



THE
BEHAVIORAL
SCIENCES
TEAM

Annual Report

(FY 2017 and FY 2018)

March 2019



Behavioral Sciences Team
for a better choice

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About this report

This report is a summary of activities by the Japan's national **Behavioral Sciences Team (BEST)** (administrative office: the Ministry of the Environment, Government of Japan) during FY 2017 to FY 2018. Other than our work in two years, this report also describes what the **BEST** places importance on and future issues.

The **BEST** has performed a variety of activities including **liaison councils** for 2 years since its establishment in April 2017 in all-Japan system with collaboration among industry, academia, politics, government, and other relevant citizens.

The primary aim of this report is for a wide range of readers to understand the **BEST's** initiatives in an easy-to-understand and brief manner as much as possible. For those who wish to know about the details of the initiatives, please see meeting materials and other documents posted on the website below.

►The Behavioral Sciences Team (**BEST**) website (Japanese):
www.env.go.jp/earth/ondanka/nudge.html

The **BEST** appreciates the cooperation, support, and efforts made by people with various positions in the industry, academia, politics, government, and other relevant citizens both in Japan and abroad. We are afraid we cannot list all of their names in this report due to space constraints. We appreciate all of them, and thank you for your continued contribution.

Column 1: What is a nudge unit?

During David Cameron's administration in 2010, the United Kingdom established the **Behavioural Insights Team (BIT)**, aiming to enable people to make better choices for themselves using behavioral insights including **nudges** (see **Column 2** for more details). The **BIT** has later become known as the **Nudge Unit**. Since then, countries around the world have established government or non-governmental organizations using nudges. These organizations are sometimes collectively referred to as **nudge units** other than their official names.

Column 2: What are nudges?

Nudge means 1) to push someone gently, usually with your elbow, in order to get their attention or to move them forward, and 2) to gently persuade or encourage someone to take a particular decision or action (source: Longman English Dictionary). We use the latter meaning of “pushing someone gently” because government and non-governmental agencies would not directly and physically push on the field.

Richard H. Thaler, who is a professor of the University of Chicago and received the Nobel Memorial Prize in Economic Sciences in 2017, defined a nudge as below in his book *Nudge* (2008) with Cass R. Sunstein, who is the co-author of the book and is a professor of Harvard University.

“A nudge is any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives”

The “choice architecture” in his definition means the environment in which people choose. Ten years after the publication of his book *Nudge*, Professor Thaler mentions that improving the “choice architecture” enables people to make wiser choices without restricting any options. He also stresses that the goal is to help people make better choices “as judged by themselves,” and recommends nudging for good (*Science* Vol. 361, Issue 6401, p. 431).

Professor Thaler named **nudging for evil** as **sludge** that makes wise decision-making and prosocial activity more difficult. He urges those in both the public and private sectors to engage in sludge cleanup campaigns.

Because a nudge is merely one of approaches that use knowledge of behavioral sciences (so-called **behavioral insights**), the term **behavioral insights** are often used globally instead of nudges. The **BEST** also uses the general knowledge of behavioral sciences beyond nudges, we therefore named our team as the **Behavioral Sciences Team**, which bears **Behavioral Sciences**, one of multidisciplinary academic disciplines.

In order to enable people to make better choices, the **BEST** contemplates and discusses ethical considerations including what is good or bad, and good or bad for whom, to promote **nudging for good** with the approach of respecting every person's value, and to eliminate **nudging for evil**.

Abbreviations

BEST	Behavioral Sciences Team [Japan]
BETA	Behavioural Economics Team of the Australian Government [Australia]
BI	Behavioral Insight
BIG	Behavioural Insights Group (Harvard John F. Kennedy School of Government)
BIT	Behavioural Insights Team [United Kingdom]
BI-Tech	Behavioral Insights X Technology
EBM	Evidence-based Medicine
EBP	Evidence-based Practice
EBPM	Evidence-based Policymaking
EIPM	Evidence-informed Policymaking
eMBeD	Mind, Behavior, and Development Unit [World Bank]
HuB	Human Behavior (public-private partnership council focusing on human behavior to solve social issues) [Japan]
OECD	Organisation for Economic Co-operation and Development
Platinum	Nudge Project Team (PT) [Ministry of the Environment, Japan]
SBST	Social and Behavioral Sciences Team [United States]
SDGs	United Nations Sustainable Development Goals
STI for SDGs	Science, Technology, and Innovation for Sustainable Development Goals
YBiT	Yokohama Behavioral insights and Design Team [City of Yokohama, Japan]

1. About the Behavioral Sciences Team

(1) Overview

- The **B**ehavioral **S**ciences **T**eam (**BEST**) is a nationwide challenge having a unique characteristics of all-Japan system with collaboration among the industry, academia, politics, central and local governments, and other relevant citizens. (administrative office: the Ministry of the Environment, MOE)
- The **BEST** was established in April 2017 under the initiative of the MOE for the purpose of applying the knowledge and insights of behavioral sciences including nudges (**nudge** means to push someone gently) to the society as a government policy or a business strategy as early as possible; and disseminating them in an autonomous way. The Nobel Memorial Prize in Economic Sciences in October 2017 was about behavioral economics, helping the initiatives deepen and the collaborative structure strengthen gradually.
- It is essential to involve all relevant stakeholders in an activity to let it take root in communities. Therefore, the **BEST** has all-Japan system in which all participating members can freely discuss regardless of their positions, ranks, etc., not discussing just within government agencies.

(2) Administrative office

- The MOE works as the administrative office of the **BEST** based on the following experiences and structures:
- The MOE was acclaimed for behavior changes that took root in society. It initiated the Cool Biz campaign in 2005, which is now internationally commonly referred to as a behavior change that has taken root in an entire society. In 2015, it also initiated behavioral insight (BI)-related demonstration projects over several years and the Cool Choice campaign as a climate change countermeasure. Under the direction of the Prime Minister, the MOE represents the government and plays the leading role for the Cool Choice campaign to realize lifestyle innovation. The MOE consistently implements initiatives related to people's lifestyles and behavior changes. For instance, it has implemented the world's largest-scale demonstration project (the MOE's BI project) for the practice of Evidence-based Policymaking (EBPM) with cooperation from over 500,000 households since FY 2017.

- These initiatives have been implemented with cooperation from individuals including staff and intellectuals who have studied and obtained master's and/or doctoral degrees in academic disciplines necessary for the initiatives, such as behavioral sciences, statistics, policymaking, business models, and community organizing.
- In particular, some staff, who went to the United States using the Long-term Overseas Fellowship Program provided by the National Personnel Authority, witnessed that BIs were widely penetrated in the US government policies and private sector's fields. After coming back home in 2015, the staff planned for giving their research outcome back to the society and assisting people in making better decisions. He established a dedicated project team as the MOE's BI team named the Nudge Project Team (PT), or **Platinum** before any of other government ministries and agencies did. This prompted the establishment of Japan's nationwide BI team, the **BEST** and the initiation of the MOE's large-scale BI-related projects through coordination between relevant parties, the demand for ensuring budget from the Ministry of Finance, etc.

(3) **BEST's liaison councils**

- The **BEST** holds **liaison councils** in which participating members are invited based on the topic of each council and have discussions.
- For example, for a question "what kind of nudges should we design and how?," the **BEST** has been considering this with various viewpoints, suggesting "we should design nudges in a way that gives people an opportunity to look back their behavior and customs and helps them become aware of something, enabling them to increase their literacy, so that they can make better choices as judged by themselves" and "it is important to properly assess effects of behaviorally-informed policies, improve transparency through EBPM and EBP (Evidence-based Practice), and ensure accountability." The **BEST** has two ABCs of discussions as its mottos: for a better choice, and to help autonomous behavior changes.

(4) Global BI trends, and how the world assesses Japan

- The world including the United Kingdom and the United States focuses on BIs that can be used for solving a variety of social issues in policy areas such as environment and energy; healthcare and medical treatment; education; tax collection; streamlining public administration; work-style reform; eliminating discrimination; and SDGs (United Nations Sustainable Development Goals).
- The world started to consider BIs in particular the complement of traditional policy approaches such as regulatory (e.g. laws), financial (e.g. subsidies), and informational ones (e.g. increasing public awareness, providing information).
- According to the OECD, over 200 organizations and institutions around the world, centered in Europe, the United States, and Australia, utilize BIs for public policies. The **BEST** and **Platinum** are each regarded as one of the 200+, and are recognized and acclaimed for their initiatives internationally, for example, they receive requests from other organizations and institutions both in Japan and abroad for giving lectures and holding meetings.



(5) Utilizing BIs

- Effective examples of using BIs in other countries may not always work out in the same way in Japan because cultures, customs, and other aspects are different. An effective example of using BIs under a certain condition in Japan also does not always work out in the same way under a different condition in Japan.
- Some point out that there are not a few examples that failed to produce desired effects in contrast to best practices.
- Before utilizing BIs, it is important to consider that BIs do not always work for everything. Each example should be examined and identified one by one, to clarify which example produces desired effects or not.
- In Japan, each of the industry, academia, politics, government, and citizens has recently raised awareness of nudges. Ten years after the publication of the book *Nudge* in 2008, the world started to consider the concept of “**Beyond Nudge**” to solve such pointed-out matters.
- For example, there is “**boost**” (pushing someone strongly) as a next new BI approach. The key concept of boost is “agency” (the capacity of an actor to act in any given environment). The idea behind agency is that it is essential for people to engage in an activity on their own initiative to make it a habit and keep doing it. With this idea, boost is a policy approach that allows people to improve their competencies and literacy and to develop their choice-making capabilities by themselves on their own initiative. The MOE carries out demonstration projects using the boost approach as well, and examines how to harmonize nudges and boosts into the traditional policy approaches.
- While widely sharing methodologies, issues, and measures regarding use of BIs, the **BEST** considers using behavioral sciences to solve issues in a wide range of fields. The **BEST** also shares information and collaborates with government agencies, practitioners, and intellectuals in other countries going ahead of Japan, such as European countries and the United States.

Column 3: Overview of the BEST

Establishment

- ✓ In April 2017
- ✓ Established under the initiative of the MOE
- ✓ Japan's first organization using BI, recognized and registered by the OECD

Mission

- ✓ To promote autonomous behavior changes with the personalized approach of respecting every person's values while preserving freedom of choice, in order to enable people to make better choices

Purpose

- ✓ To apply initiatives that are based on BIs including nudges to the society as a government policy or a business strategy as early as possible, and disseminate them in an autonomous way

Goals

- ✓ To perform policymaking and practices through robust effectiveness measurement based on evidence, improve transparency, and ensure accountability
- ✓ To disseminate effective behaviorally-informed approaches that complement the traditional policy ones to the public and private sectors
- ✓ To create a win-win-win situation for various stakeholders, and let the BI approaches take root in communities

Members

- ✓ All-Japan system in which members in the industry, academia, politics, central and local governments, and other relevant citizens can freely discuss, regardless of positions, ranks, etc. not just within government agencies
- ✓ Those who aspire to make Japan and the rest of the world better places

Target fields

- ✓ All policy areas
- ✓ We discuss how to utilize BIs to solve a variety of social issues resulting from people's behavior

What the BEST places importance on

- ✓ Are BIs designed to allow us to make better choices for ourselves on our own initiative?
- ✓ Are BIs designed to give us an opportunity to become aware of and look back on our behavior and customs and help us something, enabling us to increase the literacy, so that we can make better choices on our own?

Developing new policy approaches

- ✓ We make the traditional policy approaches (regulatory, financial, and informational ones) and BIs complement each other to develop better policies
- ✓ We develop cost-effective and flexible policy approaches for targeted people



2. Expanded use of behavioral insights in Japan

(1) Global moves toward the utilization of BIs

- More and more non-governmental organizations and institutions started to adopt BIs, such as the World Bank's Mind, Behavior, and Development Unit (**eMBed**) and Harvard University's Behavioural Insights Group (**BIG**), in addition to government organizations utilizing BIs such as the Behavioural Insights Team (**BIT**) under the Cameron's administration and the Social and Behavioral Sciences Team (**SBST**) under the Obama's administration.
- According to the OECD, over 200 organizations and institutions around the world, centered in Europe, the United States, and Australia, utilize BIs for public policies. In Japan, three BI teams: the **BEST**, **Platinum**, and **YBiT** (**Y**okohama **B**ehavioral **i**nsights and **D**esign **T**eam) are registered by the OECD.

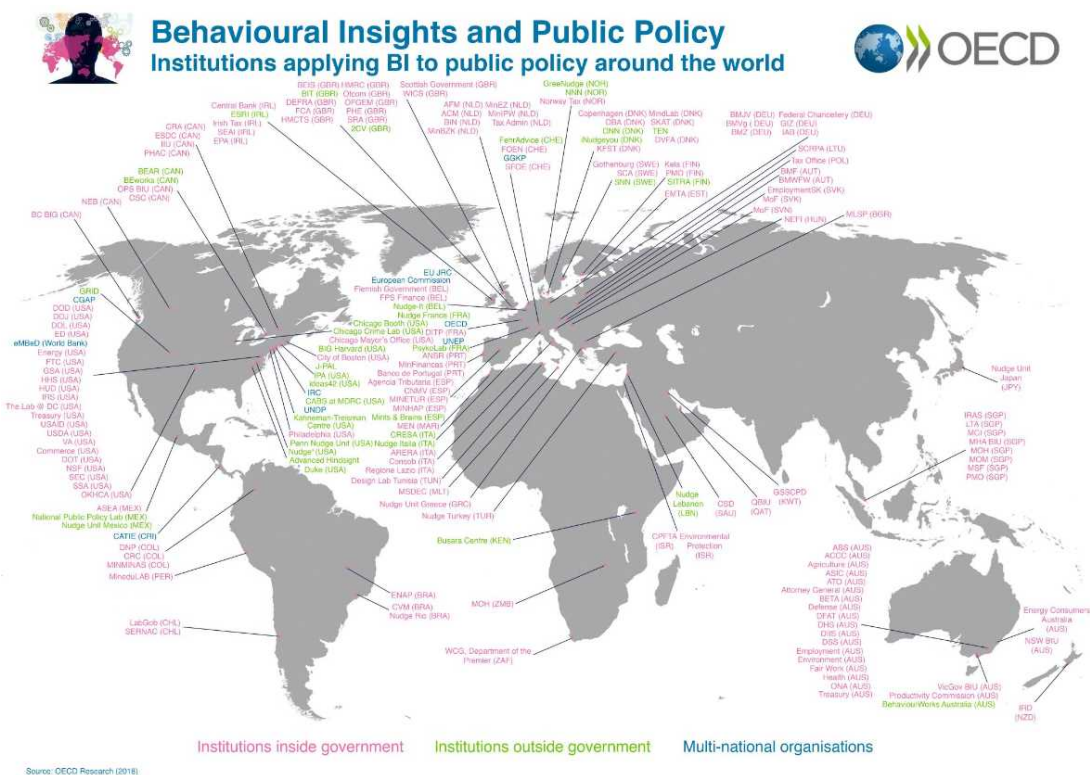


Figure 1: Institutions applying BIs to public policy around the world

Source: the OECD (August 2018) oe.cd/nudge

The OECD registers 202 institutions around the world as of August 2018. The **BEST** is on the map as the BI institution of Japan (it is specified as “Nudge Unit Japan” on the map. We are currently asking the OECD to change the name). Other than the **BEST**, the **Platinum** and the **YBiT** are also registered as the BI institutions of Japan although their names are not specified on the map. Please consult the **BEST** office (the MOE) when establishing a BI institution in Japan.

(2) Japanese central government's trends

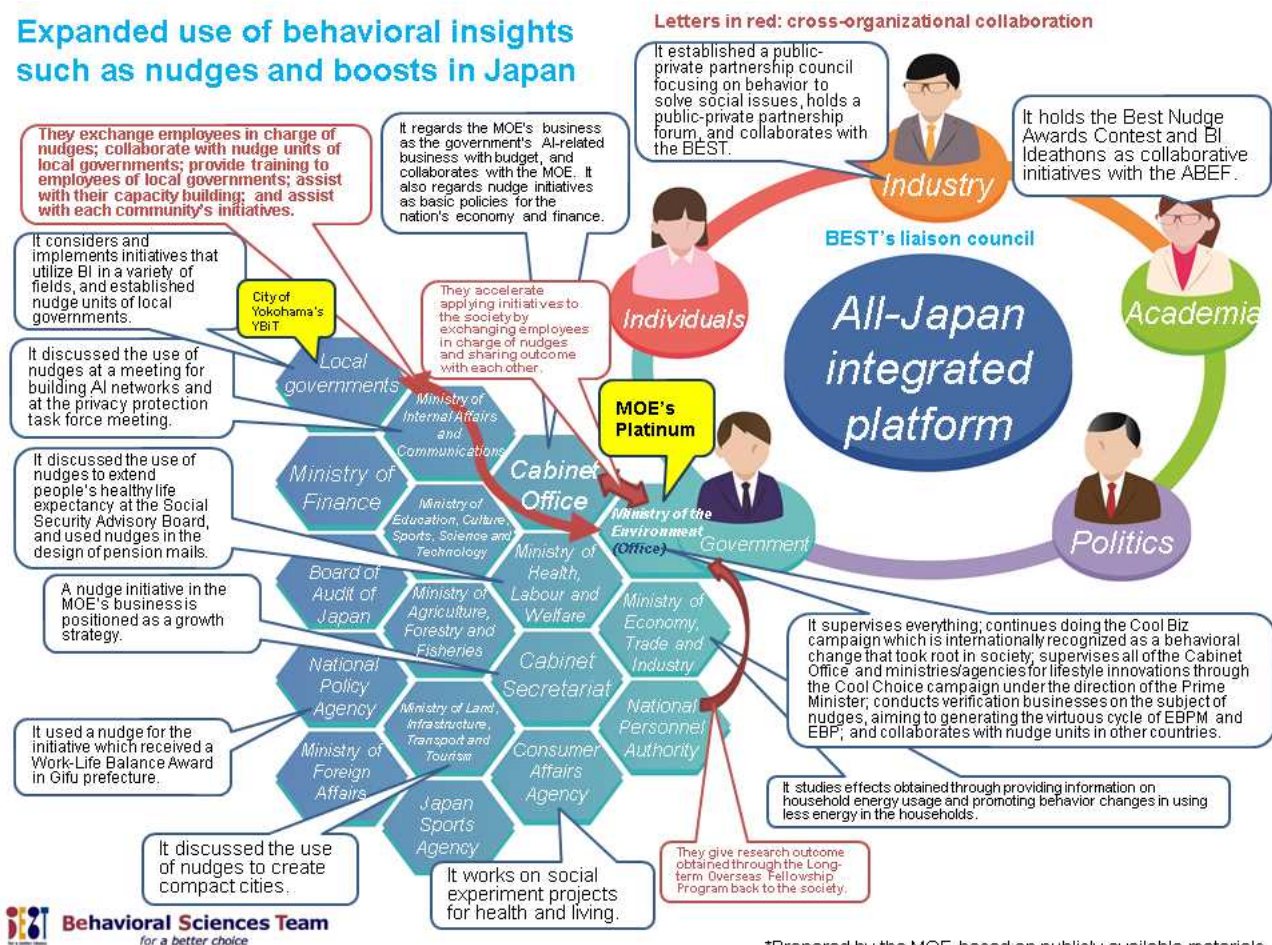
- After the establishment of the **Platinum**, under the Japanese central government, the nationwide **BEST** considers applying BIs to policies through the all-Japan system with collaboration among the industry, academia, politics, government, and other relevant citizens.
- Over 10 ministries and agencies participate in **BEST's liaison councils**, and each considers using BIs on its own.
- There are also some collaborations within the central government. For example, the MOE and the National Personnel Authority collaborate from the viewpoint of giving research outcome obtained through the Long-term Overseas Fellowship Program back to the society. Another example is that the MOE and the Cabinet Office strive to accelerate applying initiatives that use BIs to the society by exchanging staff in charge of behavioral sciences, sharing knowledge and outcome with each other, and holding seminars targeted at the Cabinet Office and all of ministries and agencies, which are originally planned by voluntary staff.
- The MOE and the Agency for Natural Resources and Energy share their project progress and outcome with each other within and outside of **liaison councils**, and consider reflecting such progress and outcome in their own policy measures.
- Given these circumstances above, the Cabinet Office approved the overall government policies of promoting behavior changes using BIs such as the MOE's BI projects and expanding markets for "Future Investment Strategy 2018" and "Basic Policy on Economic and Fiscal Management and Reform 2018", which are part of the nation's growth strategies.

(3) Japanese local governments' trends

- More local governments are participating in **BEST's liaison councils** as well as lectures, seminars, and other events held by the **BEST**.
- The City of Yokohama in particular established its BI team, Yokohama Behavioral insights and Design Team (**YBiT**), in February 2019, whose members are mainly volunteers. The **YBiT** plans to collaborate with the **BEST**. The **YBiT** is the first BI team registered and recognized by the **BEST** and OECD among Japanese local governments.
- As described above, local governments also consider the organization-wide use of BIs.

(4) Expanded use of BIs in Japan

- In the aim of further striving to use BIs both in government and business sectors to solve social issues, the MOE, local governments, and the private sector established **Human Behavior (HuB), a public-private partnership council focusing on human behavior to solve social issues**. The **BEST** started collaborating with the **HuB**.
- **Figure 2** below shows that there are collaborations between the central and local governments not just within the central government itself, and collaborations beyond the sectors of industry, academia, politics, government, and other relevant citizens. It is expected that the momentum of using BIs to solve social issues resulting from people's behavior will further increase throughout Japan.



*Prepared by the MOE based on publicly available materials

Figure 2: Expanded use of behavioral insights in Japan

3. BEST's initiatives

(1) Liaison councils

- **BEST's liaison councils** (administrative office: the MOE) are set up for the purpose of considering the use of behavioral sciences to solve issues in a wide variety of fields including environment and energy while sharing methodologies, issues, and measures to solve the issues in terms of initiatives that use behavioral sciences.
- **Liaison councils** are opportunities for participants to discuss in all-Japan system with collaboration among industry, academia, politics, government, and other relevant citizens. The principle of the councils is an open space for an open discussion.
- Councils are held in the form of “potluck”; participants bring topics every time. Participating members are invited based on the topic of each council for discussions.
- For instance, participating members from the central and local governments, the private sector, universities, and other organizations introduce their initiatives that focus on behavior. On the subject of such initiatives, they also put them into EBPM practice, and develop strategies for applying initiatives that use knowledge of behavioral sciences to the society as a business strategy or a government policy. Some specific topics are as follows:
 - Share methodologies, issues, and measures to solve the issues in terms of initiatives that use behavioral sciences
 - Consider the use of behavioral sciences to solve issues in a wide variety of fields
 - Develop strategies for applying initiatives that use knowledge of behavioral sciences to the society as a business strategy or a government policy
- **Liaison councils** were held twice during FY 2017 and six times during FY 2018.
- Specific points at issue and meeting materials of the past **liaison councils** are available on the website below.

▶ **BEST's website (Japanese)**
www.env.go.jp/earth/ondanka/nudge.html



- ◆ 1st on November 15, 2017
 - Setting up BEST's liaison council
 - Congratulatory messages (given by Richard H. Thaler, Professor of the University of Chicago Booth School of Business, and by Ichiro Kawachi, Professor of Social Epidemiology and the Chair of Department of Social and Behavioral Sciences at the Harvard T.H. Chan School of Public Health)
 - Initiatives by the MOE
 - Initiatives by the MOE's BI project operators
 - Initiatives by local governments (Tokyo Metropolis and Yamaguchi Prefecture)
- ◆ 2nd on January 23, 2018
 - EBPM on the subject of the MOE's BI projects
 - Initiatives by local governments (Adachi Ward, Kobe City, and Uji City)
- ◆ 3rd on May 24, 2018
 - Initiatives by the Agency for Natural Resources and Energy to promote behavior changes among general consumers
 - Outcome during the first fiscal year of the MOE's BI projects
 - EBPM on the subject of the MOE's BI projects
 - Project newly adopted as the MOE's BI projects
 - Model projects for creating CO2 reduction value from renewables utilizing blockchain technology
- ◆ 4th on August 2, 2018
 - Strategies for disseminating initiatives that use knowledge of behavioral sciences as a government policy or a business strategy in an autonomous way in Japan
- ◆ 5th on October 25, 2018
 - Best Nudge Awards Contest and BI Ideathon
 - Trial demonstration of the function as an evidence institution
 - Introduction of examples of initiatives using behavioral sciences to solve social issues
 - (a) Regional revitalization and taxation system (promoting the use of the taxation system to support regional revitalization): Mitsubishi UFJ Research and Consulting Co., Ltd. and Nagi Town, Okayama Prefecture
 - (b) Healthcare and medical treatment (increasing the rate of taking cancer screening tests): Cancer Scan Co., Ltd. and Hachioji City, Tokyo Metropolis
 - Various approaches to prompting behavior changes to solve social issues: Community Organizing Japan
 - "Beyond Nudge" for future nudges
- ◆ 6th on November 22, 2018
 - Points to be factored in prior to the use of BIs such as nudges
 - What the industry, academia, government, and relevant citizens expect the BEST to do
- ◆ 7th on December 12, 2018
 - Introduction of examples of initiatives using behavioral sciences to solve social issues
 - Improvement of work environment and work-style reform: the National Police Agency and the Information and Communications Division, Gifu Prefecture, Chubu Regional Police Bureau (encouraging staff to take paid leave)
 - Frameworks for using BIs such as nudges
 - Expanded use of BIs such as nudges in Japan
 - How the United States uses budget for EBPM
 - Policy recommendations
 - The perspective of citizens and consumers who receive nudges, and ethical considerations
- ◆ 8th on March 18, 2019
 - Introduction of examples of initiatives that focus on behavior
 - (a) Michiya Tanimoto, Associate Professor of Kindai University (muscle exercises)
 - (b) Japan Sports Agency
 - Annual report for FY 2017 and FY 2018 (draft)

Figure 3: Status of BEST's liaison councils

Table 1: Discussion summary of BEST's liaison councils

No.	Discussion summary
1	The 1st liaison council was held because the full-fledged verification of the MOE's BI projects started. Participants discussed initiatives by the MOE and local governments.
2	Participants discussed EBPM on the subjects of (i) the structure that facilitates the MOE's entire BI projects and (ii) the design for demonstrating individual BI projects.
3	Participants discussed the outcome during the first fiscal year (2017) of the MOE's BI projects; EBPM; the promotion of behavior changes through changes in external environment such as social and economic systems (Model projects for creating CO2 reduction value from renewables utilizing blockchain technology); etc.
4	Participants discussed strategies for disseminating initiatives that use knowledge of behavioral sciences as a government policy or a business strategy in an autonomous way in Japan
5	Participants from local governments introduced examples of their initiatives that used behavioral sciences, and various approaches to prompting behavior changes, in order to solve social issues in a variety of fields. Centered on intellectuals engaging in behavioral sciences and other academic disciplines, the participants discussed areas that can be used as a reference for other local governments that have the same issues, and areas for improvement. Through these introduction and discussion, the participants carried out trial verification of the function as an evidence institution , resulting in the establishment of BITE . As ten years have passed since the publication of the book <i>Nudge</i> , they also discussed Beyond Nudge, which has also been discussed internationally.
6	One year has passed since the first liaison council was held. As participants have accumulated various points at issue from various perspectives, they organized and compiled these points at issue that should be factored in prior to the use of BIs such as nudges, and discussed what they should further discuss and what they lack based on the past points at issue. Participants also discussed the results of interviewing mainly those from the industry, academia, government, and other relevant citizens other than participating intellectuals for what kind of activities they expect the BEST to do, and discussed the direction in which the BEST should make efforts in the future.
7	Participants from government agencies introduced examples of their initiatives on the field that used behavioral sciences in order to solve social issues in a variety of fields. Centered on intellectuals engaging in behavioral sciences and other academic disciplines, the participants discussed areas that can be used as a reference for other organizations that have the same issues, and areas for improvement. Through these introduction and discussion, they carried out the practice of BITE , the function of evidence institution . Participants also introduced the frameworks for using BIs such as nudges as well as boosts on which other countries have focused as the next new BI approach after nudge, and discussed Beyond Nudge. Policy recommendations were approved and added as a new function of the BEST . Participants also discussed the perspective of citizens and consumers who receive nudges as well as ethical considerations, which are the areas that they need to discuss further.
8	Two years have passed since the establishment of the BEST . Participants discussed drafting a report of BEST's past activities. Focusing on muscles and exercises, which could be said as the origin of various behaviors, participants discussed the details of effective approaches to people, timing to take such approaches, hooks to help people keep their behavior, etc. while learning such approaches and hooks in a practical way.

(2) BITE

- Around the world, some organizations work as a consultation organization for the government of the country. These organizations consisting mainly of intellectuals from academic disciplines play the roles of providing scientific evidence and assisting in applying initiatives to the society. These organizations are sometimes called **evidence institutions**.
- For example, in the United Kingdom, an organization named What Works Centre focuses on “what works” and assists in applying EBPM to the society based on best available evidence at the time. The organization is considered to be arm’s-length from the government, but has the aspect of government agency because it receives support from government-related agencies. Therefore, the organization is not in a complete independent or neutral position, but runs operations while improving transparency.
- The following issues have been identified based on initiatives by **evidence institutions** around the world:
 - ✓ Not only providing evidence, but also how to promote demand is important.
 - ✓ It is important to build the demand-side’s trust step by step
 - ✓ It is important to not only collect evidence but also have the function that generates new evidence (not just introducing examples)
 - ✓ It is important to carry out EBP to see how evidence should be connected to issues on the field. It is also important to consider how **evidence institutions** can collaborate with local governments
- Given that participants in **BEST’s liaison councils** discussed the necessity of a consultation organization and a supporting agency for BIs and EBPM, the **BEST** featuring intellectuals from each academic discipline decided to play the role of **BITE***, the function of **evidence institution**.

*The organization particularly intends to harmonize behavioral insights based on behavioral economics, and traditional economics (**Behavioral Insights × Traditional Economics**), and to communicate them in an easy-to-understand way in plain language.

- Fields in which we have produced outcome are as follows:
 - Environment and energy
 - Regional revitalization and taxation system
 - Healthcare and medical treatment
 - Work environment and work-style reform
 - Urban planning and vitalization in city centers
 - Innovative technologies and platform business
 - Muscles and exercises
- Various organizations that promote the use of BIs develop their unique frameworks for using BIs, and make it available to the public. Such frameworks are broadly divided into the following two types:
 - Process flow that shows organized things to keep in mind at each step of the cycle of policymaking and practice
 - Checklist that shows organized concepts and conditions which should be achieved and met for effective interventions
- These frameworks are effective if used appropriately. However, if you use them without understanding them properly, you cannot obtain sufficient effects because the background and purposes of the frameworks are different from those of other frameworks. On the other hand, if you use them appropriately, not only you will obtain effects, but also it will be helpful to ensure accountability and transparency. Not just using the frameworks, it is also important to monitor effects from activities and keep making improvements by going through the PDCA cycle.
- Today, the OECD started developing a comprehensive framework for practitioners in each country in cooperation with them. The OECD intends to incorporate the beginning through ending of the cycle of public policies into the comprehensive framework so that it shows tools, methods, and ethical guidelines for practitioners. The **BEST** also cooperates and engages in editing work.
- Please see the website below for the details of frameworks for using BIs such as nudges.

- ▶ **BEST's website (Japanese)**
www.env.go.jp/earth/ondanka/nudge.html



- The **BEST** has been collecting and organizing examples of the use of BIs in Japan and abroad, and preparing for making them available to the public.
- The **BEST** will enhance the **BITE** function by receiving inquiries from government agencies and holding workshops, leading to promoting behavior changes using BIs.

(3) BI-Tech

- Personalized approach for every person is essential for the promotion of behavior changes.
- Regarding its BI projects, the MOE collects big data through IoT technology, such as the actual energy usage (e.g. electricity, gas, and automotive fuels) of individuals and households as well as information on their attributes; analyzes the big data through AI technology; sends personalized messages to the individuals and households; and examines how the personalized messages have prompted the individuals and households to change their energy usage.
- As described above, the combination of BIs and advanced technologies such as AI and IoT (**Behavioral Insights × Technology**) is a key for personalized approaches. The **BEST** coined the combination as **BI-Tech**. The **BEST** strives to explore **BI-Tech** as new cross-field technologies such as FinTech (Finance x Technology), HealthTech (Healthcare x Technology), EdTech (Education x Technology), and PoliTech (Politics x Technology), and to disseminate it.
- For instance, through a collaboration with the Japan Society of Information and Communication Research, the **BEST** discussed **BI-Tech** as an information and communication policy of the new era with the OECD. The **BEST** gave a lecture on the subject of “Enhancing well-being by harmonizing behavioral insights and technologies such as AI and IoT” at a public-private collaborative forum held by the **HuB** (**public-private partnership council focusing on human behavior to solve social issues**).

- The MOE's BI projects including **BI-Tech** is regarded as the government's business with AI-related budget. **BI-Tech** initiatives are included in the "Future Investment Strategy 2018", and are considered a help to expand the markets of low-carbon products, services, and lifestyles. As the OECD bearing "Economic" focuses on **BI-Tech**, it is expected that the harmonization of BIs and technologies could help explore new markets and create economic growth.
- **Figures 4 and 5** below show the specific examples of **BI-Tech** that the MOE has worked on through its demonstration projects. Please see the link below for the detailed materials of the examples.

- ▶ Promoting behavior changes using BI-Tech (Japanese)
www.env.go.jp/earth/ondanka/nudge/BI-Tech.pdf



Figure 4: Energy conservation digital nudges using smart meters and mobile app



Figure 5: Eco-driving nudge on a mobile app with a GPS sensor

(4) Collaboration with the Association of Behavioral Economics and Finance

A) Best Nudge Awards Contest

- In collaboration with the Association of Behavioral Economics and Finance (ABEF), we held a **Best Nudge Awards Contest** on a trial basis from August to September 2018. We solicited local governments' initiatives that promoted behavior changes using BIs such as nudges and which effects were measured, in order to solve social and public administration issues in a wide variety of fields.
- Eight out of applications submitted were assessed in the ABEF's 12nd annual meeting from the viewpoints: novelty, social significance, the theory of behavioral sciences used, appropriateness of knowledge used, appropriateness of the method to measure effects, and the possibility of making an impact on other local governments and fields. The following two initiatives out of the eight received the Best Nudge Award. The links below contain materials introducing the two initiatives (these materials are not application documents). **Figures 6 and 7** show the images of each of the initiatives.

○ Representative: Cancer Scan, Co., Ltd.

- Project name: Project for encouraging people to take colorectal cancer screening tests
- Project launched: in Hachioji City, Tokyo Metropolis
- www.env.go.jp/earth/ondanka/nudge/renrakukai05/mat04_2.pdf

○ Representative: Uji City, Kyoto Prefecture

- Project name: Patrol to eliminate dog waste “Yellow chalk operation”
- Project launched: in Uji City, Kyoto Prefecture
- www.env.go.jp/earth/ondanka/nudge/renrakukai02/mat03_3.pdf

- We will appreciate good initiatives, and hold the contest in a full-fledged manner when the ABEF holds an annual meeting, and introduce examples of initiatives so that other local governments can refer to them.



Pattern A
Gain framed message
Rate of taking screening tests: 22.7%

Pattern B
Loss framed message
Rate of taking screening tests: 29.9%

Figure 6: Increasing the rate of taking cancer screening tests by changing the message on a postcard (Hachioji City)



4:00 pm on September 27: Please take the waste home

Figure 7: Date on which the dog waste was found, and message asking the dog owner to take care of the waste (Uji City)

Uji City urged pet owners to follow dog walking etiquette by writing a date and a message on the street with chalk. This encouraged citizens to make proactive efforts, reducing waste on the street and cutting clean-up costs.

B) Behavioral Insights Ideathon

- In collaboration with the ABEF for the 2nd time, we started with **Behavioral Insights Ideathon*** in November 2018. We solicit ideas that help promote behavior changes using BIs, in order to solve social and public administration issues in a variety of fields. We particularly solicit novel, innovative, and moonshot ideas that lead to creating innovations.

*An ideathon is a coined word combining “idea” and “marathon.” It is an event in which participants exchange ideas for a specific topic and generate ideas together, which could become seeds of innovations.

- We will process ideas submitted in the following way depending on the content of the idea:
 - Will provide information on ideas to the **BEST**, the ABEF, or relevant government agencies.
 - For great ideas, we will carry out verification research with the ABEF’s researchers by interviewing the idea owners and receiving technical advice (ideathon type 1)
 - We will also announce great ideas, and with budget, solicit a consortium that is capable of providing a structure and a field necessary to realize the great ideas (ideathon type 2)

We look forward to your applications!



(5) Virtuous cycle of EBPM and EBP

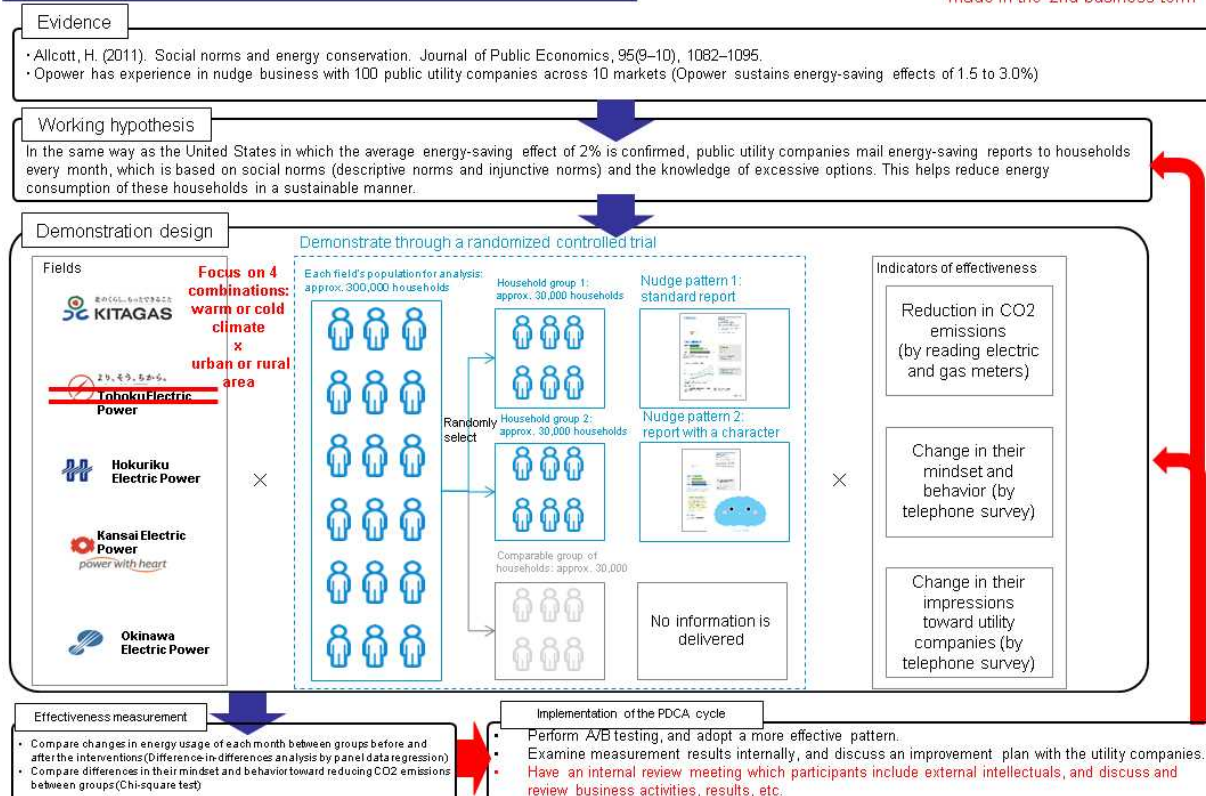
- The **BEST** promotes EBPM and EBP on the subjects of the MOE's BI projects and local governments' initiatives.
- The reason why the **BEST** promotes EBPM and EBP is that we believe it is important to assess the effects of policies appropriately, improve transparency, and ensure accountability.
- According to the project "Promoting Evidence-based Policy in Japan" launched by an independent administrative institution, the Research Institute of Economy, Trade and Industry, there are three phases regarding evidence: generating, communicating, and using evidence.

Source: Interim report of project "Promoting Evidence-based Policy in Japan" (Japanese)

www.rieti.go.jp/jp/columns/data/a01_0484_ebpm_report.pdf

- In its BI projects, the MOE carries out demonstration projects that have all the three phases. In other words, we formulate a working hypothesis for a social issue that we want to solve based on the existing evidence (*use*); design the way of proving the hypothesis, actually demonstrate it by going through the PDCA cycle, and produce outcome (*generate*); widely disseminate information on the new evidence obtained through the demonstration so that third parties can use it to formulate another hypothesis and to design the way of proving it (*communicate*); and plan for applying the new evidence to its own initiatives (*use the new evidence*) and strive to implement the initiatives.
- The MOE uses the template of demonstration design shown in **Figure 8** so that the template is helpful for the MOE's BI project operators to manage the progress of their initiatives.
- Both policymaking with EBPM and practice with EBP are important. It is essential to regard EBPM and EBP as an inseparable and unified set, and create the virtuous cycle of EBPM and EBP.
- The sound of the word "EBPM" may mislead people into believing that only evidence is important because they place too much emphasis on the evidence. However, Evidence-based Medicine (EBM), from which EBPM is said to derive, has the concept of **Figure 9**, suggesting the importance of taking into consideration not only evidence, but also resources (limited resources) and values (the targeted person's values); striking a balance among these three elements; and making decisions in a comprehensive manner.

Example 1: Comparison between regions for effects from energy-saving reports mailed to households *Letters in red: improvements made in the 2nd business term



Example 2: Examining best design of an energy-saving report for households *Letters in red: improvements made in the 2nd business term

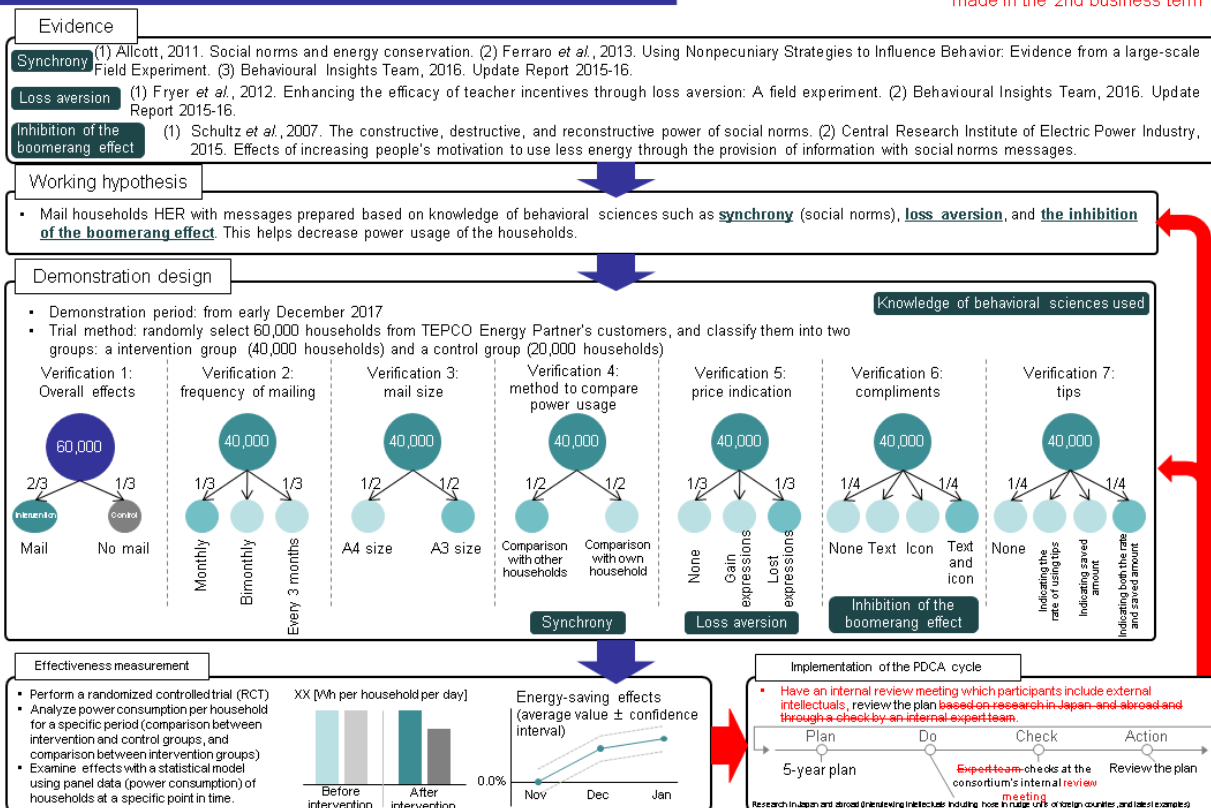


Figure 8: Examples of demonstration design by the MOE's BI project operators

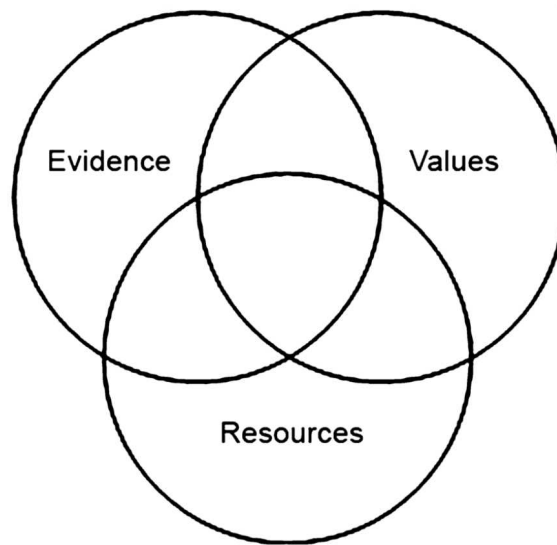


Figure 9: Relationship among elements that should be taken into consideration in the process of healthcare decision-making

Source: Gray (2001) Evidence-based Healthcare. Second Edition

- As a simple expression to communicate that evidence is not the only element to take into consideration, countries including the United Kingdom, the United States, and Australia sometimes use Evidence-informed Policymaking (EIPM) instead of EBPM. Although it uses the term EBPM, the **BEST** keeps the importance in mind.
- There is an idea behind evidence: best available evidence. Even if some kind of successful evidence is available outside of Japan, the evidence may not be applicable to examples in Japan. In addition, evidence obtained under some situation in Japan may not produce the same effects in a different situation.
- It is important to use best available evidence at the time, not to explore “perfect” evidence indefinitely, which may not even exist. It is important to formulate a working hypothesis appropriately using best available evidence after a certain level of careful consideration even if the evidence is not “perfect,” and move on to demonstration and effect-measurement processes. As one of options, if you cannot find your ideal evidence, you may generate evidence through demonstration, but at the same time, you need to calculate how much it costs to generate such evidence.

- Staff working on the public administration field are sometimes forced to decide whether “it is time to generate evidence” or “we should refer to the existing evidence and move on to the next process even if the evidence has some uncertainties.” As one of points at issue during **BEST’s liaison councils**, participants suggested the necessity of discussing what kind of evidence is needed to proceed initiatives with confidence, and when we should suspend the ongoing process of activity. We should discuss such lines while referring to the idea behind EBM.
 - Other than the points at issue above, the following points at issue were also suggested for the practice of EBPM. Please see the link below for detailed materials.
 - ✓ What kind of staff and organizations are required for public administration?
 - ✓ It is important to regard negative outcome as positive one even if the outcome has turned out to be not originally expected effects.
 - ✓ It is important how effectively an idea and a field are matched.
 - ✓ It is important how effectively evidence obtained is utilized.
 - ✓ It is necessary to have ethical considerations for an intervention experiment and the intervention itself.
- ▶ Promoting EBPM on the subject of BI projects – from the practice of EBPM to the virtuous cycle (Japanese)
- www.env.go.jp/earth/ondanka/nudge/EBPM.pdf



- In **BEST’s liaison councils** in the first half of FY 2019, we will discuss the practice of EBPM based on the project outcome so far on the subject of the MOE’s BI projects, etc.

(6) Ethical considerations

- Before adopting an approach that uses BIs such as nudges, it is important to have ethical considerations from the perspective of citizens and consumers who receive nudges.
- In **BEST's liaison councils**, participants indicated that nudging works as an encouragement to a person who desires to achieve some specific goal to take action, and works as a help for a person to become aware of and change his or her behavior even though the person does not have any specific goal. We consider that especially the latter person does not necessarily feel the need of changing his or her behavior, and shows a passive attitude to receive the nudge.
- Sir Gus O'Donnell, who played the central role of carrying out the UK BIT's activities, advised the **BEST** that the purposes and details of nudge be transparent and open to the public in order to eliminate people's concerns about the use of nudges.
- The **BEST** places importance on the following two things: if BI systems are designed to allow people to make better choices for themselves on their own initiative, and if BI systems are designed to give people an opportunity to look back and become aware of their behavior and customs, enabling them to increase their literacy, so that they can make better choices as judged by themselves.
- We therefore have believed that it is important to properly assess effects of BIs, improve transparency through EBPM, and ensure accountability.
- In **BEST's liaison councils**, there was also a suggestion that we need to have ethical considerations for both intervening and the intervention itself when some kind of intervention is used, and that we need to explain intervention experiment methods to the public in an easy-to-understand way to obtain their understanding.
- The code of ethics used for demonstration targeted at people is not always in place in policy areas, therefore, those who conduct demonstration need to examine the code of ethics on a case-by-case basis at this moment. However, as the government strives to promote EBPM, in the **liaison councils**, there was another remark insisting that the necessity of standardized rules should be discussed because we cannot disregard ethical considerations toward individuals.
- We discussed field research while referring to the Japanese Psychological Association's code of ethics requiring to ensure execution responsibility, accountability, and management responsibility from the ethical perspective. We will need to examine if we should apply the association's code of ethics to other policy areas.

(7) Nationwide collaboration

A) Public-private partnership council focusing on behavior to solve social issues

- The **HuB** (public-private partnership council focusing on human behavior to solve social issues) holds a public-private partnership forum as an opportunity for participants to network in order to solve social issues such as SDGs from the perspectives of “human” and “behavior,” and as a matching platform for project operators (seeds) and local governments (needs) which have social issues resulting from people’s behavior.
- The **BEST** closely collaborates with the **HuB** by exchanging opinions and sharing information to create synergies toward making more efforts for individuals. The **BEST** also gave a lecture at the public-private partnership forum. (Materials used for lectures are available on the websites below.)

- ▶ **HuB**, a public-private partnership council focusing on behavior to solve social issues (Japanese)

www.env.go.jp/earth/ondanka/hub.html

- ▶ Public-private partnership forum focusing on behavior to solve social issues (Japanese)

www.env.go.jp/earth/ondanka/nudge/post_49.htm



Column 4: Whom are nudges for?

In the public-private partnership forum focusing on behavior to solve social issues, participants discussed nudges should work for what and whom. As it raises “for a better choice” on its logo, the **BEST** advocates that nudges should be for our better choices and nudges should be for us, not for other people excluding yourself. The **BEST** gave the concept of *Keiseisaimin* as an example, which means governing the society and rescuing/saving the people. The word of economy in Japanese is said to derive from this term. The **BEST** advocates the necessity of making more efforts for every person while keeping the society and the people in mind.



B) BI institutions of local governments

- There is increasing momentum of using BIs not only in the all-Japan's BI institution and the central government's BI team such as the **BEST** and the **Platinum**, but also in local governments.
- The **YBiT**, which was the pioneer among local governments, strives to apply innovative initiatives that use BIs to a variety of fields through demonstration, aiming to solve environment, economic, and social issues including SDGs simultaneously. The **YBiT** is recognized both by the **BEST** and by the OECD.
- Some members of the **Platinum** and the **BEST** moved to local governments. The **BEST** places importance on such networking, and aims to strengthen collaboration further throughout Japan.

C) Capacity building for staff working in central and local governments

- BI institutions around the world strive to develop better policies by using BIs to complement the traditional policy approaches, such as regulatory, financial, and informational ones.
- It is said that BIs effectively work when we implement a humane initiative directed at humans while respecting each person's value in order to solve social issues resulting from people's behavior.
- The scope of the application of BIs is not limited to some specific fields. There is room for applying BIs to all kinds of fields. For example, any ministries and agencies can use BIs in expressions for public awareness activities.
- As such, voluntary staff of the MOE and the Cabinet Office planned for inviting intellectuals and holding seminars targeted at central and local governments. This allowed the participants to learn about BIs including nudges and behavioral economics, and gave them an opportunity to consider if they can utilize some BIs in their usual tasks.
- The administrative office of the **BEST** also gave lectures and held seminars targeted at local governments, etc. based on their needs, from the smallest unit of local government to regional units such as the Nine Prefectures and Cities (Tokyo Metropolis and Saitama, Chiba, and Kanagawa Prefectures as well as Yokohama, Kawasaki, Chiba, Saitama, and Sagami-hara Cities) and the Kinki area.

- These activities are a part of the practice of **BITE**, the function of **evidence institution** that introduces the difficult theories and knowledge of the combination of BI and the traditional economics in an easy-to-understand way in plain language. By doing such activities, we strive to accelerate applying initiatives that use BIs to the society.

(8) International collaboration

- We visited government agencies, educational and research institutions, and private businesses of countries such as the United Kingdom and the United States which governments started using BI for their government-wide public policies before the Japanese government does, as well as international organizations, introduced initiatives each other, and exchanged opinions. We also strived to build and retain international BI networks with the Behavioural Economics Team of the Australian Government (**BETA**), **eMBeD**, the International Energy Agency, and other organizations by, for instance, taking follow-ups via video conference.
- Through delivering information in English, the **BEST** has got recognized in the international society.
- Given that there are over 200 organizations utilizing BIs around the world centered in Europe, the United States, and Australia, the founder and president of the **BEST** (Dr. Tadahiro Ikemoto, D.Sc., MPH, MPA) was invited to give a lecture, special session, and panel discussion at Behavioural Exchange 2018, a global behavioral sciences conference, held in Australia in June 2018. You can view the lecture and panel discussion on the website below provided by the Australian Government.

► Presentations in Behavioural Exchange 2018
www.youtube.com/watch?v=sd8qtJi_wpE



- We were also invited to give a lecture at an event held in Paris in September 2018 in relation to the G20 summit 2019 to be held in Japan. We delivered information on our initiatives globally at the event.
- We introduced and proposed our **BI-Tech** initiatives to other countries at a conference held in February 2019 in relation to the G20 summit. Participating countries then responded to our proposal saying they would share their own initiatives using BIs. We will create innovations by harmonizing technologies and behavioral sciences, a multidisciplinary academic discipline across natural science, humanities, and social science, and contribute to achieving STI (Science, Technology, and Innovation) for SDGs.
- As described above, we will advance efforts while enhancing the presence of Japan in collaboration and cooperation with the international society.

(9) Beyond Nudge

- Boosted by the success of the UK **BIT** and the Nobel Memorial Prize to Richard H. Thaler who co-authored *Nudge*, there are now over 200 organizations utilizing BIs around the world. Typical examples of using BIs are nudges.
- Although best practices receive a lot of attention, the following things have been pointed out:
 - ✓ There is certain number of examples that failed to produce desired effects
 - ✓ Everything does not always go well with a nudge itself
 - ✓ What efforts should we make effects sustainable and enhanced?
 - ✓ What efforts should we make to scale our initiatives into other regions?
 - ✓ What is a more thoughtful and personalized approach for each person?
 - ✓ Do BI systems allow people to make better choices for themselves on their own initiative?
 - ✓ Do BI systems give people an opportunity to look back and become aware of their behavior and customs, enabling them to increase their literacy, so that they can make better choices as judged by themselves?

- Over 10 years after the publication of the book *Nudge* in 2008, “Beyond Nudge” (or its equivalents like the 2nd generation nudge, nudge 2.0 or nudge plus) is now considered internationally to solve the pointed-out issues.
- The next new BI approach after nudge is boost. Both of the words “nudge” and “boost” have the meaning “to push someone.” Boost means more firmly pushing someone, and has the keyword of “agency” (the capacity of an actor to act in any given environment). The idea behind agency is that it is essential for people to engage in an activity on their own initiative to make it a habit and keep doing it. With this idea, boost is a policy approach that allows people to improve their competencies and literacy and to develop their choice-making capabilities by themselves on their own initiative.
- The MOE conducts a demonstration project that uses a boost, in which students from elementary to high schools are educated about the environment. The MOE examines how effectively we can harmonize nudges and boosts into the traditional policy approaches.
- In **BEST’s liaison councils**, some participants pointed out that nudges and boosts should be used in a complementary way to create synergies. Public awareness activities that all the central and local governments have carried out so far have the aspect of boost. It is of importance to identify the effects of the activities.
- It is important to effectively incorporate various BIs into the traditional policy approaches, not just using a nudge or a boost itself.

(10) Policy recommendations

- It was concluded that, in the following cases, policy recommendations should be compiled and organized, and issues should be put on the table.
 - In a case that several participants express their opinions with the same intent about an issue, discussions on the issue deepen with each council, and a certain level of shared understanding is built.
 - In a case that BIs are not fully utilized, but full use of BIs may improve or solve social and public administration issues to be addressed.

- We should keep the following things in mind when compiling and organizing policy recommendations:
 - ✓ Contemplating the circumstances and positions that people are in, who receive recommendations. It should not be pie in the sky.
 - ✓ The possibility of organizing policy recommendations by the credit of the intellectuals agreed
- As a starter, we decided to further contemplate the strategies for the government's projects, which have been discussed repeatedly since the **BEST's 2nd liaison council**.
- In this regard, we decided to contemplate two types of strategies: a national strategy and a strategy for project operators who conduct the government's projects. The following points at issue were indicated for the former strategy:
 - ✓ We should consider how to apply evidence to be obtained to policies and initiatives.
 - ✓ We should widely develop policies and initiatives in society while taking the robustness of evidence into account.
 - ✓ We should share progress and outcome with relevant ministries, agencies and organizations; collaborate with them; and consider multifaceted uses of the outcome.
- The following points at issue were indicated for the latter strategy at this moment:
 - ✓ We should encourage people to make a decision and to change their behavior in a way that they continue implementing the policy or initiative on their own initiative as a business or as a service even after the government's project ends.
 - ✓ Evidence should be reflected in the review of initiatives and systems depending on the accumulation level of evidence without waiting for the government's projects to end.
- We will further contemplate these points at issue from FY 2019 onward.

4. List of participants of liaison councils

(honorifics omitted; affiliations and titles are as of the latest participation of councils)

○ Intellectuals (Japanese syllabary order)

- ・ Keitaro Aoyagi, (株) メトリクスワークコンサルタンツ 代表取締役 青柳 恵太郎
- ・ Takanori Ida, (大) 京都大学大学院経済学研究科 教授 依田 高典
- ・ Yumiko Iwafune, (大) 東京大学生産技術研究所エネルギー工学連携研センター 特任教授 岩船 由美子
- ・ Toshiro Ogaki, 三菱 UFJ リサーチ & コンサルティング (株) 政策研究事業本部公共経営・地域政策部 研究員 大垣 俊朗
- ・ Fumio Otake, (大) 大阪大学大学院経済学研究科 教授 大竹 文雄
- ・ Kohei Okazaki, 内閣府経済社会総合研究所国民経済計算部価格分析課 政策調査員 岡崎 康平
- ・ Masanobu Ogura, 衆議院議員 小倉 将信
- ・ Zentaro Kamei, (株) PHP 研究所政策シンクタンク PHP 総研 主席研究員・立教大学大学院 21 世紀社会デザイン研究科 特任教授 亀井 善太郎
- ・ Kazumi Kubota, (公) 横浜市立大学医学部臨床統計学 助教 窪田 和巳
- ・ Makoto Kuroki, (公) 横浜市立大学大学院国際マネジメント研究科 准教授 黒木 淳
- ・ Tatsuya Kurosaka, (株) 企 代表取締役 クロサカ タツヤ
- ・ Yohei Kobayashi, 三菱 UFJ リサーチ & コンサルティング (株) 政策研究事業本部経済政策部 主任研究員 小林 庸平
- ・ Hiroshi Komiyama, (株) 三菱総合研究所 理事長 小宮山 宏
- ・ Naoki Kondo, (大) 東京大学大学院医学系研究科健康教育・社会学分野 准教授 近藤 尚己
- ・ Nagayuki Saito, 慶應義塾大学大学院メディアデザイン研究所 リサーチャー 齋藤 長行
- ・ Shusaku Sasaki, (大) 京都大学大学院経済学研究科 特定専任講師 佐々木 周作
- ・ Masahiro Sugiyama, (大) 東京大学政策ビジョン研究センター 准教授 杉山 昌広
- ・ Yoichi Sekizawa, (独) 経済産業研究所 上席研究員・研究コーディネーター 関沢 洋一
- ・ Yasuhiro Daisho, 早稲田大学研究院次世代自動車研究機構 特任研究教授 大聖 泰弘
- ・ Makoto Tanaka, (大) 政策研究大学院大学 教授 田中 誠
- ・ Michiya Tanimoto, 近畿大学大学院生物理工学研究科 准教授 谷本 道哉
- ・ Takahiro Tsuchiya, (公) 横浜市立大学 教授 土屋 隆裕
- ・ Makiko Nakamuro, 慶應義塾大学総合政策学部 准教授 中室 牧子

- ・ Keisuke Nansai, (国研) 国立環境研究所資源循環・廃棄物研究センター 国際資源循環研究室長 南齋 規介
- ・ Chizuru Nishio, (大) 筑波大学大学院ビジネス科学研究科 教授 西尾 チヅル
- ・ Jun Fukuyoshi, (株) キャンサースキャン 代表取締役 福吉 潤
- ・ Yuki Hondo, (大) 横浜国立大学大学院環境情報学研究院・学府 教授 本藤 祐樹
- ・ Keiko Matsuzawa, 特定非営利活動法人コミュニティ・オーガナイズ・ジャパン 副代表理事 松澤 桂子
- ・ Kayo Murakami, (大) 京都大学大学院農学研究科 JSPS 研究員 村上 佳世
- ・ Kazuhisa Mogi, (一社) 日本自動車工業会環境委員会運輸政策対応 WG 主査 茂木 和久
- ・ Hidefumi Yokoo, (国研) 国立環境研究所資源循環・廃棄物研究センター国際資源循環研究室 研究員 横尾 英史

○Local governments

- ・ Saitama Prefecture
- ・ Saitama City, Saitama Prefecture
- ・ Tokyo Metropolis
- ・ Adachi Ward, Tokyo Metropolis
- ・ Hachioji City, Tokyo Metropolis
- ・ Yokohama City, Kanagawa Prefecture
- ・ Kawasaki City, Kanagawa Prefecture
- ・ Uji City, Kyoto Prefecture
- ・ Nagi Town, Okayama Prefecture
- ・ Yamaguchi Prefecture

○Central governments

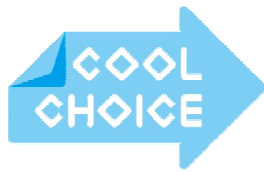
- ・ Ministry of the Environment
- ・ Cabinet Secretariat
- ・ National Personnel Authority
- ・ Cabinet Office
- ・ National Police Agency
- ・ Consumer Affairs Agency
- ・ Ministry of Internal Affairs and Communications
- ・ Ministry of Foreign Affairs
- ・ Ministry of Finance

- ・ Ministry of Education, Culture, Sports, Science and Technology
- ・ Japan Sports Agency
- ・ Ministry of Health, Labour and Welfare
- ・ Ministry of Agriculture, Forestry and Fisheries
- ・ Ministry of Economy, Trade and Industry
- ・ Agency for Natural Resources and Energy
- ・ Ministry of Land, Infrastructure, Transport and Tourism
- ・ Board of Audit of Japan

○ Businesses, etc. (Japanese syllabary order)

- ・ オリックス自動車（株）
- ・ （株）企
- ・ （株）サイバー創研
- ・ 住友商事（株）
- ・ （株）住環境計画研究所
- ・ ソーシャルアクションカンパニー（株）
- ・ （株）チーム AIBOD
- ・ デジタルグリッド（株）
- ・ デロイトトーマツコンサルティング（同）
- ・ （株）電通
- ・ （株）電力シェアリング
- ・ （一財）電力中央研究所
- ・ 東京海上日動火災保険（株）
- ・ 東京ガス（株）
- ・ 東京電力エナジーパートナー（株）
- ・ 凸版印刷（株）
- ・ 日本オラクル（株）
- ・ （株）日本新電力総合研究所
- ・ （株）日本総合研究所
- ・ （株）フジクラ
- ・ （株）マッキンヘルスケアワールドワイドジャパン
- ・ （株）三菱総合研究所
- ・ 三菱 UFJ リサーチ & コンサルティング（株）
- ・ みやまスマートエネルギー（株）

- ・ みやまパワーHD（株）
- ・ （株）メトリクスワークコンサルタンツ
- ・ 楽天（株）
- ・ ローカルエナジー（株）
- ・ ロバスト・ジャパン（株）



未来の
ために、
いま選ぼう。



Behavioral Sciences Team
for a better choice

THE
**BEHAVIORAL
SCIENCES
TEAM**