Japan ICT Market Outlook

JETRO

Japan External Trade Organization
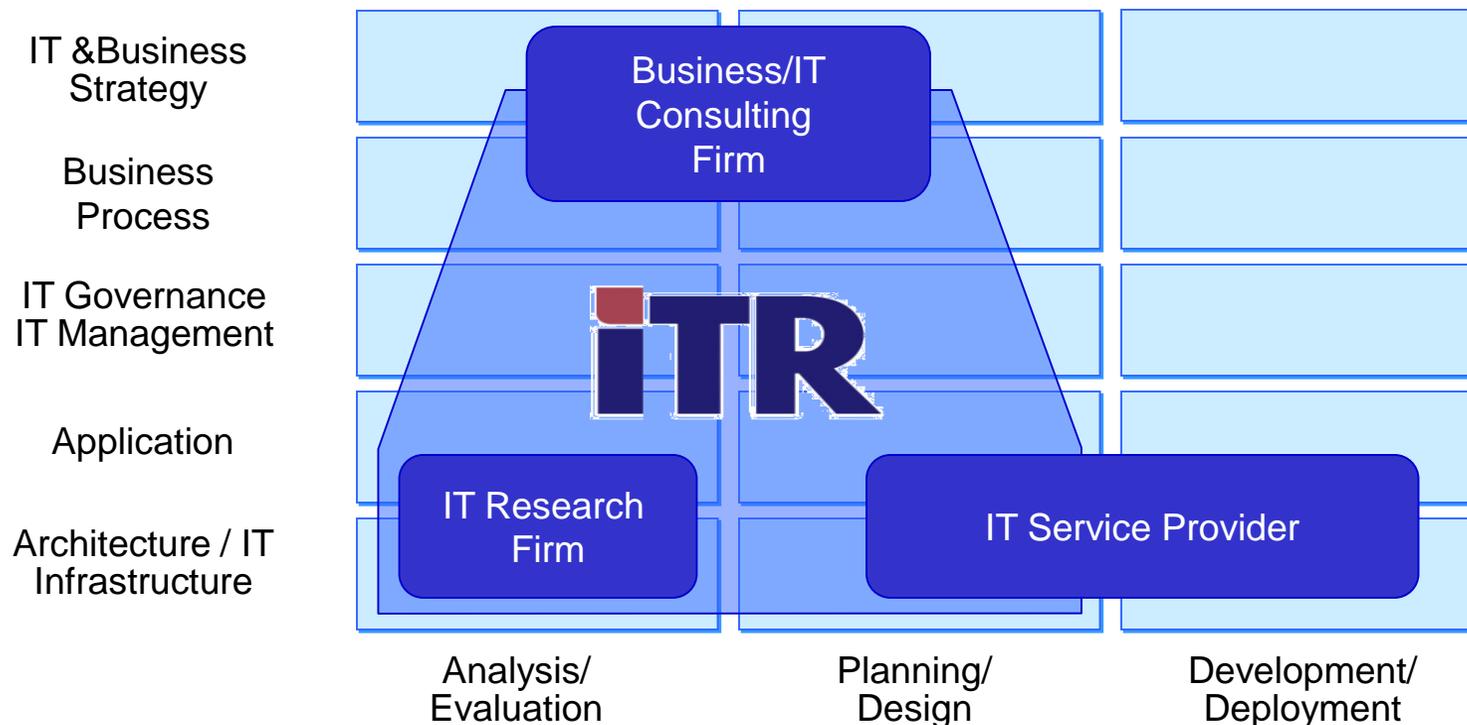
February 2020

iTR

ITR Corporation

About ITR Corporation

ITR is the largest Japan-based independent ICT research and consulting firm. We provide hands-on advice about technology markets, partner evaluations and technology deployments to drive your business.

ITR Service Portfolio

Offerings

- ICT Focused, Independent Market Research & Consulting.
- Timely and Precise Data on Product Markets and Technology Trends.
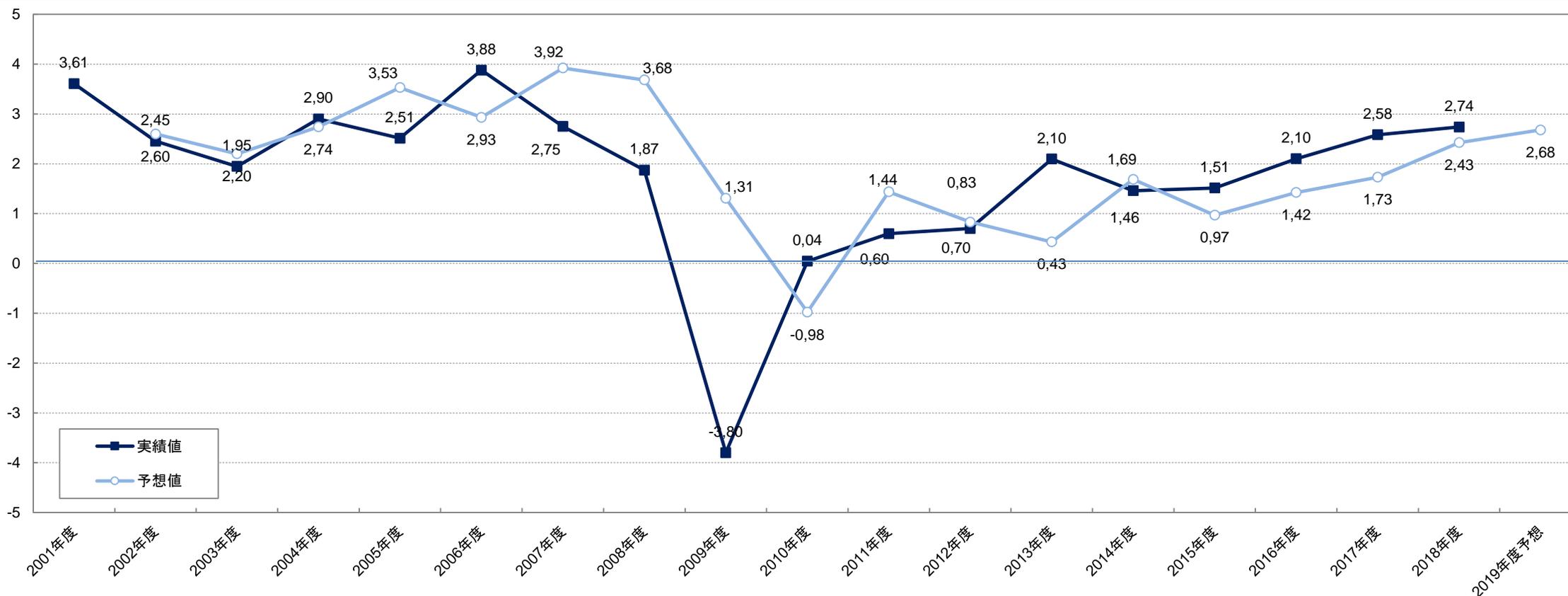- Practical Advice to Support Critical Decision Making.

IT &Business Strategy

Business Process

IT Governance IT Management

Application

Architecture / IT Infrastructure

Business/IT Consulting Firm

IT Research Firm

IT Service Provider

Analysis/ Evaluation

Planning/ Design

Development/ Deployment

Main Areas of Expertise

- Alignment of Business Strategy and Information Technologies
- Strategic Data Utilization
- ICT Cost / Performance Benchmarks
- Vendor/Product Evaluation and Selection
- Global ICT Governance and Local Deployment Planning

Japan IT Market Investment Index

ITR 2019 IT Market Index
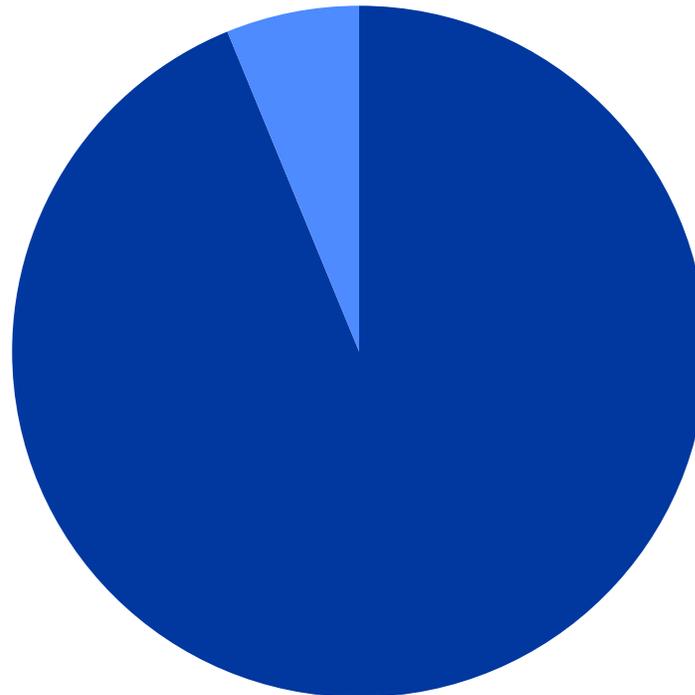
Japan's IT market investment sentiment has steadily increased over the last several years and is approaching levels seen before the Lehman Shock.

Source: ITR 2019 Investment Trend Survey.

Japan IoT Market Survey

ITR 2019 IoT Market Survey

ITR conducted a survey on IoT trends with enterprise users. 373 people were interviewed, 94% of whom will continue to deploy IoT services.

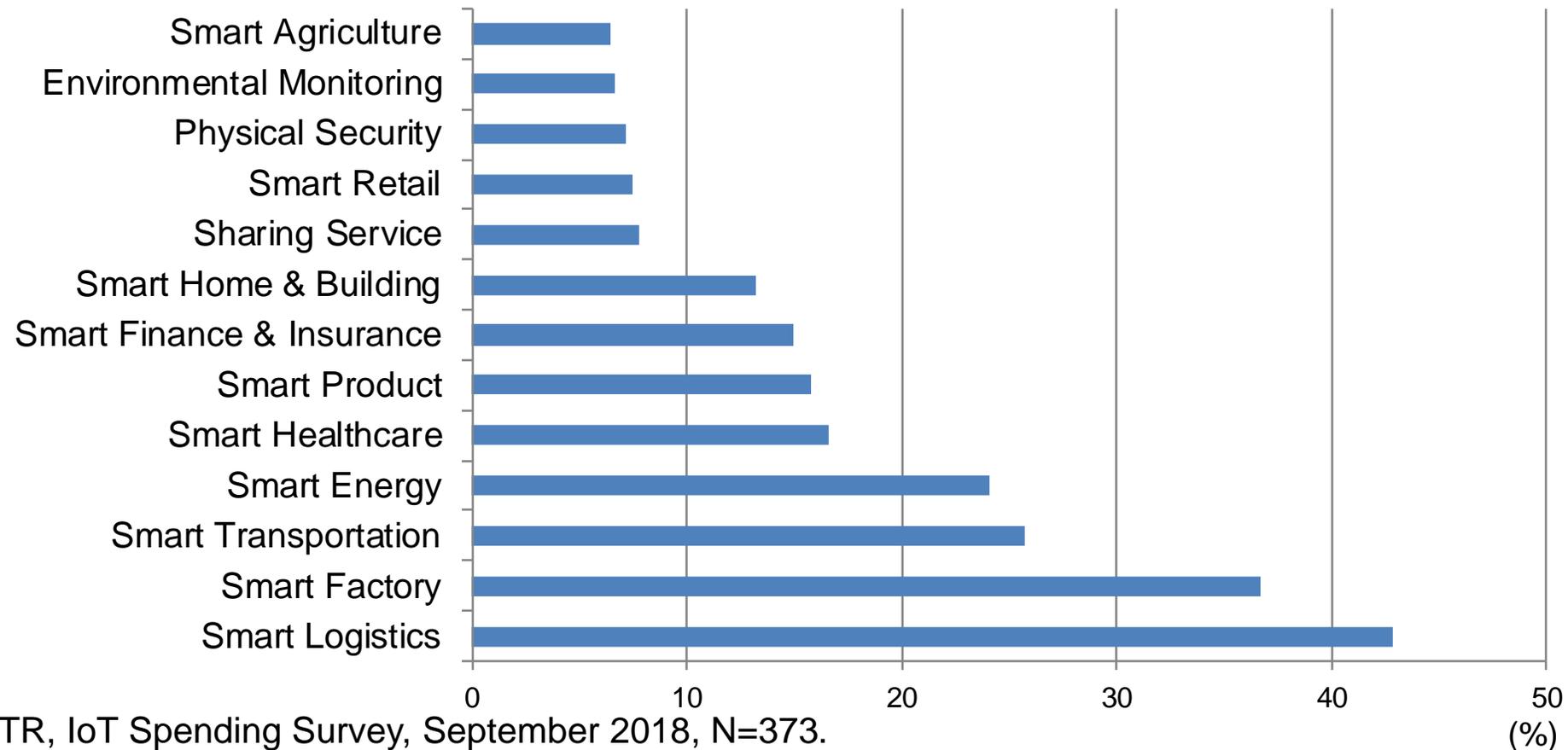■ Introduced and will continue to expand

■ Although it introduces, since it has no effect, it will not expand in the future

Source: ITR, IoT Spending Survey, September 2019, N=373.

Japan IoT Market Projected Industry Uptake

Japan IoT Uptake by Vertical

Most companies are investing in smart logistics, smart factory and smart transportation IoT services to optimize supply chains, human labor costs and service delivery costs.

Source: ITR, IoT Spending Survey, September 2018, N=373.

(%)

4

Future of Japanese Innovation – Tokyo Olympics

Shinkansen

Computerized Scoring

SC Maglev

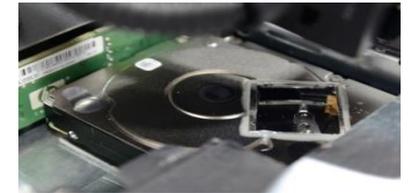**Super Hi Vision (8K)**

Satellite Broadcast

TOKYO 1964

TOKYO 2020

40 TB Hard Drive

Broadcast in Color

Quartz Wristwatch

5G **5GBPS Mobile Network**

Self Driving Cars
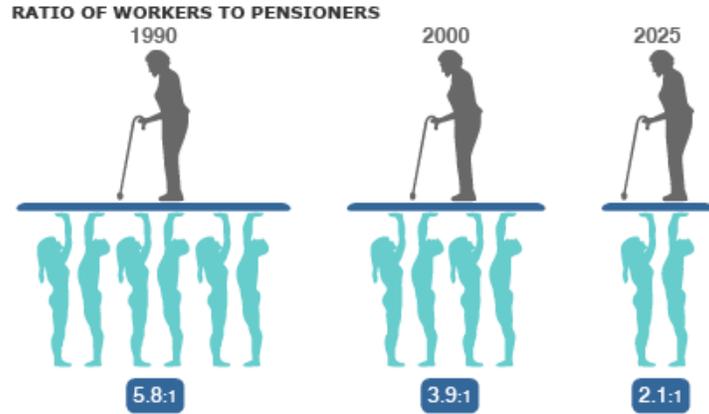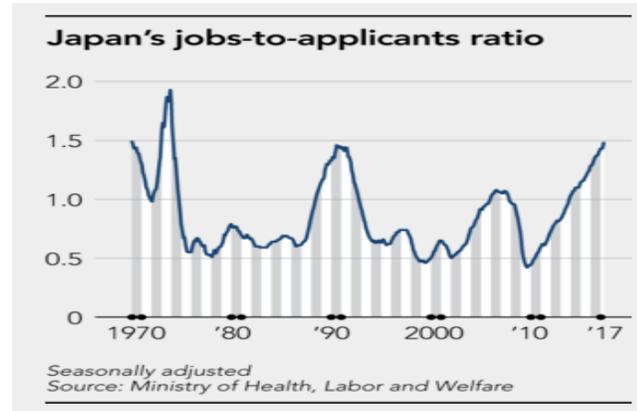
Socioeconomic Factors Driving the IT Market in Japan:

IoT is seen as a way to improve the economy & society in relation to several issues:

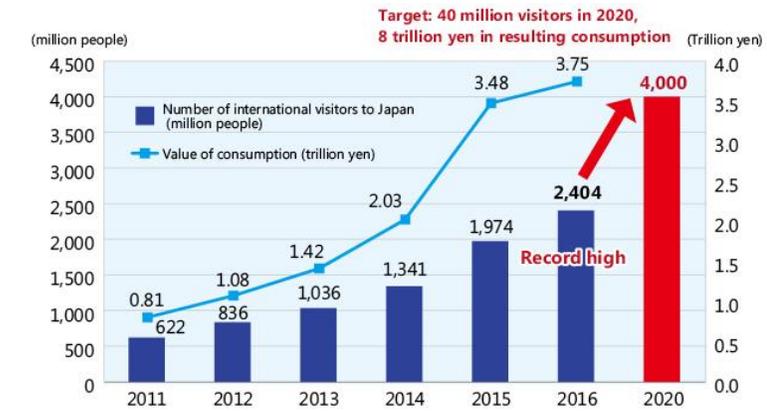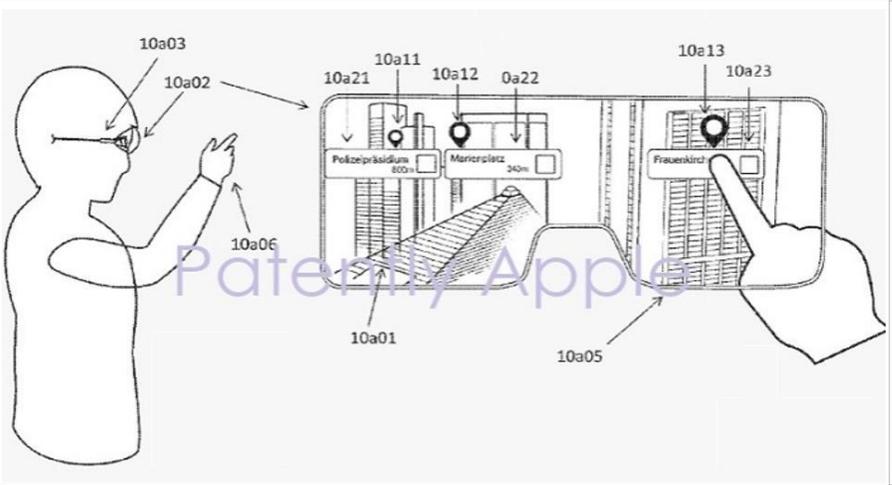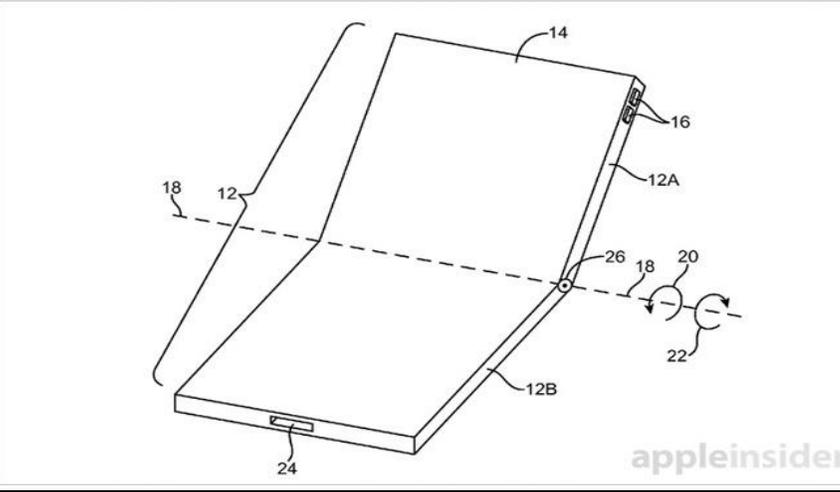| **Aging Population**	**Labor Shortage**	**Tourism Boom**

Future 5G Form Factors
5G will also herald new form factors such as smart glass, foldables, rollables and eventually implantable devices.
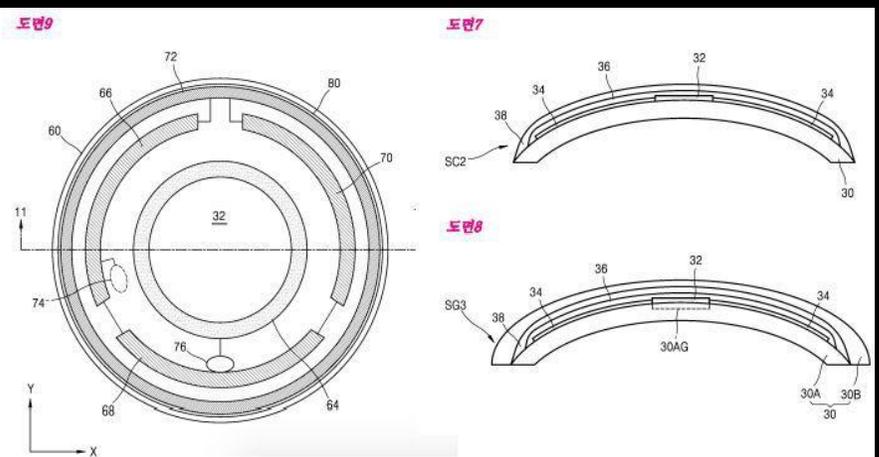
Apple AR Glass Patent

Apple Foldable Display Patent

NeuraLink

Samsung Smart Contact Lens Patent

Robotic Arm

Facebook Building 8

Image Source: Apple, Samsung, Facebook, NeuraLink, Festo

Japan's IT Market is Facing a Labor Crisis

Japan IT Hiring Situation

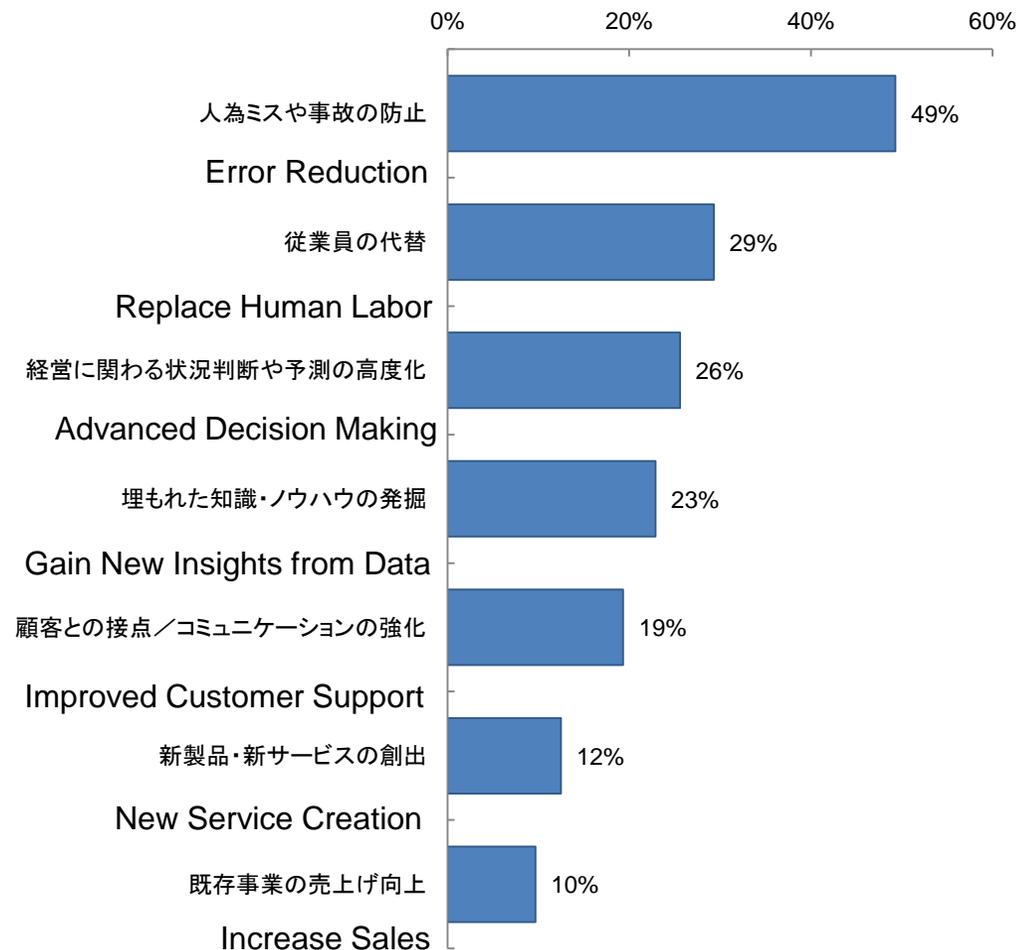|	Entry to middle management	Middle management	Senior management
Accountancy & Finance	18%	15%	9%
Banking & Financial Services	6%	5%	1%
Distribution	7%	5%	1%
Engineering	19%	19%	7%
Human Resources	16%	19%	6%
IT	19%	19%	7%
Legal	4%	5%	2%
Marketing	10%	22%	10%
Operations	19%	3%	3%
Production	7%	3%	0%
Procurement	9%	6%	1%
Research & Development	13%	10%	2%
Sales	36%	36%	17%
Supply Chain	13%	12%	3%

Source: Hays.

Japan is facing a severe labor shortage recently and this includes the IT space, as IT is one of the areas where companies have had a very difficult time filling positions. Cybersecurity is one of the key areas of concern and many of the recent cyberattacks have been blamed on Japan's lack of cybersecurity professionals. Japan could have a shortfall of up to 600,000 IT professionals by 2030.

This has meant that IT companies have started expensive training programs to try to cope with demand but this also means that there will be increased IT offshoring in the coming years, representing an opportunity for CEE countries.

The Importance of AI to Japan's IT Sector

Japanese Companies Intended Use of AI, 2019

Artificial Intelligence is emerging as a major theme in Japan's IT market as almost of half of companies surveyed plan to use AI to reduce human error in their business and create a safer environment. 30% of companies also plan to deploy AI in order to replace human labor which is why areas such as chatbots, HRTech and other types of RPA have become high priorities in recent months.

Therefore there will be significantly increased demand for IT offshoring services based around Artificial Intelligence and Machine Learning and this represents a very big opportunity for CEE IT companies with expertise in the space.

Source: ITR 2019 Investment Trend Survey.

CEE & Japan ICT Business Partnerships

ESET

Slovakian IT security vendor ESET is most successful CEE IT vendor in Japan. The company has been active in the Japanese market for 15 years and currently has a domestic market share of over 10% due to its partnership with Canon.

Silicon Studio

Many Japanese game developers have recently started outsourcing parts of game development to CEE countries such as Silicon Studio, which outsources computer graphics work to the Ukraine. AR and VR application development is also particularly emerging as an area of focus.

Transcosmos

Transcosmos is the largest BPO outsourcer in Japan and recently opened a new office in Poznan having expanded to Warsaw in 2017. The company also recently expanded to Cluj-Napoca in Romania and has been present in Hungary for many years.

Image Source: ESET, Silicon Studio, Transcosmos.

Summary & Conclusions:

-There is an increasing interest in Japan to both use ICT solutions to solve social issues and to partner with foreign companies to do so. This is creating new opportunities for Eastern European and Japanese companies to work together.

-Current hot topics in the Japanese market where foreign IT services are in demand include:

- -BPO services as Japanese business expand into Eastern Europe
- -Cybersecurity
- -Outsourcing for Japan`s gaming industry
- -Development of 5G services
- -Development of VR, AR & MR Services

-Any IT services related to solving Japan`s social issues such as decreasing population, increasing elderly population, the tourism boom and increased self-sufficiency using IoT are also currently in high-demand.

-Partnering with organizations such as JETRO are a good first step in exploring the Japanese market.

Thank You!/ありがとう ございました!!

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