

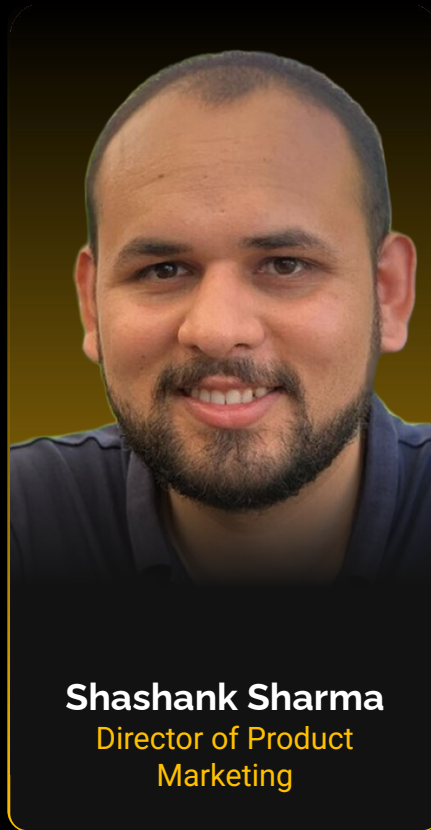


Why intelligence must be distributed, not centralized

Rethinking the industrial AI playbook for real-time, governed operations



Speakers



Why decisions are moving to the edge

The business is demanding decisions faster than the centre can make them.



Supply chain volatility

Disruption and shortage are now permanent operating conditions



Re-plan production in minutes — not overnight planning runs or corporate sign-off



Demand volatility & mass customisation

Smaller batches, more variants, shorter lead times



Adapt continuously at the line — dynamic scheduling and fast changeovers at the point of production



Competitive pressure on responsiveness

When products commoditise, the fastest responder wins the order



Treat decision latency as a competitive metric — the data-up, decision-down loop is too slow to win



Regulatory & sustainability compliance

Traceability, emissions reporting and data sovereignty tightening



Enforce compliance at the point of action — documented in real time; some data can never leave the site



Workforce & expertise drain

Experienced operators retiring, specialist skills scarce



Embed know-how where the work happens — available to every shift, not queued behind a central team



The playbook that built the last decade

One pattern turned industrial data into insight.



That model worked for business analytics – **it was built for data that could afford to wait.**

But operational data plays by a different set of rules.



Why the model breaks on the plant floor

“The plant floor is still
a black hole:
mountains of data,
very little insight.”

Lack of information visibility

Metrics aren't surfaced where decisions are made.

The moment to act passes

“By the time it's centralized, the moment to act on it has often passed...”

Lack of domain context

“...and the context that people closest to operations understand best gets lost along the way.”

Central data team becomes bottleneck

Expanding the use of data to everyone who can create value is essential for the success.

Analytics could afford to wait. Industrial AI can't — that's the difference.



The three walls of centralize-first

Why “collect → centralize → analyze” stalls real-time, governed operations.

The fix isn't anti-central. Distribute execution, centralize governance.

Latency

1

The moment to act has passed

Data reaches the center too late for sub-second decisions.

Governance

2

Governance gets stuck

Models get trained on raw, untrusted data.

Lost context

3

Context is stripped away

Reshaped far from the source, the real signal gets buried.



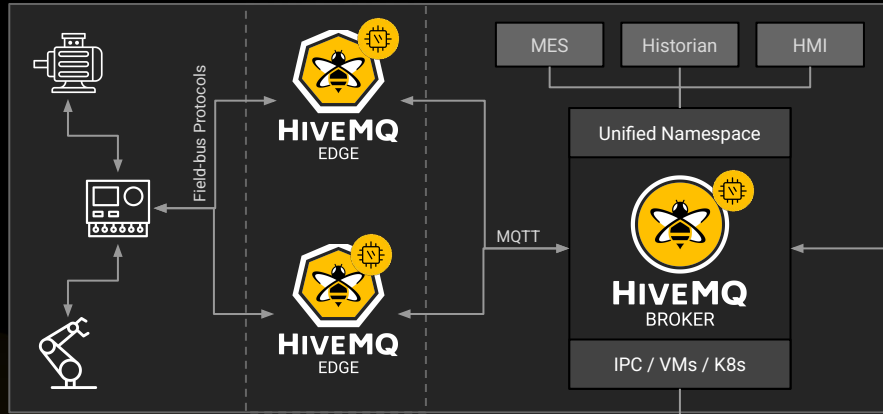
THE REFRAME

Move intelligence to the data.
Don't move the data to the intelligence.

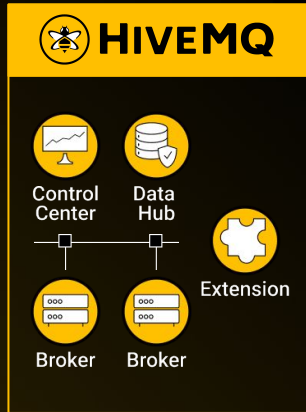
"Industrial AI does not require centralized data. It requires connected, contextualized, trusted and accessible data."



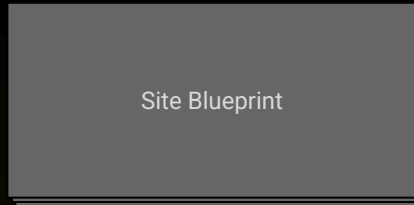
Site 1 - Reference



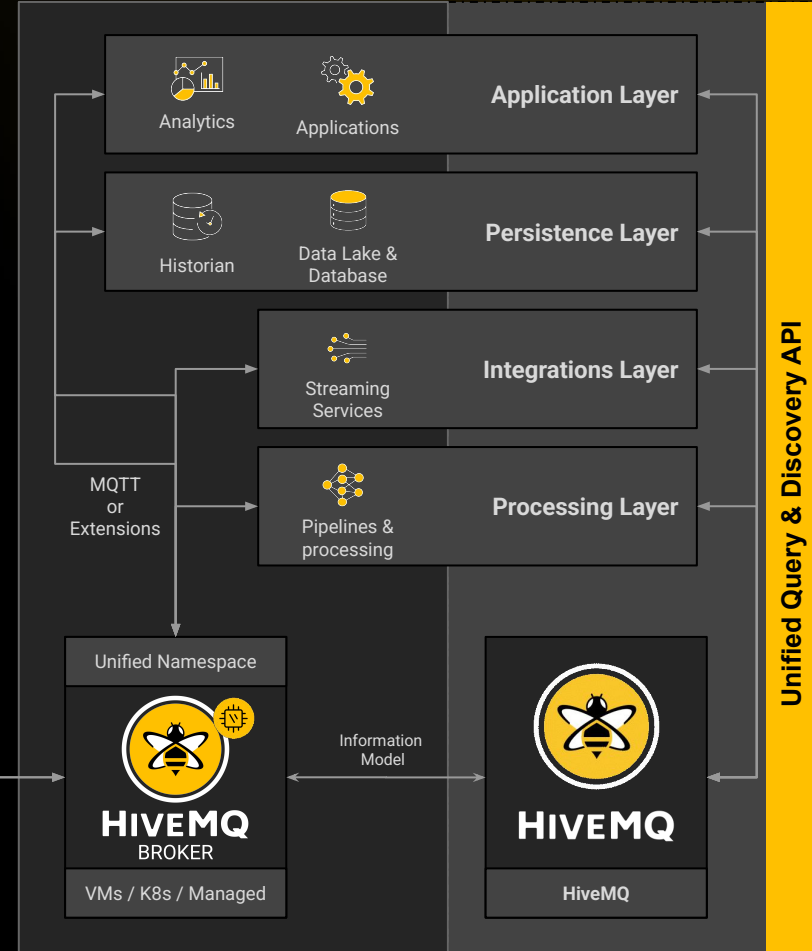
What's Inside...



Site 2 ... Site N



Cloud or data center



Unified Query & Discovery API

Leaders aren't waiting for the debate to settle

What operators achieve when intelligence sits where the data already lives.



\$24M

saved

80% less production
downtime across 24 factories



99.999%

factory uptime

Compliance-grade reliability
across 15 factories



<1 sec

to unlock a car door

Down from 30 seconds, across
20M vehicles

Trusted by



Mercedes-Benz Group

SIEMENS



Smart manufacturing

Automotive

Enabling **real-time visibility and consistent operations** across global factories with a unified data architecture.

Global

Standardization

Unifying machine and plant data across diverse manufacturing sites

Centralized

Monitoring

Improving fault detection and reducing downtime with real-time insights

AI-Ready

Foundation

Powering predictive maintenance and faster rollout of digital initiatives



Smart manufacturing

Pharma

Digital factory initiative **automated regulatory compliance** and provided a single pane of glass into all factories.

\$83M

Savings

By moving from 99.99% to 99.999% factory uptime

15

Factories Connected

For real-time visibility and compliance across global operations

500+

Instruments

Connected for automated real-time data capture for regulatory compliance

Three things to take back to your team

1 →

Centralize-first is the bottleneck

The moment to act passes and context is lost before data reaches the center.

2 →

Move intelligence to the data

Keep governance central; push compute and local intelligence to the edge.

3 →

Audit your own workloads

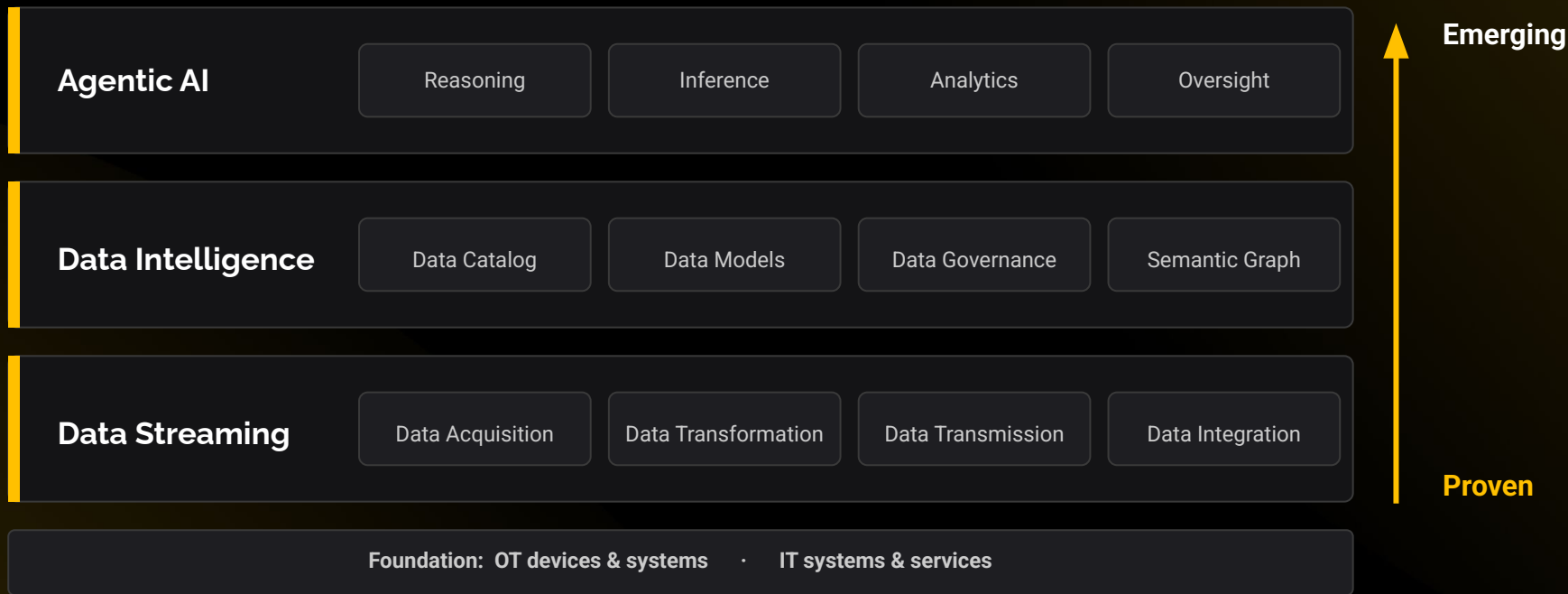
Ask what truly benefits from being centralized, and what doesn't.

Stream data. Build intelligence. Activate AI.



How HiveMQ powers streaming, intelligence & agents

One platform: the central nervous system for multi-agent industrial intelligence.



Questions!

