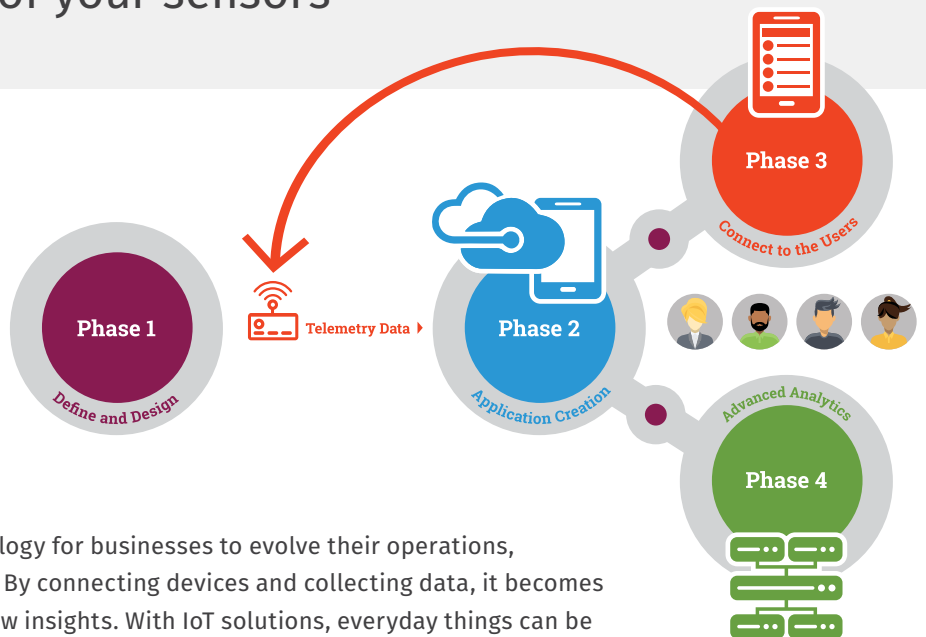


# Connected Products (IoT)

Helping you make sense of your sensors

We quickly and securely allow the integration of collected IoT data with existing enterprise data. We then rationalize the massive amounts of data and an organization's downstream applications so decision-makers can understand how their business works at a deeper level than ever before.



## What is IoT?

The Internet of Things (IoT) is an enabling technology for businesses to evolve their operations, products, and how they interact with customers. By connecting devices and collecting data, it becomes possible to analyze that information to create new insights. With IoT solutions, everyday things can be IoT enabled, such as an office building, washing machines, elevators, or vending machines. Allowing companies to make improvements to their business—from increasing operational efficiency to delivering better customer experiences and new revenue streams.

### The Value

- Offers secure integration with existing applications
- Provides actionable insights

### The Proof

- Delivers key insights to the right users immediately
- As business evolves, add data sources in real-time

### The Outcomes

- Predictive analytics to support product development modeling
- A centralized data system for downstream applications

## Barriers to IoT

**Complexity:** IoT implementation requires a specialized skill set. For companies that are new to IoT, this could require hiring a whole new department of specialists.

**Time:** Many IoT solutions require months to set up and integrate with existing business processes, causing a delay between initial investment and realizing value.

**Cost:** Understanding the cost of IoT is complex, and investing in new personnel, infrastructure, and equipment makes IoT cost-prohibitive for many companies.

**Security:** With so many devices deployed on the edge, IoT poses unique security, privacy, and compliance challenges.

## Our Solution

IoT Service Hub aggregates and maps the ingestion data to a centralized system and makes the information available through a secure integration layer for downstream use. Our cloud-based, turnkey platform increases equipment uptime, improves quality of service delivery, integrates with back-end services, and creates new service revenue streams.

## Scenario 1: Increase Equipment Uptime

A heavy equipment manufacturer with a large percentage of legacy equipment needs a way to optimize machine uptime. Using the IoT Service Hub and machine learning we can identify equipment anomalies before failures occur, optimizing productivity, reducing maintenance cost, and increasing operational efficiencies.

- Optimizes equipment uptime by predictively identifying problems in real-time
- Keeps legacy and new equipment operating at optimal performance by transitioning from reactive to proactive maintenance
- Reduces routine maintenance by performing condition-based maintenance that addresses high probability issues rather than ad hoc fixes
- Enables remote monitoring of equipment

## Scenario 2: Improve Quality of Service Delivery

A COO wants to reduce equipment operating costs by transitioning from reactive to predictive maintenance, extending the useful life of equipment and optimizing service personnel.

- Improves first-time fixes by accurately predicting and identifying root causes
- Reduces maintenance costs by 10-40 percent by replacing the “right” parts, fixing the “right” issues, and assigning the “right” technician
- Improves worker safety by monitoring equipment and conditions and sending alerts or halting equipment usage before incidents occur

## Scenario 3: Create a New Revenue Stream

An OEM of equipment uses IoT Service Hub to produce recurring revenue streams by gathering and analyzing data that complements predictive maintenance, and presents opportunities to monetize services.

- Creates new revenue streams by enabling performance-based service agreements or equipment-as-a-service
- Enables remote monitoring of equipment at customers’ sites, presenting the opportunity to offer guaranteed equipment performance contracts
- Provides extensibility to place sensors on own and third-party equipment

## The Business Problem

“I want to utilize streaming data and machine learning to create a better experience for our customers or lower our operational expenses.”

## The Opportunities

### Reduce Equipment Downtime

Manufacturers need to identify and reduce issues that lead to downtime

### Increase Productive Uptime

Quickly identify and remedy when equipment thresholds are exceeded

### Routine Maintenance Costs

Take the guess work out of equipment failures or performing rules-based maintenance

### Increase Asset Lifespan

Weather, poor quality materials, and increased production demands can jeopardize asset lifetime

### Improve Worker Safety

Environment or fault monitoring can produce an alert or initiate counter measures to be taken before an incident occurs

### New Revenue Streams

Create equipment-as-a-service offerings, such as remote diagnostics or predictive maintenance

80%

of companies that adopt IoT report efficiency improvements

70%

of companies lack awareness about asset maintenance

90%

of executives said that CX is one of the greatest opportunities for IoT

As part of the 110-year-old Hitachi Ltd. family, we uphold its legacy of quality, integrity, and excellence. This strong foundation allows us to build trust with our clients, attract the best and brightest people, and create a culture rich in innovation. Through industry-first cloud solutions, we help organizations everywhere to be better every day.