



Governance Innovation for the Digital Era

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1. Why we need Governance Innovation



Short answer is....

Because our society is undergoing the **fundamental shift** thanks to **digitalization**.



Shift to **Society5.0**

What is Society 5.0?

Society 5.0 is the fifth stage of society for the humankind following ①hunting society, ②agriculture society, ③industrial society and ④information society.



- Basic feature of 'Society 5.0' is the shift to <u>post-information</u> <u>society</u>.
- ➤ However, the shift to Society5.0 has much wider implication for our society and its governance structure.
 - Shift to Post- modernity
 - Shift to Post- homo sapiens (homo deus?)



We are undergoing combination of these "shifts".

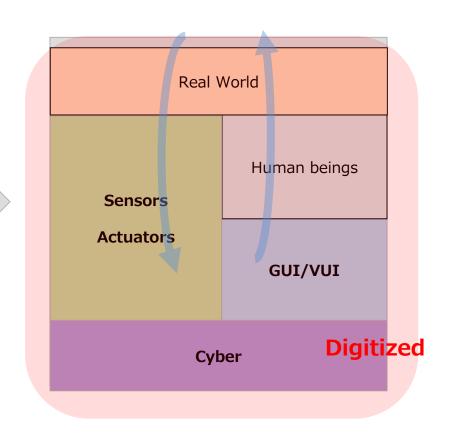
What is Post-information society?

Information Society	Society 5.0 = Post-information society
Digitalization within the internet	Digitalization <u>beyond</u> the internet
<u>Text</u> -based data	Data with diversified origin and format
Two separated worlds: IT/OT	One <u>integrated</u> world: cyber=physical
Hardware + software	Software-dominant
With human intervention	With/without human intervention

"Information society"

Real World Partially automated Human beings Man/machine interface (Screen, keyboard, mouse) (Machine/assembly/high class /natural language) Computer(Memory/kernel/CPU) Communication network/www (TCP/IP Model)

"Society 5.0"



Shift to the post-information society has much bigger impact...

Three premises behind our existing governance

- Real-time data is not available for monitoring and instantaneous improvement of the system.
- Regulations cannot be customized for individual cases.
- Only human-beings make decisions.



- Development of IoT, 5G technology and AI will nullify these premises.
- ➤ It poses us challenges in the areas of rule-making, monitoring and enforcement.
 - ⇒ Challenges to the modern system (Post-modernity)
 - ⇒ Possible emergence of superintelligence (Post-homo sapiens)

2. What is Governance Innovation?



Illustration of the future governance

Speed of innovation is accelerating

⇒ Law : **Goal=based** approach

AI/algorithm make decisions

- ⇒ Control/design of software through <u>architecture</u> (AIs don't read law.)
- ⇒ Combination of <u>"Law and Code"</u>
- ⇒ Rational approach on **liability**(Deferred Prosecution Agreement)

Big players possess huge amount of data and computing capacity

- ⇒ Comply and explain
- **⇒** Assurance on corporate cyber integrity
- ⇒ Empowerment of government by **Regtech/Suptech**
- **⇒** Competition policy

Globalized world

⇒ Cross-border interoperability across the countries

We can also formulate the issue in the following way....

Triad of Governance Innovation

- Governance for Innovation Governance that encourages innovation
- ➤ Governance of Innovation

 Governance that keeps balance between innovation and other values (privacy, democracy, fairness...)
- ➤ Governance by Innovation

 Governance that makes use of innovation



Data Free Flow with Trust

Increasing role of 'Architecture'

- Foundation for designing digitalized industrial/social systems (self-driving system, smart city...)
- > Bridge between Law and Code
- Tool for comply and explain

Architectural leadership

- Understanding the entire ecosystem (holistic approach)
- Taking the multi-layered(stack) approach
- Looking at the object as complex/multi-faceted system
- Going **between** the concept and the trifles
- Providing the 'roughly correct' view

We are collaborating with OECD, WEF and many other parties.

GOVERNANCE INNOVATION

Redesigning Law and Architecture in the Age of Society 5.0

