

**December 12, 2016**

RESEARCH SUMMARY

 **Yano Research Institute Ltd.**  
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## **Potential of Next Generation Monitoring in Japan: Key Research Findings 2016**

### ◆ Research Outline

**Yano Research Institute has conducted a feasibility study on the domestic next generation monitoring with the following conditions:**

1. Research period: From August to November, 2016
2. Research targets: IT vendors, user companies/organizations (local governments/public bodies, various manufacturers, constructors, transporters, warehousing companies, service providers, etc.)
3. Research methodologies: Mainly surveys via telephone, partly face-to-face interviews by the specialized researchers and literature search.

### **What is the Next Generation Monitoring?**

The next generation monitoring in this research indicates the systems to enable remote monitoring by utilizing IoT technologies (cloud/big data, analysis/analytics AI/machine learning, etc.) This research targets services and solutions that are outsourced and sold by IT vendors. However, those in-house systems (on premise) developed by user companies and organizations, and those maintenance/support services provided by various manufacturers of devices and equipment are excluded.

### ◆ Key Findings

#### ■ **Next Generation Monitoring Likely to be Accepted at Factories/Manufacturing Sites, Social Infrastructure, and for Disaster Prevention, and Expands to Health Management**

The next generation monitoring has already started being introduced on a trial basis or being demonstrated at factories, manufacturing sites, as well as in social infrastructure and for disaster prevention, and more to be accepted in broader areas. In addition, the next generation monitoring is to be applied to further broader areas, including health management for people at working sites of various manufacturers, constructors, transporting/warehousing companies (such a solution is called “healthcare monitoring.”)

#### ■ **Next Generation Monitoring for Factories and Manufacturing Aims for Failure Prediction and CBM**

The next generation monitoring for factories and manufacturing has started being introduced in large enterprises on a trial basis, aiming to attain failure prediction and CBM (Condition Based Maintenance). It is expected to be introduced for facility monitoring at large companies by 2020, including assembly manufacturing for FA devices, at robots-introduced factories, and in process manufacturing.

#### ■ **Next Generation Monitoring for Social Infrastructure/Disaster Prevention Projected to be Introduced First for River Monitoring and Other Disaster Prevention Measures**

The next generation monitoring for social infrastructure and disaster prevention is likely to be introduced preferentially for the matters that influence human lives such as monitoring of rivers to watch flooding and wind/flood damages, or to watch precipices and slopes that have risks of landslide disasters, or for the matters that have huge social influences. By 2020 and beyond, main social infrastructures are started being monitored.

## ◆ Report Format

Published report: "Remote Monitoring IT Monitoring (Next Generation Monitoring) 2016"

Issued on: November 30, 2016

Language: Japanese

Format: 243 pages in A4 format

Price: 180,000 yen (The consumption tax shall additionally be charged for the sales in Japan.)

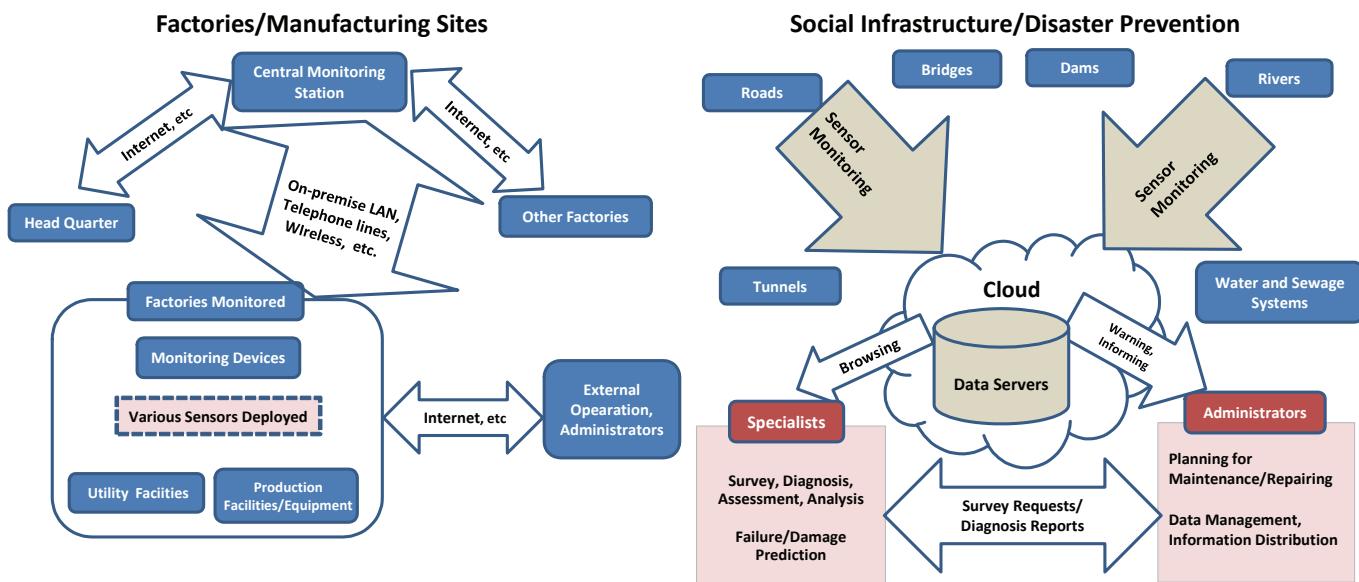
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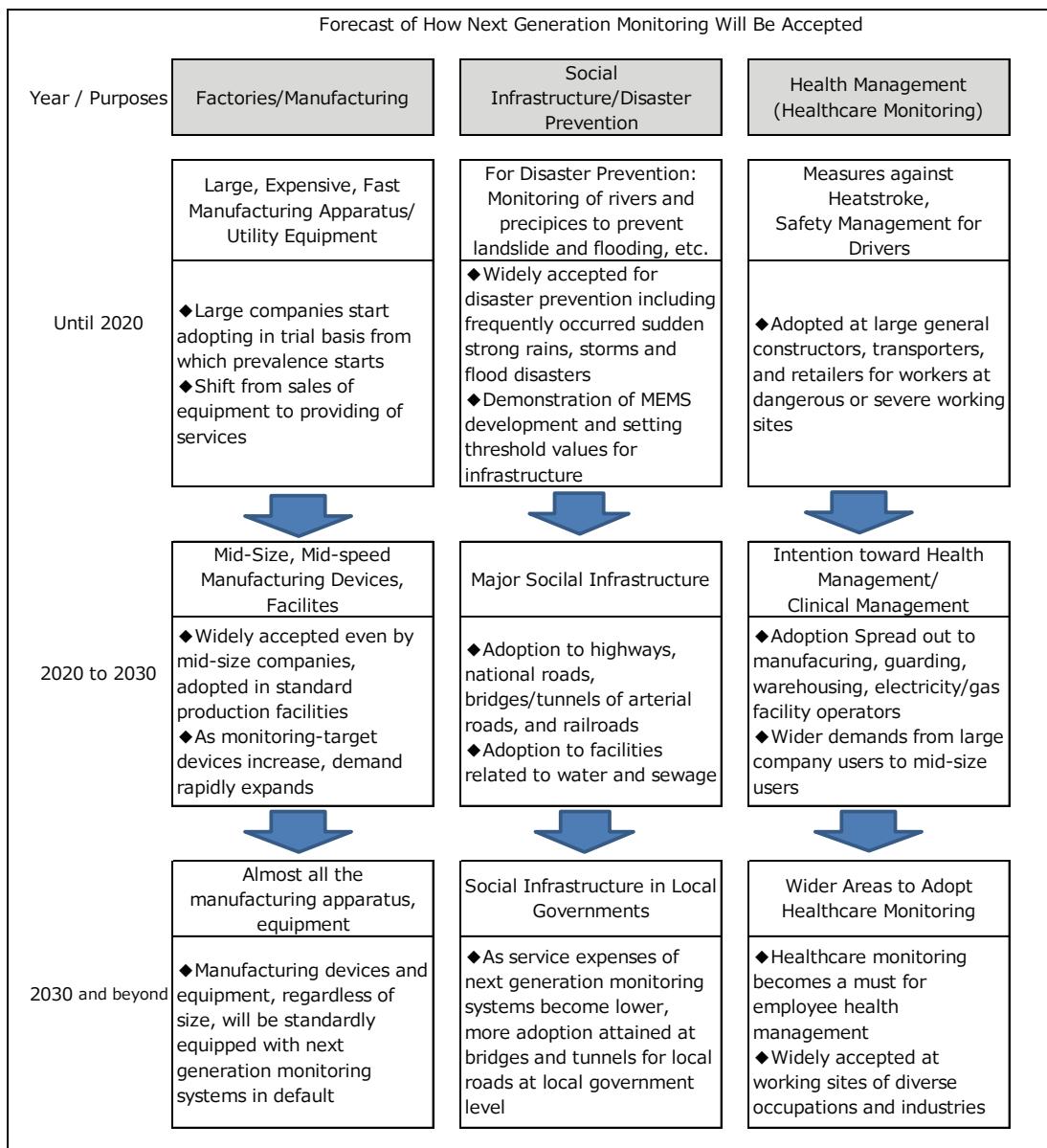
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■ Figure 1: Concept of Next Generation Monitoring



Research by Yano Research Institute

■ **Figure 2: Scenario of Next Generation Monitoring to be Accepted Widely**



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Note:

1. The next generation monitoring in this research indicates the systems to enable remote monitoring by utilizing IoT technologies (cloud/big data, analysis/analytics AI/machine learning, etc.) This research targets services and solutions that are outsourced and sold by IT vendors. However, those in-house systems (on premise) developed by user companies and organizations, and those maintenance/support services provided by various manufacturers of devices and equipment are excluded.

Note that the services and solutions outsourced and sold by IT vendors include “Facteye”, “Menterities”, “DoctorCloud”, “Facility Monitoring Service”, “Operational Data Management & Analytics”, “Industrial IoT”, and “MMCLOUD”.