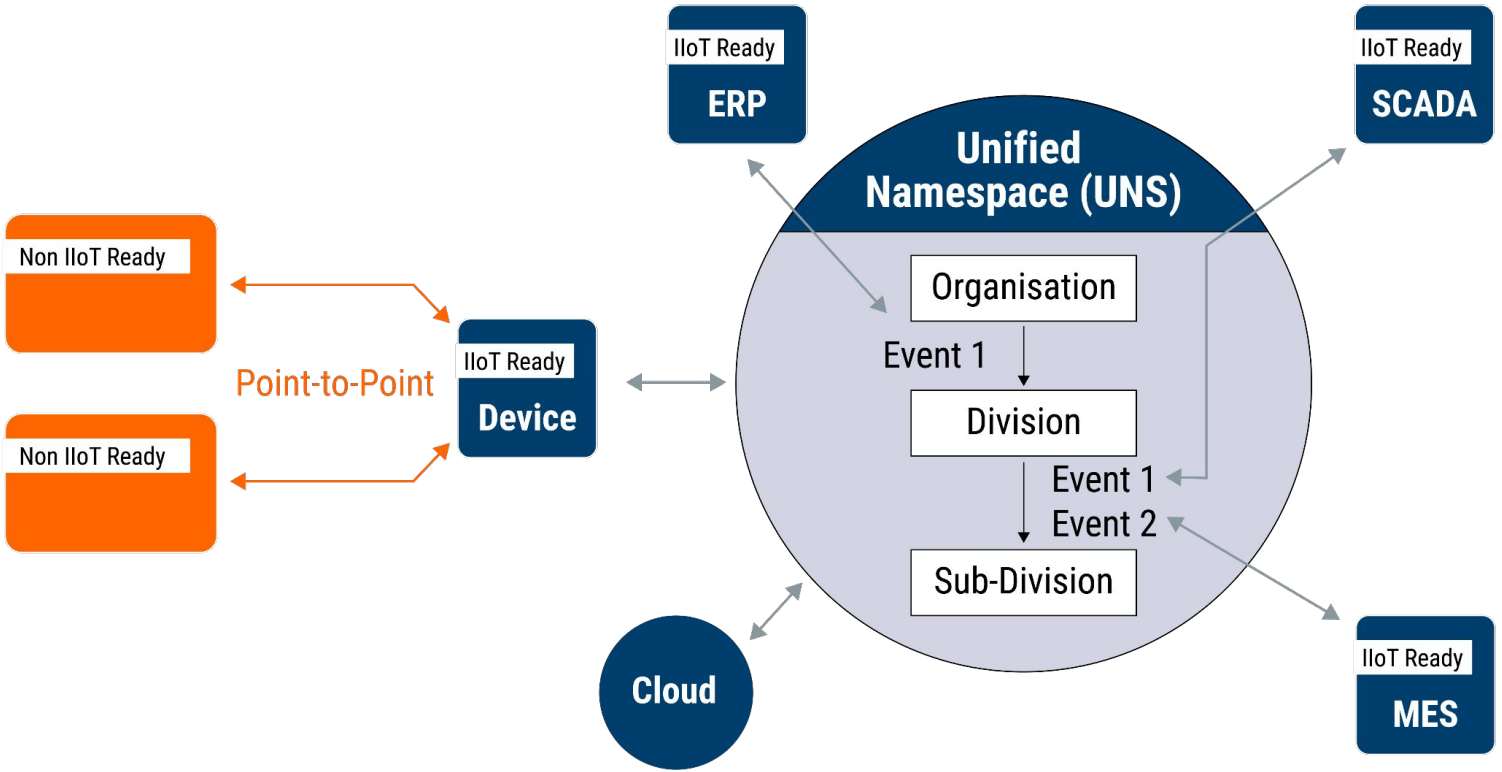
# Transaction Data to Events in UNS



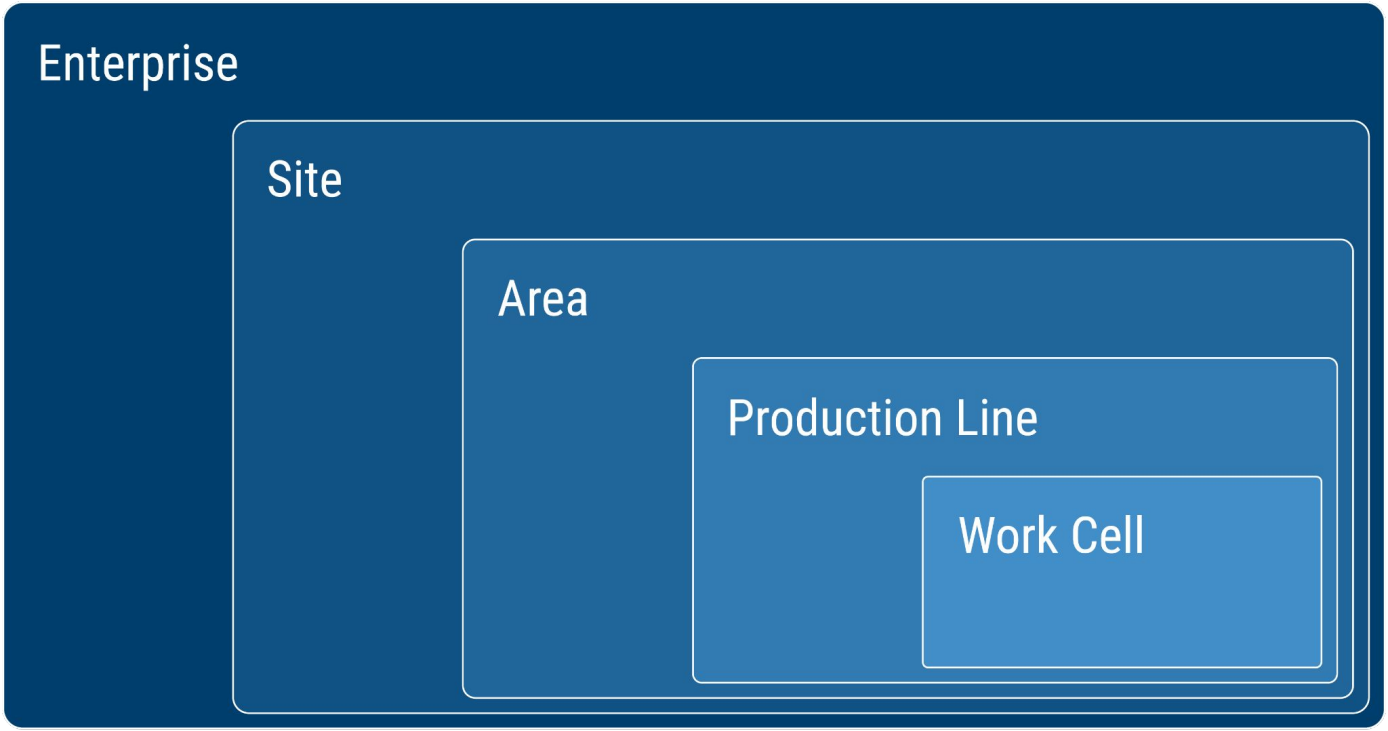
# Reference Architecture Model



# Semantically Structuring UNS Hierachy

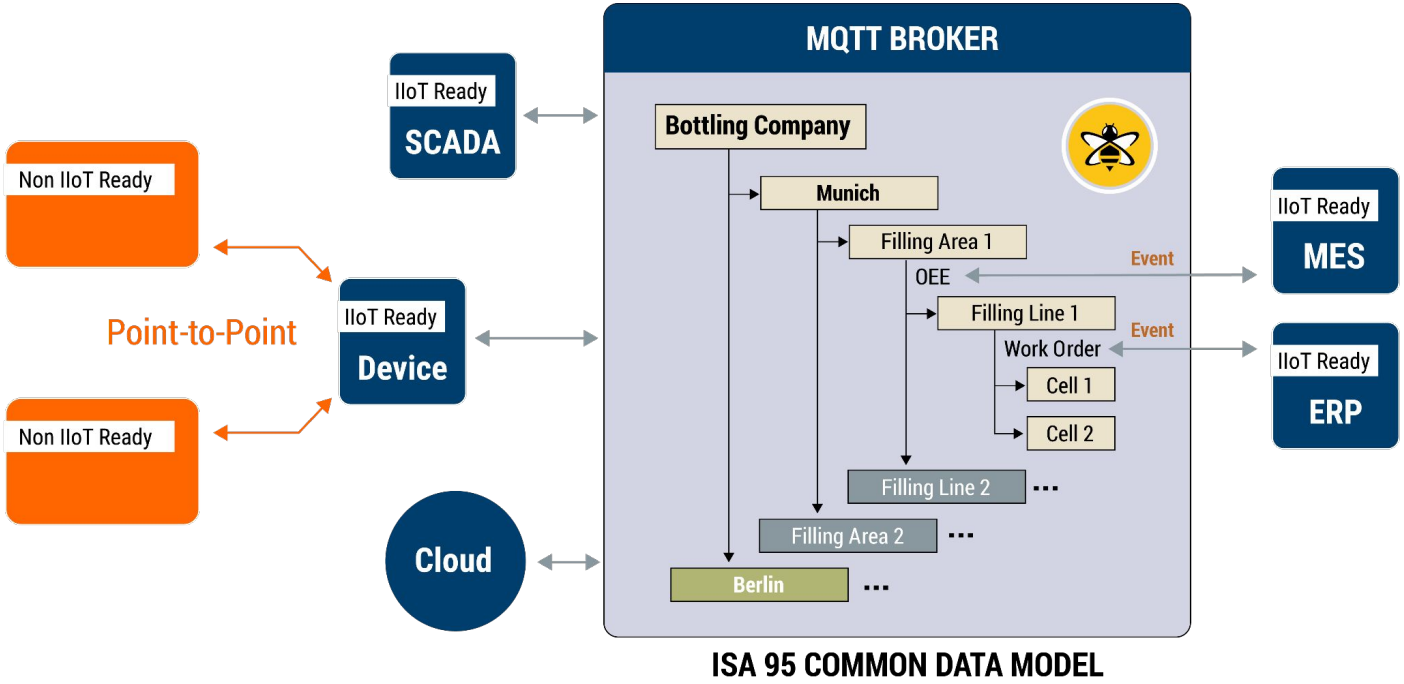


# Best Practices for Structuring the UNS

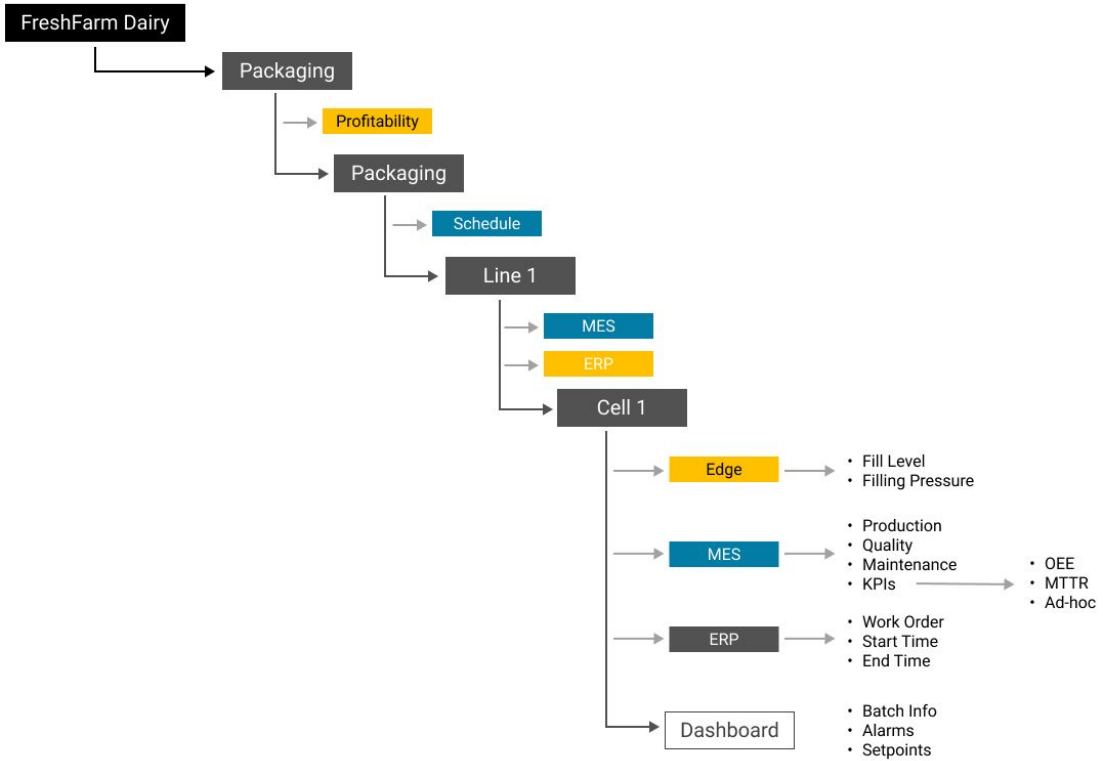



*ISA 95 Common Data Model*

# Example of a UNS Enterprise Structure



# UNS Semantic Hierarchy



# Anglian Water Improves IT-OT Integration by Building a UNS with HiveMQ

**Largest water and water recycling company in the UK.**

# Challenges

- **Improve customer service, environmental performance, and operational efficiency**
- **Bring disparate data into a single source of truth**

# Solution

- **Using HiveMQ to collect MQTT data**
- **Building a Unified Namespace (UNS) on top of MQTT to create a single source of truth for data**

# Results

- **Better insight into asset performance.**
- **Improved integration between IT and OT environments.**
- **Maintained a high level of security**

# Demo

## Live Unified Namespace