

TENTATIVE SUMMARY OF AI ISSUES

※This summary was compiled by the members of the AI Strategic Council based on the recent rapid changes in technology and the Hiroshima AI Process.

Introduction

○Potential of generative AI

- The emergence of generative AI, like the invention of the internal combustion engine or the ICT revolution, may be an epoch-making event in history that will broadly improve the quality of life. It is also expected to resolve various issues, such as improving productivity and information access.

○Affinity between generative AI and Japan

- Japan has a high degree of affinity with generative AI and has great opportunities, because of (i) high level of research and technology, (ii) positive images of robots and AI, (iii) a sharp decline in the working population, (iv) a strong need for digitalization, and (v) sensitivity and creativity.

○Significance of considering strategies at this point of time

- With the emergence of AI, Japan is once again showing signs of growth, and now is the time for a bold strategy so as not to fall behind.
- Governments should address risks so that people feel secure in society and each player has predictability. In addition, necessary infrastructure should be provided so that companies and researchers can fully engage in their activities.

○Relationship with past policies and significance of the issues

- The government has formulated the "AI Strategy 2022" and the

“Social Principles of Human-Centric AI.” While maintaining the base of strategies and principles of the past, the members of the AI Strategic Council, as experts, organized the issues and directions centering on generative AI, in light of rapid technological change and the vision and goal agreed upon at the G7 Hiroshima Summit (“trustworthy AI, in line with our shared democratic values”).

Basic Concept

○Exercise a leading role in establishing international rules

- AI has no borders, and international common understanding, rulemaking, and interoperability are important. Japan should lead the discussion through the “Hiroshima AI Process” etc.

○Response to risks and use

- To promote the development, provision, and use of generative AI, appropriate responses should be made to the concerns and risks of generative AI. There needs to be “guardrails” in place, so to speak.

○Prompt and flexible response involving diverse stakeholders

- The government needs to provide a fast and agile response involving multi-stakeholders while also taking into account the Hiroshima AI process and other study timelines.

Response to risks

○Basic policy on risk responses

- First, AI developers, providers, users and others assess the risks by themselves and fulfill the governance functions.
- As necessary, consider and implement a risk response framework with various stakeholders including the government.
- Among the risks that are already beginning to surface, those that can be addressed based on existing the legal systems,

and guidelines should be addressed immediately, such as by making them known to the public.

- If there is a possibility that the existing legal system, etc. may not be able to handle the situation, a response should be considered with reference to studies in other countries.
- We will work to identify risks that may arise in the future.

○Transparency and reliability

- AI developers and providers are required to proactively disclose information in accordance with current laws and guidelines.
- Government should also consider directly encouraging transparency and reliability with key AI developers and providers.
- In light of the spread of generative AI, it is necessary to consider necessary revisions, etc., regarding existing guidelines. On the occasion, third-party certification and auditing systems should also be used as references, in coordination with studies conducted in other countries.
- It is also desirable to encourage R&D and the dissemination of technologies to reduce the risks that have emerged.

○Specific examples of concerned risks and responses

- Risk of leakage of confidential information and improper use of personal information, and privacy rights
- Risk of sophistication and facilitation of crimes
- Risk of social instability and confusion due to disinformation, etc.
- Risk of more sophisticated cyber attacks
- Handling of generative AI for education
- Risk of copyright infringement
- Risk of increased unemployment due to AI

Use of AI

- Generative AI has the potential to accelerate digitalization and contribute not only to improving the productivity of our country as a whole but also to solving various social issues.
- To accelerate the use of AI, it is necessary to advance the construction of data collaboration platforms for medical care, nursing care, administration, education, finance, manufacturing, etc., the materialization of the DFFT concept, human resource development, and the development of business environments for startups.
- It is important for the government agencies to work together and take the initiative to pursue the availability of generative AI, while taking into consideration the risk of leakage of confidential information.
- It is important to acquire skills and literacy so that a wide range of generations can enjoy the benefits of generative AI.

AI development capability

- It is important to foster basic research and development capabilities for generative AI in Japan. It is most important for the government to develop computing resources and data, which are the infrastructure for AI development.
- Procurement of power to utilize computing resources is an issue. It is necessary to consider measures for effective use of electricity, including the utilization of local data centers.
- The development and expansion of data, mainly in Japanese, that can be used for development should be promoted.
- In addition, the development of generative AI itself is expected to be unconventional development promotion measures that respect market principles to the maximum extent possible and fully utilize the vitality of the private sector. It is

also hoped that Japan will establish a research environment that attracts top scientists from around the world.

Other

- According to the necessity for information management, security-related issues will be discussed by specialized divisions.
- It is also necessary to keep in mind the appropriate use of conventional and generative AI according to each situation.
- The government needs to formulate and promote policies in cooperation with each ministry, centered on the AI Strategy Council and the AI Strategy Team.
- The AI Strategy Council will also contribute to the "Hiroshima AI Process."
- It is important for the government to hear the opinions of a wide range of people and business operators when implementing policies based on this summary.