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# Japan's Approach to AI Regulation

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Prof. Hiroki Habuka

Center for Interdisciplinary Studies of Law and Policy
Kyoto University Graduate School of Law

# Japan's Basic Approach

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## Background

(i) Facing a severe shortage of workers

(ii) No strong reason to regulate AI

(iii) Culturally friendly to AI

## Strategies

- Optimize the advantages of AI while mitigating its risks to a level deemed acceptable by society.
- Sector-specific regulations
- General soft-law guidelines
- Agile and multi-stakeholder approach
- Contribute to international rule-making

Members of the European Parliament visited Kyoto University to discuss AI regulation (May2023)

# Regulation on AI



- **No general regulation** that constrains the use of AI
- **Digital Platform Transparency Act** requires large online digital platforms to **disclosure of key factors determining their search rankings**.
- The **Financial Instruments and Exchange Act** requires **algorithmic high-speed trading businesses** to **register** with the government, as well as to establish a **risk management system** and **maintain transaction records**
- **Personal Information Protection Act** is also relevant for both development and input phases.

# Regulation for AI

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## By Sector

- **Autonomous Driving**: The revised Road Traffic Act and Road Transport Vehicle Act allow **Level 4 automated driving**.
- **Finance**: The Installment Sales Act allows credit card companies to **determine credit amounts using data and AI**.
- **Infrastructure**: The High-Pressure Gas Safety Act enables Super Certified Operators to **conduct safety inspections without interrupting operations** for up to eight years.
- **Legal**: AI-assisted contract services align with **Attorney Act**.
- **Healthcare**: Early approval systems for AI-based diagnostic software.

## In General

- The Digital *ad hoc* Commission (*Digital Rincho*) will revise approximately **10,000 regulations and ordinances on analog methods**, which include requirements for written documents, on-site inspections, periodic inspections, and full-time stationing.

# Copyright Act

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## Basics

- Objective data such as map data, machinery operation data, or people flow data are not considered copyrighted works.
- On the other hand, many training data for Large Language Models may be copyrighted.

## Amendment of Copyright Act in 2017

- It stipulates that using copyrighted works for AI training by automatically downloading or processing data without human enjoyment of the work's expression, does not generally constitute copyright infringement.
- Exceptions apply if it unfairly harms the copyright holder's interests. Also, copyright holders can prohibit such processing.
- This applies only to the AI training stage: i.e., whether the output of generative AI infringing copyright when it resembles existing works is a topic of current debate, including interpretations of what it means for AI to "rely" on existing works.

# Agile Governance of AI Systems

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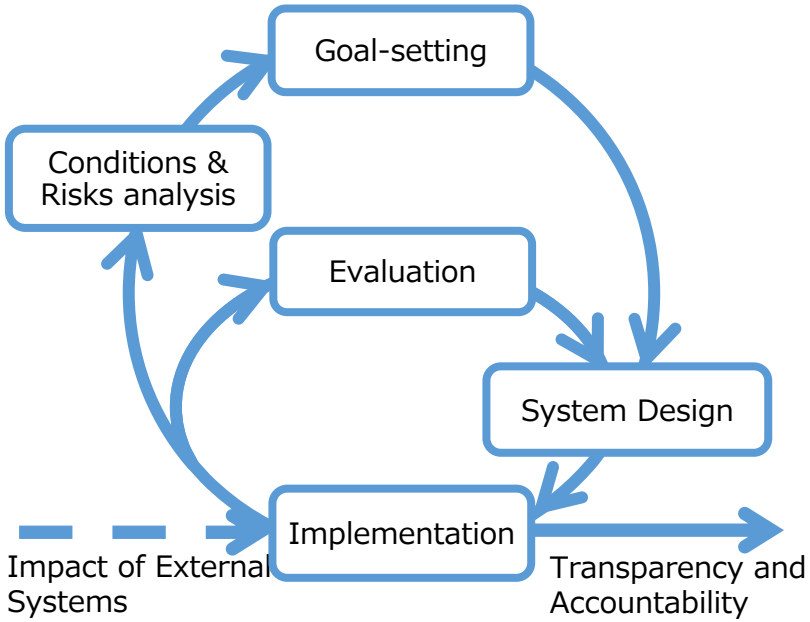
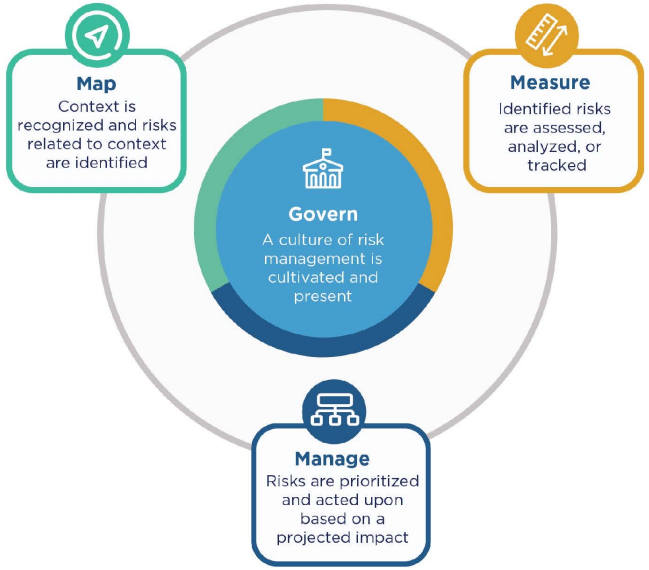
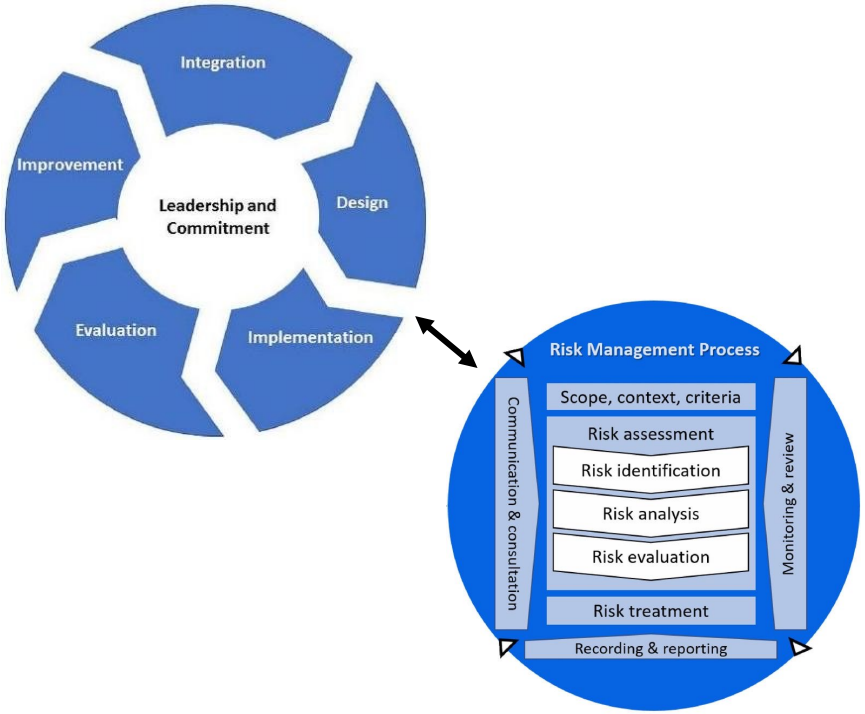



Japan “AI Governance Guidelines”




NIST AI Risk Management Framework




ISO 31000: 2018

# Mapping AI Governance

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## 1 AI Risks

**1. Technological Risks**

(1) Misjudgment
(2) Bias
(3) Hallucinations
(4) Safety
(5) Security

**2. Social Risks**

(1) Privacy
(2) Risks to Democracy
(3) Use for Harmful Purposes
(4) Economic Impact (Monopoly, Job Replacement)
(5) Impact on Property Rights (Intellectual Property, Data)
(6) Environmental Damage

**3. Nature of Risks**

(1) Difficulty in Prediction and Explanation
(2) Numerous Stakeholders
(3) Speed of Innovation and Proliferation
(4) Difficulty in Assessing Trustworthiness
(5) Raising Ethical Issues
(6) Globalization
(7) Unknown Impacts of General-Purpose AI

## 2 Fundamental Goals of Governance

・Human Rights ・Democracy ・Rule of law
・Economic Development ・Sustainability

## 3 AI Principles

| | | | | | |
|---|---|---|---|---|---|
| Safety | Security | Privacy | Fairness | Transparency | Account ability |
| Validity | | | | | |

## 4 Governance of AI Systems


## 5 Governance of AI Society

| | | | | | |
|---|---|---|---|---|---|
| Regulation | Standards/ Guidance | Property Rights | Sanction/ Liability | Remedy | Global Co-operation |
| Agile/Multi-stakeholder/Distributed Processes | | | | | |

# Key Questions

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## 1. AI risks

(1) What is the “AI” we are talking about?
(2) What are the differences between (i) AI and traditional systems, (ii) normal AI and generative AI, and (iii) AI and humans?
(3) How to categorize the AI risks?

## 2. Goals and principles

(1) What are the goals and principles at stake?
(2) What are the relevant “AI principles” for the said “fundamental values”?

## 3. Risk management by AI Actors

(1) What should the risk management process look like?
(2) What consideration is necessary, especially for AI systems?
(3) How to manage complex value chain risks?

## 4. Governance of AI society

(1) What governance measures are available? [Regulation/market/norms/architecture]
(2) What are the pros/cons of each measure?
(3) How to design regulation? How to design sanction/liability mechanisms?
(4) What kind of tools will be helpful? Who should develop them?

## 5. Global cooperation

(1) Yes, it is important, but of what? How? Who?