



# IoT

IoT is a key driver of digital transformation and business innovation. Hyperconnectivity is enabling people, information and things to come together in unique ways that are fundamentally changing business and society. Fujitsu helps organizations to become hyperconnected businesses and take full advantage of this shift.



## Services

### ■ IoT Consulting Services

Fujitsu' long and comprehensive global experience means we have been able to develop expertise across a number of industries. For customers exploring how to transform their business using IoT, we work with them to co-create solutions specifically for their needs. To support our co-creation approach we have invested globally to build out our design thinking capabilities, digital transformation spaces and industry consulting teams.

### ■ Industry 4.0 Services

Manufacturers have pioneered the use of sensors and data-based monitoring, but today's advanced networking, real-time controls and machine intelligence are taking the sector to a new level of sophistication and productivity. It is becoming a hyperconnected industry. That's what the term Industry 4.0 describes. It goes far beyond automation and is reinventing manufacturing. Hyperconnected technologies are enabling manufacturers to better understand their operations in real time to optimize and transform any interaction with suppliers, partners and customers.

Co-Creation of Industrial Value Networks is in center of our Industry 4.0 approach. As well as consulting on the implementation of Industry 4.0, our approach is focused on three main pillars:

- Collaborative Engineering - Engineering Cloud Orchestration, Design & Simulation Tool Integration, Design-Data Management.
  - Information Creation at the Edge - Asset Tracking & Tracing, Supply Chain Transparency, MRO Optimization, Work-in-Progress Management.
  - Industrial Analytics - Predictive Maintenance, Quality Assurance, Machine Utilization and Demand Forecast, are part of our Industry 4.0 portfolio.
- All underpinned by our Integrated Industrial Cyber Security expertise and experience.

### ■ IoT Infrastructure Services

Key to successful IoT deployments is being able to manage devices and sensors both centrally and at the edge. Fujitsu has access to a vast range of sensors to meet the needs of many use cases. In edge computing Fujitsu has its GlobeRanger iMotion platform and Intelliedge gateway and appliances. M2M solutions, including those supporting LPWAN allow us to offer global IoT connectivity. As an established IoT Systems Integrator, we use these Infrastructure Services to support the rapid creation of IoT solutions.

## Solutions & Products

### ■ IoT Infrastructure Solutions

Fujitsu provides a range of connected service solutions including remote asset monitoring, global asset tracking, connected field force, and facility management and safety services built around the IoT Infrastructure services. Our Cloud IoT Platform sits in our Public Cloud Service K5 providing data management, aggregation, and analytics alongside application development and device management capabilities. All these are provided as E2E Managed IoT Solutions.

### ■ Retail Engagement Analytics

Fujitsu's Retail Engagement Analytics (REA 2.0) puts real-time operational information at retailers' fingertips. Using RFID and IoT technologies to capture, monitor and analyze real-time in-store customer behavior, REA allows retailers to effectively manage everything from staff allocation and store layout to product placement and checkout queue traffic levels.

### ■ GlobeRanger

GlobeRanger addresses real business problems and helps organizations to overcome the challenges that they face by connecting devices, people, processes and resources. A series of IoT platforms and devices enable businesses to gain full visibility over their manufacturing processes and coordinate disparate parts and assets, in addition to managing maintenance and tracking the whereabouts of assets – usually physical equipment.

### ■ Fujitsu Manufacturing Industry Solution COLMINA

COLMINA links data on the location of people and products, on factory equipment, and all systems and know-how throughout the manufacturing process, as well as data among companies in the supply chain.

### ■ Fujitsu INTELLIEDGE™

Available as a gateway or appliance, it combines the right mix of hardware and software components that provides organizations a platform to understand in real-time the "enterprise" data being generated at the edge for greater awareness and faster decision-making.

### ■ Enterprise Wearables, Devices, Sensors

Fujitsu offers a broad range from embeddable sensors from smart tags and badges, to fully integrated Vital Sensing Bands and Head Mounted Displays. These form part of the UBIQUITOUSWARE portfolio delivered as

the front-end interface for Human Centric IoT with proprietary algorithms held on the IoT platform delivering actionable business insight from the wearables platform.

- **Driver Safety** is a wearable solution to alert drivers when attention/drowsiness is detected. The sensor is worn round the neck of drivers measuring their biorhythms and identifying a loss in attention. It also allows the organization to optimize route planning.
- **Worker Safety** is a wearable solution for lone/field workers. This solution is delivered as a combination of Sensor and Algorithm - The Vital Band links through the IoT platform which contains Fujitsu proprietary algorithms to help highlight levels of risk.
- **Worker Efficiency** uses HMD and Web application Augmented Reality solution to deliver improved worker efficiency and help bridge the engineering skills gap.
- **Intelligent Care** is a Remote Monitoring device to support home living. The solution monitors the environment using sensors and based on this real time information it allows care givers to respond intelligently based on the needs of residents.

### ■ Intelligent Society Solutions

Utilization of ICT has gained popularity in social infrastructure fields such as Food, Agriculture, Health & Medical care, Transportation, Education and Energy. Aimed at addressing various social challenges in these fields, Fujitsu is continuously creating new value through innovative ICT such as cloud and mobility solutions.

- **FUJITSU Intelligent Society Solution Akisai** cloud for food and agriculture is a service that has been designed to provide comprehensive support to all aspects of agricultural management, such as for administration, production, and sales in open field cultivation, horticulture, and in animal husbandry.
- **FUJITSU Intelligent Society Solution SPATIOWL** is a solution for the integrated management of many types of transportation-related data using Big Data analytics and Cloud Computing technology.
- **FUJITSU Intelligent Society Solution RFID and Sensor Solution** is based on advanced Automated Identification Technologies (AIT). It is designed to optimize asset management by increasing visibility and traceability of individual parts in the internal manufacturing and the supply chain processes.