Hello, Future!

新経済連盟

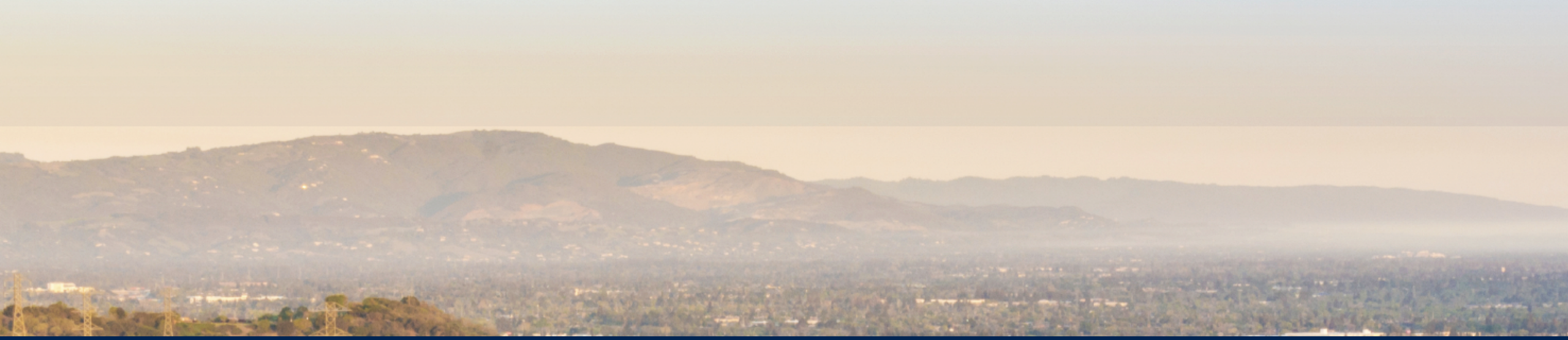
Japan Association of New Economy

Japan Ahead 2

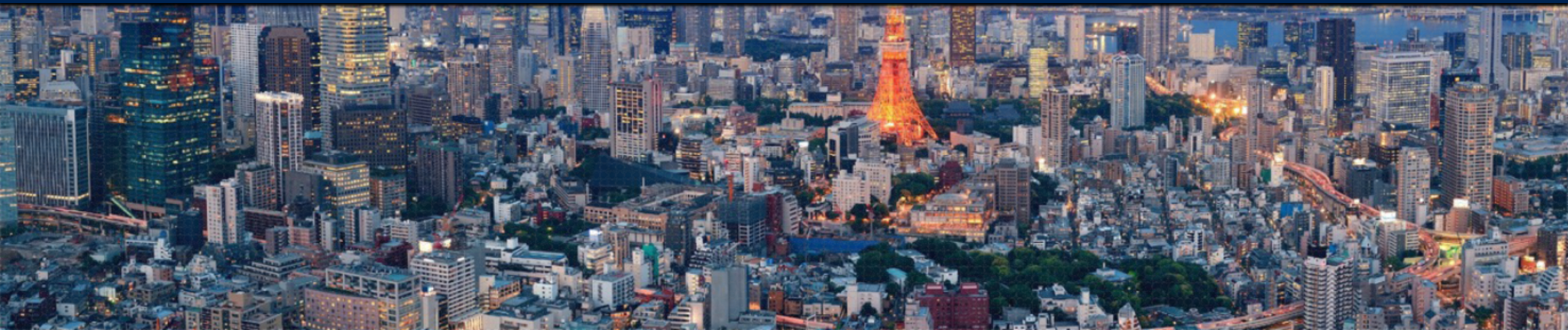
April 2018

How This Set of Recommendations Is Positioned

- Japan Association of New Economy announced “Japan Ahead” in 2015 as a proposed basic economic policy.
- Its revised version has been mapped out this time around on the back of developments since the announcement, including progress in government response and new global trends.
- Association set to come up with specific and individual proposals in the future to realize the basic economic policy.



1. Perception of Historical Backgrounds
~ What Is Taking Place in the World Now? ~



Global Structural Changes ~ the World in 2050 ~

- Japan's rank of purchasing power parity-based GDP: 4th in 2018→8th in 2050
- China & India: 2 biggest economic powers (accounting for 35% of global GDP in 2050)

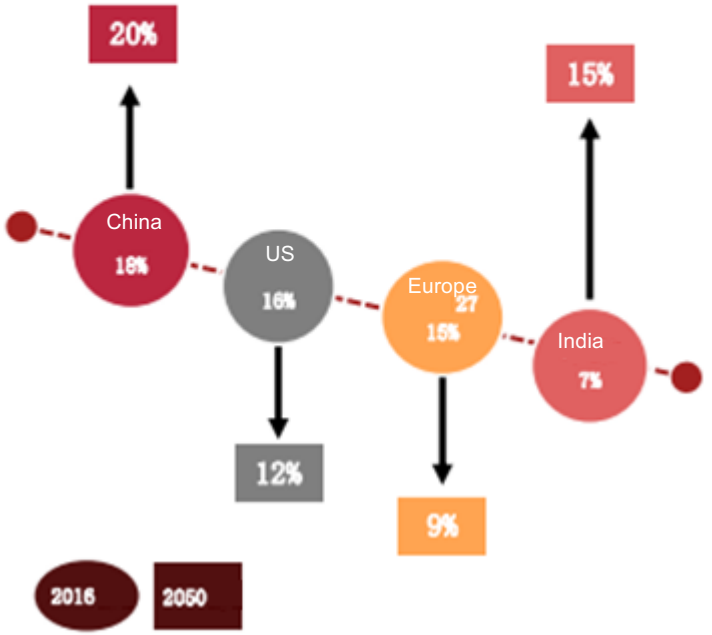
Emerging markets will dominate the world's top 10 economies in 2050 (GDP at PPPs)

2016	2050	
China	1	1	China
US	2	2	India
India	3	3	US
Japan	4	4	Indonesia
Germany	5	5	Brazil
Russia	6	6	Russia
Brazil	7	7	Mexico
Indonesia	8	8	Japan
UK	9	9	Germany
France	10	10	UK

E7 G7

G7: US, UK, France, Germany, Japan, Canada, Italy
E7: China, India, Indonesia, Brazil, Russia, Mexico, Turkey

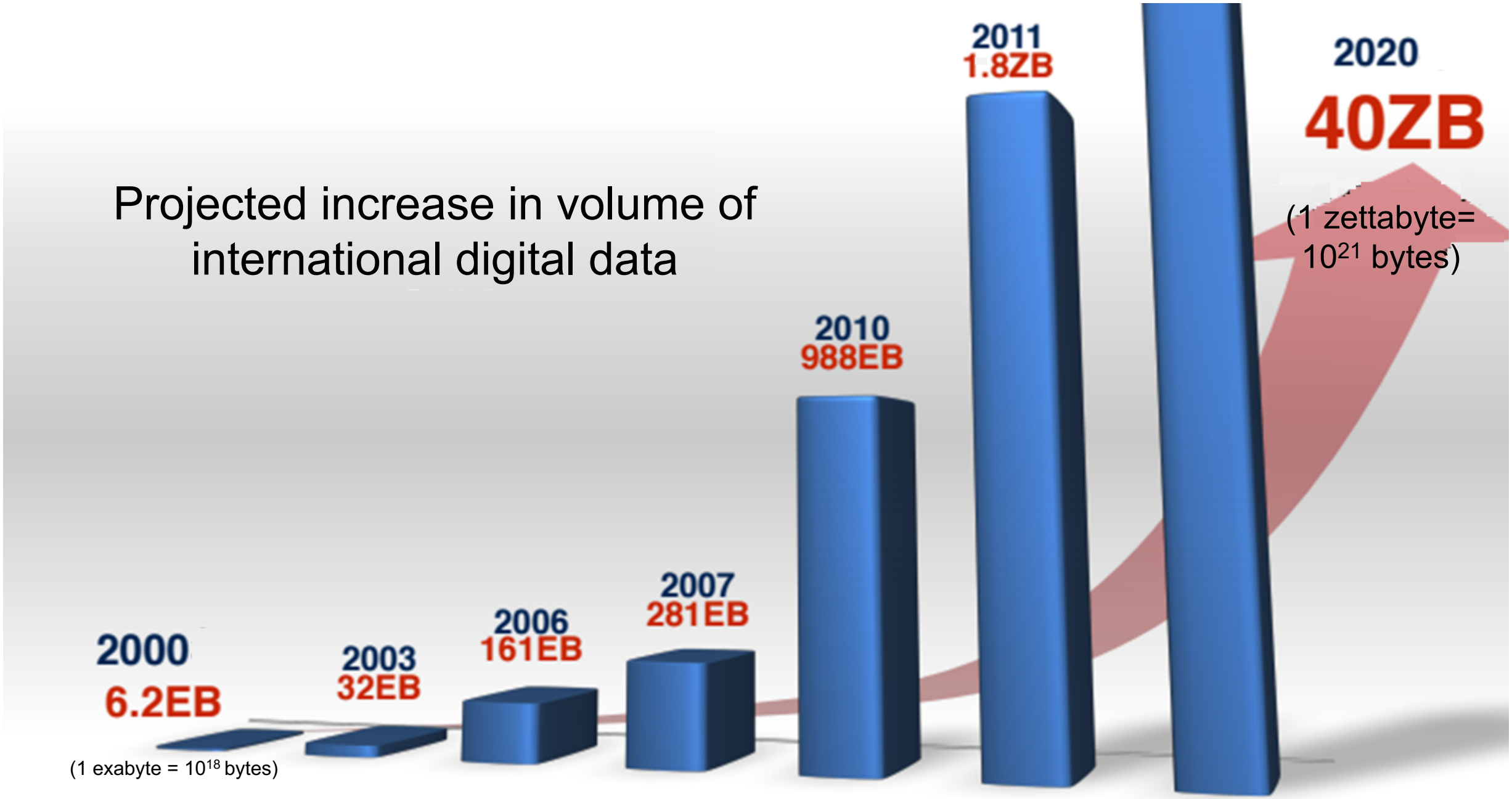
The US and Europe will steadily lose ground to China and India.
Share of world GDP (PPPs) from 2016 to 2050...



Source: IMF (2016 estimates), PwC (forecasts for 2030, 2050)

Source: Extracted from PwC report of May 2017 "The long view: how will the global economic order change by 2050?"

Projected increase in volume of international digital data



Source: Report by “ICT kotozukuri Discussion Panel,” Ministry of Internal Affairs & Communications


Smartphone
Augmented reality (AR)
Blockchain
Drone
Virtual reality (VR)
Social Revolution
Robot
Wearable device
Machine translation
Nanotechnology
Automated driving
Human genome decoding
Internet of Things (IoT)
iPS/Regenerative medicine
Sharing economy
Human body communication device
3D printer

AI Revolution

AI technology is developing rapidly and constantly calling forth a completely new future in our business and social lives which is not an extension of our past.

For instance, business decision-making using sentence and image analysis technology and the use of AI in supporting customer service operations are becoming commonplace.
AI will increasingly penetrate into our society in various scenes including medical and legal decision-making, optimization of large factories, and customer services using robots equipped with AI.

Connected World

It is not AI alone that is on the list of evolving technologies. The IoT, or the Internet of Things, is another example. It enables each and every thing to be connected via the Internet. Moves to connect house keys, microwave ovens, TVs, etc. with the Internet are already underway. We are going to enter an era when clothes and shoes we wear, food and drinks, animals and plants, and we human beings themselves are linked through the Internet in the future.

These are combined with AI to create a society where everything connected with the Internet is controlled in an optimal manner and "what we need is on hand at the right time and as much as necessary while everything is safer, more convenient and more comfortable."

Social system Revolution

From the Owned Economy

To the Sharing Economy

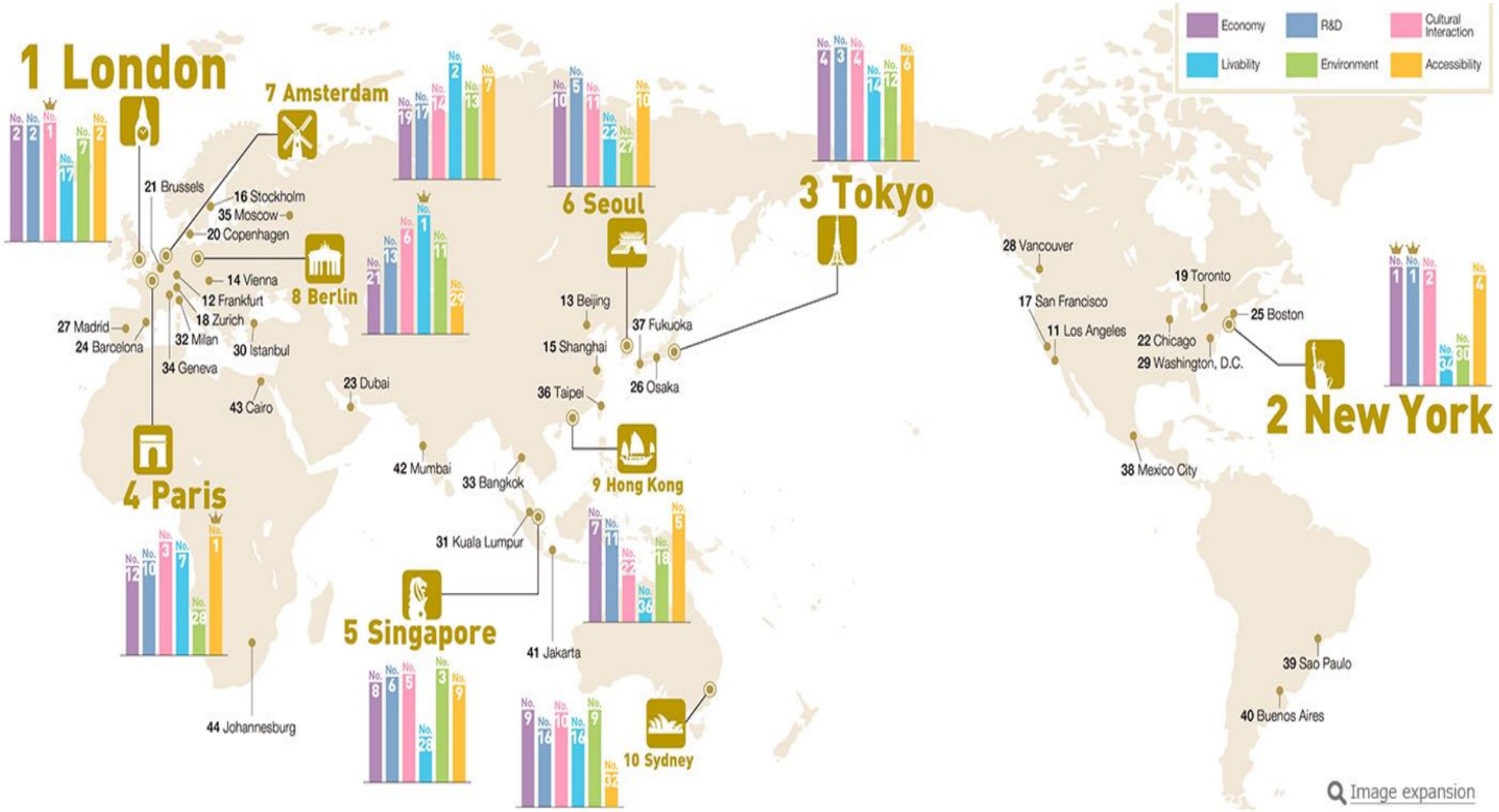
Blockchain

Bitcoin

Blockchain is another example of disruptive new technologies.
Virtual currencies such as bitcoin use this technology, but its application goes beyond these.

For instance, it is said that blockchain can replace various systems created as means to ensure the reliability of transactions such as registration, accounting audit, ratings, electricity trading and voting.
This may redefine how companies operate and what the government should be in the future.

Japan Has Potential, Tokyo Ranked 3rd

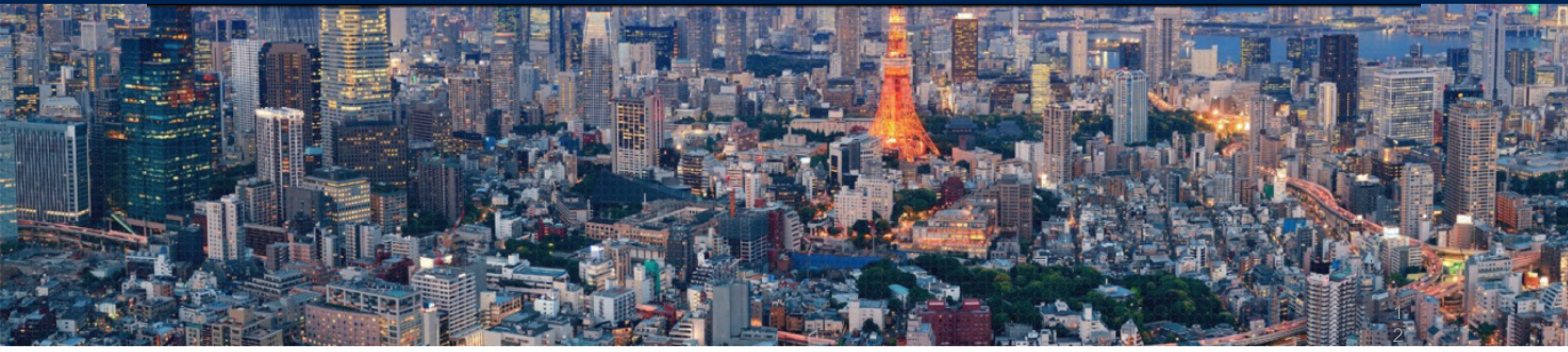


Source: “Global Power City Index YEARBOOK 2017,” Institute for Urban Strategies, Mori Memorial Foundation

What Japan Is Required of

- Only countries that are quick to have systems matching social revolution put into shape can survive (an era of competition between systems)
- Japan cannot survive as a country without promptly addressing the issue of fewer children & aging population
- Team Japan comprising Japanese nationals alone cannot win

2. Our Vision of Ideal Economic Society



Necessary to Cause Innovation in Japan

- With their industrial structures transformed, U.S. and Chinese companies utilizing data dominate the world, rapidly weakening the presence of Japanese firms.
- Japan has not made much progress yet in the transformation of its industrial structure.

Rankings of global companies' market capitalization

	End of 1997	Sept. 29, 2017
1	General Electric (US)	Apple (US)
2	Coca-Cola (US)	Alphabet (Google, US)
3	Microsoft (US)	Microsoft (US)
4	Exxon Mobil (US)	Facebook (US)
5	NTT (Japan)	Amazon.com (US)
6	Merck (US)	Berkshire Hathaway (US)
7	Royal Dutch Petroleum (Netherlands)	Alibaba Group (China)
8	Intel (US)	Tencent (China)
9	Philip Morris (US)	Johnson & Johnson (US)
10	Toyota Motor (Japan)	Exxon Mobil (US)

Source: Extracted from Nikkei newspaper article dated Oct. 1, 2017

Rankings of Japanese firms' market capitalization

Rank	Dec. 5, 1996	Market capitalization (1 tril. yen)	Oct. 11, 2017	Market capitalization (1 tril. yen)
1	NTT	13.2	Toyota Motor	22.6
2	Toyota Motor	12.2	NTT	10.9
3	Bank of Tokyo-Mitsubishi	10.5	SoftBank	10.5
4	Sumitomo Bank	6.1	MUFG Bank	10.2
5	Dai-Ichi Kangyo Bank	5.7	NTT DOCOMO	10.1
6	Fuji Bank	5.5	KDDI	7.6
7	Industrial Bank of Japan	5.4	Japan Tobacco	7.4
8	Sanwa Bank	5.2	Keyence	7.3
9	Matsushita Electric Industrial	4.2	Japan Post Bank	6.3
10	Nomura Securities	3.6	Nintendo	6.2

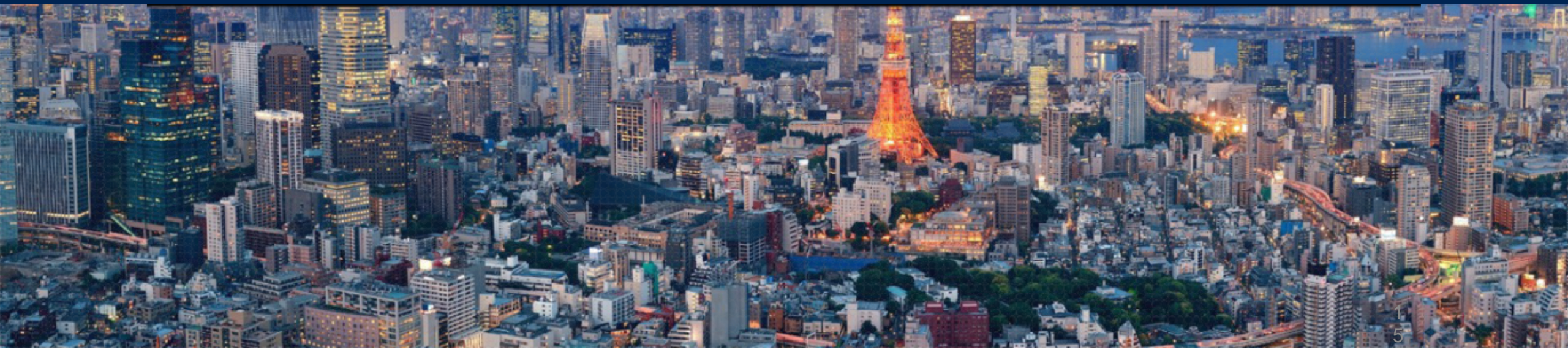
Source: Extracted from Nikkei newspaper article dated Oct. 11, 2017

Our Vision of Ideal Economic Society

Innovation powerhouse

- A society that thoroughly allows the private sector to do whatever it can, ensures free economic activities, and minimizes regulations
- A society where failures are tolerated, and one is given another try
- A society abounding in diversity
- A society where information is fully disclosed to the public, and fair credit & evaluation are given by diverse methods based on every bit of visualized information

3. Our Goals & KPIs to Be Pursued

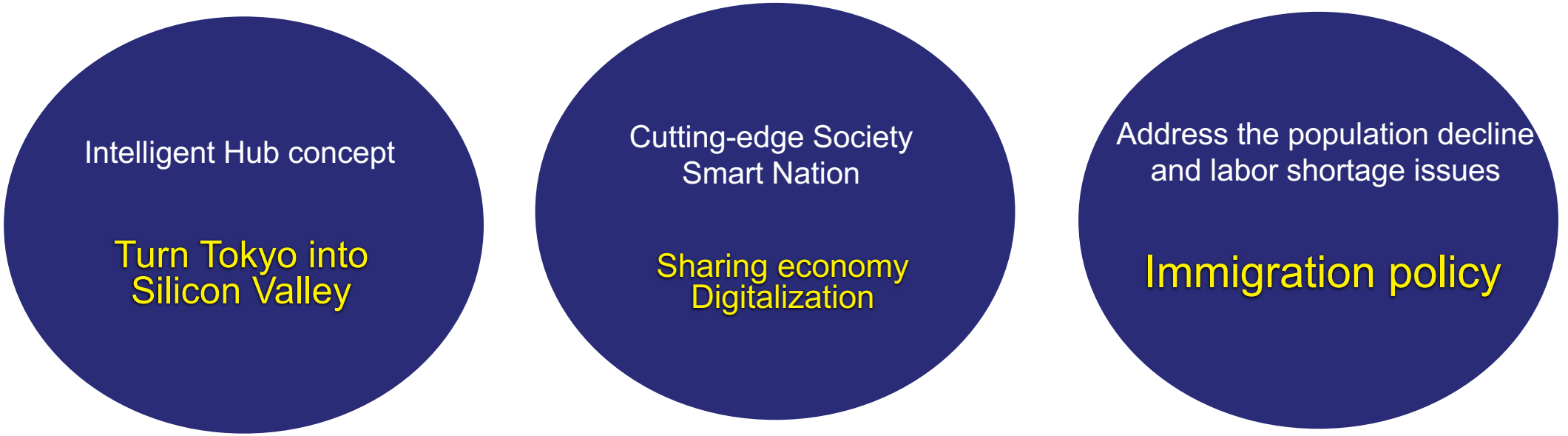


Policy Goal: Generate ¥150 Trillion or More from Three Pillars

Japan Ahead 2

+¥150 trillion or More

(=approx. 1.4 trillion USD / 1.2 trillion EUR, as of 2018.5)



KPIs

E.g. Effective corporate tax rate, new business entry rate

E.g. market size of the sharing economy, ratio of cashless payments

E.g. Immigration target
Annual number of inbound tourists
Annual spending of inbound tourists

List of KPIs of Planned Measures (1)

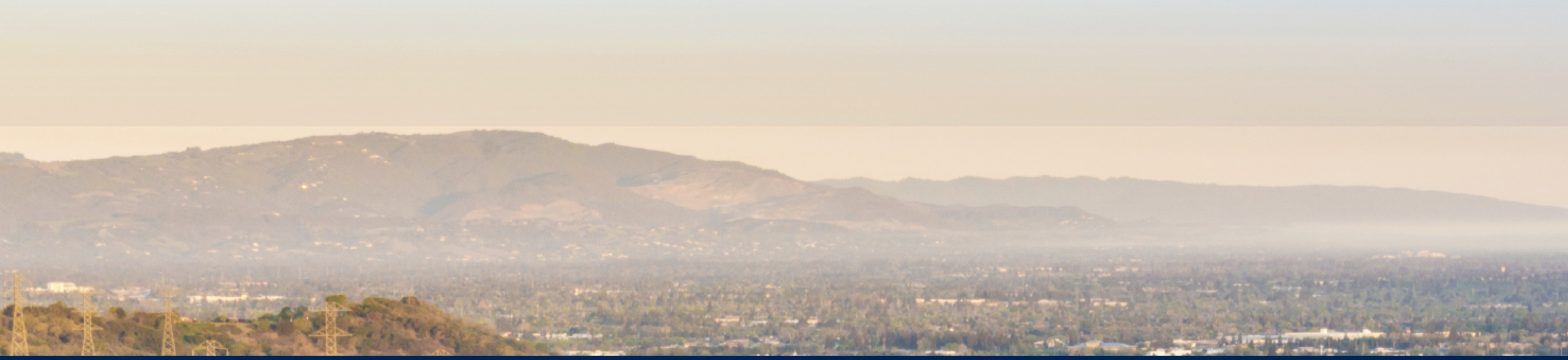
Planned measure	KPIs (examples)	Current value	Target value
(1) Intelligent Hub concept	Foster Japan-originating next-generation corporate leaders like Toyota	None * Toyota 19 tril. yen, SoftBank 10 tril. yen	Birth of 20 tril. yen company in market capitalization
	English ability (average TOEFL score)	71	80
	No. of foreign firms transferring head offices/Asian HQ to Japan		10/year
	Effective corporate tax rate	29.97% (29.74% from FY 2018)	Around 20%
	New business entry rate	5.2% (2015)	10% range
	Ranking of “legal system on ICT,” IT competitiveness rankings, Global Competitiveness Report, World Economic Forum	27th (2016)	within top 10
	Balance of internal investment by foreign companies	24.4 tril. yen (end of 2015)	50 tril. yen (*)

(*) Existing government target is 35 tril. yen by 2020

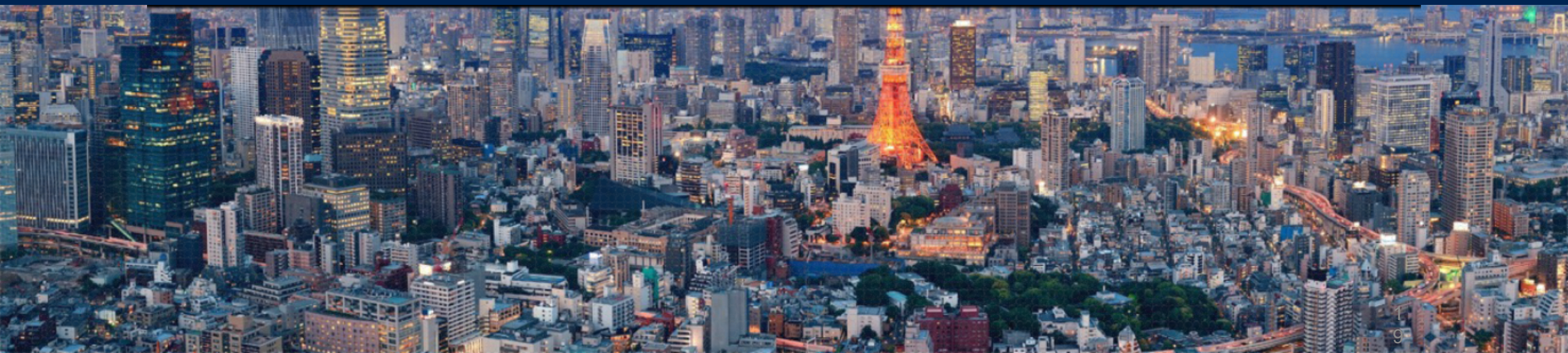
List of KPIs of Planned Measures (2)

Planned measures	KPIs (examples)	Current value	Target value
(2) Cutting-edge society: Smart Nation	Size of sharing economy market	1,180 bil. yen (InfoCom Research survey, 2016)	10 tril. level (2025)
	Administrative procedures made online in principle		100% in principle (FY2020)
	Ratio of cashless payments	18% (2015)	90% within 3 years
(3) Population decline & labor shortage issues	Immigration target	(Ref.) Foreign residents' ratio of population 1.9% (end-2016)	Set by basic immigration law
	Annual number of inbound tourists	28.69 mil. persons (2017)	100 mil. persons (2030) (*)
	Annual spending by inbound tourists	4,416.2 bil. yen (2017)	30 tril. yen (2030) (*)

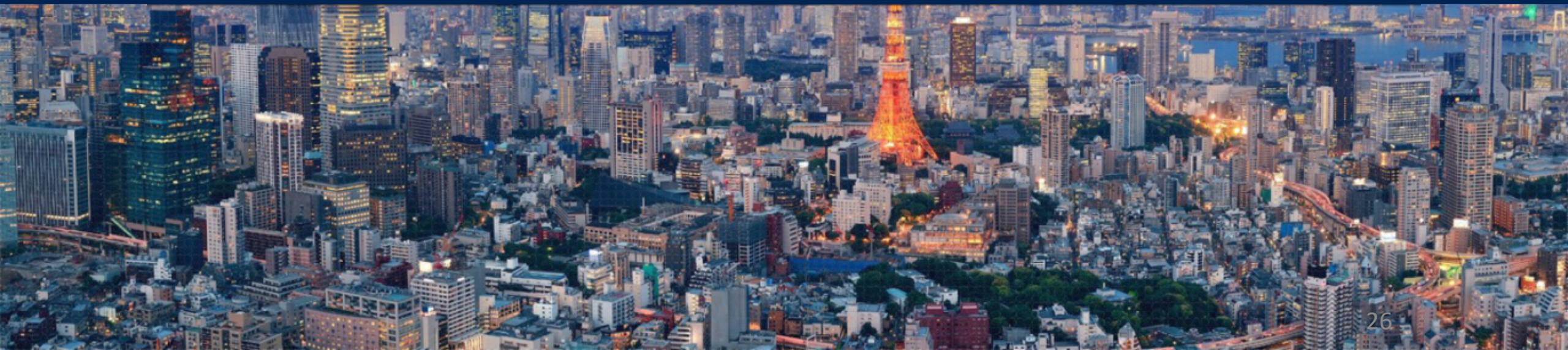
(*) Existing government targets are 40 million persons, 8 trillion yen by 2020.



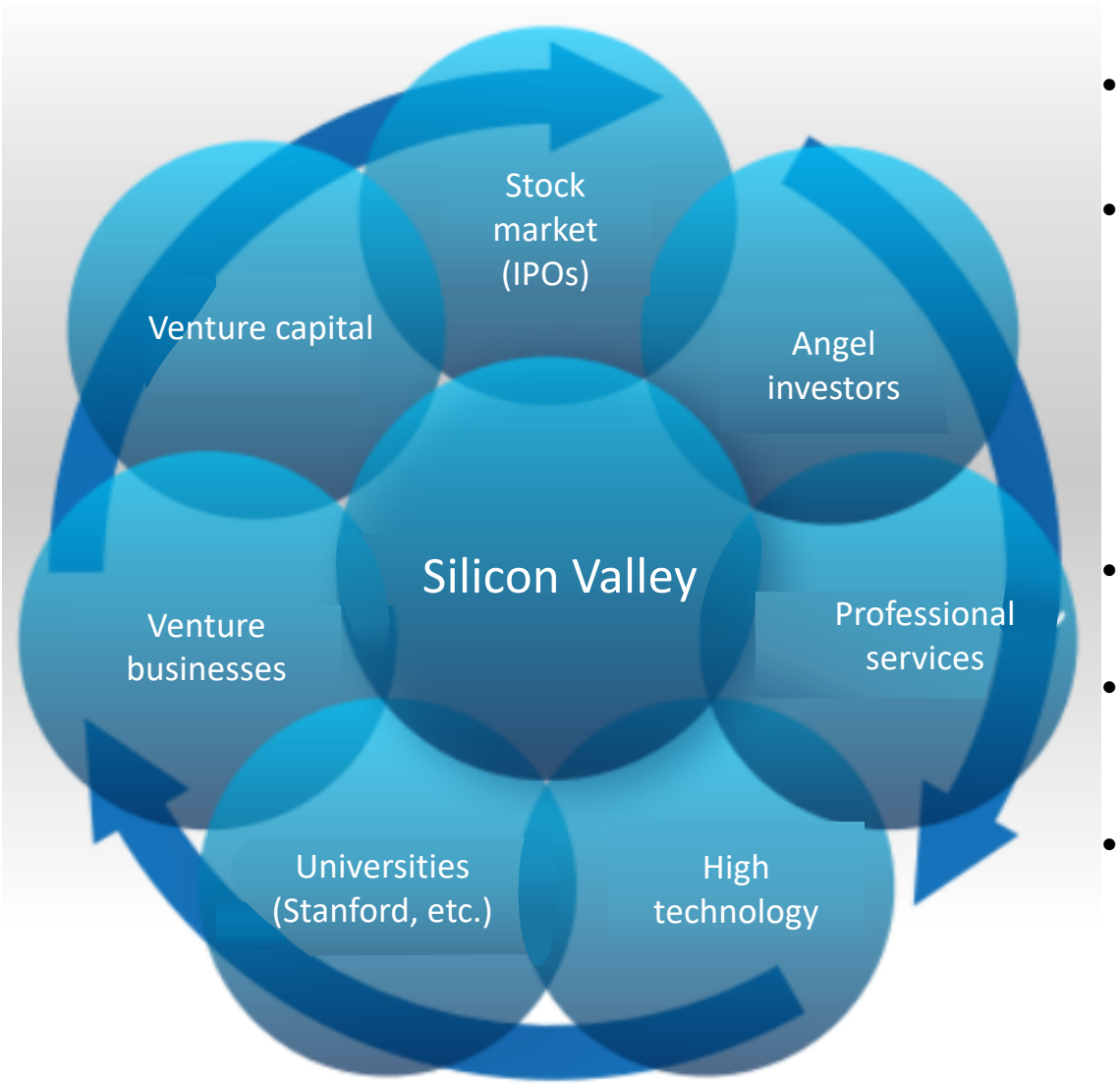
4. Details of Specific Measures



4-1. Intelligent Hub Concept
~ Turn Tokyo into Silicon Valley ~



Silicon Valley Ecosystem



- **Diversified talent, presence of mentors**
- **Talented people gather from around the world**

  50% of business founders are immigrants (*1)

  66% of workers engaged in jobs related to computers/math are foreigners (*2)
- **Culture that admires start-ups**
- **Legal environment easy to do business**
- **Partnership between universities & venture businesses**

(*1) Research in 2015 by Mr. Richard Florida of University of Toronto. Immigrants are core members at more than half of all venture companies launched in Silicon Valley in the past 20 years.
(*2) Data from Joint Venture Silicon Valley report “2018 Silicon Valley Index”

List of Detailed Measures

Planned measure	Specific measures
Intelligent Hub concept	(1) Flow talent, wisdom, money toward Japan
	(2) Reduce corporate tax (to around 20%)
	(3) Support innovation/start-ups
	(4) Put into place environment of workstyle competitive & globally applicable
	(5) Nurture globally competent talent
	(6) Promote corporate philanthropy to return profit to society

Specific Measures: Genuinely Competitive and Global-Standard Workstyle

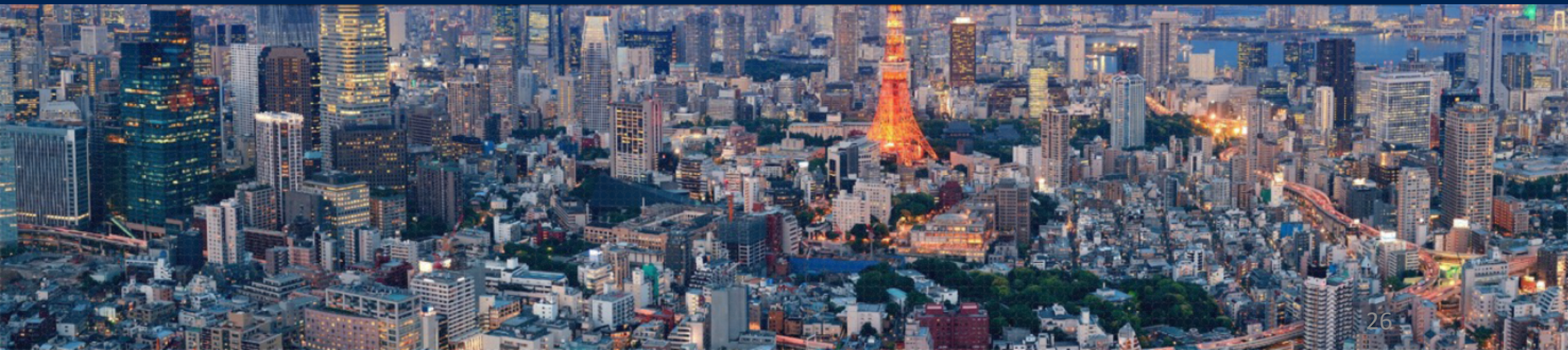
- Uniformly tightening regulations to control long working hours alone will not prepare us for a new era and will reduce Japan's international competitiveness.

- The system should center on performance-oriented, professional workstyle.
  Shift and redefine the overall lifestyle to a new knowledge society.

- To achieve the above, it is necessary to examine various systems including the existing labor laws and social security system from scratch.
  We will make specific proposals for this purpose.

* Our Association has established corporate categories such as venture company and knowledge-society company and has been proposing that companies falling under these categories establish a new, flexible working hour system on an individual company basis to which work hours, holidays, breaks, and penalty rates are not applied.

4-2. Cutting-edge Society: Smart Nation



Smart Nation

Toward the World's No. 1 "Most Advanced Society: Smart Nation"

List of Detailed Measures

Planned measures	Specific measures
Cutting-edge society: Smart Nation	(1) Build digital-first society
	(2) Promote cashless society
	(3) Put into shape personal/corporate/administrative data infrastructure (thorough use of Individual number system, etc. & completion of data infrastructure)
	(4) Promote sharing economy
	(5) Make administration smart on government's own initiative & reduce administrative costs
	(6) Promote "xxx tech" in demonstration tests (using special zones, sandboxes, etc.)
	(7) Design systems/institutions matching new economy
	(8) Fair regulations/taxation for both domestic & overseas companies
	(9) Nurture talent specialized in IT/AI

Specific Measures: Fair Regulations and Taxation for Both Domestic and Overseas Companies

- Ensure fairness in terms of taxation and regulations to enable domestic companies to compete with overseas companies under the same conditions in the era of cross-border economy.

Taxation

・Handling of the base erosion and profit shifting (BEPS) issue

Regulations

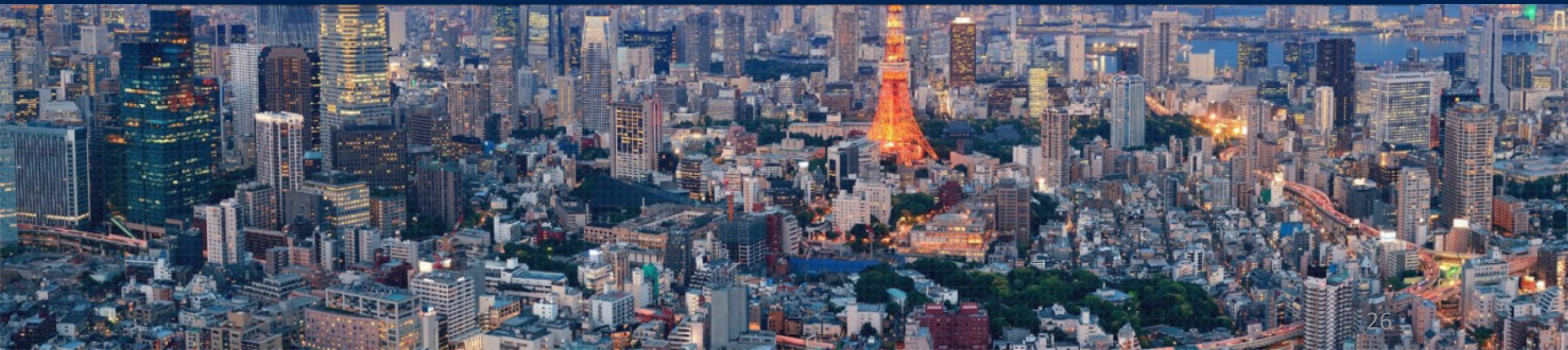
・Achieve the extraterritorial application and appropriate enforcement of regulatory laws and ordinances for overseas companies providing services to Japanese residents

Organize an act for collectively preparing relevant regulatory laws and ordinances*

・In principle, make the extraterritorial application of all laws/ordinances a norm.
・Organize enforcement rules/structures

***Current examples**
Under the Act on the Protection of Personal Information of Japan, the Personal Information Protection Commission is not authorized to give orders to overseas companies and does not enforce penal provisions.
There is no extraterritorial application of the Travel Agency Act and Telecommunications Business Act.

4-3. Response to Population Decline & Labor Shortage Issues



List of Detailed Measures

Planned measures	Specific measures
Response to population decline & labor shortage issues *** Measures to address demand shortage/market shrinkage stemming from population decline, etc., insufficient supply system due to labor shortage, etc.**	(1) Discuss immigration policy head-on
	(2) Reform social security system
	(3) Promote use of sharing economy such as crowd delivery & ride sharing
	(4) Super tourism-oriented country

Specific Measures: Discuss Immigration Policy Head-on

- Consider establishing a basic immigration law
- Consider setting an immigration target
- Actively receive immigrants who are not skilled immigrants or not in professional, technological areas
- Accept immigration of those requiring humanitarian consideration such as refugees
- Examine citizenship based on the place of birth in relation to Japanese citizenship

[Reference] Ratio of foreign-born population in various countries (OECD survey)

US 7%; UK 7.7%; Germany 9.3%; Estonia 16.1%; Switzerland 23.3%; Japan 1.9%
(The figure for Japan was as of the end of 2016 and the figures for others were as of 2013.)