The 4th Asia-Pacific Regional Forum on
Smart Sustainable Cities and e-Government 2018

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The Power of ICT
Approaches and Solutions for Smart Sustainable Cities

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- Our approaches to 'Smart Sustainable City'
  - Methodology of City Assessment
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Fujitsu at a glance

Headquarters:
Tokyo, Japan

Established:
1935

President:
Tatsuya Tanaka

Principal Business Areas:
Technology Solutions
Ubiquitous Solutions
Device Solutions

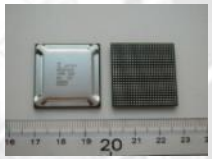
Employees:
155,000 worldwide

Revenue:
4,509.6 billion yen
(US$41.7 billion)

Operating profit:
128.8 billion yen
(US$1,192 million)

R&D Expenses:
173.9 billion yen
(Approx. 3.9% of Revenue)

Stock Exchange Listings:
Tokyo (Code:6702), Nagoya



Note:
All yen figures have been converted to U.S. dollars for convenience only at a uniform rate of US$1 = 108 yen, the approximate closing rate on March 31, 2017.

Approaches to 'Smart Sustainable City'

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Approaches for Smart Sustainable City

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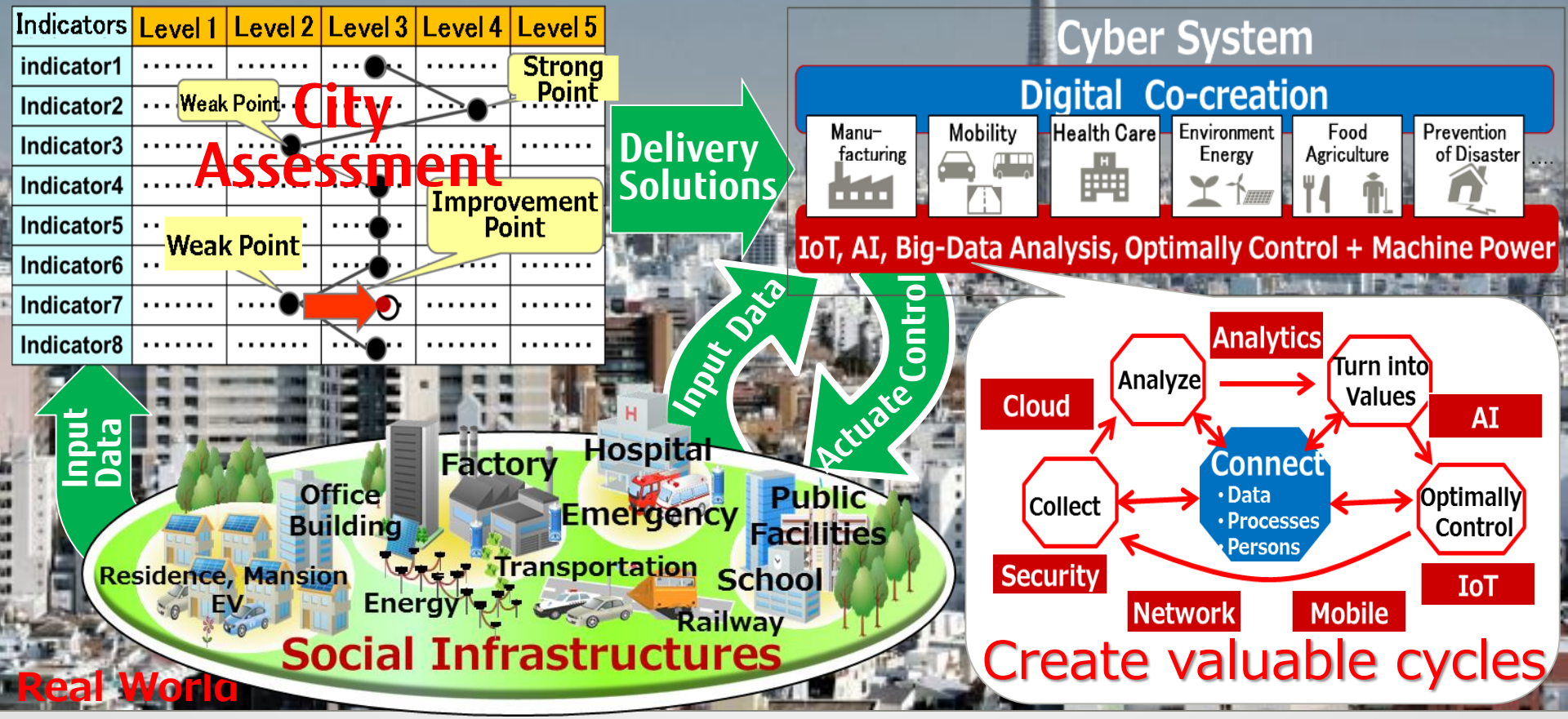
City Assessment

- It is important to know current city from various viewpoints.

Implementation in Cyber system

- Create valuable cycles
- Digital Co-creation (connectivity and combination)



City Assessment Methodology

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City Assessment based on the International Standards

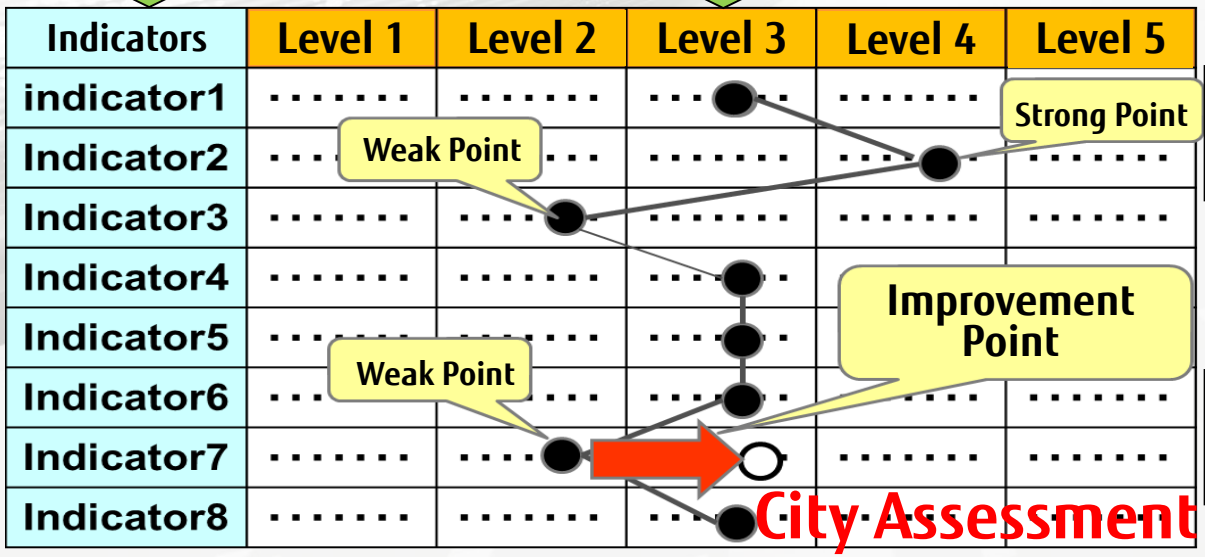
- Indicators ; ITU-T (L1601, L1602, L1603) , ISO (ISO 37120), ・・・
- Methodology ; ISO 37153, ・・・

Indicators of City Assessment

City Assessment Methodology

Select indicators

Concept of ISO37153 (Maturity Model)



[Government] Make/Improve policies or measurements

[Vendors] Propose Solutions or Services

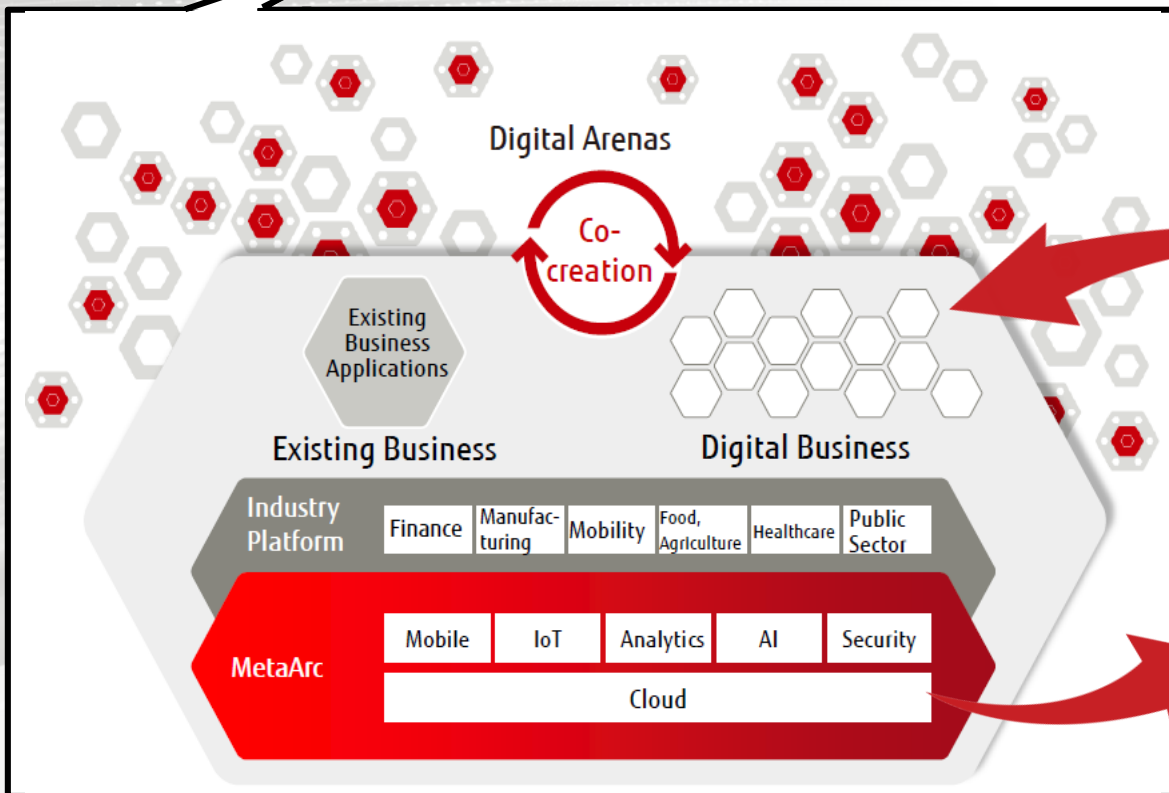
Digital Business Platform

- Creating value from data to enable digital business
- Achieving business outcomes from data

Digital Co-creation

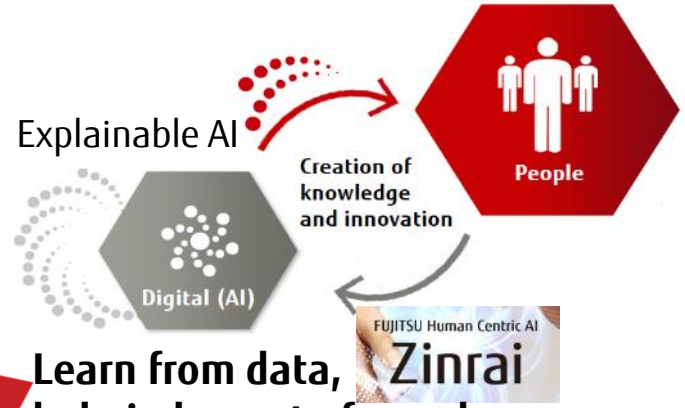
Manu-facturing | Mobility | Health Care | Environment Energy | Food Agriculture | Prevention of Disaster ....

IoT, AI, Big-Data Analysis, Optimally Control + Machine Power



【Example of using AI】

Learn from experience, interact with digital, create ideas and make decisions.



Learn from data, help judgment of people. Augment the capability of people

Key Technologies

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- High Performance Computer × Artificial Intelligence
  (Big Data × HPC × Algorithm)

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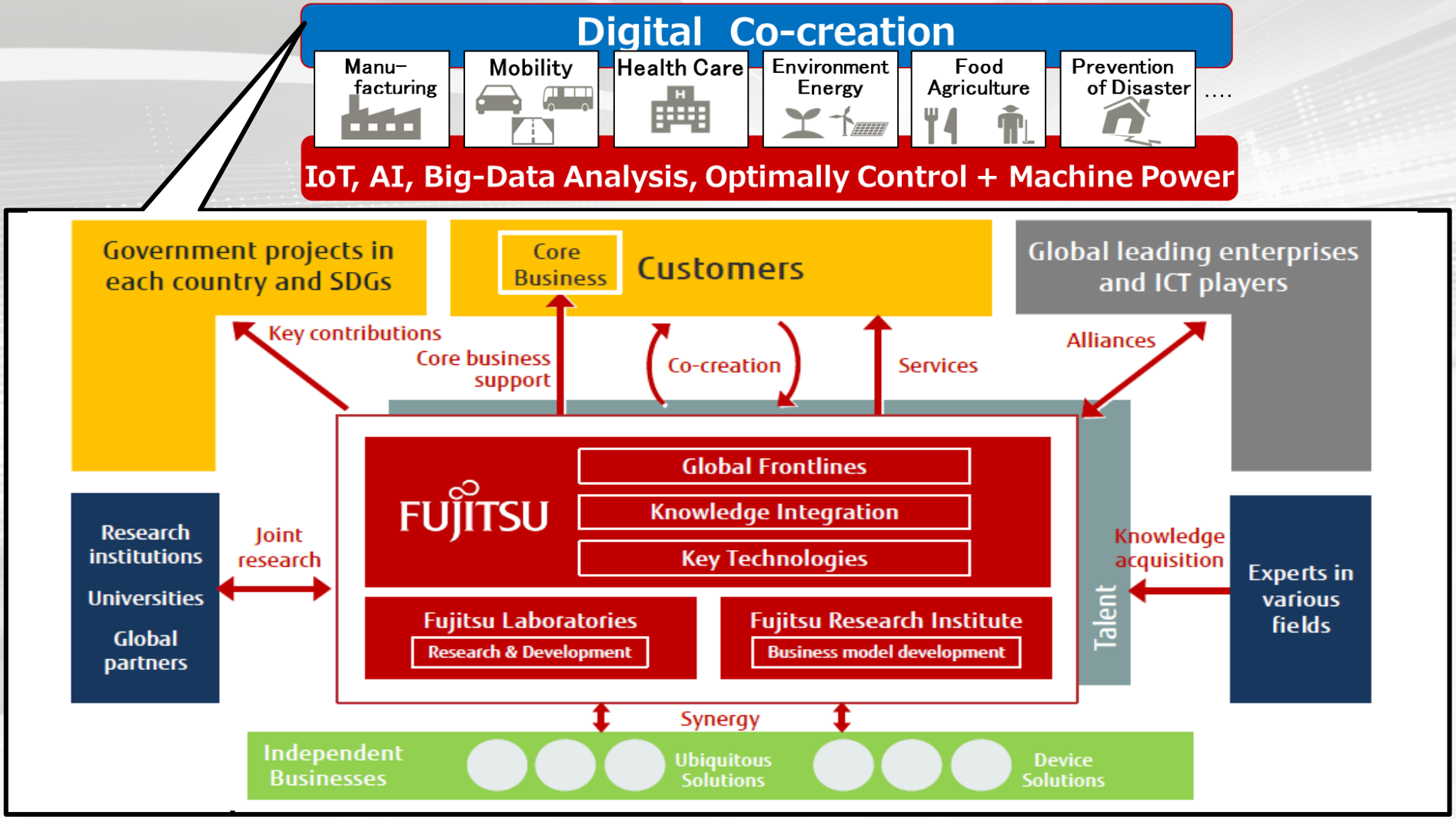
Digital Co-creation

- Creating new value together with eco system partners and customers to shape a different future
- Together achieve business and social innovations



Disaster Risk Management

Patricia – the strongest hurricane ever recorded (Oct., 2015)
The western coast/Mexico

Tsunami Impact Simulation

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JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY
Dr. Toshitaka BABA

Tsunami/Flood Damage Prediction

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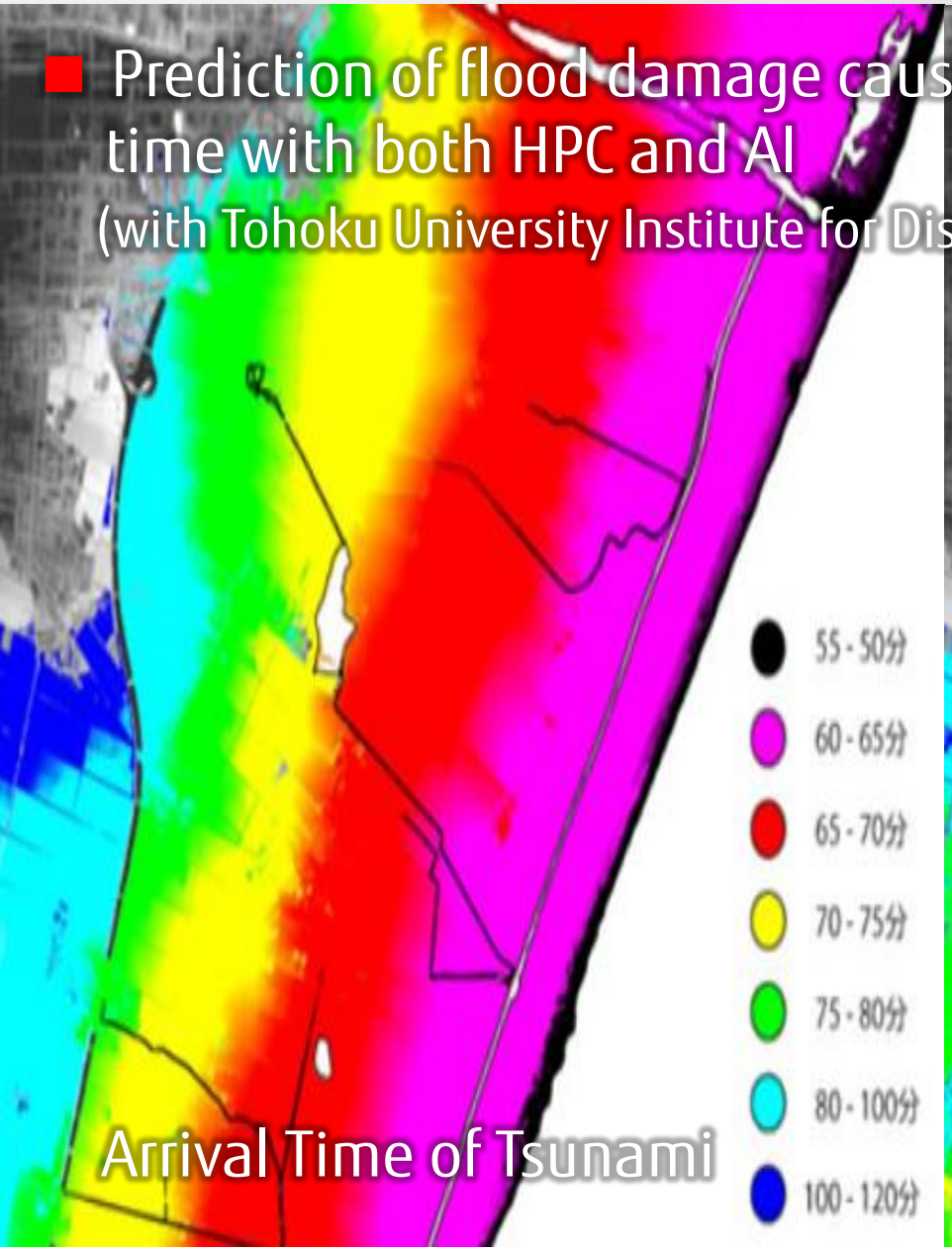
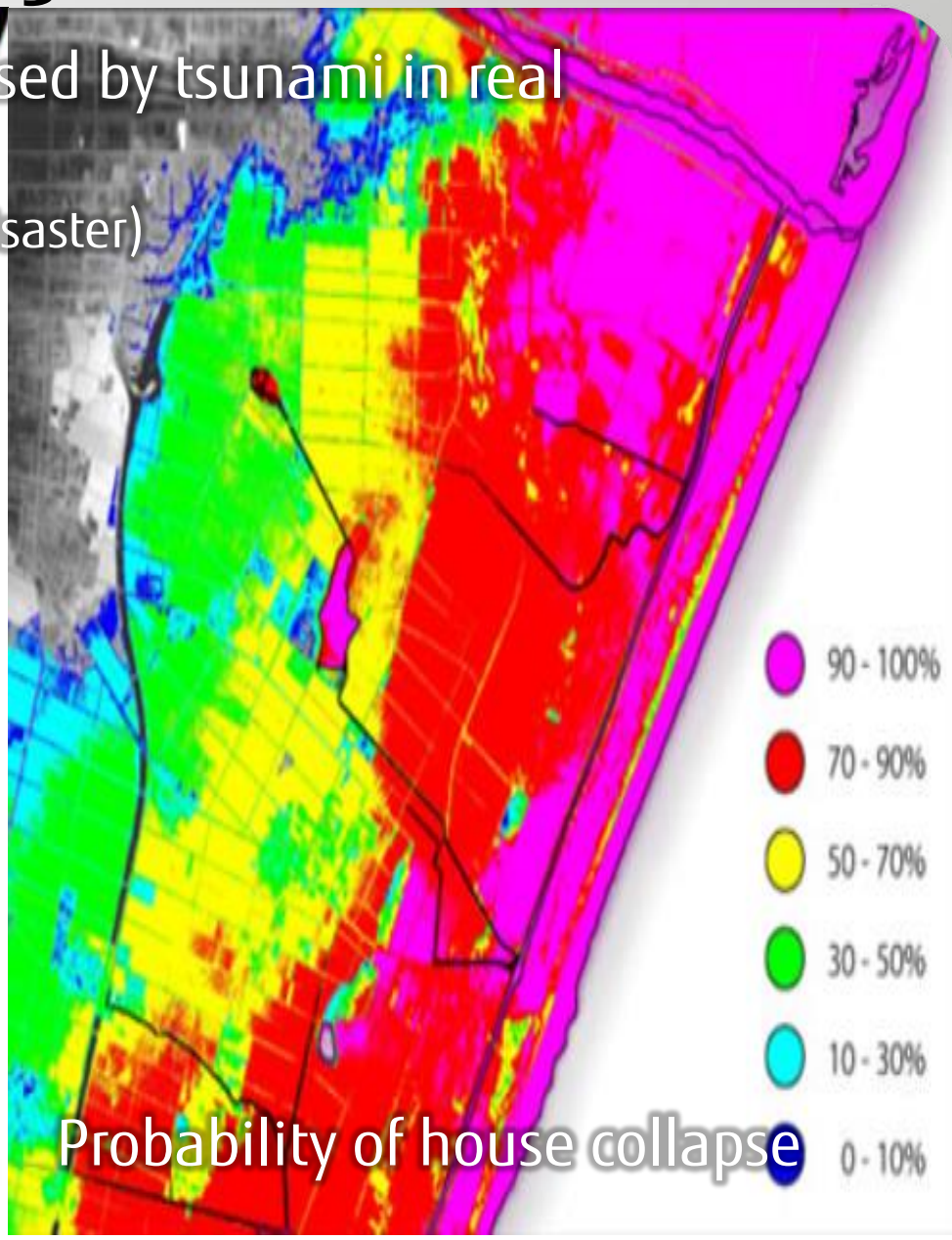
- Prediction of flood damage caused by tsunami in real time with both HPC and AI
  (with Tohoku University Institute for Disaster)





Partnership in the Global Centre for Disaster Statistics

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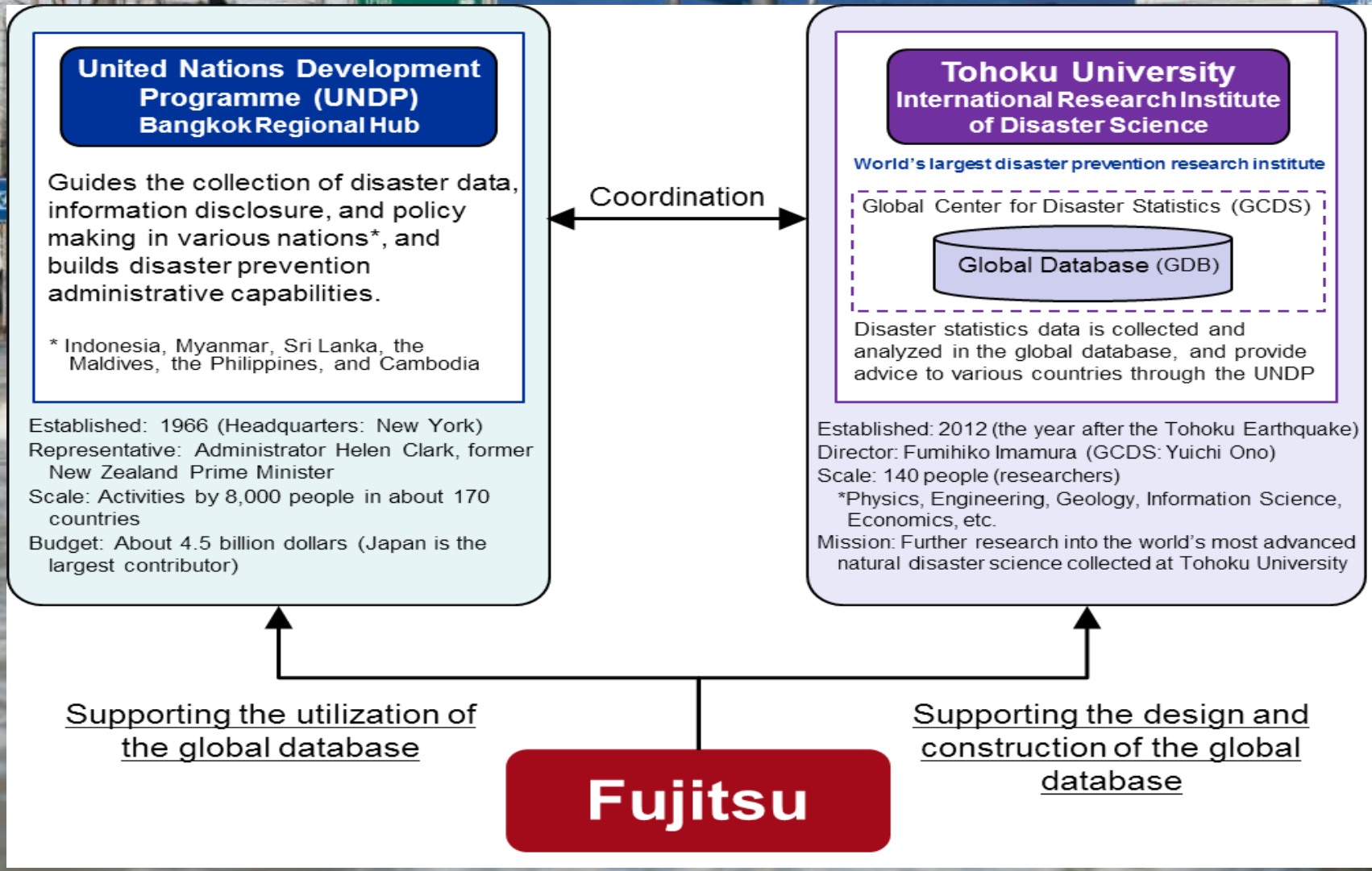

Smart Mobility

11 SUSTAINABLE CITIES AND COMMUNITIES

13 CLIMATE ACTION

Citywide Surveillance

Using AI, Fujitsu visualizes & optimizes the 'Entire City.'

With Fujitsu's AI in various contexts, we can truly utilize the power of innovation.
And you will be taking the next step into a new world of business/service.

Advanced Urban Monitoring System

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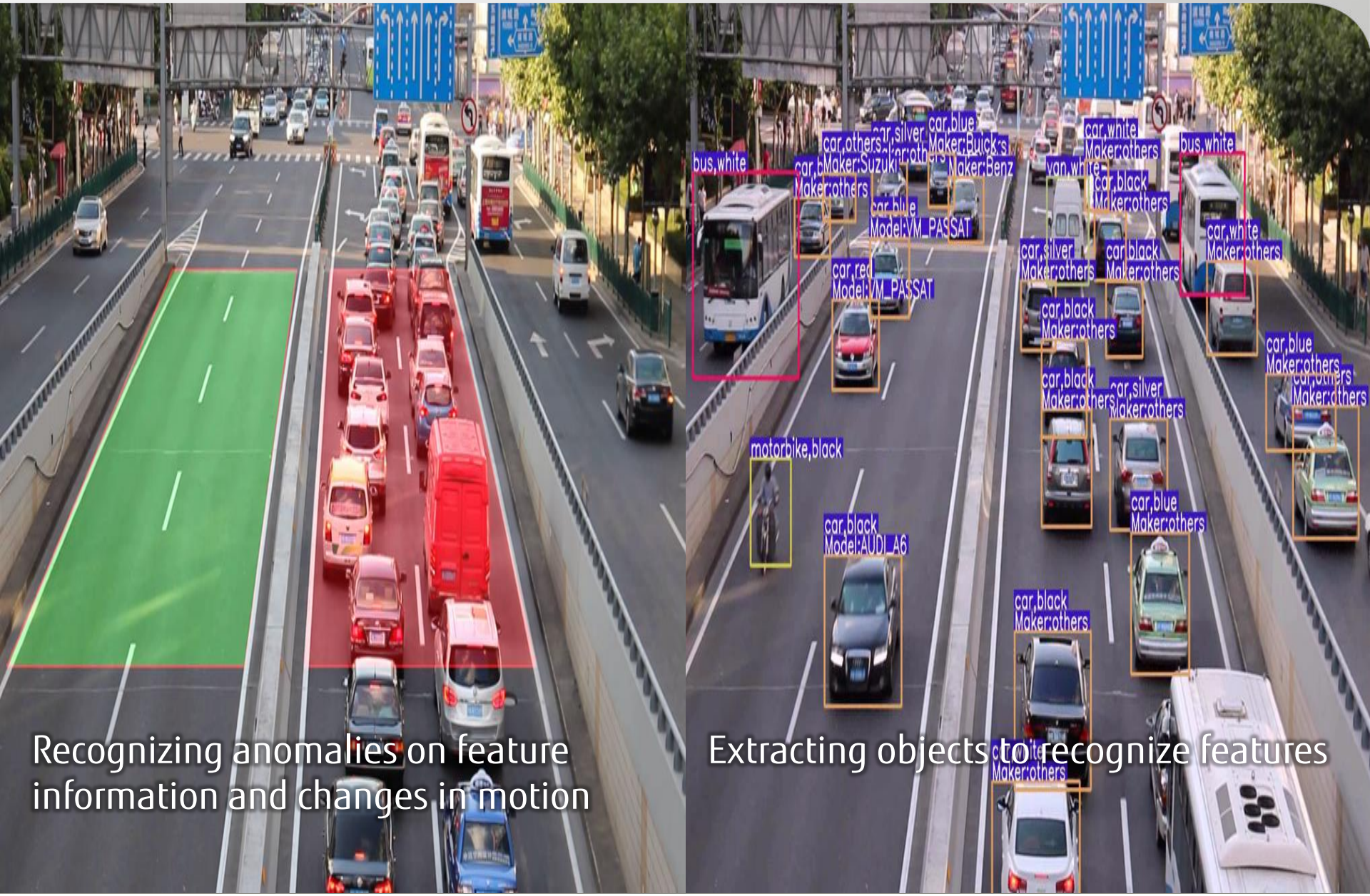

Contribution on Smart Mobility

- **The smart mobility system connects users and many kinds of information related to traffic in the city (Road, Railway, Taxi, Bus, etc.)**

  ⇒ **Reduce the traffic congestion and CO_2 emissions**

Use Cases of Citywide Surveillance

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Security Airport / Police

- Specific Person Search
- Anomaly Detection
- Facial Recognition

Smart City / Big Event

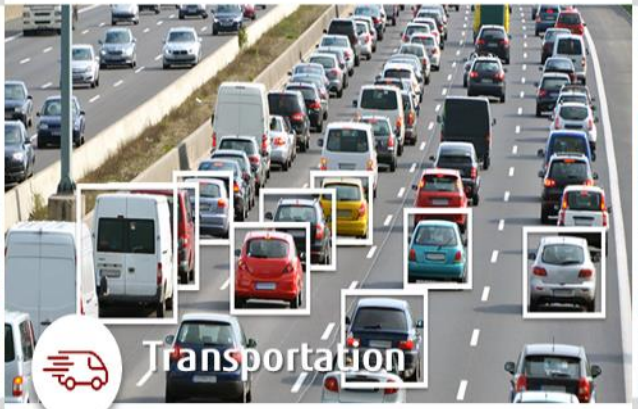
- Illegal /Overtime Parking Detection
- People-flow Detection
- Smart Parking

Retail Shopping Mall / Gas Station

- Detention Time Detection
- Vehicles & People Counter / Identification

Industrial Zone

- Theft Monitoring
- Facial Recognition



Transportation

- Congestion Detection
- Traffic Monitoring / Counting
- LPR

Disaster Management

- Water Level Monitoring

Environment Monitoring

Environment Monitoring for Eco Industrial city

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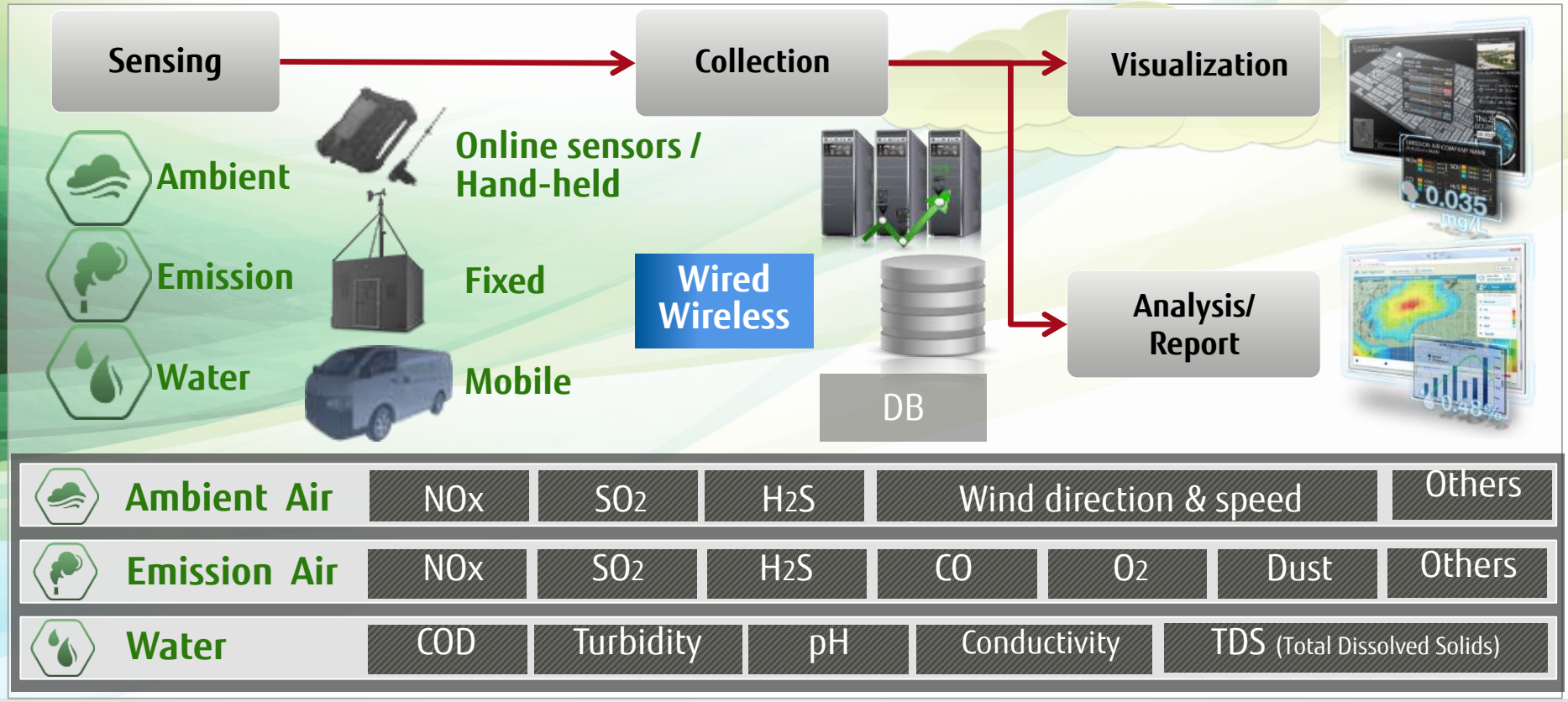
Integrated data management :
Any particle data can be stored in the centralized DB.

benefits

- Real-time data sensing & collection of various kinds of properties.
- Early detection & countermeasures for pollution causes based on accumulated data.
- Intuitive and easy-to-use GUI



Summary

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ICT realizes Smart Sustainable City

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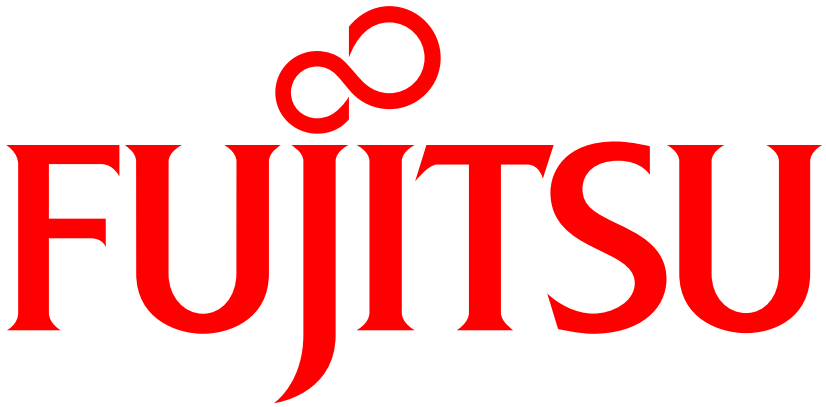
- **Human centric**
- **Power of ICT : IoT, Big data, AI, Super computing**
- **Collaboration between government, Academia and Private sector for citizen**



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