

## NTT AI Charter



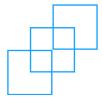




Artificial Intelligence (AI) has been rapidly pervading society through technological innovations such as deep learning, and it will soon be solving everyday problems of various kinds and scales without human awareness or understanding.

However, there have been fears that the use of AI could lead to unintended discrimination and unjustified restrictions or inducements to action. In addition, the long-term consequences and impact of AI behaviors are still uncertain, thus raising both expectations and anxiety. In order to answer these concerns and to embed AI more deeply and successfully into society, NTT, as well as its employees and engineers (hereafter 'we'), need basic principles in our approach to AI, which we should constantly be aware of and keep in mind as we get more involved in the use and R&D of AI.





### Enabling Sustainable Development

Al is a beneficial technology that enables holistic development of lives and society. We ensure that our active R&D and our fair social implementation of Al will continue to benefit people, society and the planet into the future, with full respect for the norms of various countries, regions and communities. Establishing Al technologies that enable people to pursue sustainable development fulfills our mission, from both a public and a corporate viewpoint.

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#### Human Autonomy

Al is not just a tool for people to solve social issues but is evolving into an entity that brings about changes in people's behavior, living environment, and even the consciousness of individuals and society. Human autonomy should always be respected when such Al is designed and adopted. We will continue to extend our knowledge of Al and our understanding of its characteristics so that we can design and apply Al appropriately in accordance with social norms such as human rights and diversity.



### Ensuring Fairness and Openness

The operational results of AI systems may contain bias. We will ensure that fairness is always maintained by understanding the characteristics of data and algorithms in AI so that users will not feel compelled to make unfair decisions. The mechanisms of AI will become more and more complicated. We will ensure openness by presenting AI's operational scope and limitations as well as by improving its transparency and explainability while always listening to public voices.





We will build AI systems to be secure throughout their operational lifetime and respond quickly in cases of error or abuse. Automated AI systems will bring more benefits but even more risks. We will ensure their safety by understanding the details of their operations and by preparing for anticipated risks.





We will ensure privacy in AI to improve its trustworthiness by observing the secrecy of communications and by establishing an appropriate flow of personal data for AI.



## Communication and Co-creation with Society

Al and its surrounding environments are changing dynamically. We will constantly share information and communicate with society. We need to collaborate with stakeholders in conducting R&D and creating new Al businesses. Through communication and co-creation with society, we are contributing to the development and spread of an Al that can be trusted by everyone.



NTT contributes to a sustainable society through the power of innovation. We are a leading global technology company providing services to consumers and business as a mobile operator, infrastructure, networks, applications, and consulting provider. Our offerings include digital business consulting, managed application services, workplace and cloud solutions, data center and edge computing, all supported by our deep global industry expertise. We are over \$97B in revenue and 330,000 employees, with \$3.6B in annual R&D investments. Our operations span across 80+ countries and regions, allowing us to serve clients in over 190 of them. We serve over 75 percent of Fortune Global 100 companies, thousands of other enterprise and government clients and millions of consumers.

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