

How to Make the Most of Japan's IoT Market Gap

Yoshiaki TOJO

JETRO San Francisco

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JETRO SF Monthly Webinars

“Opportunities in Japan”

~ 4th Thursday, 11h00-12h00, PDT ~

Apr. 28: Bio-Medical Industry

May 26: Energy Industry

Jun. 22: *(Southern California Innovation Webinar)*

Jul. 21: Internet of Things

Aug. 25: IT in Agriculture

Sep. 22: IT in Healthcare

Yoshiaki TOJO

Head of JETRO San Francisco



① Technology Commercialization

- JETRO (2014 ~): Cross-Pacific Biz-Dev
- NEDO (2011~16): Technology Commercialization Program

② ICT Policy & Business Promotion

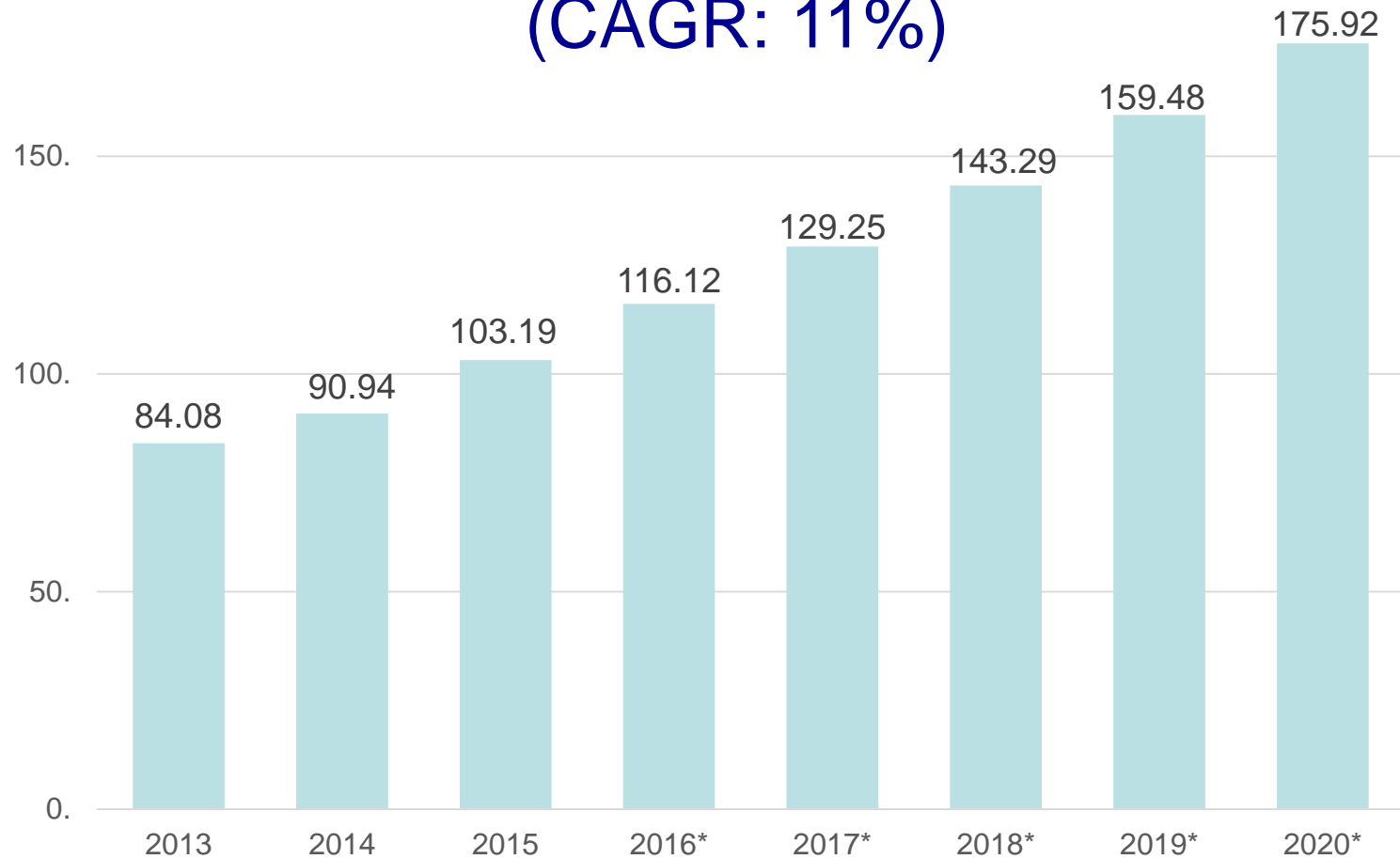
- METI (2009~11): ICT Policy on Cloud Computing & Big Data
 - first use of Salesforce platform for public service
 - formulation of “Security Guideline for Cloud Services”

③ Innovation Economics & Policy

- OECD (2005~2009): Innovation Strategy
- Kyoto University (2001~2003): Network & Behavioral Economics

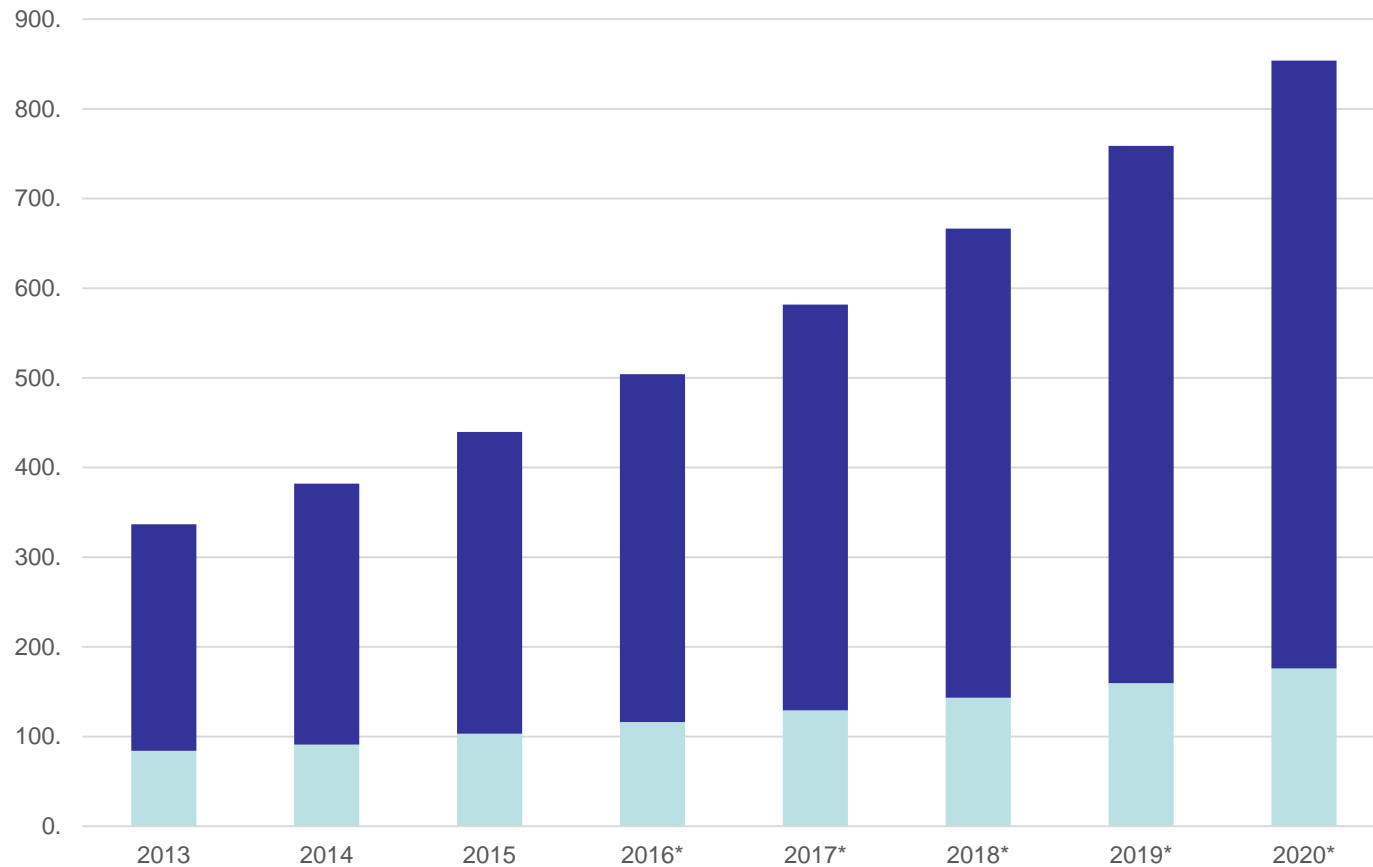
\$ 103 bn (2015) Revenue of IoT in Japan

(CAGR: 11%)



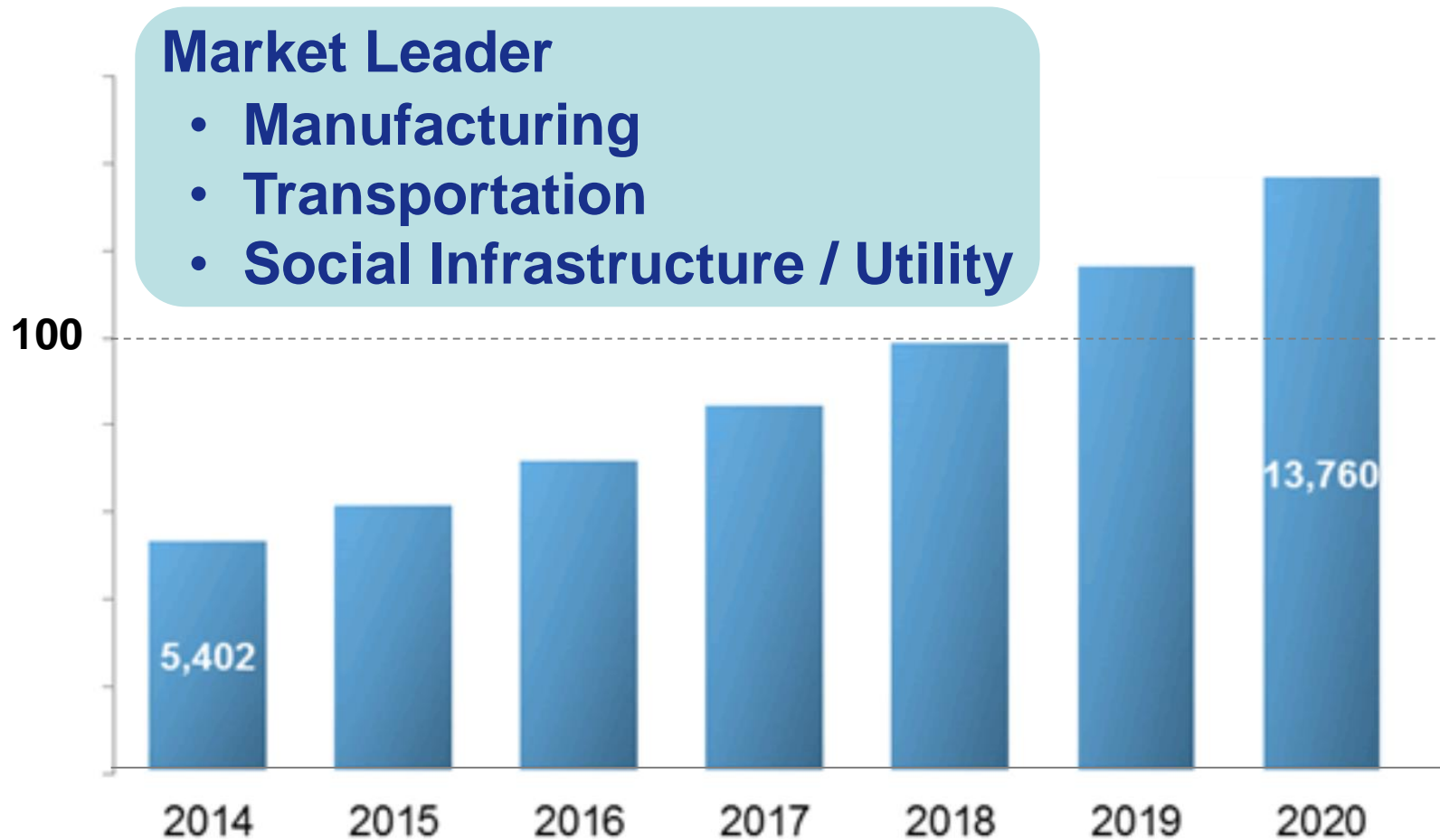
Source: IDC 2013-2015

23% of Asia-Pacific IoT Revenue

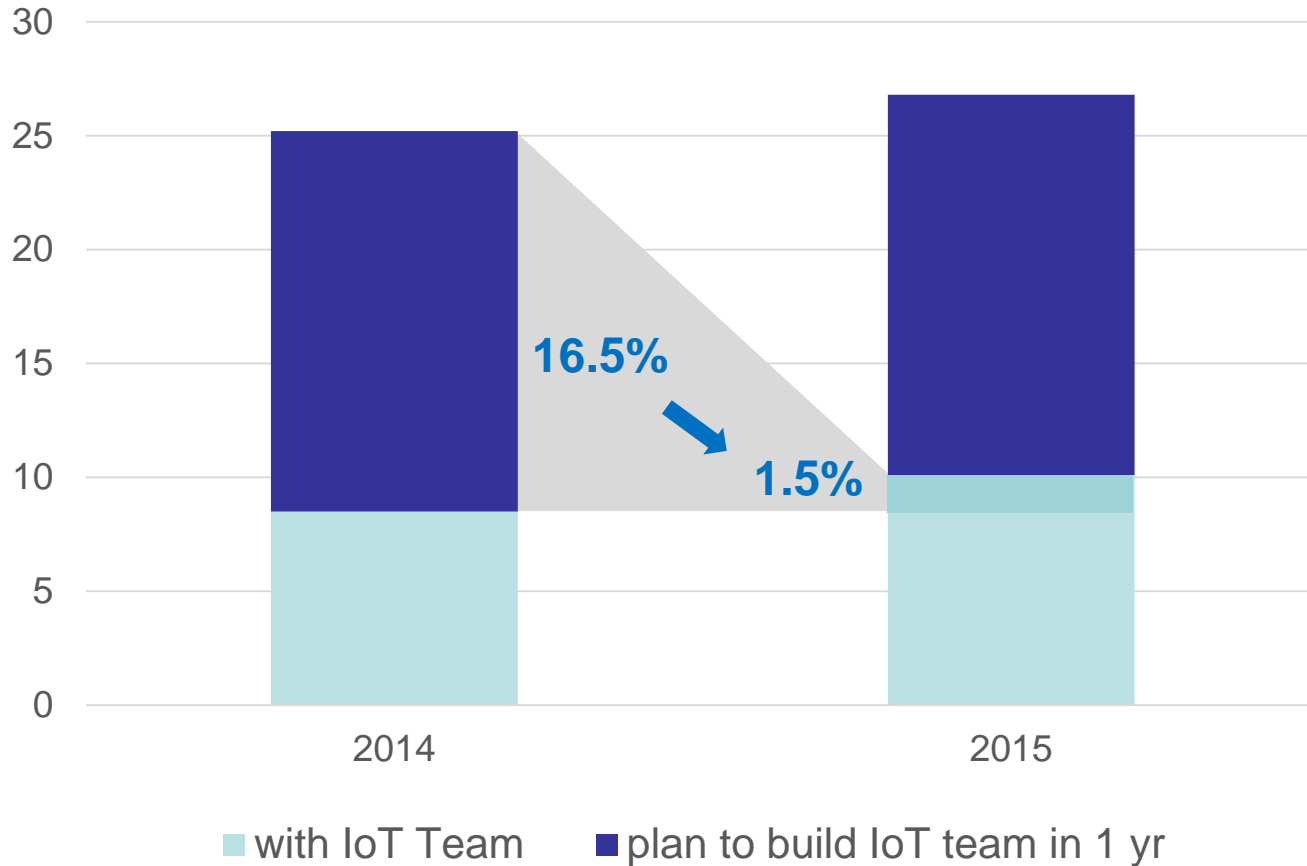


Source: IDC 2013-2015

\$ 54 bn (2014) IoT Expenditure in Japan (CAGR: 17%)



IoT teams have not been build as planned.



Source: IDC 2016

Barriers to purchasing IoT devices and services (Accenture Global Survey)

Weak Value Proposition

62%



find IoT devices are too expensive

Security / Safety Concern

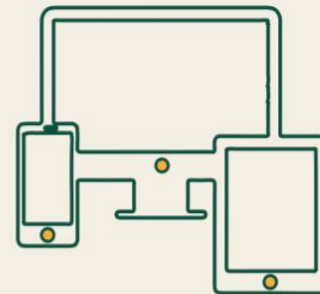
47%



are concerned about privacy and security issues

Lack of Information / Expertise

23%



are unsure which device will be of use to them

17%

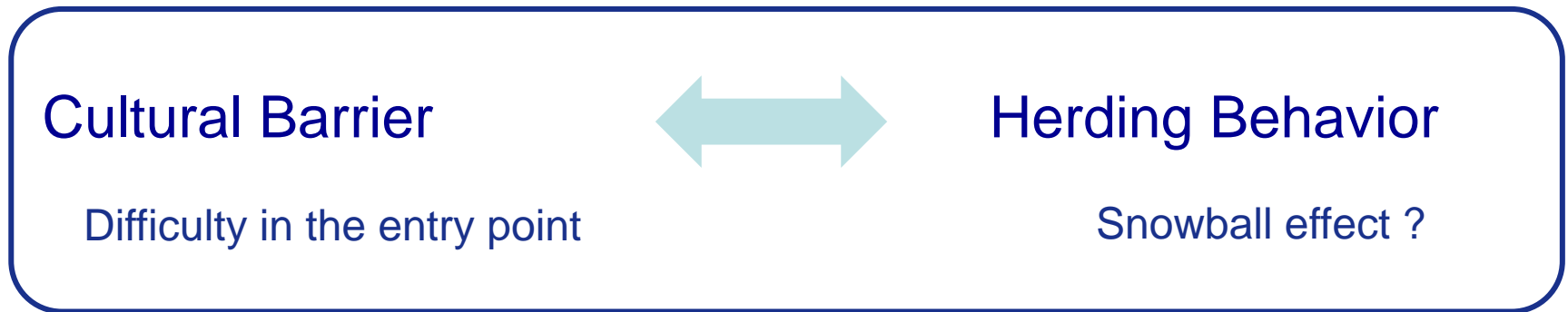
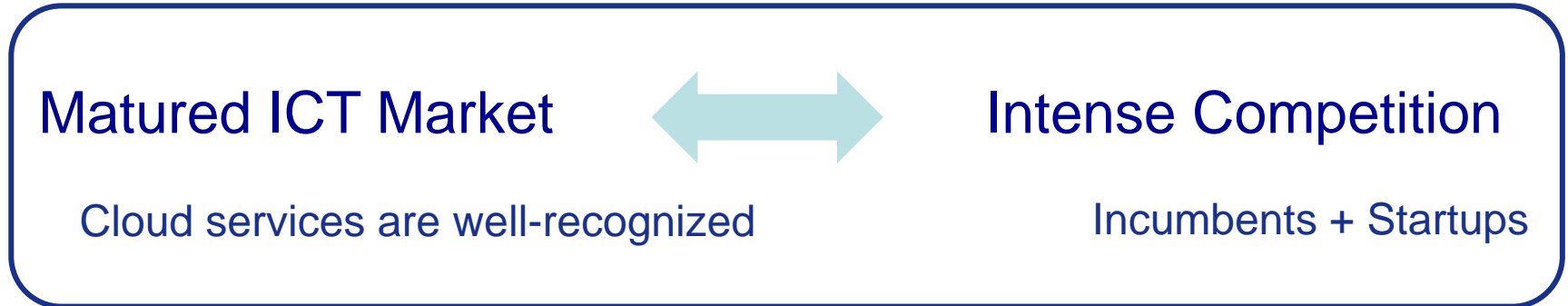


find IoT devices too confusing

Source: Accenture

https://www.accenture.com/_acnmedia/PDF-3/

Accenture-Igniting-Growth-in-Consumer-Technology.pdf



Commitment for Success
(Localization / Japanese Partner / Sales Office)

Improved privacy laws

- ~ Amendment of the **Act on the Protection of Personal Information (APPI)** ~
- Personal Information Protection Commission (PIPC)
- Rules for anonymized information and sensitive data
- Rules for personal data transfer and opt-out policies
 - ⇒ APEC Cross Border Privacy Rules (CBPR) system will help address cross-border data transfer issue.

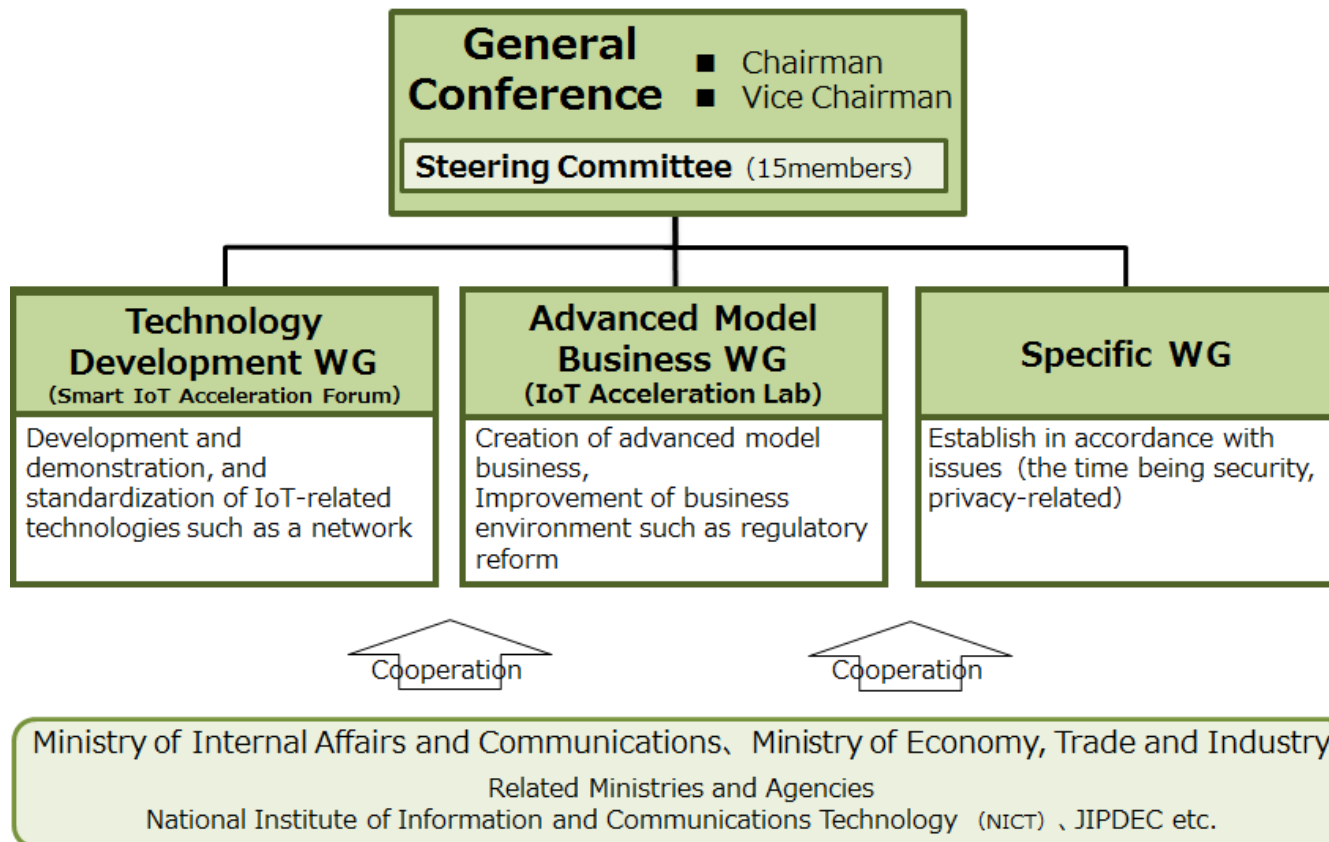
National ID and Data Sharing

~ Amendment of "My Number Act" ~

- My Number system started in Oct. 2015.
- Enable sharing of information from Jan. 2017 (national level) and Jul. 2017 (local authorities).
- The Specific Personal Information Protection Commission to oversee the My Number system.

IoT Acceleration Consortium

(<http://www.iotac.jp/en/>)



Healthcare Big Data Centre

~ PMDA's new initiative ~

- The Pharmaceuticals and Medical Devices Agency (PMDA) plans to establish a regulatory science centre to collect and analyse medical Big Data, including electronic data in the Clinical Data Interchange Standards Consortium (CDISC).
- PMDA hopes to create new guidelines for pharma companies developing new drugs..

JETRO has supported more than 14,000 foreign companies in their entry and business expansion in the Japanese market.

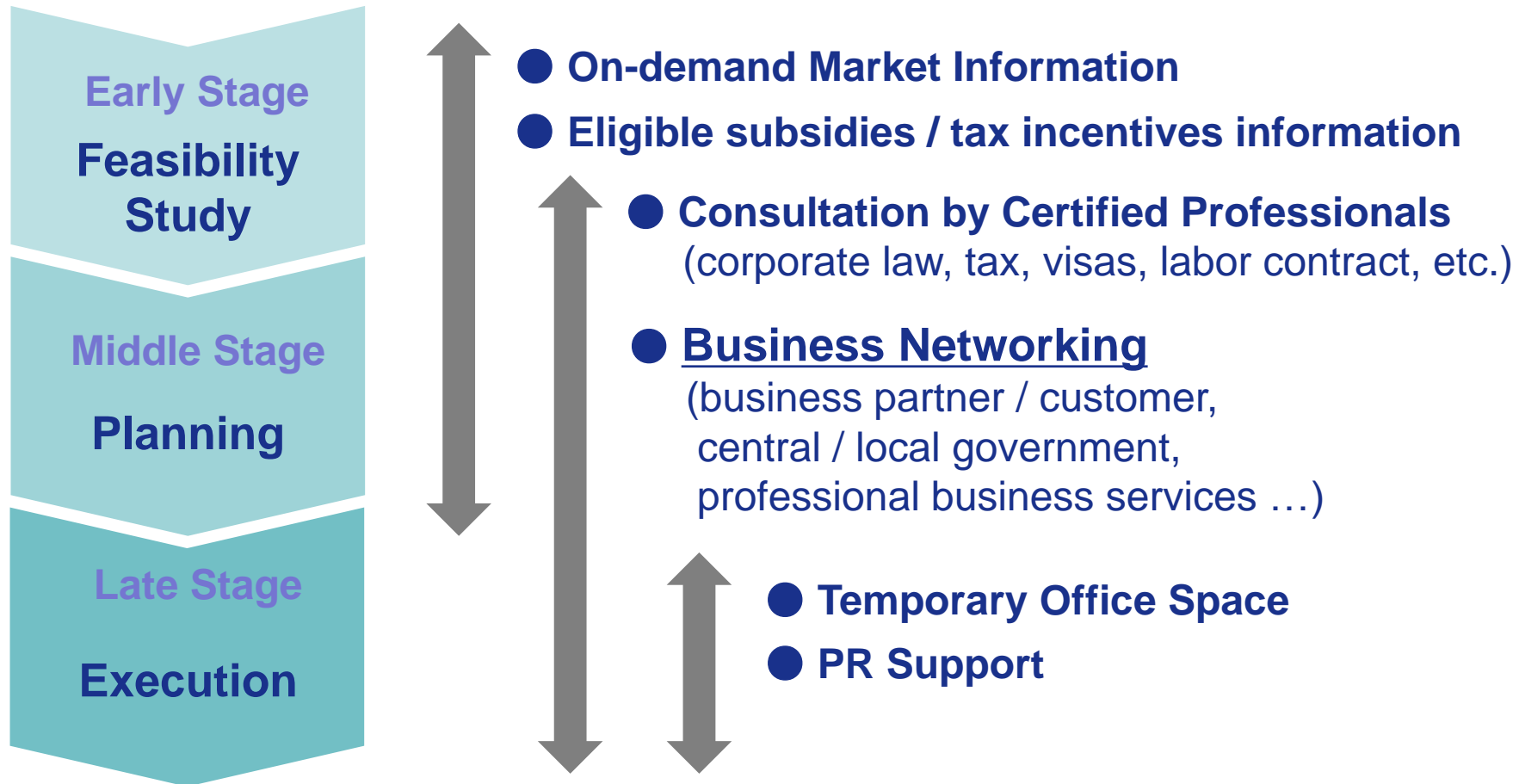
We look forward to assisting you.

Talk to the JETRO first!

Hiroyuki ISHIGE
Chairman & CEO of JETRO



- ◆ **Invest Japan:**
... assisting US companies at the first entry and business expansion in Japanese market
- ◆ **Business Match-Making:**
... promoting US-Japan business partnership, especially for SMEs
- ◆ **Innovation Partnership:**
... helping Japanese startups being connected to the US venture community
- ◆ **JETRO Seminars:**
... providing updated information on Japanese business environment and policy measures



Subsidy Program for Global Innovation Centers (total budget: 1.0 billion JPY)



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For any questions or additional information

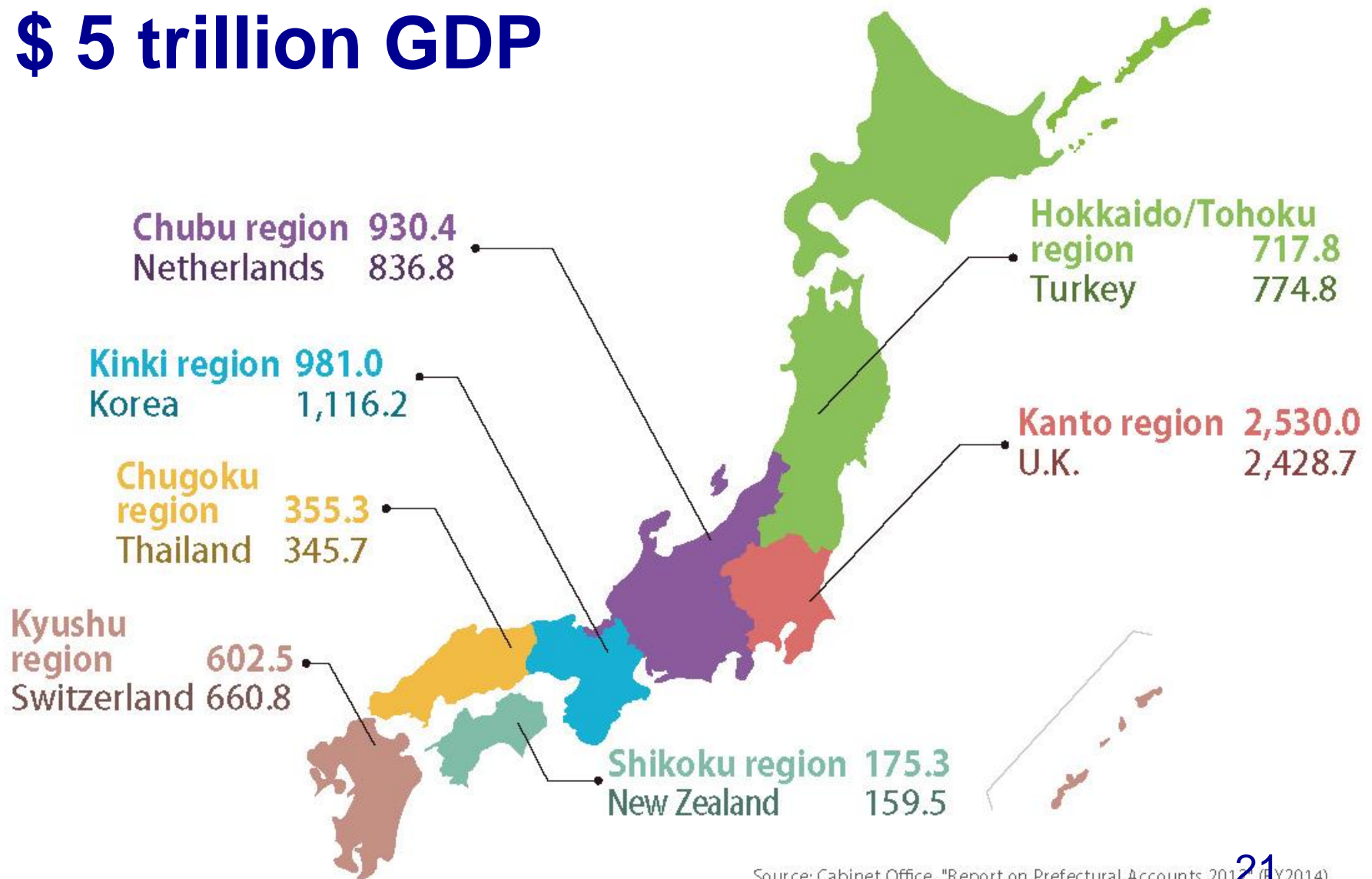
JETRO San Francisco
575 Market Street, Suite 2400
San Francisco, CA 94105
415-392-1333
sfc-info@jetro.go.jp

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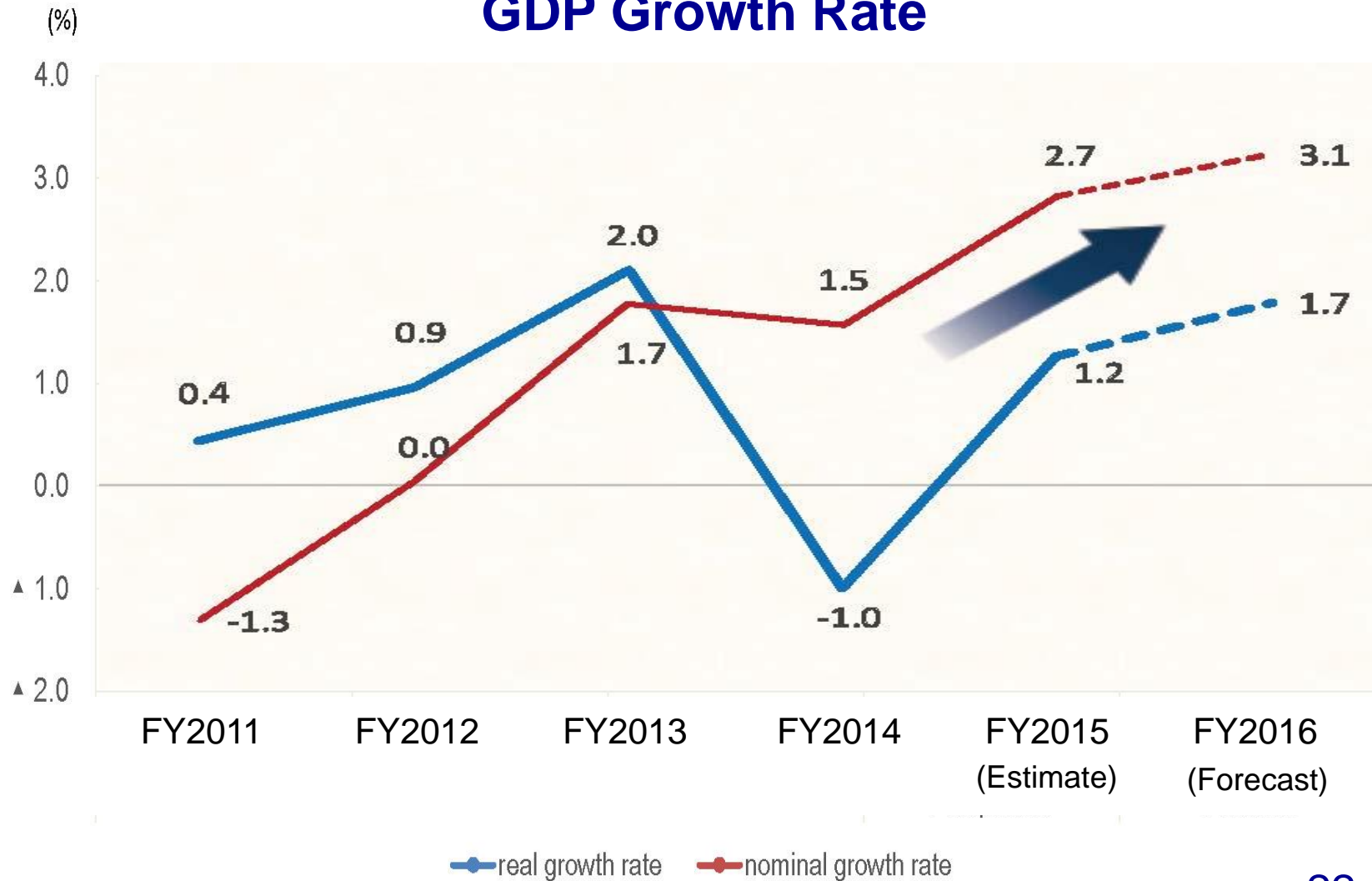
ANNEX: Case for Engaging with Japan

- ① **Healthy & Sizable Market**
- ② **Technology & Innovation**
- ③ **Pro-business Government**

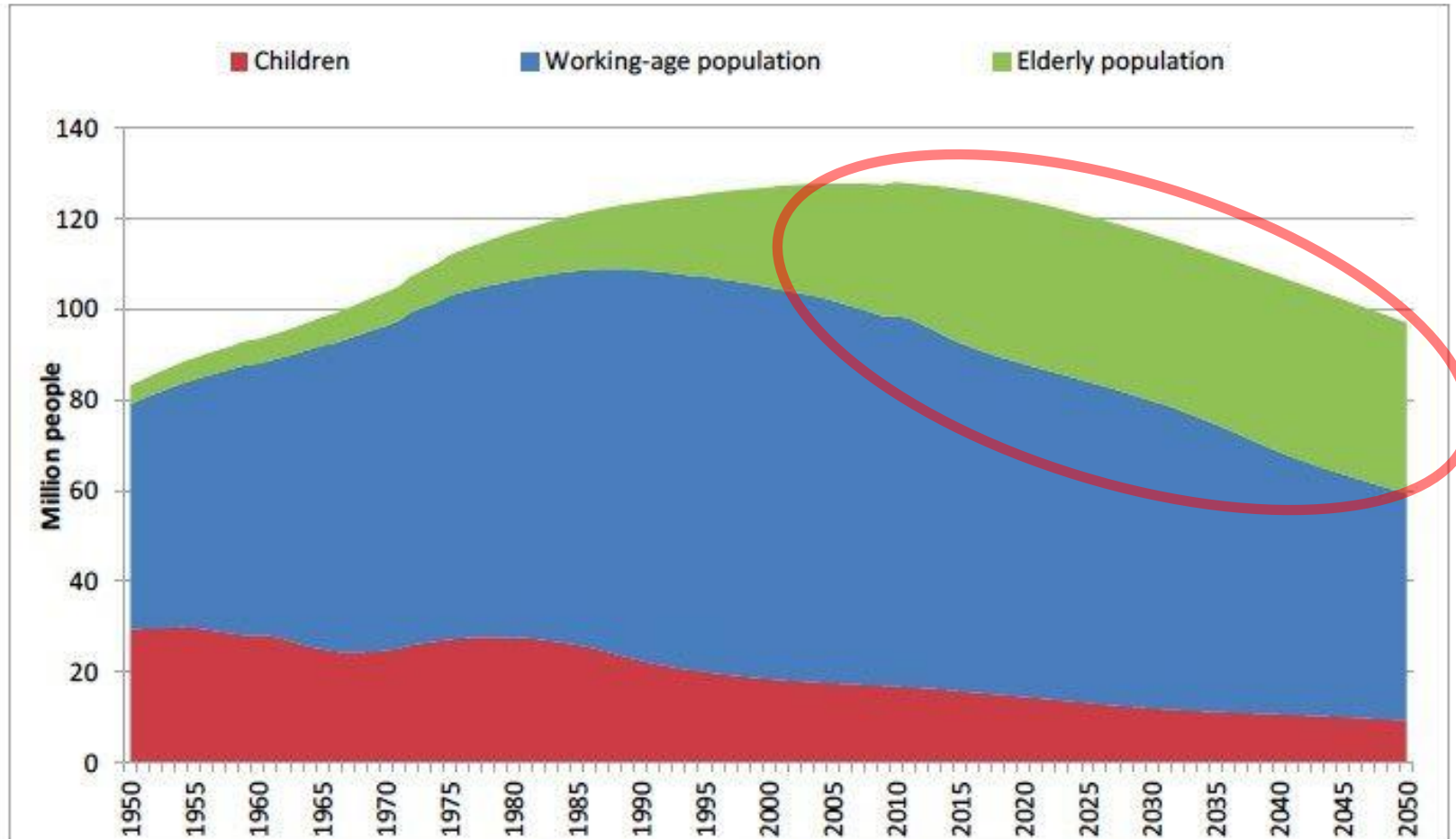
\$ 5 trillion GDP



GDP Growth Rate



Aged population still grows (Most affluent cohort will be over 75 in 2025)



Japan enjoys highest R&D intensity

Research funding percentage of GDP
(G8 comparison)

Rank	Country	Percentage of GDP (%)
1	Japan	3.75
2	German	2.98
3	U.S.	2.79

4th - France (2.29%), 5th - UK (1.73%),
6th - Canada(1.69%), 7th - Italy
(1.27%), 8th - Russia (1.12%)

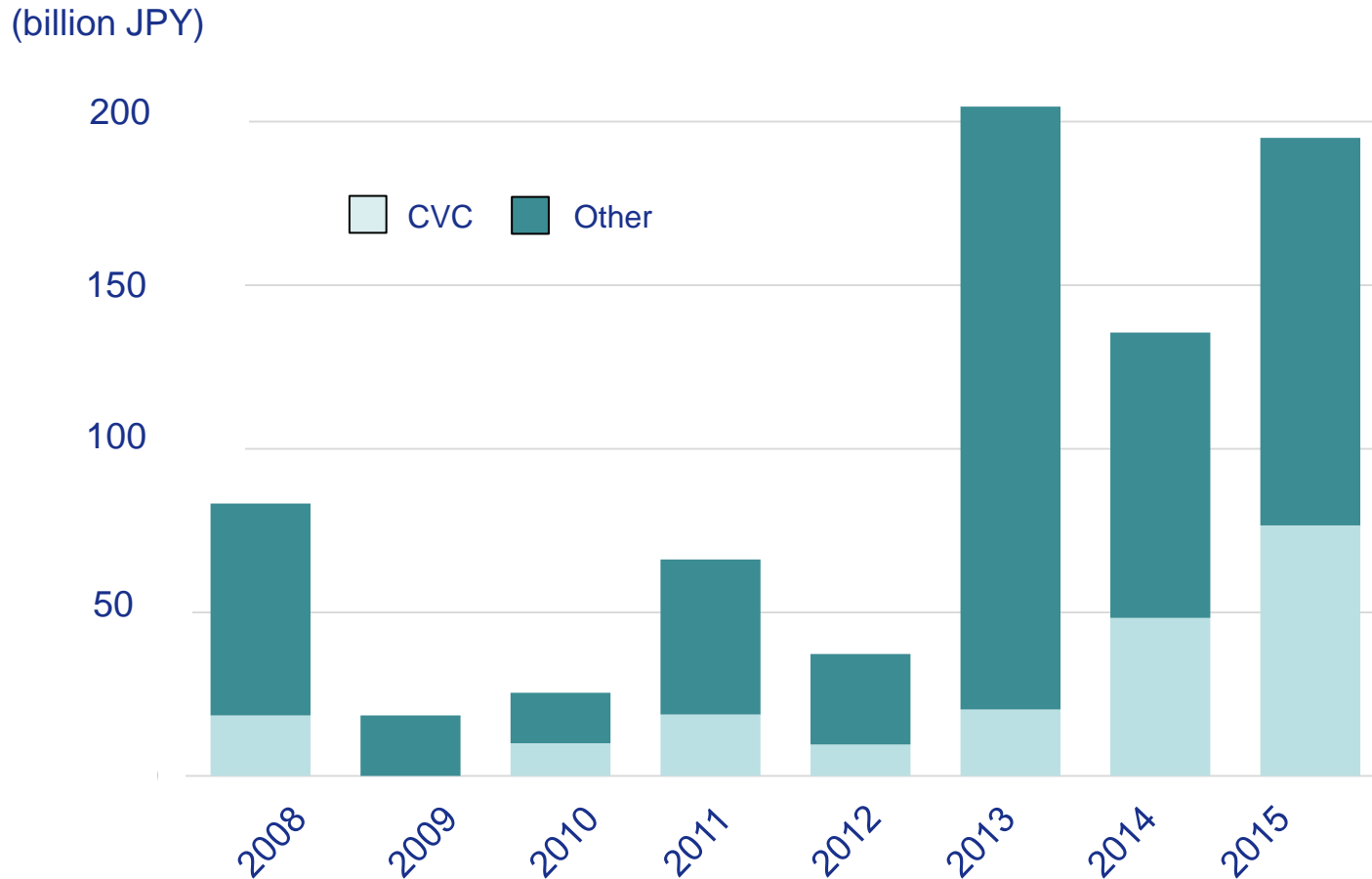
Number of researchers per 10,000 people
(G8 comparison)

Rank	Country	Number of researchers per 10,000 people
1	Japan	52.0
2	Canada	45.6
3	German	42.5

4th - US (40.2), 5th - UK (39.7),
6th - France(38.3), 7th - Russia (31.0),
8th - Italy (12.7)

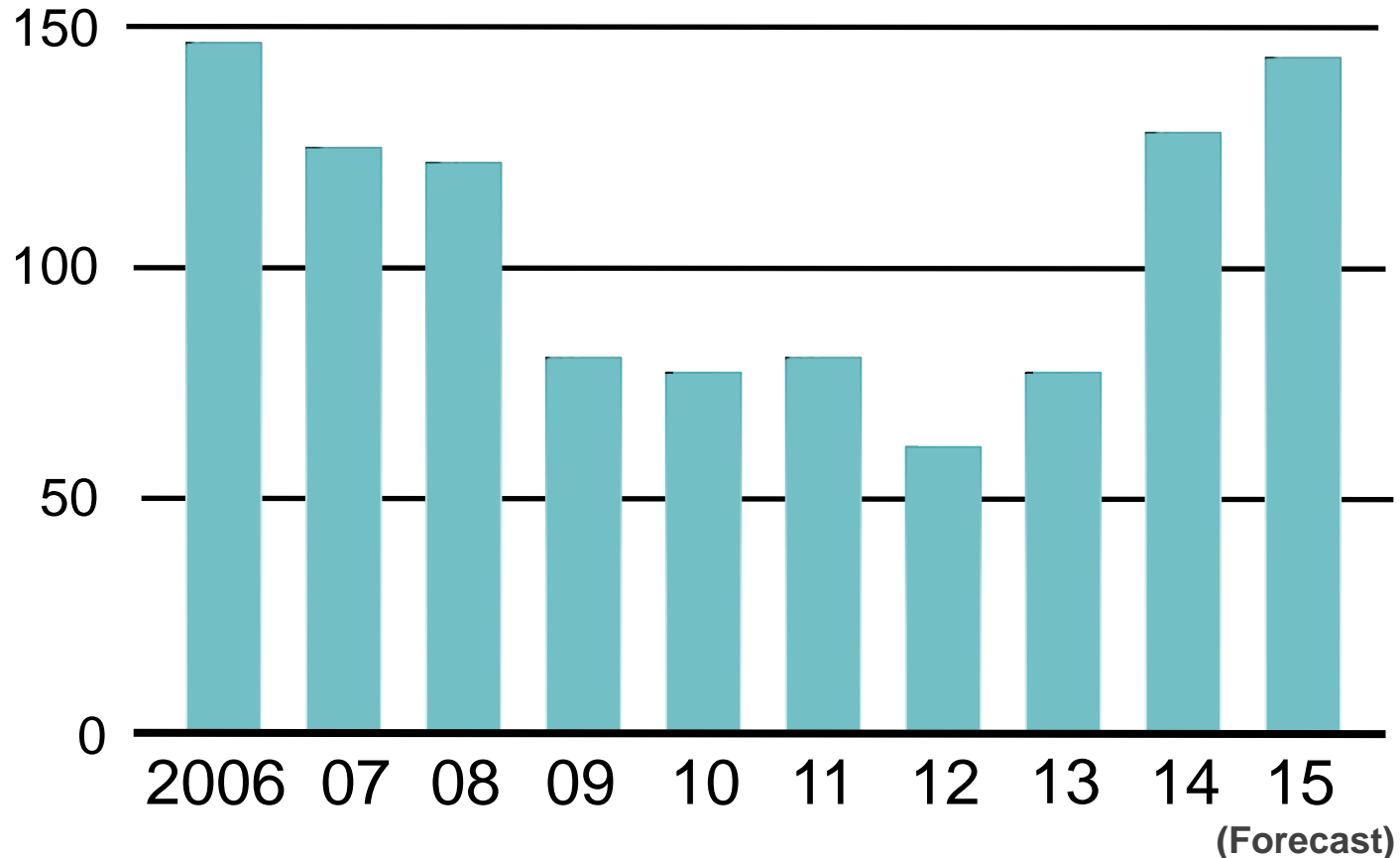
Source: Created from Ministry of Internal Affairs and Communication, "Survey Result on Science and Technology Indicators 2014"
Date source: OECD "Main Science and Technology Indicators," etc.

Japan VC fundraising by year



Source: Japan Venture Research

Total Amount Raised by Unlisted Venture Companies in Japan (billion JPY)

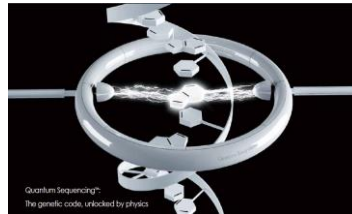


Source: Japan Venture Research

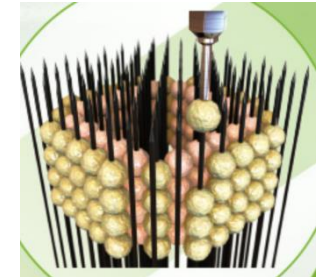
Disrupting technology startups are emerging.

Quantum Biosystems

Single-molecule
"Quantum DNA
sequencer"

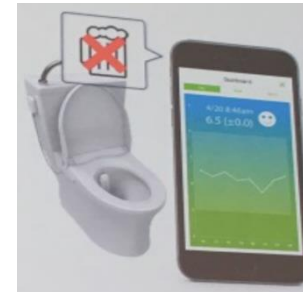


CYFUSE
Bio 3D Printer
Regenova®



CYBERDYNE

Robotic remedial
device HAL®



SYMAX

Automatic biomarker
sensor attachment
for toilet

SanBio

Cell therapies for
neurological disorders

2nd Stage of Abenomics

Revolution in earning power



Investment for the future



Expansion of labor force



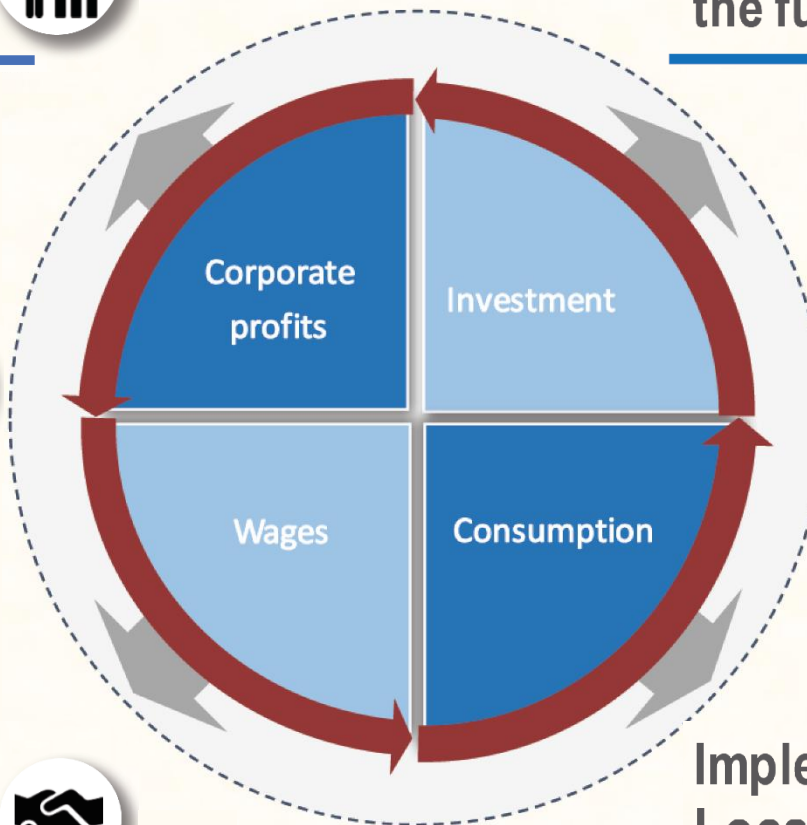
Reform of bedrock regulations



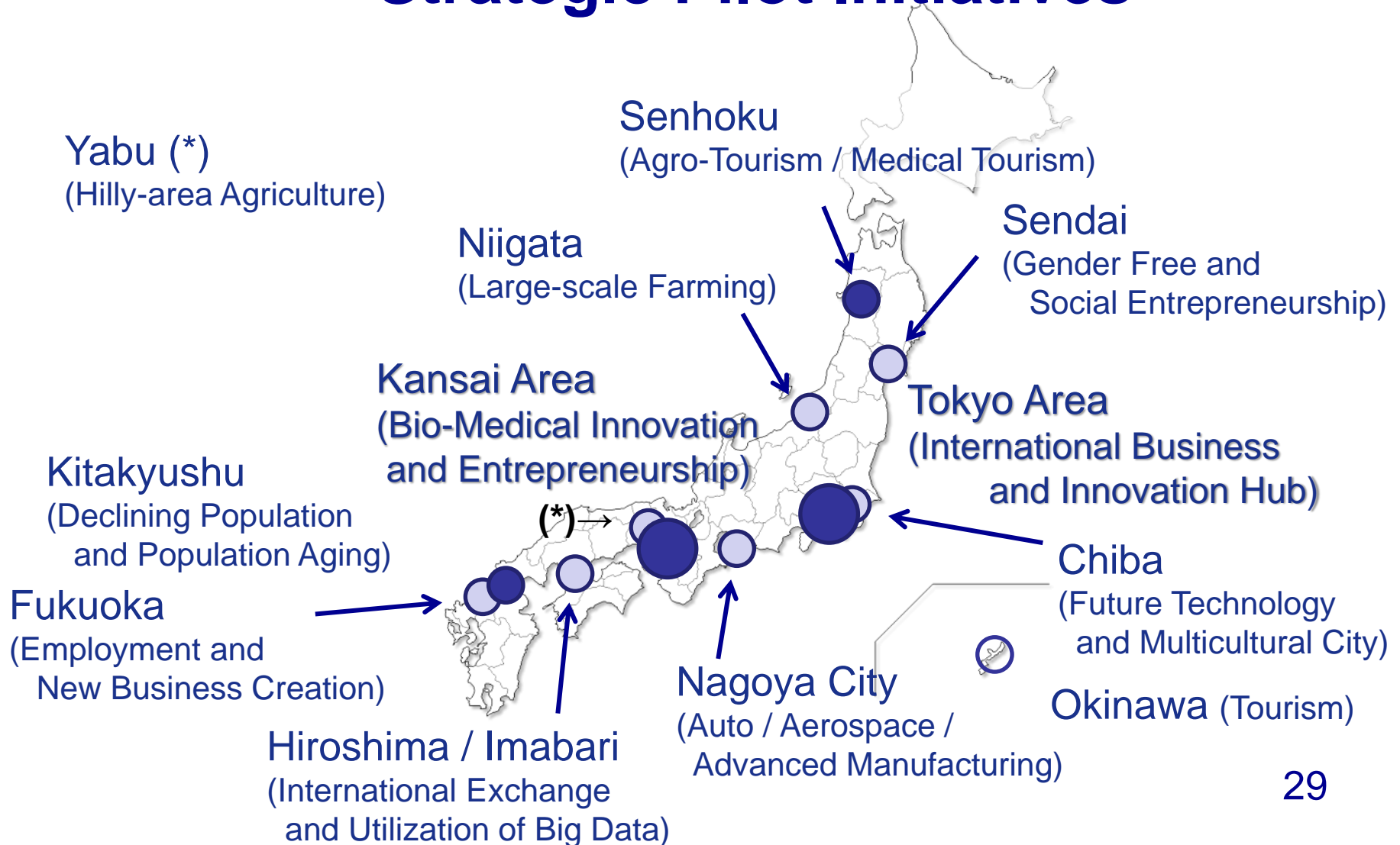
Advancement in wages and work environment



Implementation of Local Abenomics



Strategic Pilot Initiatives



5 Commitments for Attracting Foreign Business to Japan

1. Overcome language barriers

Retailers

Set the standard for mobile phone QR codes to read product information in English and other languages

Restaurants

Make multiple-language menus widely available

2. Facilitate better Internet connectivity

Free Wi-Fi

Create an environment in which foreign visitors can use free public wireless LAN (Free Wi-Fi) simply and easily at various locations around cities

3. Accommodate business jets at local airports

Customs, Immigration and Quarantine (CIQ)

Consider accepting business jets if CIQ offices are notified one week prior to the flight at local airports (currently requiring two-week advance notice)

4. Enhance educational environment for foreign children

International schools

Encourage prefectures to loosen their criteria for accrediting international schools as Miscellaneous Schools

5. Strengthen services to support foreign enterprises

Consultation services

Establish a system for State Ministers to act as advisors to foreign businesses