

Principles guiding the ethical use of AI in Social Innovation Business

Hitachi, Ltd.
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It is the aim of Hitachi, Ltd. (hereinafter "Hitachi"), through the proper use of AI*1 in its Social Innovation Business, to further enhance social, environmental and economic values while contributing to the creation of a comfortable and sustainable society based on human dignity and higher quality of life (QoL) around the world.

To realize this, Hitachi will promote the ethical use of AI by integrating an understanding of ethics as it relates to science and technology drawn from research in brain science and other areas, and knowhow in AI technology based on over 50 years of achievements in IT (information technology), in the high quality OT (operational technology; control and operation) which Hitachi has worked to provide for more than a century. The use of AI at Hitachi will be based on these guiding principles which include standards of conduct to be respected in each of the three stages of planning, societal implementation and maintenance, as well as seven items to be addressed which commonly apply to all three stages.

Standards of conduct

- I. Development and use of AI will be planned for the realization of a sustainable society
It is important to ensure that the reason for using AI in services, solutions or products is appropriate from the planning stage, in order to suppress the inherent ethical risks in AI while generating new value. Hitachi will use AI to resolve issues in society, realize a comfortable, resilient and sustainable society and to improve the quality of life of people around the world.
- II. AI will be societally implemented with a human-centric perspective
To ensure that decisions made by AI respects the rights of individuals and contributes to the interest of society, it is important that AI is societally implemented in a responsible manner and ensure its harmonious co-existence with humans. Hitachi will societally implement AI from a human-centric perspective according to the principles of freedom, fairness and equity, and endeavor to verify that it functions as intended.
- III. AI will be maintained and managed to provide long-term value
It is important that the AI continues to consistently provide value over the long term after it is societally implemented. Hitachi will endeavor to maintain and manage the value provided by the AI in a way it is responsive to and acceptable to societal and environmental changes.

Items to be addressed

1. Safety
Hitachi will endeavor to realize and manage AI that protects human rights including health and lives, property, dignity, reliability and trust of users and related parties, by verifying that AI and the system or solution using the AI operates as with the intended quality. Further, Hitachi will at the same time endeavor to realize and operate AI that prevents the destruction or deterioration of the global environment and provides a safe life to people.

2. Privacy

Hitachi will endeavor to realize and manage AI that protects privacy by ensuring the proper handling of personal data used as input data for AI learning, evaluation, and operation as well as of the output data from AI.

3. Fairness, Equality, and Prevention of discrimination

Hitachi will endeavor to realize and manage AI that works for the interests of a diverse and inclusive group of stakeholders, while ensuring that it prevents discrimination or avoids bias based on factors such as race, gender identity or citizenship.

4. Proper and responsible development and use

Hitachi will endeavor to ensure the proper use of AI by pursuing development based on the potential risks in each specific use case so that it does not deviate from the purpose or operating conditions for which it was designed. Further, Hitachi will endeavor to ensure proper AI operation by informing users and operators of the use policy, conditions and so on. In addition, Hitachi will endeavor to ensure proper AI maintenance and management by continuing to check for any changes in the operating conditions, mindset of people in relation to the AI and its decision, and conditions in society.

5. Transparency, Explainability and Accountability

Hitachi will endeavor to ensure the transparency of the AI by validating and ensuring that the reasons behind the decision results produced are explainable. Hitachi will endeavor to be accountable for AI and its decision in response to the purpose and conditions of use of AI.

6. Security

Hitachi will endeavor to realize security-oriented AI and its operations including countermeasures at the system or operations level to prevent information leaks, data manipulation, system crashes and service interference.

7. Compliance

Hitachi will realize AI and its operations that comply with the applicable laws and regulations of the countries and regions in which the AI is to be used.

*1: Artificial intelligence (AI) is a processing module or a system that is constructed based on such processing module(s), that is capable of independently changing its output or processing method based on the data, information or knowledge learned.