Providing security and safety for NTT Group's businesses and supporting their growth

Intellectual Property Strategy

The NTT Intellectual Property Center takes appropriate action to protect the results of intellectual property investment for new value creation and the sustainability of the planet, promoting its use while respecting the intellectual property of others.

NTT Intellectual Property Center Activity Policy

NTT Group, which engages in R&D, from basic to applied, in a wide range of technological fields, has accumulated intellectual property investments (R&D investments) over the years as a telecommunications operator that are unparalleled around the globe.

The NTT Intellectual Property Center has established an Activity Policy to provide security and safety and support the growth of the NTT Group's businesses as they continue to take on the challenge of creating new value and contributing to the sustainability of the planet. It promotes the formulation of an intellectual property strategy and appropriate protections for the intellectual

property gained from our investments, all while respecting the intellectual property of others.

For example, in the transition from the conceptual phase of IOWN to the implementation phase, we launched NTT Innovative Devices Corporation and are facilitating further investments in R&D. However, this is not an endeavor that can be accomplished by the NTT Group alone. The NTT Intellectual Property Center will continue to contribute to the creation of new value by supporting collaborations with our partners around the globe through various activities aligned with our policy

Formulating and Advancing Our Intellectual Property Strategy

As NTT Group's core organization for managing intellectual property, we aim to secure competitive advantages by proactively and appropriately protecting and managing intellectual property rights (i.e., patents), or internal expertise, gained from the results of R&D, the source of our business activities.

NTT aims to share the benefits of its R&D by broadly licensing out its technologies that help advance industry and technologies can be standardized and used throughout society. When deploying the results of R&D in their

operations, each company in NTT Group respects the intellectual property rights of other companies.

With our intellectual property strategy as the basis of these activities, we take a three-pronged approach to formulating and advancing our business strategies and R&D strategy for the sake of creating new value and contributing to the sustainability of the planet: (1) develop strategic intellectual property rights, (2) manage risks, and (3) deploy the intellectual property we own.

- 1) Strengthening our competitiveness with strategic rights creation (build an intellectual property portfolio)
- · Build an intellectual property portfolio through the strategic development of intellectual property rights from fruits of R&D activities, based on technologies and anticipated business models
- 2) Risk management that protects our intellectual property rights and respects the rights of others
- When Group companies deploy the results of R&D in their operations, we examine the intellectual property rights of others inside and outside Japan up until the stage where R&D results are applied in order to avoid infringing on the rights of third parties
- Reduce business risk and comply with laws and regulations related to intellectual property rights, by sharing among Group companies information about intellectual property trends and their impact, such as revisions to systems around the world, cases of conflict and court
- 3) Develop business and partners through broad deployment of intellectual property rights
- Deploy intellectual property in business to help our customers and society, and to secure competitive advantages in business
- Proactively engage in activities to standardize intellectual property

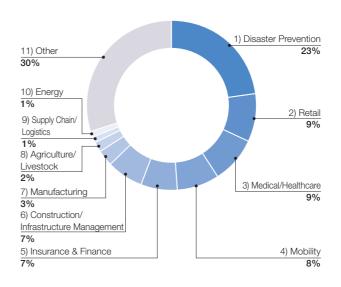


Intellectual Property Portfolio Related to Al Business

The results of R&D, which plays a major role in the creation of intellectual property for NTT Group, has translated into ownership of approximately 18,000 patents around the

In the NTT Group, we have long conducted R&D on Al technology, which is attracting significant public attention. This includes foundational technologies such as learning techniques, as well as applied inventions for a wide range of industries for which patents have also been obtained.

Percentage of NTT Group's Al Patent Applications by Business Area



Categories	Description
1) Disaster Prevention	Disaster prediction and forecasting, pre-disaster awareness through hazard maps, 3D mapping, XR remote real-time monitoring
2) Retail	Optimal staffing, store layout, resource allocation, estimations and simulations of purchase and execution trends, optimization of promotional activities in e-commerce and physical stores, demand forecasting based on purchase data
3) Medical/ Healthcare	Telemedicine, modeling & simulation of public health, optimal allocation of healthcare resources, data-driven extension of healthy lifespan
4) Mobility	Traffic flow simulation, congestion alleviation, traffic optimization, sensing around vehicles, autonomous drivir
5) Insurance & Finance	Credit, fraud detection, demand forecasting, stock price prediction, financing, credit rating
6) Construction/ Infrastructure Management	3D surveying, structural replication, detection or diagnosis of degradation, failure, abnormalities in buildings and infrastructure, remote monitoring in buildings and infrastructure, maintenance efficiency
7) Manufacturing	Monitoring of production facilities, maintenance, simulation-driven design, development, quality inspections
8) Agriculture/ Livestock	Smart farming, remote operation & automatic control of agricultural machinery and agricultural & livestock facilities, yield & quality prediction
9) Supply Chain/ Logistics	Logistics optimization, optimal dispatching and allocation of vehicles, demand and supply prediction, risk analysis
10) Energy	Stable operation of power generation facilities, energ demand and supply forecasting and optimization
11) Other	_

IPR*-DAY (initiative for raising interest in intellectual property across the Group)

The NTT Intellectual Property Center has been holding a cross-Group comprehensive event known as IPR-DAY since last fiscal year, with the aim of elevating the level of interest in intellectual property among Group employees and helping them integrate this knowledge into their daily work.

IPR-DAY 2022, conducted last November, saw the participation of 242 individuals from 55 Group companies. covering a diverse range of professions. During the event,

IPR-DAY 2022



lively discussions took place on timely topics provided not only by the NTT Intellectual Property Center, but also by intellectual property managers from various Group companies. Feedback from participants included comments saying that the content was overall refreshing and useful, leading to a significant rise in interest and understanding of intellectual property across the NTT Group.

* Intellectual Property Right

IPR-DAY 2022 Program

- Current Intellectual Property Trends from the Perspective of Industry Buzzwords
- Creating and Utilizing Patents that Contribute to
- Bridging Business and R&D Strategies through IP
- Intellectual Property Considerations in a Co-Creation Environment
- Intellectual Property Risk Management Focus Areas
- Protecting and Respecting Copyrighted Material
- The Metaverse and Intellectual Property

62 NIPPON TELEGRAPH AND TELEPHONE CORPORATION INTEGRATED REPORT 2023 63