(For the Liberal Democratic Party's Committee for Realization of Good Economic Circulation Hearing)

Japan Ahead

May 14, 2015

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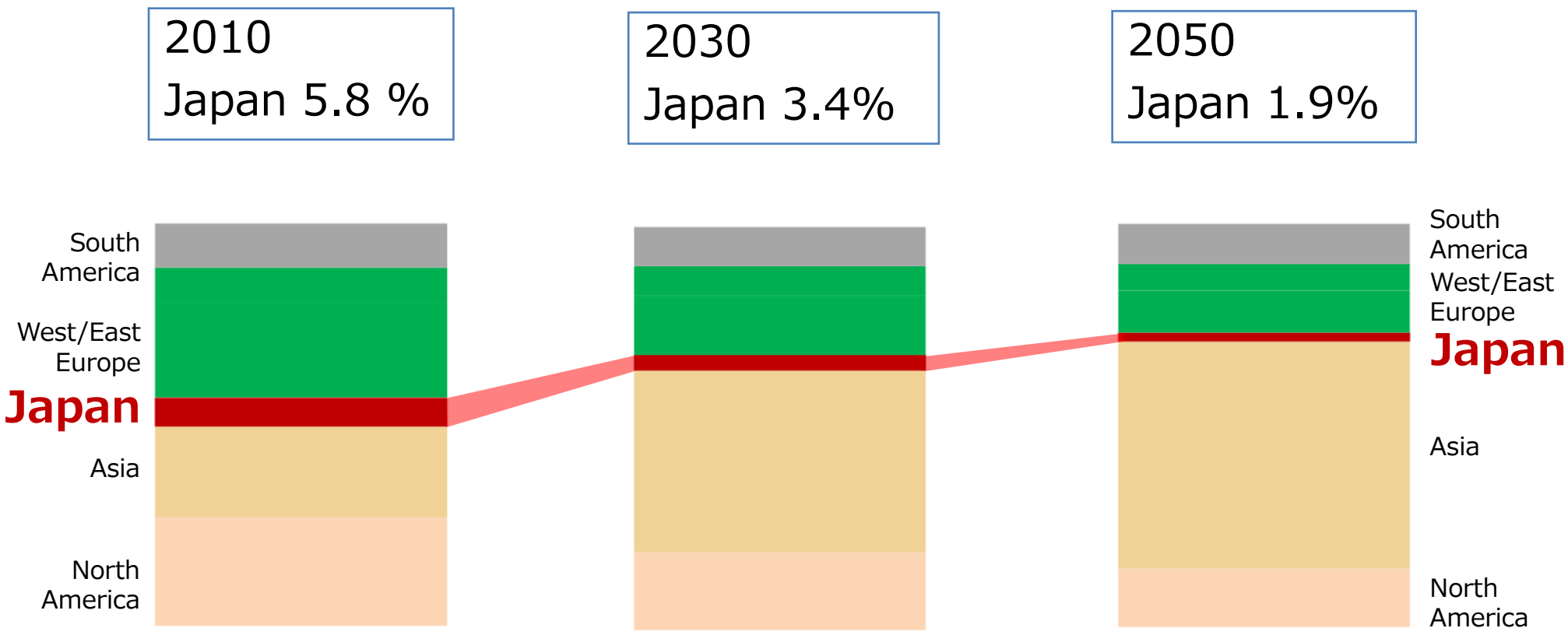
Hello, Future!

新経済連盟

Japan Association of New Economy

Japan's share of world GDP is declining

- Japan's share of global GDP: Will decline to below 2% by 2050
- Asia's share of global GDP: Approx. 28% (2010)→Approx. 48% (2050)



Source: *The Economist*, "The Economist: Megachange: The World in 2050" (Japanese edition, August 2012)

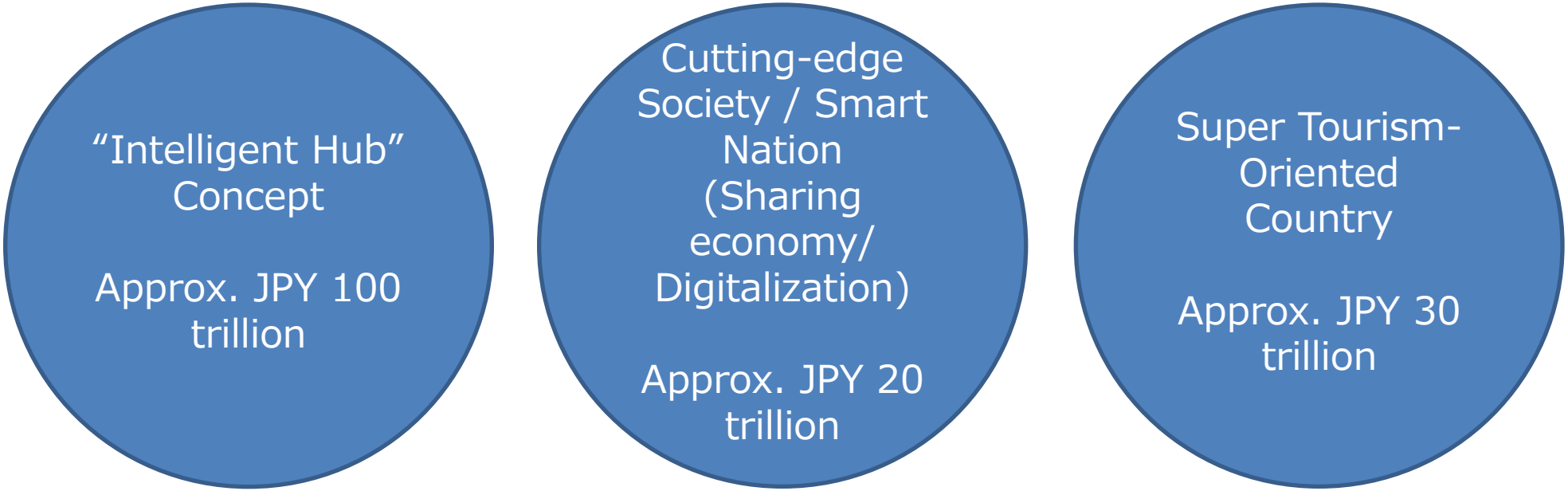
What Japan needs now

- A shift in thinking
- Not defense but offense

JANE's Proposals to Realize Virtuous Economic Cycles and their Economic Impact

■ **Today, JANE makes three policy proposals.**

■ **Our proposals will bring about an economic impact totaling approx. JPY 150 trillion.**



The Proposed Policy's KPIs (1)

Establish KPIs for each measure; undertake reforms by publicly appointing a person in charge for each KPI

policy	KPI (Example)	Present	Target
(1) "Intelligent Hub" Concept	Development of leading companies born in Japan that will be the Toyotas of the next generation		To develop companies w/JPY 20 trillion market capitalization
	English proficiency of Japanese people (raise average TOEFL score)	70 points	80 points
	Number of foreign companies to open their world or Asian headquarters in Japan		10 per year
	Corporate tax rate	34.62%	20-25% range
	Percentage of start-ups in the total number of businesses	4.5% (2010)	10% range
	"Laws relating to ICTs" ranking in World Economic Forum's IT competitiveness ranking	42nd (2013)	Within top 10
	Number of foreign nationals newly entering Japan on engineer visas	5,387 (2013)	Approx. 20,000
	Balance of foreign companies' FDI in Japan	JPY 18 trillion (end 2013)	JPY 50 trillion (*1)

***1 The Government's existing target: JPY 35 trillion by 2020.**

The Proposed Policy's KPIs (2)

Establish KPIs for each measure; undertake reforms by publicly appointing a person in charge for each KPI

Plan	KPI (Example)	Present	Target
(2) Cutting-edge Society / Smart Nation	Market size of sharing economy		JPY 10 trillion range (2025)
	Use of Internet for important, frequently utilized administrative procedures	46.2% (FY2013)	70% (FY2020)
	Share of cashless payments at major facilities and services	N.A.	100% (2020)
(3) Super Tourism-Oriented Country	Number of foreign visitors to Japan per year	13.41 million (2014)	100 million (2030) (*2)
	Amount spent by foreign visitors in Japan per year	JPY 2.0305 trillion (2014)	JPY 30 trillion (2030)

***2 The Government's existing targets: 20 million by 2020 and over 30 million by 2030.**

List of Specific Measures

Proposed Policy	Specific Measures
(1) "Intelligent Hub" Concept	Turn Japan into an "information magnet" that attracts all kinds of data
	・Realize the Internet Autobahn Initiative
	・Reduce corporate tax
	Develop an environment for attracting competent human resources from overseas
	Foster global human resources who will lead innovation (enhancement of English education and computer programming education)
	Reform corporate governance (introduction of stock-based compensation systems, etc., selling-off cross-held shares)
(2) Development of a Cutting-edge Society / Smart Nation	Regulatory reform for the creation of new industries, e.g., sharing economy
	Promotion of e-payment and cashless payment (review of promotion measures, including requiring people to make cashless payments for public services)
	Development of a new law to promote the Digital First economy (new law for IT use)
(3) Super Tourism-Oriented Country	Fundamental review of airport policy (co-use of Yokota Base by private aircraft, support entry of LCC, etc.)
	Establishment of CMO (Chief Marketing Officer) post and appoint a candidate from the private sector
	Elimination of barriers (communication, authentication, payment, language, and cultural) to foreigners visiting Japan
	Development of laws and supportive environment to promote the sharing economy to secure transportation and accommodation for foreign visitors (repost)
	Raising attractiveness of entertainment in the city (casinos, music events, relaxation of amusement business law, etc.)
	Development and enhancement of duty-free stores

1. What is happening in the world today?

Those who have control over data will control the world

■The Internet's big bang is taking place, leading to a rapid explosion of data volume.

■"Those who have control over data will control the world"

■Countries have reestablished their growth and data strategies based on the above understanding.

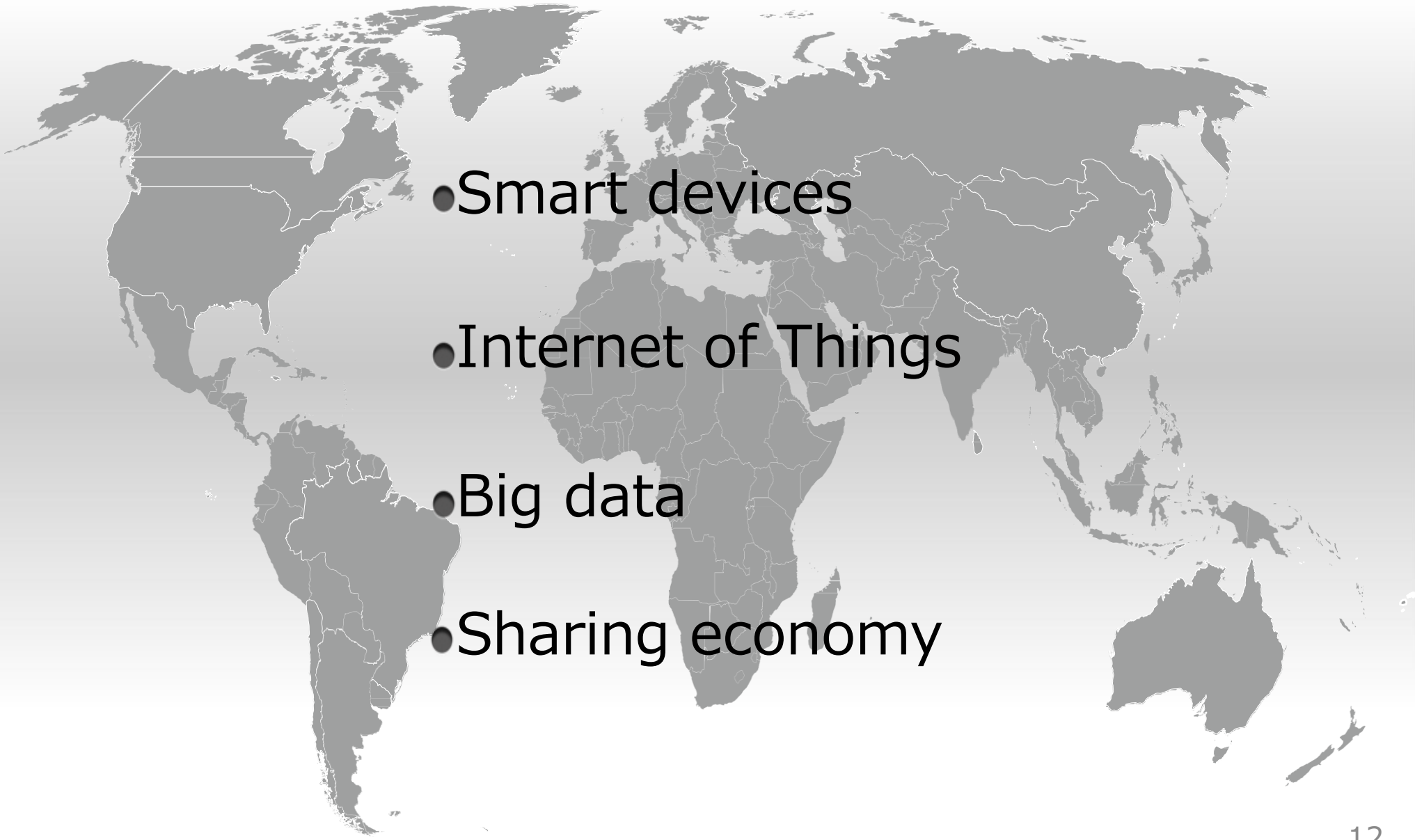
■On the other hand, Japan has been oblivious to world trends, giving rise to its "galapagosization." If this situation remains unchecked, Japan may soon face an "information drain" to other parts of the world.

■To counter world trends, Japan needs to attract data, talents, and goods. The social system must be fundamentally transformed so that it can quickly respond to the latest developments.

Forecasted global growth of digital data

Source: Ministry of Internal Affairs and Communications, Report from Study Group on Creation of ICT Ideas

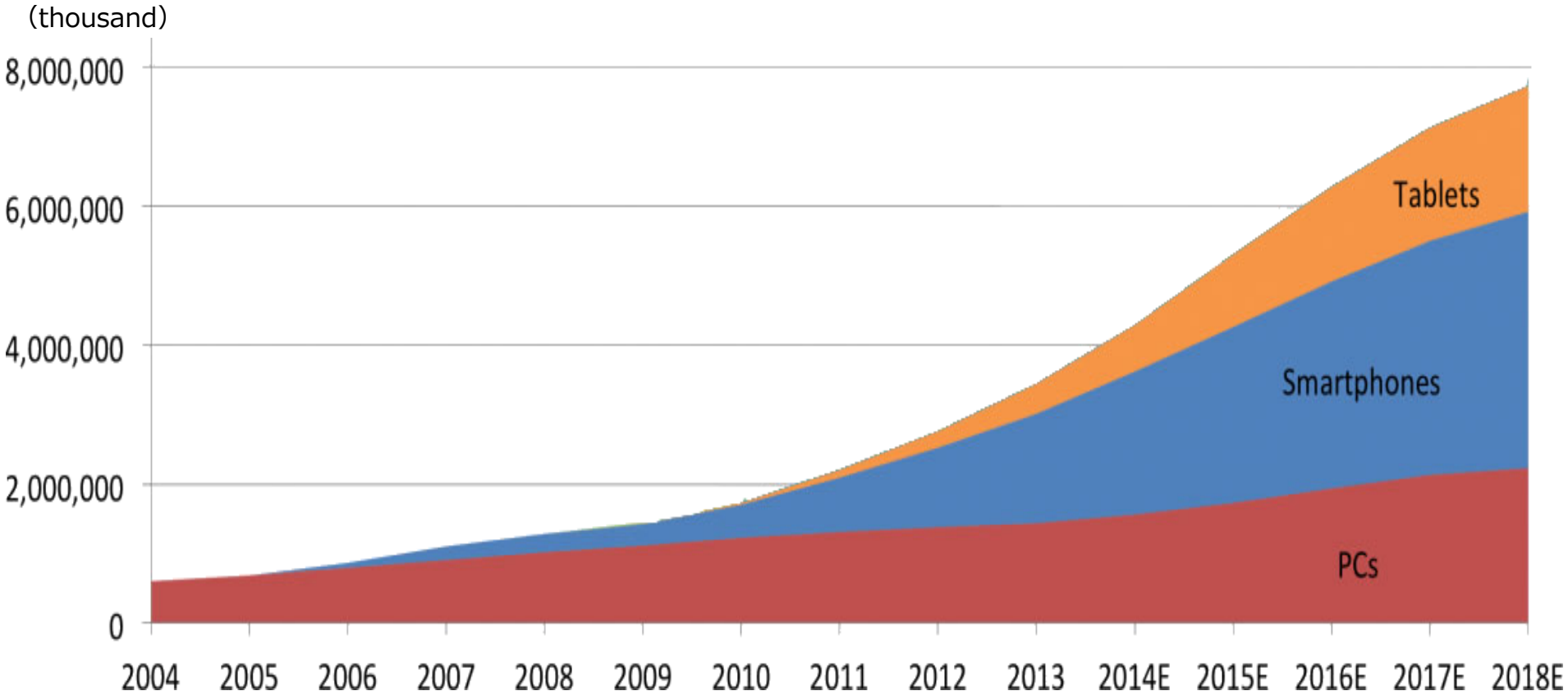

Transportation
Life
Power
Shopping
Media
Travel
Nations and borders
Internet Big Bang
Education and learning
Marketing
Medicine
Finance
Publishing
Communications



- Smart devices
- Internet of Things
- Big data
- Sharing economy

Smart connected devices become primary devices

Devices connected to internet: forecast



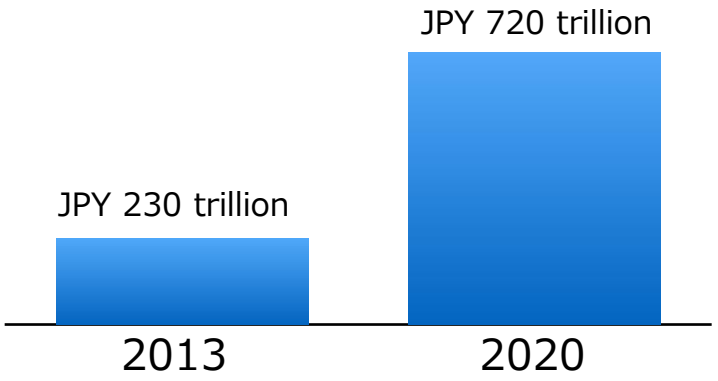
Internet-connected devices such as smartphones and tablets will be triple the number of internet PCs by 2018

Source: BI Intelligence "Number of Devices In Use Globally"

Everything will be connected to the Internet

Internet of Things (IoT)

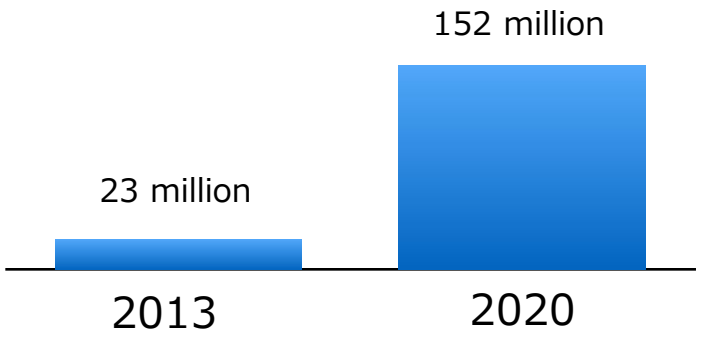
IoT's World Market



Forecast in Private Sector

"99.4% of things will be connected to the Internet"

Ex: Motor vehicles connected to the Internet (global)



Source: IDC IHS Automotive

Services transformed by Big Data, etc.

Big Data, IoT, and AI will enable:

- Detailed/accurate future projections
- Automatic determination of optimal human behaviors based on massive data using AI

Specific examples of Big Data, IoT, and AI's uses

1) Medicine: Acceleration of R&D (discovery of iPS cells)

2) Public health: Forecasts of spread of infectious diseases and alerts to individuals

3) Agriculture: Monitoring and remote or automatic adjustments of water quantity, temperature, etc. using sensors

4) Car: Automated driving by AI

5) Housing: Energy use tailored to consumer preferences

6) Manufacturing: Production according to sophisticated projection models based on analysis utilizing accumulated data and AI

7) Distribution: Real time inventory management by entire supply chain based on AI's sophisticated demand projections

8) Infrastructure: AI uses real time data to make advance predictions about aging infrastructure parts that will be replaced accordingly

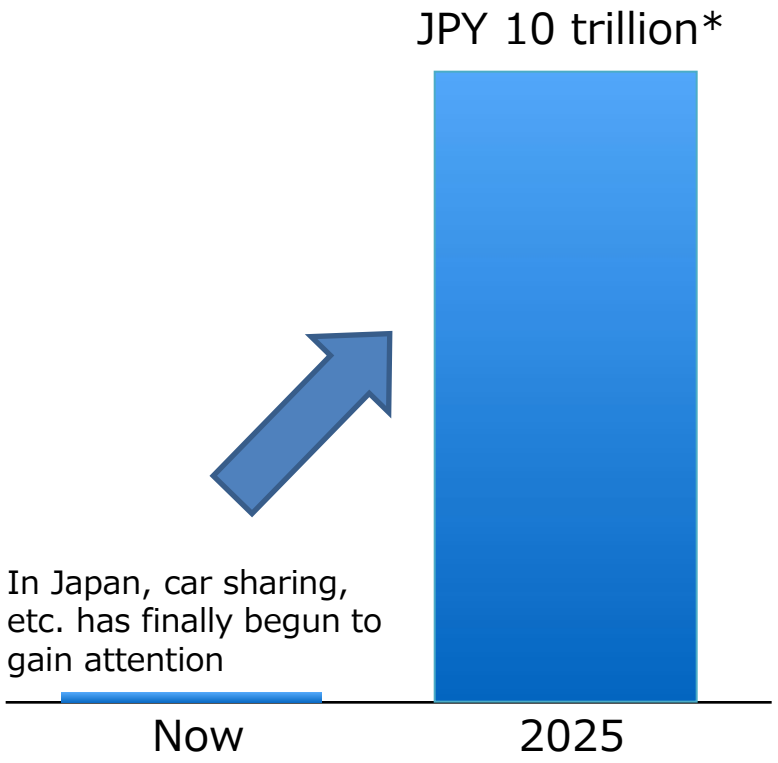
9) Electricity: Efficient supply of electricity tailored to demand

10) Administrative services: Efficiency increases through smart cities

The explosive expansion of the sharing economy (1)

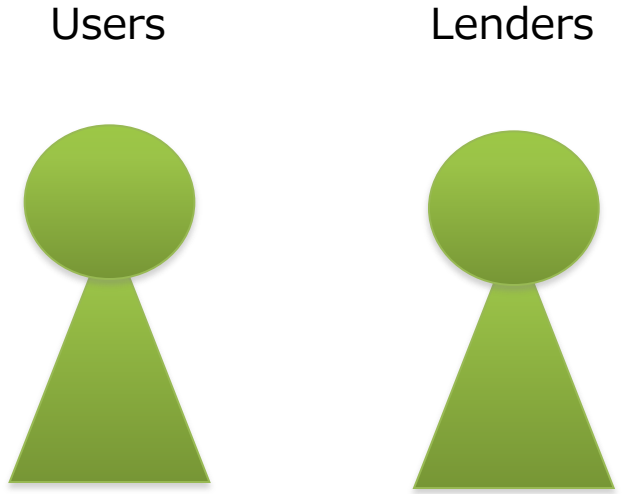
With the advances in social media, recent years have seen the rapid growth of an economy built on the exchange and sharing of the idle assets of individuals, especially in North America and Europe. The traditional ownership-based economy is turning into the sharing-based economy.

Estimated domestic market



*Preliminary calculation also factors in transportation, accommodation, nursing care, childcare, cloud sourcing, etc. Refer to the next page.

Needs



2/3 of users wish to utilize services provided by others

2/3 of lenders wish to lend personal assets to make money

Source: Nielsen, “Global Survey of Share Communities,” 2013

The explosive expansion of the sharing economy (2)

Use of idle assets and effective use of existing facilities

Vehicle sharing

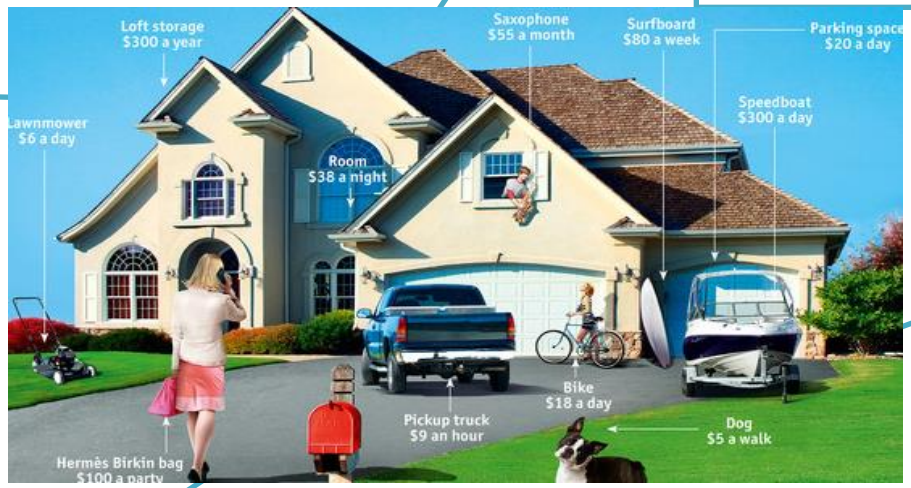
・Private vehicle/empty seat in private vehicle

*In San Francisco, ride-sharing services are said to have expanded the door-to-door transportation service market fivefold

(Reference: Total sales of taxi and limousine industry approx. JPY 1.75 trillion (2013)
(Source: Ministry of Internal Affairs and Communications, "Trend Survey on Service Industries," 2013 expanded survey release)
Car sharing businesses have increased from 10 in 2008 to 170 in 2012.
(Source: Data from Ministry of Land, Infrastructure, Transport and Tourism, "White Paper on Land, Infrastructure, Transport and Tourism in Japan, 2012")

Space sharing

・Empty room or empty house
1 in every 7 houses empty
(Source: Calculated from Statistics Bureau, "Housing and Land Survey 2013" data)
・Event venue, conference space
・Nursing care (bed sharing, etc.)
Nursing care industry: Approx. JPY 750 billion (2013-14)
(Source: http://gyokai-search.com/3-kaigo.htm)



(Source: "The Sharing Economy," *The Economist*, March 9, 2013.

Goods sharing

・Equipment and tools
・Clothing and accessories, etc.

Spare time, manpower, and skills sharing

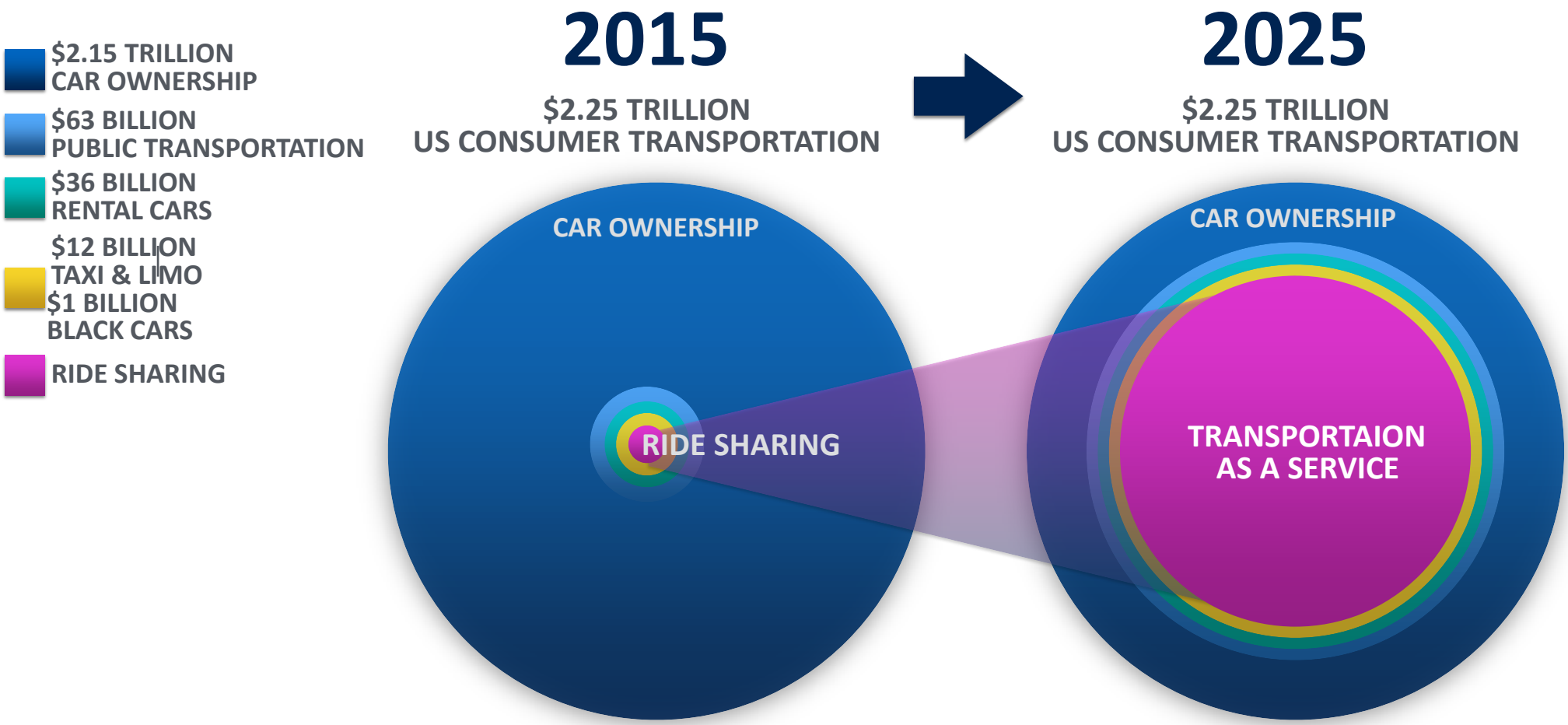
・Childcare (babysitter and child-minding)
Nursery school and daycare market: Approx. JPY 570 billion (2013)
(Source: http://www.dreamnews.jp/press/0000067177/)
・Household chores, miscellaneous tasks
・Feeding, cooking
・Pet sitting, etc.

Housewives and others can utilize spare time through cloud sourcing.
The cloud sourcing market will reach JPY 1 trillion in 2023
(preliminary calculation by CrowdWorks Inc)

Other

・Crowdfunding (money sharing), etc.

Expansion of consumer transportation industry



Source: Bureau of Labor Statistics, IBIS World, U.S. Department of Commerce, U.S. Census Bureau, and Harris Interactive report.

Those who have control over data will control the world

Data strategies are being revised around the world

Russia
・From September 2015, foreign companies will be required to store in Russia personal data related to Russian nationals

U.S.
・In 2007, a (inter-agency) committee was established by law to review FDI in the United States.
It reviews the possibility of foreign control of a U.S. business.

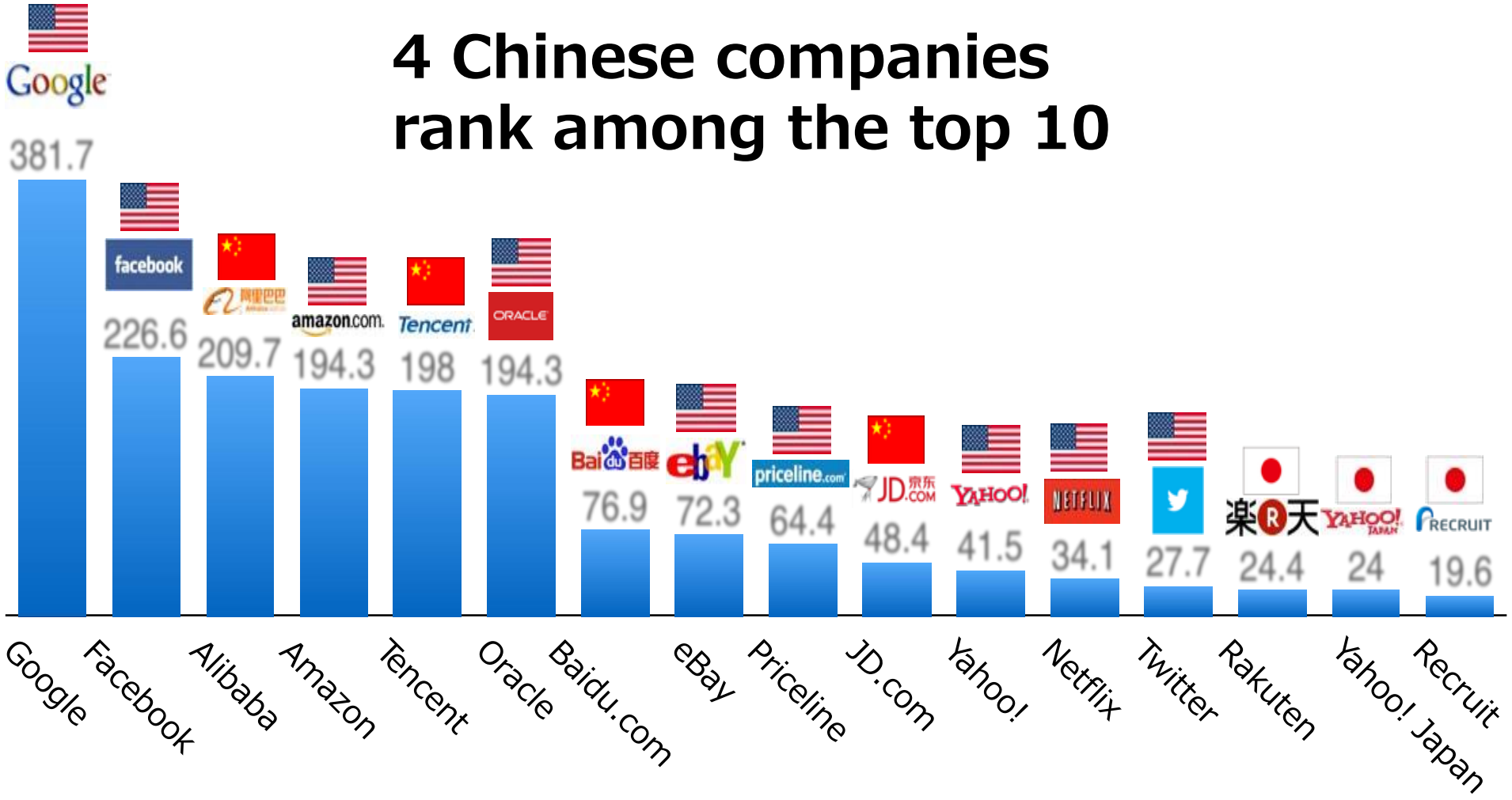
EU
・On May 6, 2015, released a roadmap toward realizing a digital single market
・Investigation into Google's violation of antitrust law

France
・"Anti-Amazon" Law

China
・Requests source code disclosure
・Issues of censorship

The Rise of China (1/2)

Ranking of Market Caps of Internet Companies

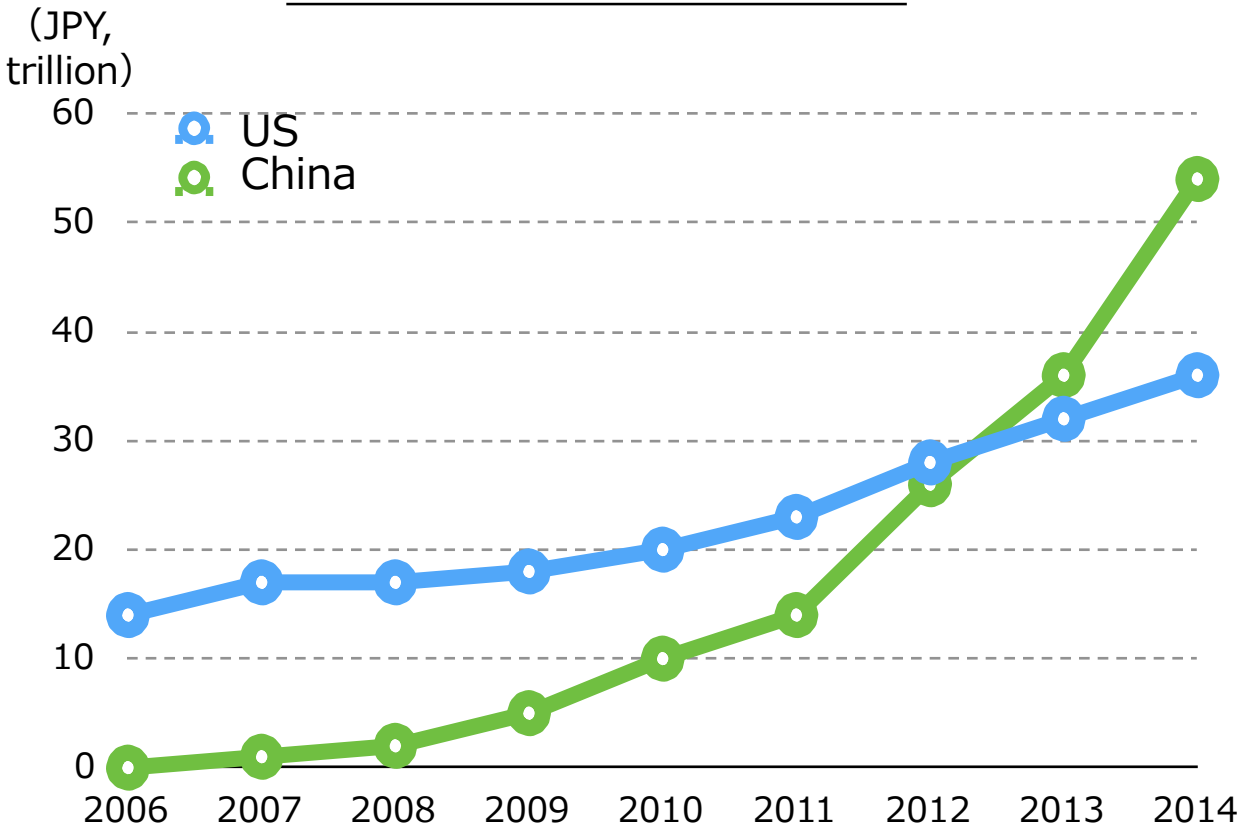


Japan: as of February 20, 2015; US: as of February 19; 1USD = 118.77JPY, 1USD = 7.7577HKD

The Rise of China (2/2)

China retail e-commerce volume already outstripping the US, home of the origins of the internet

Retail e-commerce sales



The forefront of drone deliveries

- Alibaba have tested delivery service with a drone in Beijing, Shanghai, Guangzhou
- The leading logistics company SF Express secures a system to be able to deliver 500 items a day, having tested since 2013

Source: McKinsey Global Institute, China's digital transformation: The Internet's impact on productivity and growth, July 2014

Hardware to Ecosystem

Now it has become very risky to rely solely on quality of hardware

Main players in NASDAQ has been altered

	Market Cap (in comparison with Mar, 2000)	Stock Name	
Winner	Apple x 37	Google	IPO:2004
	Adobe x 3	facebook	IPO:2012
Struggling	CISCO -68%	DELL	Retreated in 2013 (Acquired by Investment Fund)
	intel -61%	Sun microsystems	Retreated in 2009 (Acquired by Oracle)

Source: Nikkei's article on April, 25, 2014 and others

Japan must create leading companies

■Japan needs to create leading companies that will be the Toyotas of the next generation

U.S.

Google

Facebook

China

Tencent

Alibaba

2. “Intelligent Hub” Concept

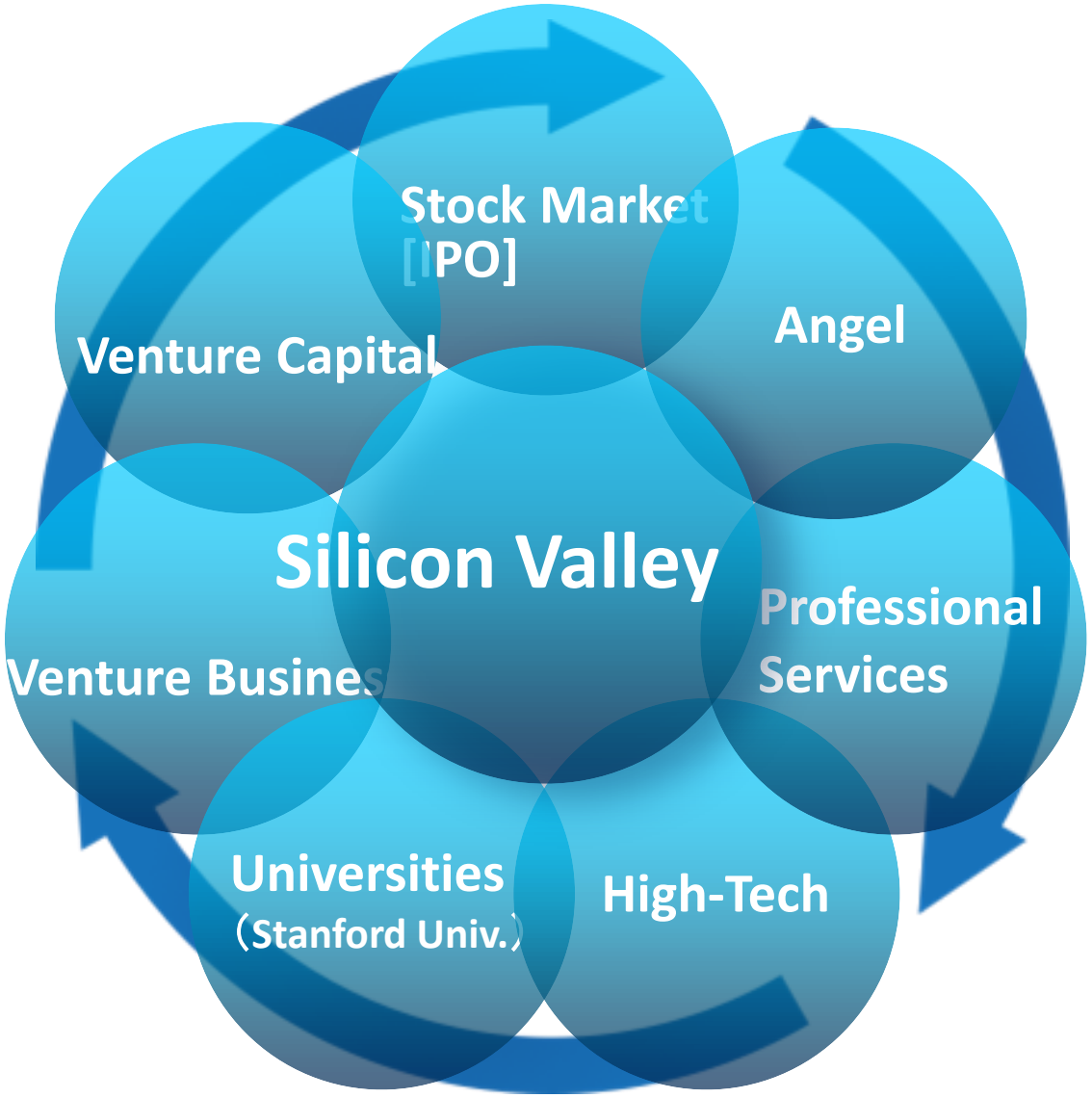
Gaining control of data determines the economic power of a nation

■ In the age of the Internet, data is constantly generated in increasing quantities. Past business models cannot deal with such amounts of data.

■ Gaining control of data determines the economic power of a nation.

■ Should strengthen competitiveness by transplanting to Japan the essence of Silicon Valley that has proven to be successful, in combination with Japan’s advantages and strengths.

Silicon Valley Ecosystem



- Diversity of human resources and existence of mentor
- Talent from around the world
  - ✓ Nearly 2/3 of scientists and engineers born outside the US
- Culture to honor entrepreneurs
- Legislation enabling more people to do business

“Intelligent Hub” Concept

Specific approaches

Proposal 1) Turn Japan into an “information magnet” that attracts all kinds of data

①Realize the Internet Autobahn Initiative

②Reduce corporate tax

Proposal 2) Develop an environment for attracting competent human resources from overseas

Proposal 3) Foster global human resources who will lead innovation

Proposal 4) Reform corporate governance

Proposal 1-(1) : Internet Autobahn Initiative

This initiative is designed to make the social infrastructure of the Internet available at overwhelmingly cheaper prices and higher speeds than any other country. The goal is to maximize the amount of circulating data and strengthen Japan's international competitiveness.

Autobahn - the overview

Germany's freeway system

- No speed limits
- Toll-free

Open infrastructure that…

Impact on Germany's automotive industry

Autobahns provide the landscape for high quality automotive manufacturing: Germany becomes the home of many highly competitive global car manufacturers

PORSCHE

Mercedes-Benz

BMW

Volkswagen

Audi

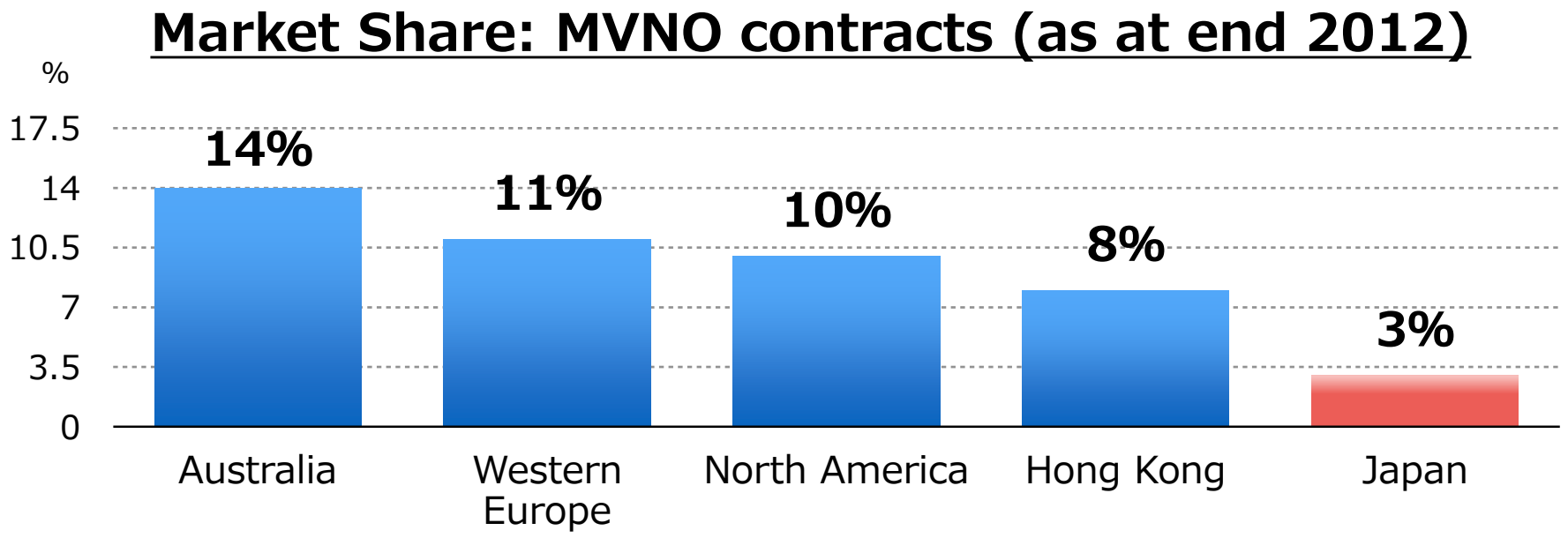
…stimulates growth in the industries that depend on that infrastructure

Proposal 1-(1): Measures of the Internet Autobahn Initiative

■Infrastructure development and system review for the realization of free, widely available Wi-Fi (for both foreign visitors to Japan and Japanese people)

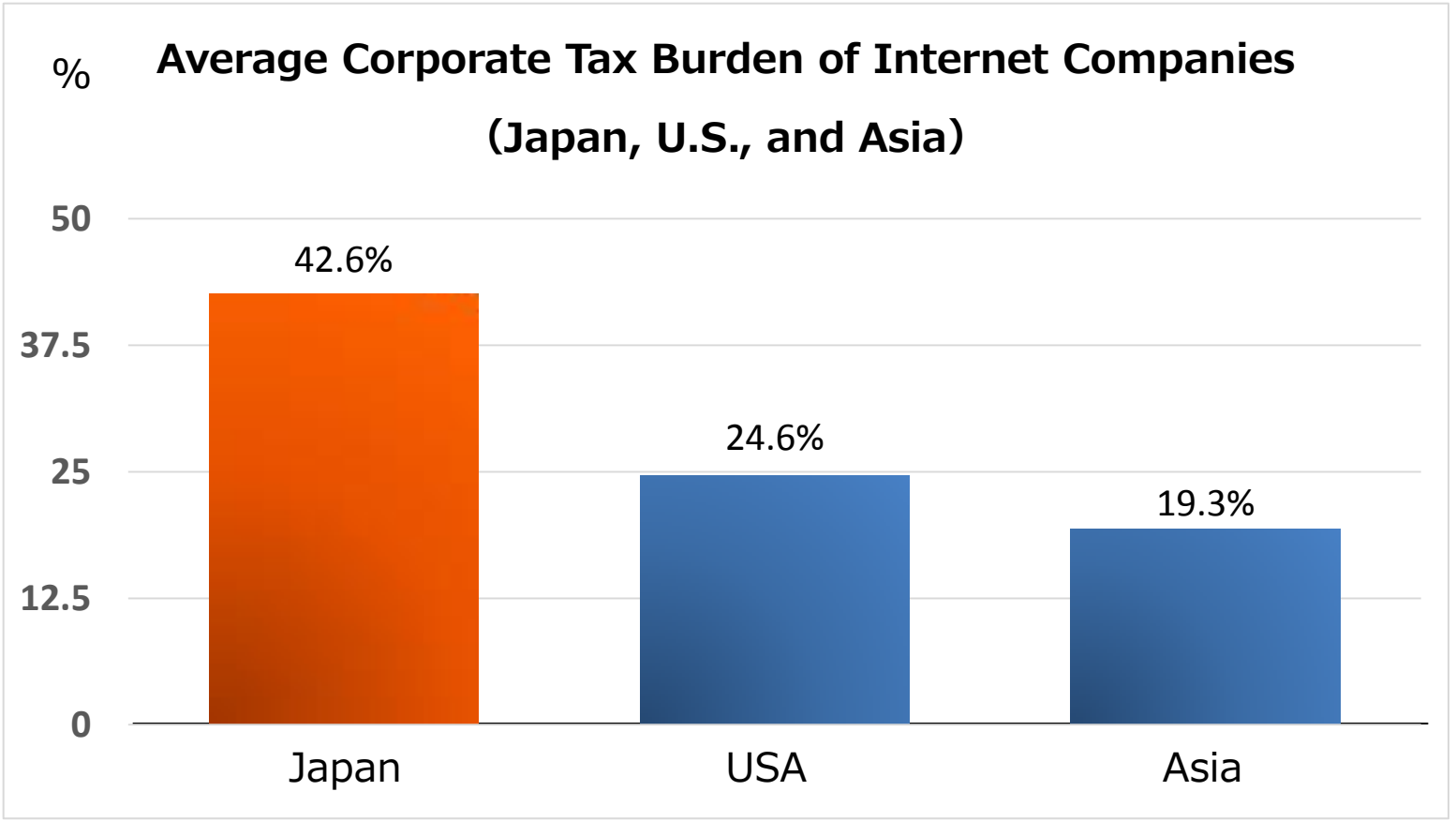
■Promotion of fair competition in the communications sector through expansion of MVNO* (further unbundling of mobile phone carrier infrastructure, etc.)

*Operators that provide mobile network services by using and connecting to services provided by other mobile phone carriers. MVNOs neither open nor operate their own wireless stations.



Source: Mitsubishi Research Institute, Future of mobile business and MNVO in overseas

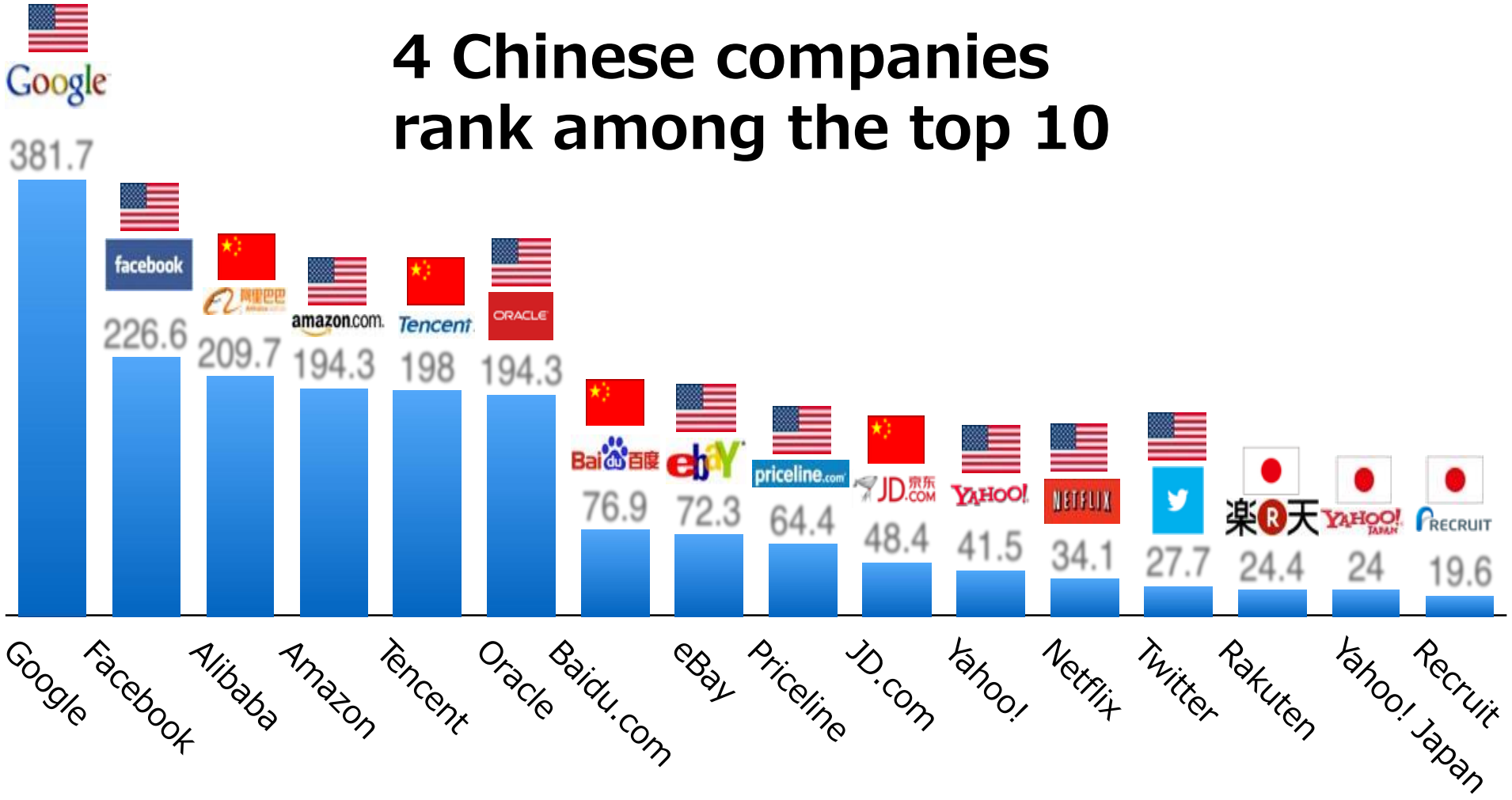
Proposal 1-(2) : Reduce Corporate Tax



※Respective Corporate P&L Statements (Rounded to the nearest whole number)
※1USD=100JPY (Baidu, Alibaba and U.S. companies), 1KRW=0.1JPY (Naver)
※Calculated by subtracting taxes from pretax profit.

Reference: The Rise of China (Identical to earlier slide)

Ranking of Market Caps of Internet Companies



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Proposal 2: Develop an environment for attracting competent human resources from overseas

■ Set up an appropriate category of foreign entrepreneurs and simplify procedures for foreign nationals to obtain resident status

■ Offer bold income and resident tax breaks for entrepreneurs and engineers invited to Japan from overseas. Corporate tax breaks for companies operated by such individuals (long-term carryover of net losses, etc.)

■ Provide comprehensive services to support the daily lives of foreign nationals

Proposal 3: Foster global human resources who will lead innovation

■ Enhance computer programming education

- Offer from elementary school to equip students with computer programing knowledge by positioning it as a part of indispensable education for the 21st century
- Develop star talents that utilize computer programming to start businesses (strengthen study abroad programs, etc.)
- Allow students to take university entrance exams in the high school subject "Information"

■ Enhance English-language education (aim to become one of the leading providers in Asia)

- Use external English tests (e.g. TOEFL) for university entrance exams
- Offer English language lessons earlier, starting from the lower grades of elementary school. Increase the number of classes for the higher grades and make English into a compulsory subject in elementary school.
- Boost the number of teachers whose native language is English at elementary and junior high schools. Make use of external instructors by establishing exemptions to the teacher certification system.

Proposal 4: Reform corporate governance

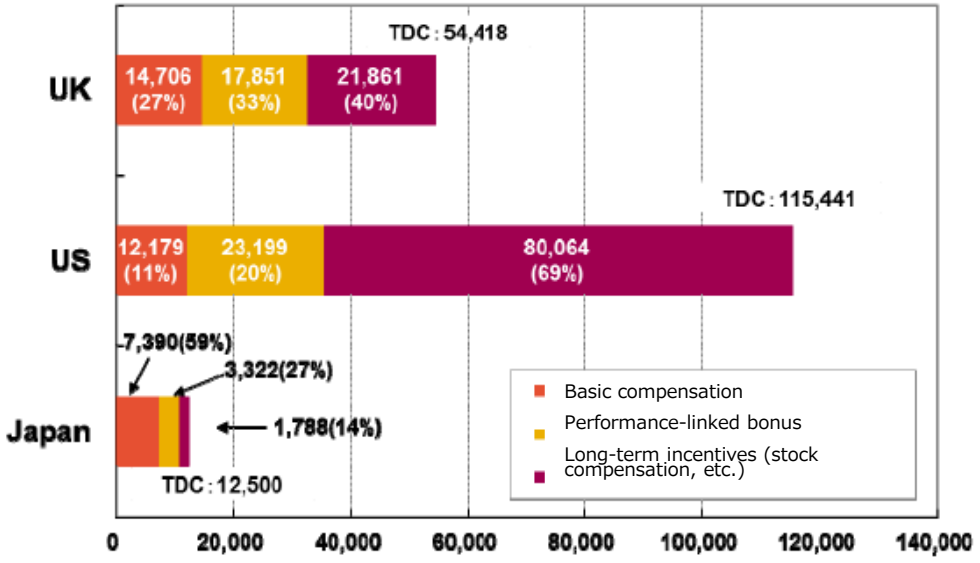
■ Introduction of stock-based compensation systems, etc.

・Legal and taxation measures should be taken to introduce in Japan systems that are offered in other countries (see below), including stock-based compensation systems, such as restricted stock (compensation in which employees are given stocks with restrictions on the transfer period) and performance share (compensation in which employees are given stocks when they achieve preset performance targets within a given period), as well as performance-linked compensation.

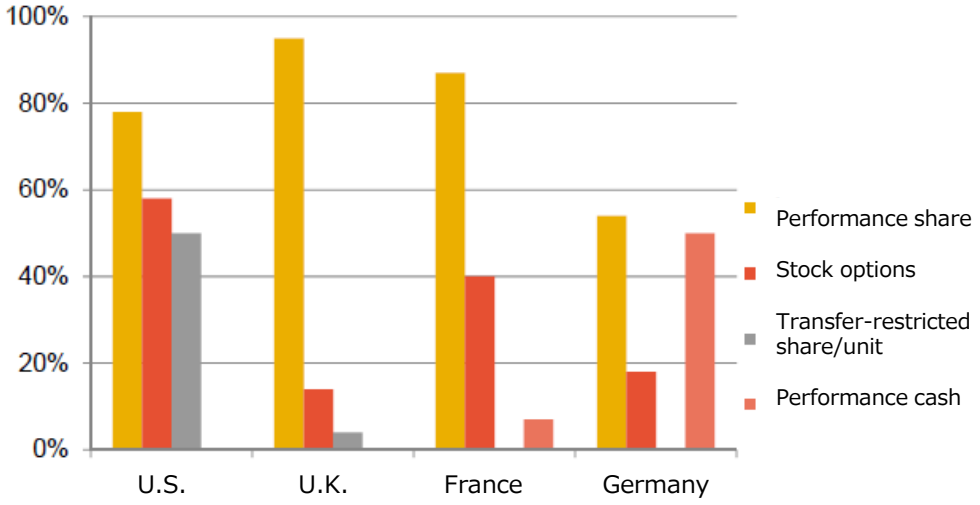
■ Creation of a roadmap for selling off cross-held shares

Comparison of Japan-U.S.-U.K. CEO Compensation (2013)

Unit: 10 Thousand JPY



Ratio of Companies Offering Long-term Incentive Systems



Source: Extracted from Towers Watson's presentation at the 13th meeting of the Ministry of Economy, Trade and Industry's Corporate Governance System Study Group

3. Development of a Cutting-edge Society / Smart Nation

Aiming toward a cutting-edge society / smart nation

- **Society as a whole needs to be optimized in order for Japan to be at the forefront of adapting to the changing times**

Cutting-edge Society / Smart Nation

Specific approaches

Proposal 1) Regulatory reform for the creation of new industries, e.g., sharing economy

Proposal 2) Promotion of e-payment and cashless payment

Proposal 3) Development of a new law to promote the Digital First economy (new Law on Utilization of Information Technology)

Proposal 1: Regulatory reform for the creation of new industries

Regulatory reform targets	Relevant laws
Realization of a sharing economy / use of idle assets, etc.	Identify laws that could become impediments and consider measures to address them (see next page)
Responses to new services (automated driving, etc.)	Road Traffic Act, etc.

Development of laws and a supportive environment for promoting a sharing economy

■ **Development of laws and a supportive environment to make effective use of the idle assets, etc. of individuals**
⇒Should quickly establish a system within the Government to discuss/review its possibilities based on strong leadership

[Anticipated services]

- **Execution of a project to increase the number of foreign visitors to Japan to 100 million**
  Provision of transportation and accommodation
- **Responses to declining birthrate and aging population**
  Effective use of nursing care facilities, provision of babysitting services
- **New employment schemes**
  Employment opportunities for housewives/househusbands and senior citizens in which they can work in their spare time

[Relevant laws]

Road Transportation Act, Inns and Hotels Act, child welfare and long-term care-related laws, labor-related laws, finance-related laws, etc.

Proposal 2: Promotion of e-payment and cashless payment

■ **Review of promotion measures, including requiring people to make cashless payments for public services**
⇒Will help increase the capture rate of the levied consumption tax

Measures taken by other countries

Korea

- Mandatory use of credit card payments for public agency and corporation fees
- Amount paid through cashless transactions is deducted from (user's) taxable income
- 2% of the sales of cashless transactions is deducted from the amount of tax payable (by affiliate store)
- Anyone (affiliate stores) who refuses to make card payments is subject to criminal punishment

Israel

- Bans cash transactions except for transactions involving small amounts (applicable to corporate and individual transactions)
- Violators are subject to criminal punishment

Proposal 3: Outline of the new Law on Utilization of Information Technology(1)

Establishment of basic principles and creation of a roadmap

- The **Digital First** principle
- **Elimination of the principles of face-to-face and on-paper delivery**
- Principle of **revising existing system and laws** for promoting IT usage
- **Establish framework for seeking opinions from the private sector** on regulations that interfere with IT usage
- Ensure **data coordination between administrative agencies** (do not request the same data from companies and individuals multiple times; do not request the same data from multiple agencies) and follow-up

etc.

Proposal 3: Outline of the new Law on Utilization of Information Technology(2)

“One-time” elimination of the principles of face-to-face and on-paper delivery (Matters to be provided for in laws dealt with in omnibus law)

1. Elimination of regulations requiring in-person communication

- Complete removal of the principle of face-to-face explanations of important matters in real estate transactions
- Promotion of remote medical care
- Promotion of online sales of prescription drugs and pharmaceuticals requiring face-to-face communication with pharmacists

etc.

2. Elimination of regulations that do not authorize provision of information over the Internet, among others, as standard methods

- Approval of digital textbooks
- Digitization of prescriptions and early realization of active usage for this
- Making deliveries of e-documents the default method for explaining the transaction agreements for financial products, etc.
- Complete removal of ban on online election campaigns (removal of ban on use of E-mail and SNS)
- Making Internet disclosure of business reports of shareholders’ meetings, etc. a default practice, and digitization of the exercises of voting rights at shareholders’ meetings
- Digitization of the written descriptions of important matters in real estate transactions, written intermediary agreements, documentation provided for in Article 37 of the Building Lots and Buildings Transaction Business Act

etc.

Proposal 3: Outline of the new Law on Utilization of Information Technology(3)

3. Improvement or elimination of the environment that does not support the completion of procedures and administrative tasks over the Internet

- Allow company launch procedures and procedures handled by city offices, etc. to be done on the Internet (Act on Use of Internet in Administrative Procedure, Commercial Registration Act, e-Documentation Act, etc.)
- Realization of smooth usage of electronic signatures and electronic certification by individuals and corporations using the “My Number” system (development of rules pertaining to the digitization of the whole process from eligibility application to contract related to public procurement procedures, etc.)
- Promote the use of “private e-post boxes” (review handling of data delivered to private e-post boxes under the different business laws)
- Realization of a highly convenient e-tax payment system using software and applications developed by the private sector
- Further relaxation of electronic storage requirements for tax-related books and documents (allow scanning by smartphone, etc.)
- Shift to electronic notifications for documents and electronic issuance of certificates by national and local governments to the people
- Realization of identity and attribute confirmation using the “My Number” system (money laundering ordinance, ordinance for prevention of improper use of mobile phones, ordinances requiring age confirmation, etc.)
- Improvement of the accuracy of various rosters using the “My Number” system and development of a framework for mitigating burden (administrative tasks related to the management of the roster of shareholders of listed companies, roster of voters, and officially certified people)
- Consider establishment of a system that allows people to vote from anywhere if they have a personal number card, etc.

etc.

4. Super Tourism-Oriented Country

Realization of a Super Tourism-Oriented Country

Should establish ambitious targets and KPIs

Goal

Make Japan a country that foreign nationals would want to visit, and thereby contribute to the realization of a true tourism-oriented country in order to ensure that the Olympic and Paralympic Games serve as a catalyst for increasing the number of repeat visitors to Japan

Item	Numerical Target	In 2014
KPI	Number of foreign visitors to Japan per year **100 million people by 2030**	13.41 million people
Economic impact	Amount spent by foreign visitors to Japan per year **JPY 30 trillion by 2030**	JPY 2.0305 trillion

Specific measures for turning Japan into a Super Tourism-Oriented Country

■ **Fundamental review of airport policy (co-use of Yokota Base by private aircraft, support entry of LCC, etc.) to turn Japan, a maritime nation, into a Super Tourism-Oriented Country**

■ **Establishment of CMO (Chief Marketing Officer) post and appointment of a candidate from the private sector**

■ **Elimination of barriers (communication, authentication, payment, language, and cultural) to foreigners visiting Japan**

■ **Development of laws and a supportive environment to promote the sharing economy to secure transportation and accommodation**

■ **Raising attractiveness of entertainment in the city (casinos, music events, relaxation of amusement business law, etc.)**

■ **Development and enhancement of duty-free stores**

***On February 27, JANE proposed 44 specific projects needed to achieve the above KPIs.**

Reference: Basis for Calculation of the Proposed Economic Impact

Basis for Calculation

(*1) “Intelligent Hub” concept approx. JPY 100 trillion

The calculation assumes that 21% of Japan’s real GDP of approx. JPY 530 trillion (FY2013) is generated as added value, based on data showing that companies supported by U.S. VCs produced revenue equivalent to 21% of U.S. GDP (source: National Venture Capital Association “Venture Impact”).

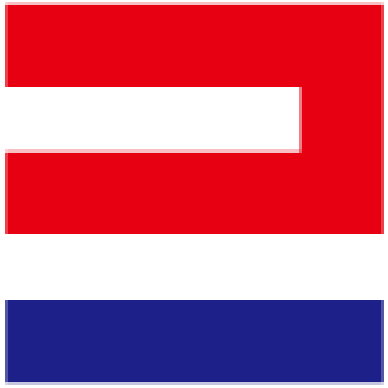
(*2) Cutting-Edge Society / Smart Nation approx. JPY 20 trillion

The KPI for the size of the sharing service market is set at the JPY 10 trillion range. In addition, it factors in the fact that digitization raises productivity and increases consumption.

(*3) Super Tourism-Oriented Country approx. JPY 30 trillion

Assumes that the amount of money spent in Japan by each visiting foreigner will double from the current average of approx. JPY 150,000

Hello, Future!



新経済連盟

Japan Association of New Economy