Japan SmartCity/IoT Market Opportunities

Eisuke Tsuyuzaki
Advisor

Japan External Trade Organization (JETRO)
San Francisco

October 2016

INVEST JAPAN

Defined: Internet of Things

Cloud/Analytics
- Applications

Platform
- Automation
- Monitoring
- Control

Device/Network
- Communication
- Sensor

Defined: Internet of Things

Cloud + Platform
- Facility management solution
- Logistics solutions
- Disaster prevention/security solutions
- Medical/healthcare solutions
- Store/shop management solutions
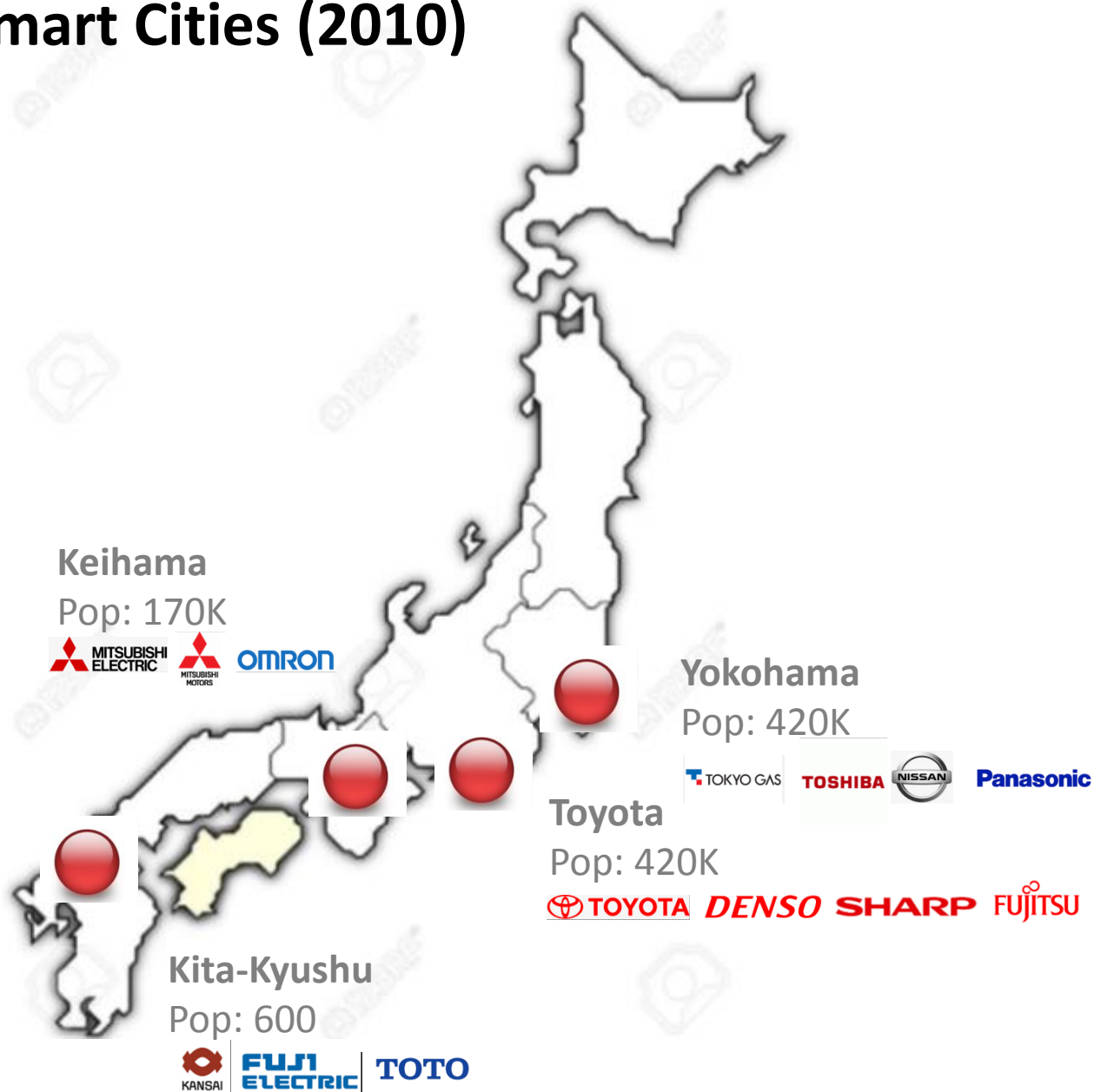- Automobile systems
- Security systems

Device/Network
- IoT Cameras & network cameras
- Imaging technologies
- RFID tag, readers and printers
- Barcode system, scanners and terminals
- Sensor module & devices
- Other components
- Wireless LAN/Bluetooth/ZigBee/Wi-Fi
- 3G/LTE

Smart Cities (2010)

Keihama
Pop: 170K

MITSUBISHI ELECTRIC   MITSUBISHI MOTORS   OMRON

Yokohama
Pop: 420K

TOKYO GAS   TOSHIBA   NISSAN   Panasonic

Toyota
Pop: 420K

TOYOTA   DENSO   SHARP   FUJITSU

Kita-Kyushu
Pop: 600

KANSAI   FUJI ELECTRIC   TOTO

INVEST JAPAN

Regeneration (2015)

Tokyo: Top Smart City

Initiatives

- Clean energy; solar, hydrogen power
- Urban transportation
- Smart hospitality
- Smart homes
- Big data
- Micro Weather forecasting
- Health monitoring
- Agri-tech

Barriers

- Unclear decision making
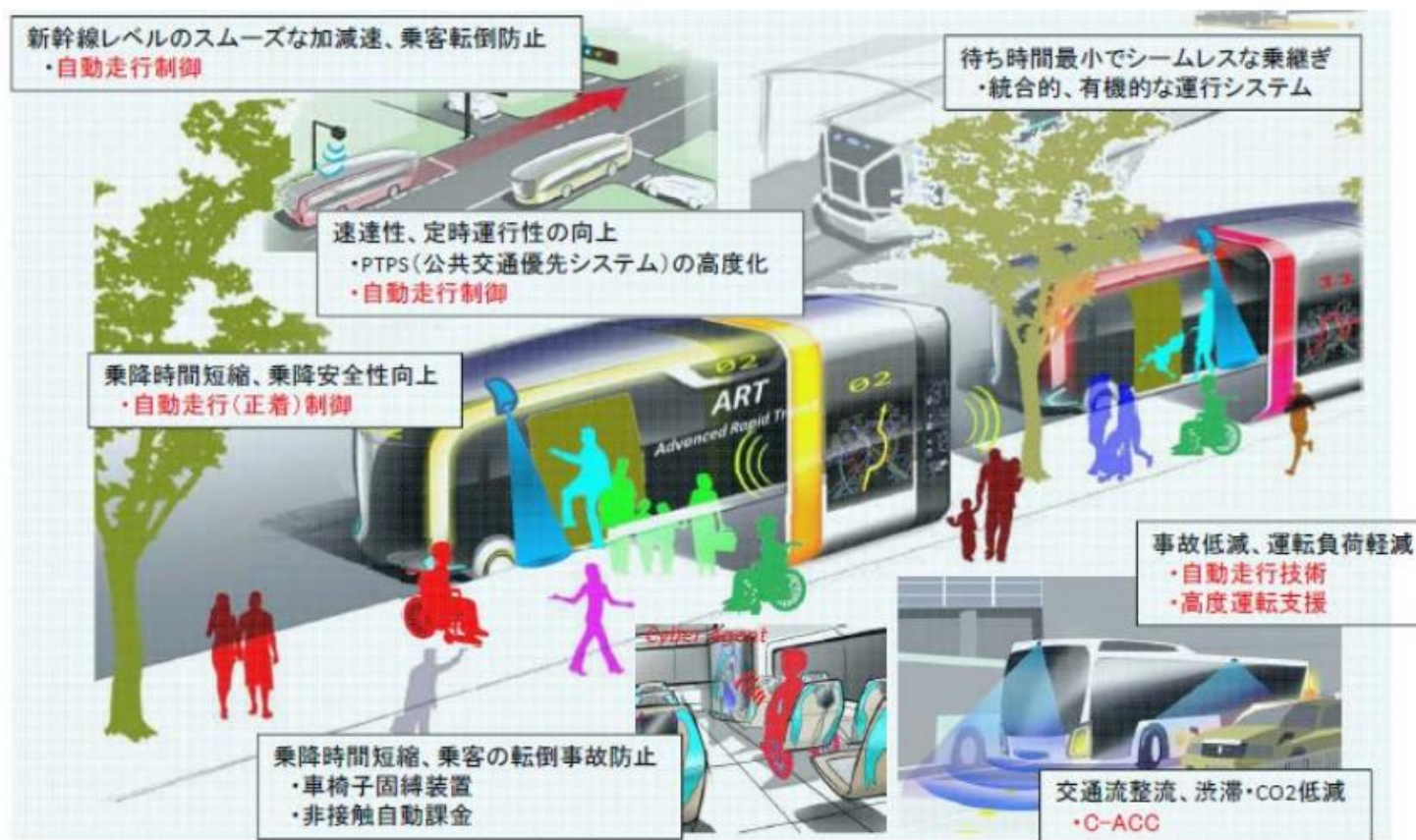- Complex business customs
- Local companies

Tokyo: Top Smart City

図 1-12　次世代都市交通システム（ART）に必要な技術

Rules

Social infrastructure
- Stable smart grid
- Disaster risk management
- Aging society

People
- More non-Japanese workers
- More programming education

Cyber security
- More engineers
- More imported technologies

R&D incentives
- IoT
- Big Data
- Sensors
- Nano tech
- Materials
- Super computing

INVEST JAPAN

Opportunities

Industry
- Energy management systems
- Energy saving devices
- Back-up Batteries
- System controllers

Retail businesses/ Homes
- Energy management system & devices
- Lighting
- Home appliances
- Back-up batteries
- System controllers

Transportation
- Electric vehicles
- Recharging infrastructure
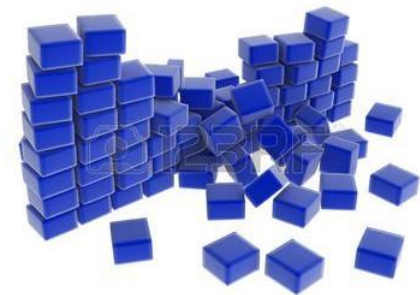
Challenges

Accenture Global Survey
- Weak value proposition (54%) (too expensive)
- Security concerns (47%) (general concern)
- Lack of information/devices (23%) (which device to use)
- Confusion (17%) (all to confusing)

Market development
- General understanding of Cloud services/value Proposition
But intense competition between Large enterprise & Start-ups

Cultural barriers
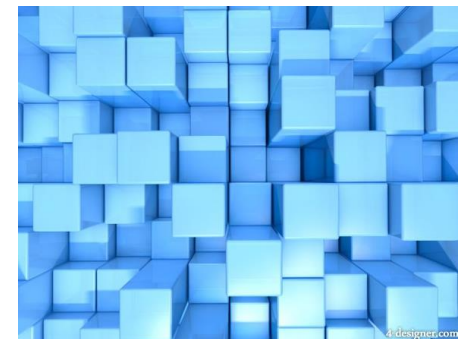- Don't know you vs Snowballing Herd

Security

Act of the Protection of Personal Information – amended (APPI)
- Personal information protection commission (PIPC)
- Rules for anonymized information & sensitive data
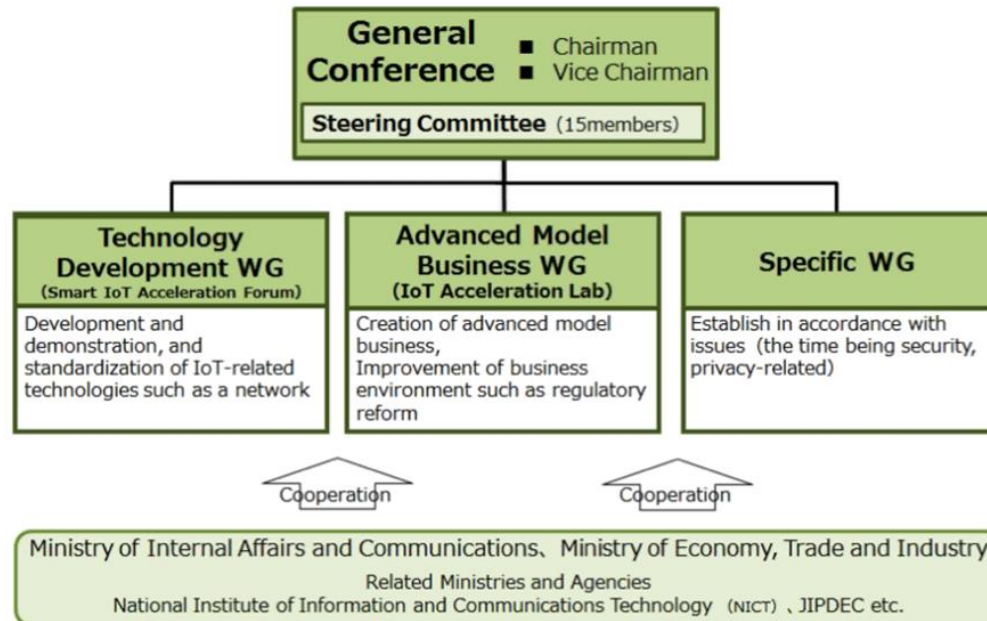- Rules for personal data transfer & opt-out policies

National identification and data sharing ("MyNumber")
- Specific personal information protection commission
- Launched in October, 2015
- Information sharing (national level) from Jan., 2017; (regional level) from July, 2017

Momentum

IoT Acceleration Consortium
(http://www.iotac.jp/en/)

General Conference
- Chairman
- Vice Chairman

Steering Committee (15members)

Technology Development WG
(Smart IoT Acceleration Forum)

Development and demonstration, and standardization of IoT-related technologies such as a network

Advanced Model Business WG
(IoT Acceleration Lab)

Creation of advanced model business, Improvement of business environment such as regulatory reform

Specific WG

Establish in accordance with issues (the time being security, privacy-related)

Cooperation

Cooperation

Ministry of Internal Affairs and Communications、 Ministry of Economy, Trade and Industry
Related Ministries and Agencies
National Institute of Information and Communications Technology (NICT) 、JIPDEC etc.

14

INVEST JAPAN

Corporate

Smart Industry
- Predictive maintenance
- Connected Car
- Fleet management

Smart Cities
- Public safety
- City data exchange
- Train as a service

IoT Core Management
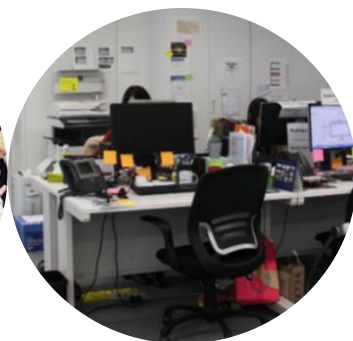
Skillsets

Projections

2013 ➜ $2.8 Bil.

- Smart Grid
- Security / Monitoring / Healthcare
- Transportation / Logistics
- Surveillance
- Telematics
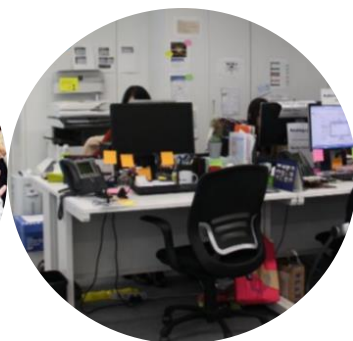- Digital consumer products
- eMoney

2020 ➜ $11.5 Bil.

comverge ®
energy made better

Demand management solutions

Partner with Kansai Electric

INVEST JAPAN

Capacitive & eddy-flow sensors

Analysis and management of Patient images, cardiac safety
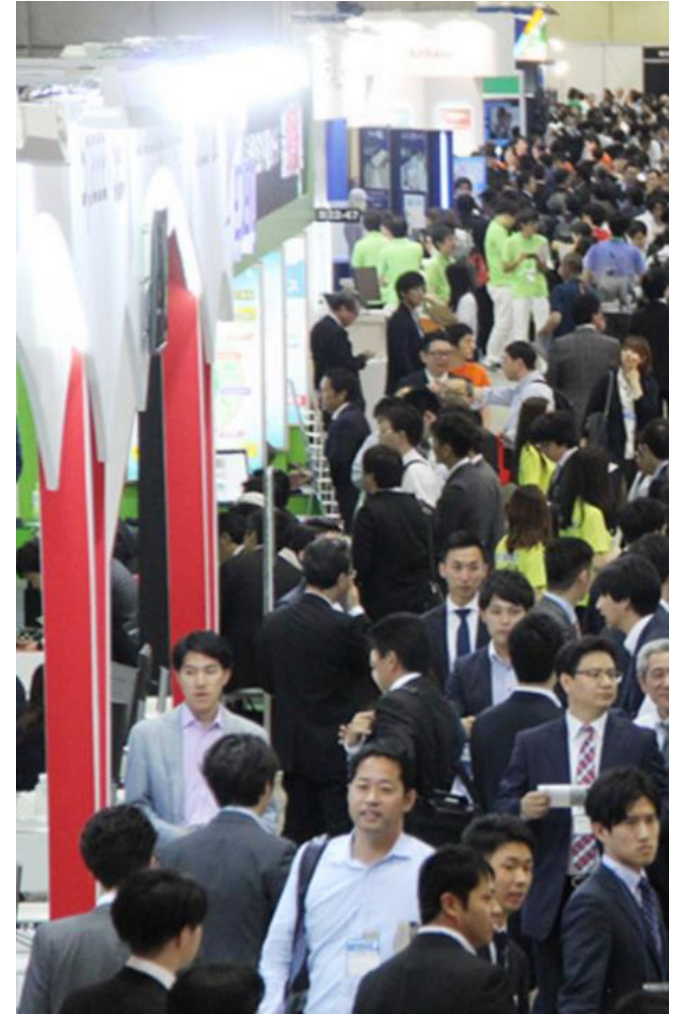
Upcoming events

Oct 5+:   CEATEC Japan

Oct 26:   IoT M2M Autumn

May 10:   Japan IT Week Spring

Thank you

Contact

Eisuke Tsuyuzaki
Advisor

Japan External Trade Organization (JETRO)

tsuyuzakie@gmail.com