



# The Internet of Things

Where technology meets business

The next stage of the technological revolution has arrived. The Internet of Things (IoT) is completely changing the way we work and increased connectivity is set to transform business.

At Hitachi Solutions, we offer more than just simple connectedness. We provide the ability to interact in a bi-directional way with the capability to drive and direct action. We take activity and analysis and create predictive models which provide meaningful feedback into the system. Our software refines existing actions and drives additional ones.

Choosing the right IoT technologies presents a challenge, and in order to get the best outcomes your business needs to ask the question:

**How can we derive enhanced business value from the IoT?**

## Growth

The IoT is radically changing the way data-driven services conduct business — enabling them to stay ahead of costly failures, improve customer experience and facilitate growth.

The prediction is that by 2020 there will be in excess of 30 billion connected devices in operation. The figure currently stands at around 15 billion. This significant growth will have a huge impact on how business is run, as well as on the wider economy.

New business models are certain to come into operation, while existing businesses will be looking at how implementing the IoT will lead to improving efficiency and increasing revenue.

Different sectors will come to the IoT implementation from various routes and there are inevitably many questions to be answered, but the most pressing one has to be — where to start?

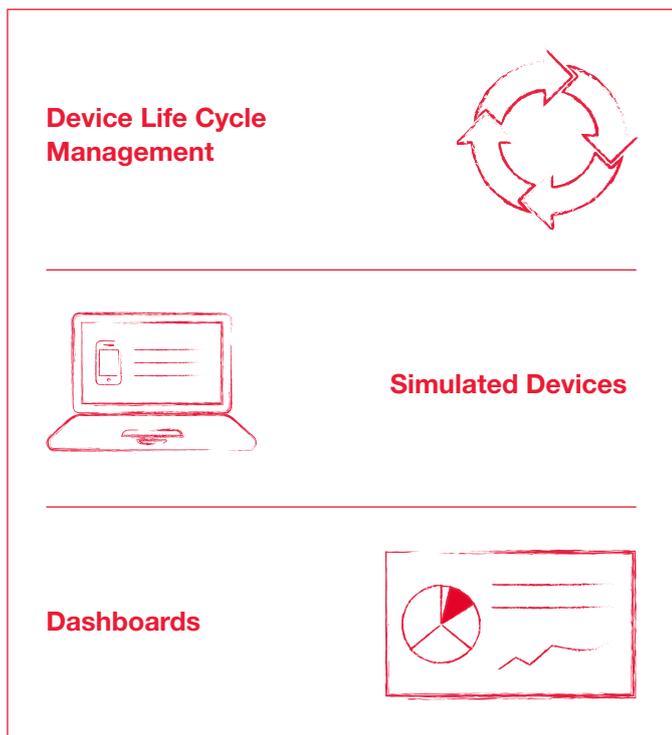
## Hitachi Solutions

### The IoT Predictive Service Hub

At Hitachi Solutions, we are already ahead of the game. Our partnership with Microsoft and in-depth knowledge across a range of industries, makes us uniquely placed to guide your business through this transformation.

The Hitachi Solutions IoT Predictive Service Hub is trusted and reliable because it is built on proven Microsoft technologies, including Microsoft Dynamics 365 and Microsoft Azure. This means your business is able to take confident, contextual and informed decisions about which actions (if any) to take next.

We already have the technology and knowledge to take your industry forward into a new way of working.



### How does it work?

The Hitachi Solutions IoT Predictive Service Hub is a combination of cloud-based software, data science and integration.

It has the power to convert your current maintenance model from repair and replace, to predict and fix, with the ultimate aim of changing the model to never fail. These inbuilt predictive features mean your business is able to work proactively rather than reactively.

It includes:

#### Device Life Cycle Management

The Hitachi Solutions IoT Predictive Service Hub allows your business to manage your customer assets with confidence. It can predict failures and optimisations and trigger actions according to a range of data and preconfigured scenarios.

There are huge cost-saving implications to this new way of working. For example, repairs are undertaken before there is a complete failure of systems and field staff are deployed with the right equipment first time.

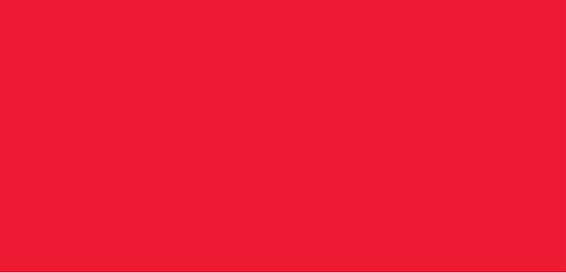
#### Simulated Devices

The Hitachi Solutions IoT Predictive Service Hub enables your business to look into the future by simulating devices' behaviour. It allows testing models before implementation and therefore choosing the right configuration from the outset.

This provides a level of assurance around managing equipment and assets to ensure correct action every time.

#### Dashboards

Real-time dashboards give you the ability to view data as it happens. Refreshable dashboards allow your business to access relevant data on a daily or weekly basis, depending on your needs.



## Remote monitoring

The Hitachi Solutions IoT Predictive Service Hub allows your business to be truly mobile. No matter where you, or your staff, are located, you can maintain a total overview of all your Microsoft Dynamic 365 systems at all times.

Field staff are able to carry out their work quickly and efficiently. They know what needs repairing, what needs replacing and where stock is held. They also have the potential to cross sell through opportunities suggested to them by the system — warranties, for example — leading to increased revenue possibilities.

All this leads to dramatically improved customer outcomes and cost-saving efficiencies for the business.

### State Monitoring

The IoT hub is continually analysing data to monitor change in your devices. Any changes can trigger a predetermined process of actions or activities. Alerts are also sent directly to the operator device, keeping all relevant parties informed and aware.

### Administration

Management and administration are completely supported. Invoicing becomes easy and the strong financial element within the solution gives your business the capability to easily quantify all your actions.

## Intelligent use of the IoT

Hitachi Solutions will work with you to determine the best course of action for your business. Because we employ industry professionals, we are able to operate alongside you with full understanding of your desired outcomes.

We don't just provide the software, we provide trusted partners.

- We start with your objectives.
- We build on your success with you.
- We streamline your operations.
- We consider scalability.

The Hitachi Solutions IoT Predictive Service Hub's automation and intelligence will interact with devices and solve a problem before a customer is even aware of it.

This means:

- Reduced equipment downtime.
- Increased productive uptime.
- Reduced maintenance costs.
- Increased asset lifespan.
- Improved worker safety.
- Potential new revenue streams.

## Customer service

Customer service is completely transformed by effective Field Service Management.

The automation of everyday tasks by Microsoft Dynamics 365 IoT, will leave staff free to concentrate on less mundane matters leading to improved productivity and increased customer satisfaction.

- Seventy-three per cent of consumers think that a company valuing their time is the most important thing they can do to improve customer service<sup>1</sup>.
- Sixty-five per cent of incoming requests require a field visit<sup>2</sup>.
- Twenty-six per cent of those require secondary or follow up visits<sup>2</sup>.

The Field Service Work Flow ensures companies don't waste customers' time by automatically updating them on the status of their request by automated texts and emails — keeping the customer fully informed at every stage of the process.

The IoT ensures the right person, in the right place, at the right time, with the right skills and right equipment.

<sup>1</sup> Forrester research Trends 2016: The Future of Customer Service  
<sup>2</sup> Field Service Automation Trends: Best-in-Class - Aberdeen Group, Dec 2015

## We have the answers

At Hitachi Solutions, we have looked at the question of how the IoT can enhance your business outcomes and have found the answers you need.

The Hitachi Solutions IoT Predictive Service Hub allows your business to:

- Reduce equipment downtime by proactively monitoring equipment health in real time so service can be performed before it is likely to fail.
- Increase productive uptime by predictively identifying problems, so repairs can be scheduled during production downtime, rather than peak periods.
- Cut routine maintenance costs by performing condition based maintenance and ensure that the device is within the warranty period.
- Increase asset lifespan by performing predictive maintenance before costly failures occur.
- Improve worker safety by monitoring equipment conditions and faults that will produce an alert before an injury is sustained.
- Create new revenue streams by enabling performance-based service agreements or equipment-as-a-service offerings.

## Smart investment

Investment is only prudent if it improves business outcomes. Making a smart investment means being confident that your business will be enhanced by use of the new technology available.

Our job is to help our customers get more value from their solutions. We combine the best Microsoft software with the best business models to create more value for you. We provide proven business benefit.

Our solution is truly end-to-end and will give your business the edge in a competitive world.

## Next Step

We welcome discussions about how use of the IoT can improve your business. At Hitachi Solutions, we are committed to supporting your digital transformation by using technology to advance business outcomes. We are committed to your success and it is our business to find exactly the right solutions for you.

Implementing the IoT for business is not just about buying new software, it is about finding a partner to work with you now and into the future, during this exhilarating technological leap.