The Data Maturity Journey
The Path to a Successful Industry 4.0 Architecture

HighByte

Industrial DataOps
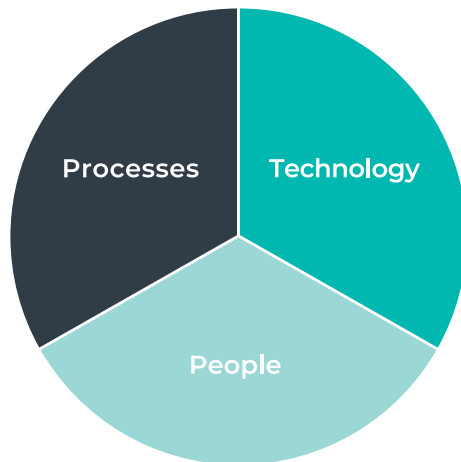## The Missing Link for Industry 4.0

Processes
- Data contracts
- Data governance
- Semantic data definitions
- Information and systems architecture

Technology
- Edge computing
- Data integration hubs
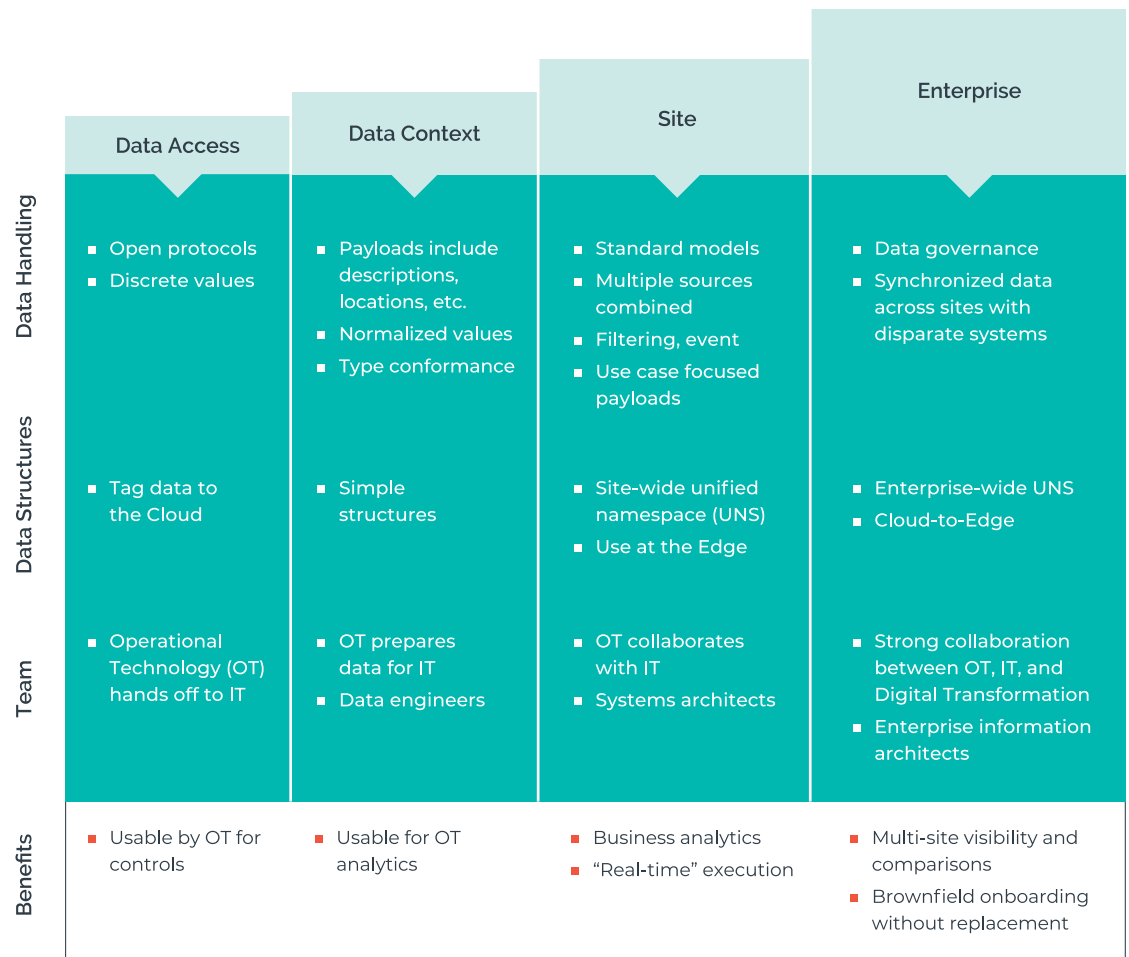- Unified namespace
- Data modelers
- Open standards

People
- Data engineers
- Systems architects
- Enterprise information architects

Pie chart: Processes / Technology / People

DataOps (data operations) is the orchestration of people, processes, and technology to securely deliver trusted, ready-to-use data to all who require it.

Industrial DataOps solutions are needed in manufacturing environments where data must be aggregated from industrial automation assets and systems and then leveraged by business users throughout the company and its supply chain.

Industrial DataOps
Maturity Model

	Data Access	Data Context	Site	Enterprise
Data Handling	■ Open protocols ■ Discrete values	■ Payloads include descriptions, locations, etc. ■ Normalized values ■ Type conformance	■ Standard models ■ Multiple sources combined ■ Filtering, event ■ Use case focused payloads	■ Data governance ■ Synchronized data across sites with disparate systems
Data Structures	■ Tag data to the Cloud	■ Simple structures	■ Site-wide unified namespace (UNS) ■ Use at the Edge	■ Enterprise-wide UNS ■ Cloud-to-Edge
Team	■ Operational Technology (OT) hands off to IT	■ OT prepares data for IT ■ Data engineers	■ OT collaborates with IT ■ Systems architects	■ Strong collaboration between OT, IT, and Digital Transformation ■ Enterprise information architects
Benefits	■ Usable by OT for controls	■ Usable for OT analytics	■ Business analytics ■ "Real-time" execution	■ Multi-site visibility and comparisons ■ Brownfield onboarding without replacement

Your Industrial Data Maturity Journey

As companies adopted Industry 4.0 technologies, they often began with lofty visions but very basic initial projects. Many found their initial project was successful but follow-on projects stalled and failed to scale. Their data infrastructure could not support the increasing complexity.

Where are you on your industrial data journey? Where do you want to go? Use the radar chart on this page to plot your own progress and prepare for the road ahead.

Next Steps

- Visit highbyte.com to learn more about HighByte Intelligence Hub, an Industrial DataOps solution designed to help you model and manage plant floor data at the Edge without writing or maintaining code.

- Email sales@highbyte.com to schedule a demo and join the free trial program.

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