

FUJISAWA



Bringing energy to life.

Sustainable Smart Town Debrief – Urban System

10/2024

Recap: Fujisawa SST

- Joint project between Panasonic and Government
- 100-year vision for the new 100 year lifespan
- Holistic smart city for community and lifestyle with community energy system, autonomous delivery, rideshare EV cars and bikes, ICT health tracking, and security



Sources: [CNBC Interview with Panasonic Lead](#), [Fujisawa West](#)

Agenda: Governance

Privacy and Trust



Human-Centered
Governance



Social Welfare



Expanding Smart Cities
Nationwide

Data, Privacy and Trust

Failure of Sidewalk Labs

- Proposed “urban data trust”
 - Non-profit trust to manage urban spaces (and data collection use) similar to land conservation trust
 - Faced massive backlash on data privacy and was cancelled
 - Critique of current data collection being transactional vs Sidewalk Labs collects through daily existence

Alphabet's plans to track people in its 'smart city' ring alarm bells



By Matt McFarland, CNN Business

But it's not just about the data that will be collected about any given visitor on day one. It's the risks we don't even know about yet, the ones that may accrue over time as data collection broadens and gets more powerful. Innovations such as self-driving cars and drones will create new ways to collect data. Businesses, including Sidewalk Labs and others, will want even more data, and it's difficult to predict what all of the new, data-collecting innovations will be.

CNN Business News Article with Negative portrayal in media

Sources: CNN Business, Anna Artyushina, “Is civic data governance the key to democratic smart cities? The role of the urban data trust in Sidewalk Toronto”, *Telematics and Informatics*, Volume 55, 2020, 101456, ISSN 0736-5853, <https://doi.org/10.1016/j.tele.2020.101456>.

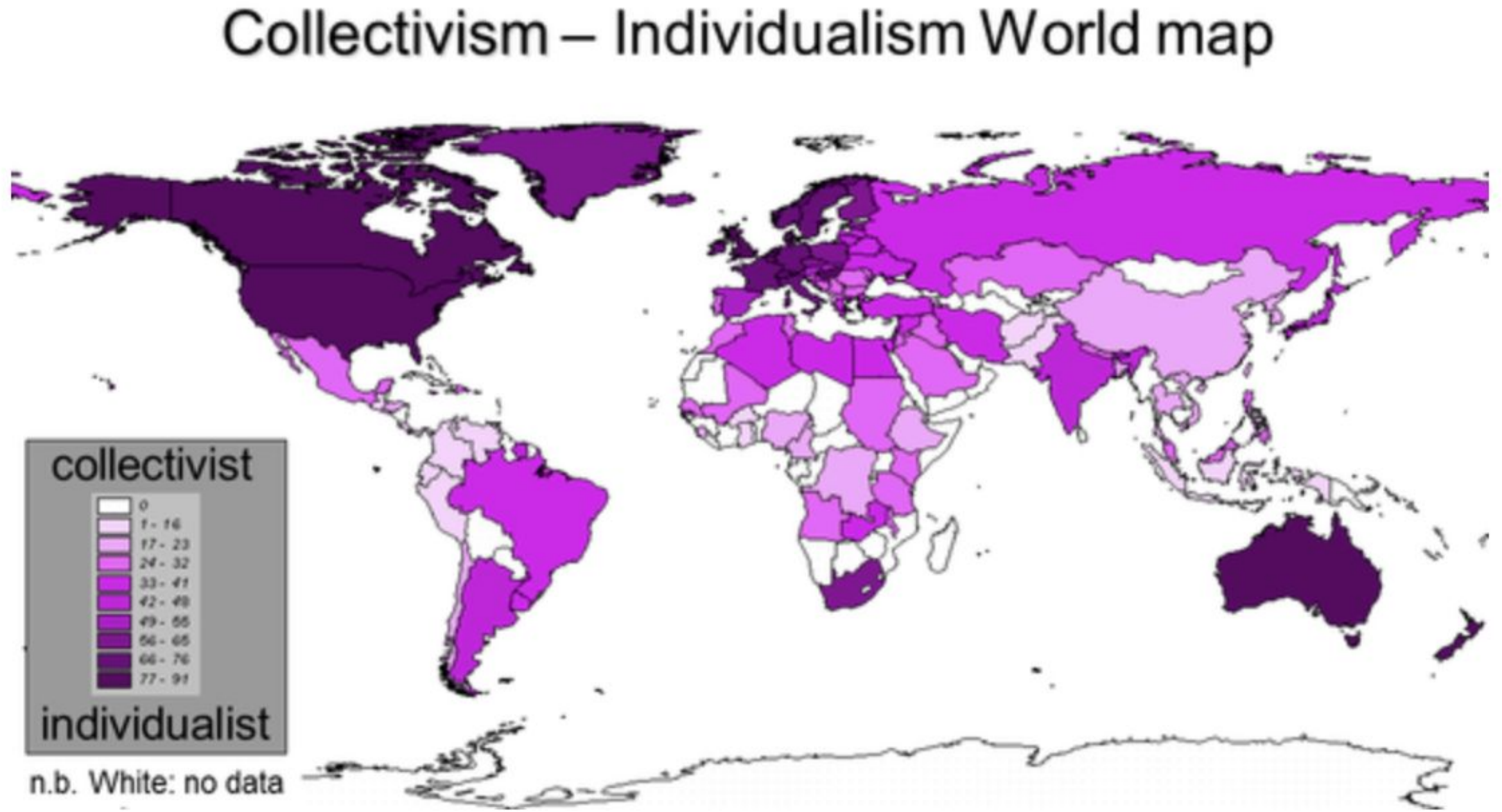
Evolving Concept of Privacy in Japan

In a paper from Meiji and Ehime University (2005): “Japanese society has not been very sensitive to the right to privacy [Hiramatsu, 1993]. There is **no Japanese word corresponding precisely to the English word privacy**. Many Japanese use the word *puraibashi*, an adopted word for privacy... [Murata, 2004].”

In a paper by Hiroshi Miyashita (2011): “Japanese people used to regard privacy as a symbol of selfishness or self-centredness. We have a long history in Japan of respecting and valuing community and the public. If **privacy is understood as a form of individualism**, we have not had such a strong individualistic culture in Japan, and therefore our **awareness of privacy** has traditionally been **relatively small**. “

6 Dimensional Model of National Culture by social psychologist Hofstede

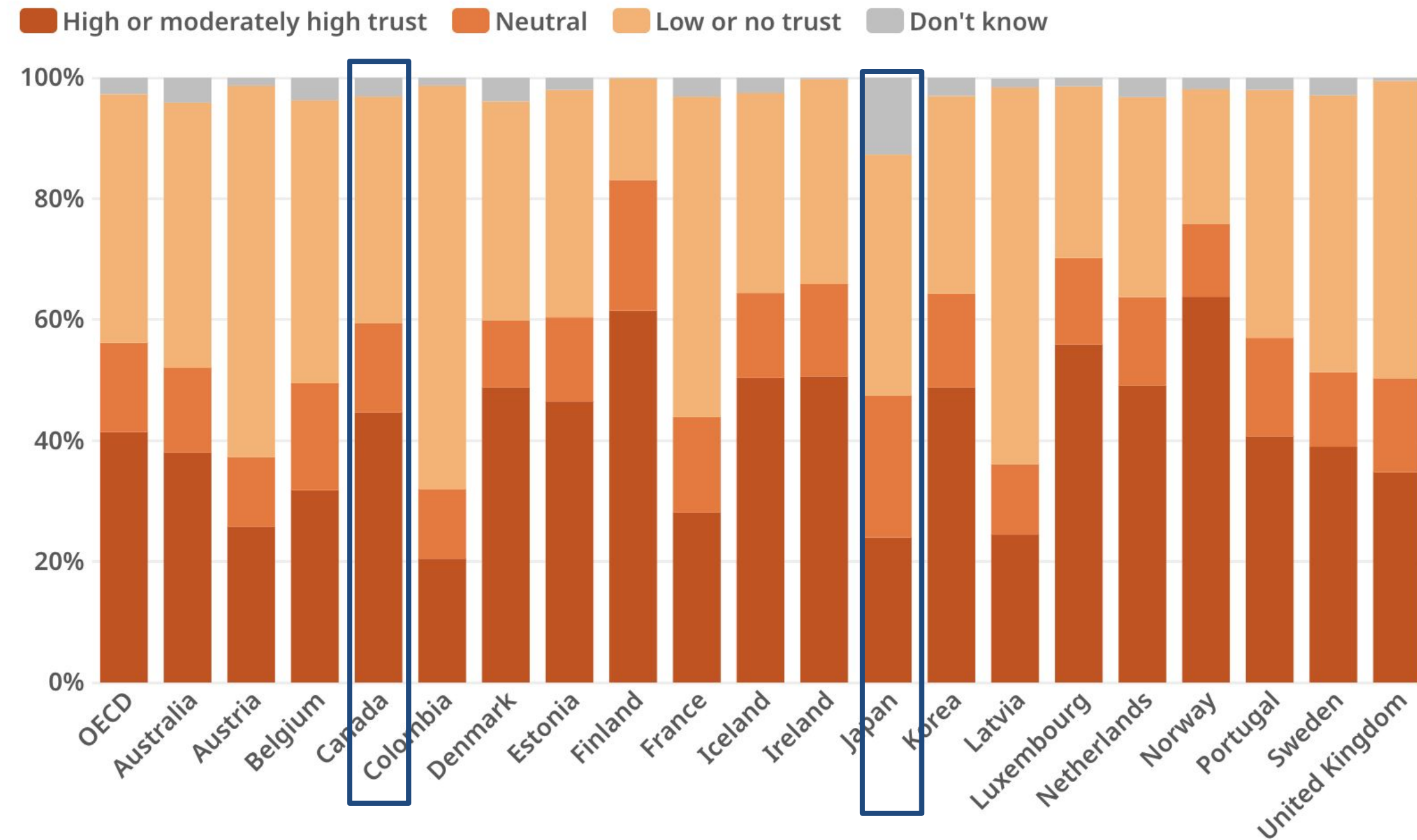
6 Dimensional Model of National Culture by social psychologist Hofstede



<https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/>

Government Trust

Trust in national government, 2021

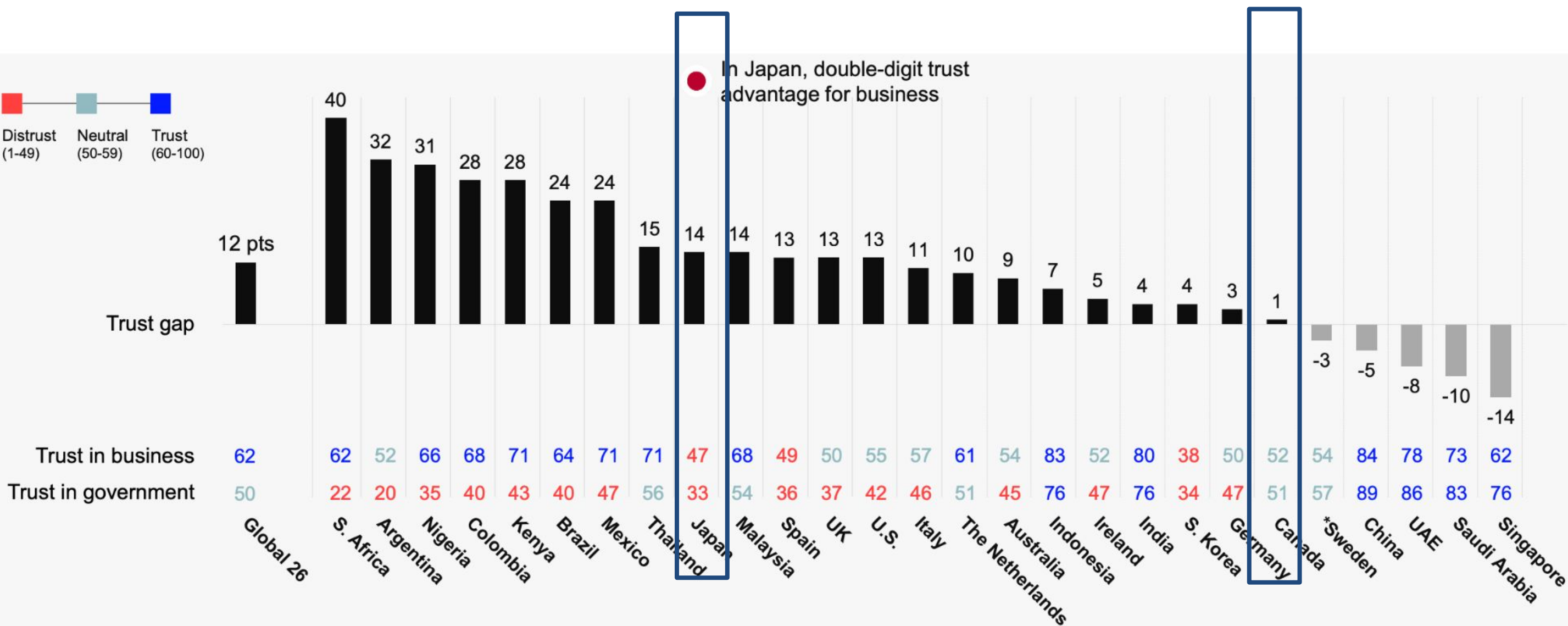


Surprisingly, unrelated to government trust

Trust in Business

Institutions Out of Balance: Government Far Less Trusted than Business

Percent trust, and the percentage-point difference between trust in business vs government



2023 Edelman Trust Barometer. TRU_INS. Below is a list of institutions. For each one, please indicate how much you trust that institution to do what is right. 9-point scale; top 4 box, trust. General population, 26-mkt avg. *Sweden is not included in the global average.

Due to a translation inconsistency, the France data was removed from this slide. For more details contact the Trust Barometer research team.

Far more trust in business in Japan than in Canada

Sources: Edelman Trust Barometer

What are the implications if Panasonic fails to innovate?

“Facilities that were initially considered state-of-the-art will most likely be obsolete after 30 years or 50 years. Generational changes will also take place with residents who live in the city with the passage of time ... there are few cases where **companies have been challenged to provide long-term solutions of 100 years.**”

The background is a solid blue color. There are two large, white, semi-circular or circular shapes. One is in the top right corner, and the other is in the bottom left corner. They appear to be part of a larger design or logo.

Human-Centered Governance

Human-Centered Governance

- Panasonic created the framework and hard infrastructure, residents keep the town running
- Panasonic prioritizes the people's voices when implementing infrastructure and policy changes within the city
- Provide new services based on residents' demands
 - Residents pushed for more surveillance cameras
 - Post-Covid increased community workspaces and storage batteries



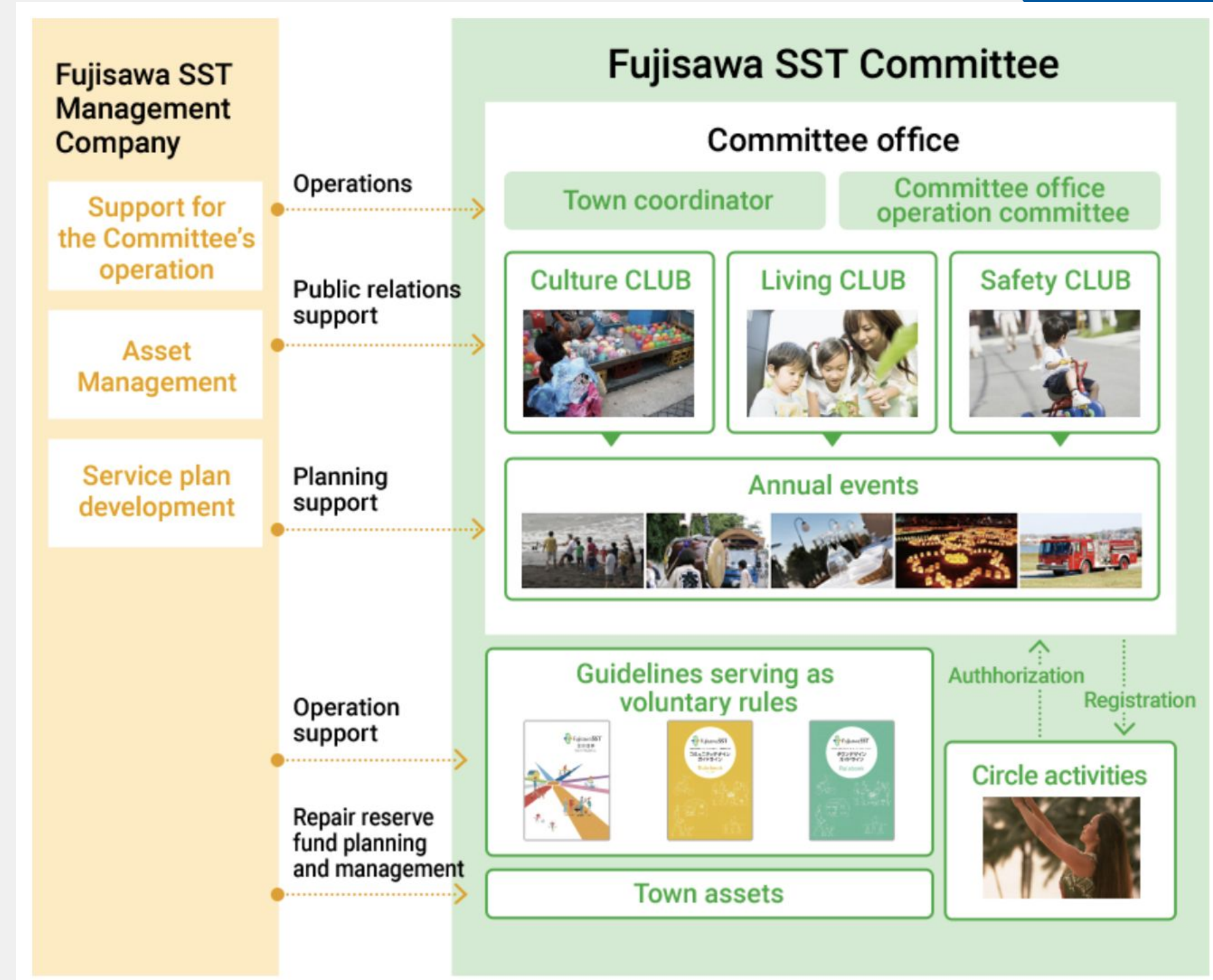
Government Setup and Flow

Fujisawa SST Management Company: Panasonic and partner companies

- incorporate wants of the residents

Fujisawa SST Committee: resident self-governing organization

- Develop the community by planning club events and festivals
- Advocate the community's needs to Management

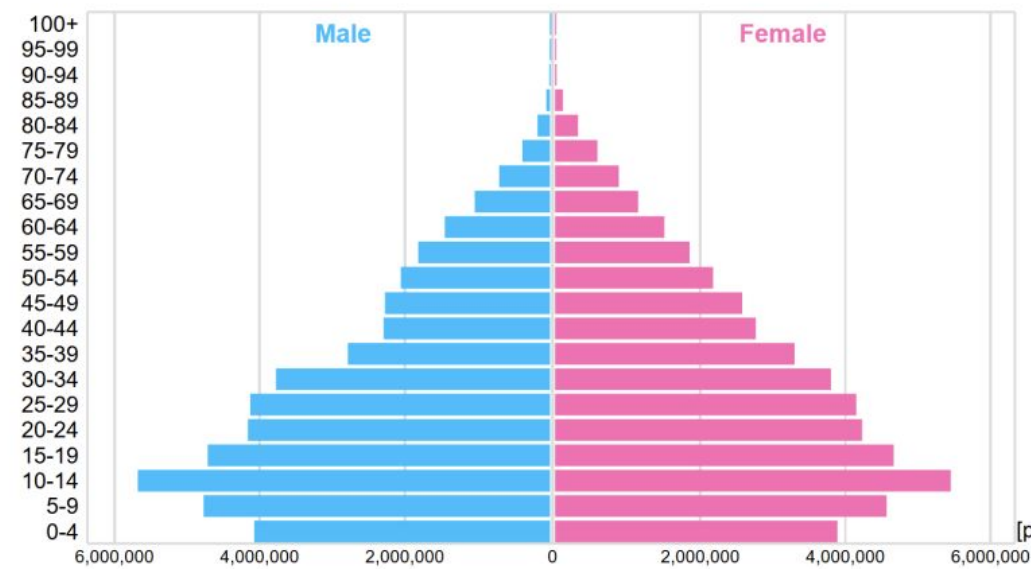


Social Welfare

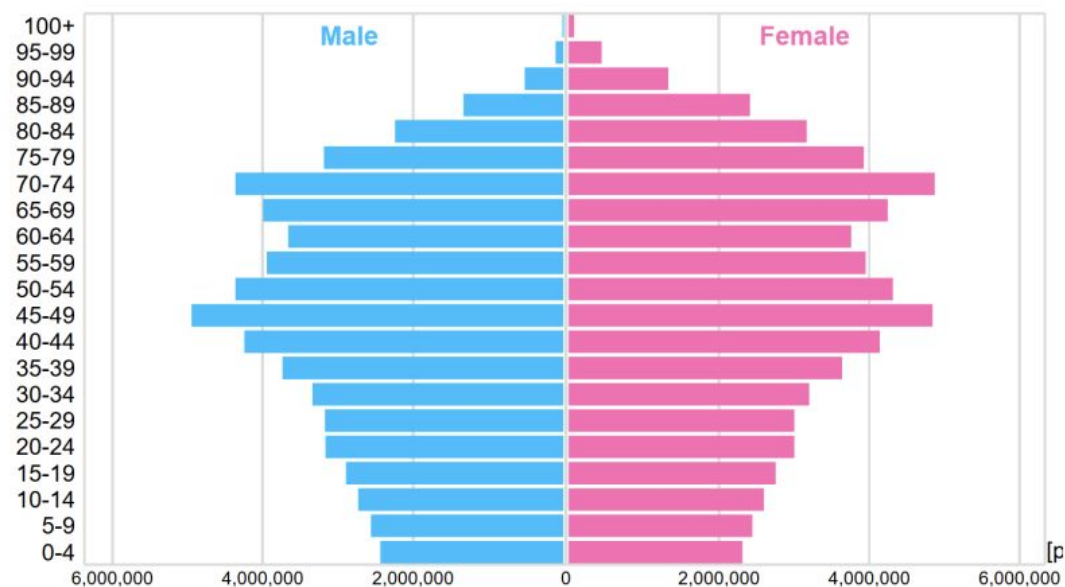
Japan Aging Society

Figure 1 – Japan's demographic pyramid in 1960, 2020 and 2045

1960



2020



Is "'super-aged' society is the oldest in the world: 28.7 % of the population are 65 or older

Birth rate of 1.2 and Tokyo now below birth rate of <1

Social Isolation in Old Age

Table 1.

Ratio of participants who had depressed mood and frailty

	2018	2020
Depressed mood	29%	38%
Frailty	10%	16%

[Open in a new tab](#)

Depressed mood and frailty among older people in Tokyo during the COVID-19 pandemic

- The ratio of elderly among residents living in cities is increasing with certainty
- Elderly who live by themselves and die solitary is becoming a serious social problem
 - Associated with income, education, gender, alzheimer's

Sources: [Depressed mood and frailty among older people in Tokyo during the COVID-19 pandemic](#)

Social – Wellness & Community

Goal: Making "Connections"

Prioritizing elderly healthcare

Residents who live in Fujisawa SST, from children to the elderly, will naturally connect with one another



Social

Community plazas

Wellness Squares

Medical facilities

Elderly Care Facilities

Nursery Centers and After-School Daycare Centers

Cram schools

shared spaces that facilitate social interaction

SOY LINK community platform

Community event schedules

residents information exchange

energy monitoring tools

— virtual hub for social and informational interaction.



Wellness SQUARE South Building



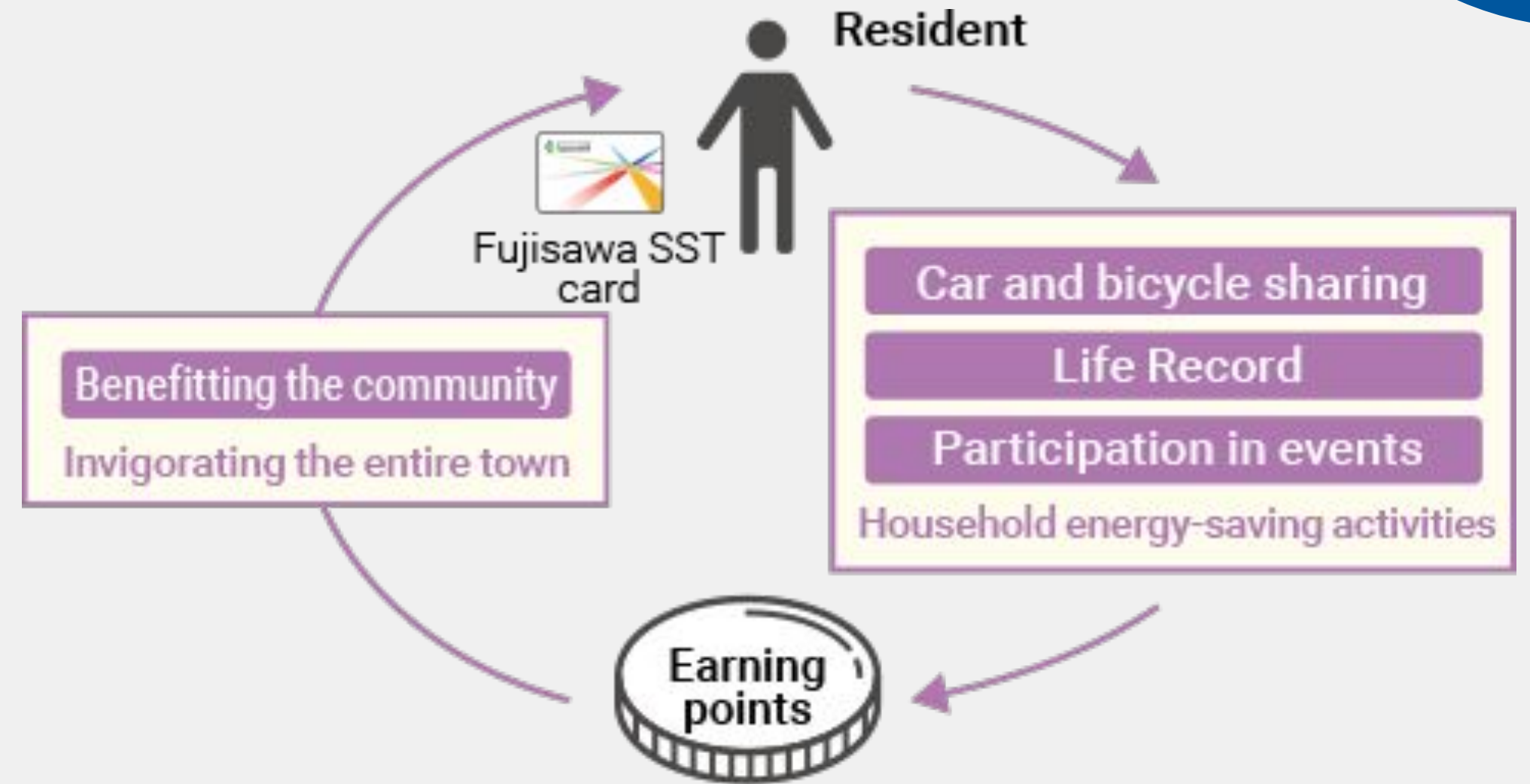
Wellness SQUARE North Building



South Building Community Hall

Social

The unique Fujisawa SST card and point program helps create a community, ensure the observance of guidelines and meet the targets of the entire town



Social – Network

Digital Network for Communication: The SOY LINK community platform connects residents with each other and to essential community services, acting as a virtual infrastructure for social and informational exchange. It also links energy systems for community-wide monitoring, integrating sustainability efforts into the social framework.

Physical Network of Community Spaces: Fujisawa designs plazas, parks, and wellness centers, encourage in-person interactions and gatherings. These spaces function as physical touchpoints for residents to connect, participate in events, and access shared resources.



Expanding SMART Cities

Nationwide Initiatives in Japan

Sustainability Ecosystem

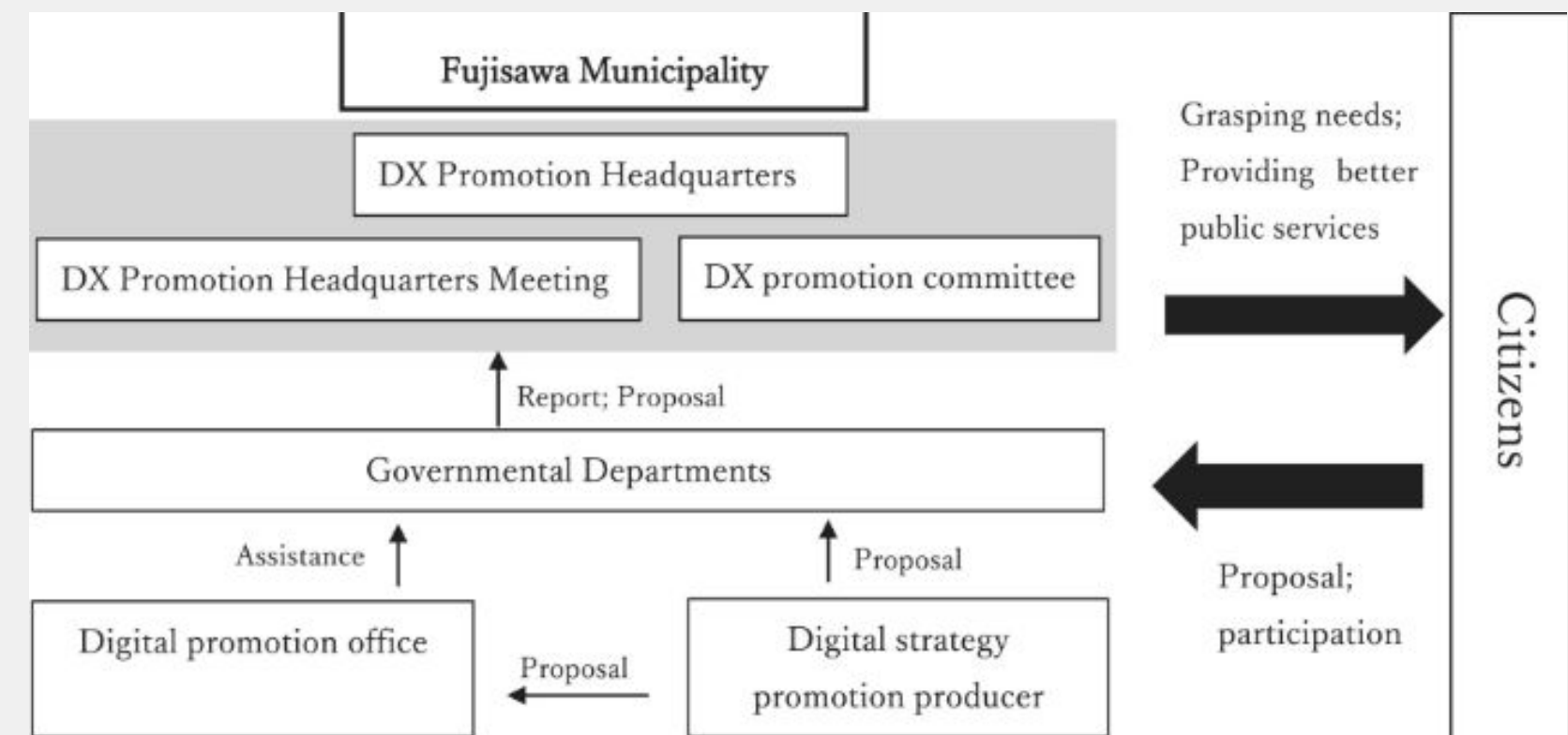
Primarily top-down initiatives:

Japan's smart city initiative (2000s) by Japan's Ministry of Economy, Trade, and Industry (METI)
The needs of disaster prevention.(2011)

Nationwide smart city initiative(2020) by Japan's Cabinet Office

'Smart City Guidebook' (2021) by Japan's Cabinet Office

A centralised online inquiries system for SST for citizens.



Sustainability Certification System

– Agents

- Adopted as a “Model Project for Promoting CO2 Reduction in Housing and Buildings” by the Ministry of Land, Infrastructure, Transport and Tourism.
- CASBEE’s highest S Rank certification for Urban Development.
- Certified as a “Business for Promoting Town Development in Harmony with the Environment” by Kanagawa Prefecture.
- Kanagawa Global Environment Award.
- Environment Minister’s Award for Global Warming Prevention Activity (Countermeasure Technology Introduction and Dissemination Category).
- Logistics Environmental Conservation Activities Award at the 18th Annual Logistics Environment Awards.
- Municipality Division Award at the Wellness Award of the Year.



Urbannet Kojimachi Building (CASBEE-RE Rank A Certified)

CASBEE Information desk

For further information, please kindly contact at;
casbee-info@ibec.or.jp

Link

[Japan Sustainable Building Database\(JSBD\)](#)

Comprehensive Assessment System for Built Environment Efficiency (CASBEE) is a method for evaluating and rating the environmental performance of buildings and the built environment. CASBEE was developed by a research committee established in 2001 through the collaboration of academia, industry and national and local governments, which established the Japan Sustainable Building Consortium (JSBC) under the auspice of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT).

CASBEE has been designed to both enhance the quality of people's lives and to reduce the life-cycle resource use and environmental loads associated with the built environment, from a single home to a whole city. Consequently, various CASBEE schemes are now deployed all over Japan and supported by national and local governments. This website provides overall information about CASBEE, associated with presentative green buildings with CASBEE evaluation.



New Economic Model

Financial Resource Flow

How it generate sufficient revenue to cover costs is unclear

As a public-private partnerships (PPPs) model, Fujisawa SST has been delegated to a mega-corporation, Panasonic

Using Panasonic's creative energy-saving and energy-storage technologies

Prioritising profit over citizen engagement, private technological companies may overlook citizens' needs and concerns



Applying for digital transformation and carbon neutrality tax incentives

Japan Tax & Legal Inbound Newsletter November 2021, No. 72

As part of its 2021 tax reform package, the Japanese government has introduced new tax incentives related to investments in digital transformation (DX) and carbon neutrality (CN) to help further two of its long term goals of promoting digitalization and environmental sustainability. The new incentives went into effect on 2 August 2021, which is the date the Industrial Competitiveness Enhancement Act (ICE Act) was revised. The revised ICE Act provides details on the application process for the DX and CN incentives, and companies may begin the process to claim the incentives (e.g., pre-consultation, submission of a business plan for approval, etc.).



Add to my Bookmarks

This newsletter discusses the application procedures and timelines for implementation for the DX and CN incentives under the revised ICE Act, so that companies may plan accordingly.

Fujisawa SST ⇔ Universities

Fujisawa government and community foster a social environment similar to Universities

Panasonic and Fujisawa City Government (University President's, Dean's, and Trustees) run Fujisawa SST

- oversee the governance of Fujisawa SST, set policies, provide resources and implement changes in the town

Fujisawa SST residents (College students) create the community through self-governance committee, clubs, and community events

- Culture Club, Living Club, Safety Club
- Buy-in to Panasonic controlling them, but are able to voice their demands

CITATIONS

CNN Business, Anna Artyushina, “Is civic data governance the key to democratic smart cities? The role of the urban data trust in Sidewalk Toronto”, Telematics and Informatics, Volume 55, 2020, 101456, ISSN 0736-5853, <https://doi.org/10.1016/j.tele.2020.101456>.

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