Special feature

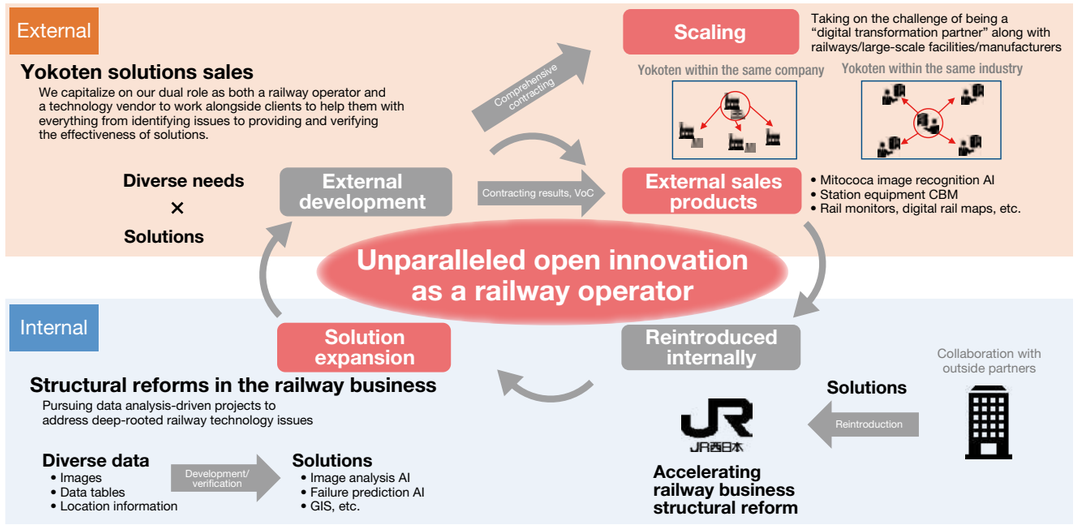
Addressing materiality through open innovation— In pursuit of unparalleled open innovation

In the JR-West Group, we are making a concerted effort, in collaboration with a variety of partners, to foster materiality-focused innovation that will allow us to evolve as a corporate group that creates new and lasting value for the future of society and the challenges it will face.

We are pursuing unparalleled open innovation as a railway operator through a two-pronged strategy. This involves an "inbound" approach of leveraging outstanding external technologies to address challenges, and an "outbound" approach of deploying our own technologies outside the company to create new value.

We are also undertaking data analysis-driven internal structural reforms of our business while challenging ourselves to create new business through JR West Labo, which serves as a testing ground for incorporating open innovation into our business operations.

A virtuous cycle model for creating both internal and external value



Leveraging digital technology in railway business structural reform

Strong-wind forecasting system for the Kosei Line

This system uses an AI model developed by JR-West to accurately predict strong winds along the Kosei Line based on high-resolution weather forecast data provided by Osaka Gas Co., Ltd.

This not only helps to ensure safety but, by reducing unnecessary detouring of express trains and suspension of local train services, also improves convenience.

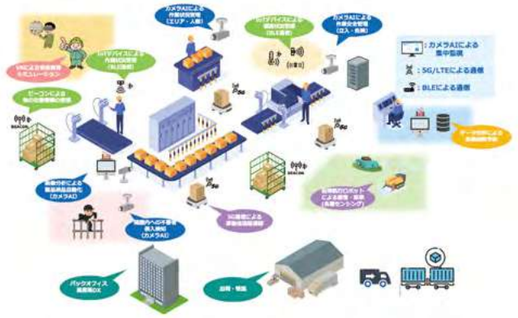
Digital rail maps

We have developed a web application that aggregates vast amounts of railway equipment information onto a map to allow for easy searching and viewing. In addition to improving maintenance work efficiency, this application also contributes to quicker response times for extraordinary circumstances, as well as communication of site-specific information and conditions. It is currently being introduced to other railway operators.

Strengthening outbound open innovation

We are bolstering our capabilities as a railway operator by leveraging the image recognition technology and data analysis skills we have cultivated in the course of our internal structural reforms and problem-solving efforts up to now. This will allow us to work alongside various business enterprises, including manufacturers and large-scale facility operators, to develop and deploy innovative solutions to the challenges they face.

Collaboration with manufacturers



● UACJ Corporation

UACJ is expanding deployment of work accident prevention initiatives, which rely on image recognition (human detection AI) technology developed in the railway industry, to factories across Japan. Wide-ranging collaboration, including those on digital transformation in adjacent fields such as quality control, is also being pursued.

Collaboration with large-scale facility operators

● One Bright Kobe Co., Ltd.

JR-West's solutions are a perfect match for the challenges of greater urban revitalization and marketing. As a data solutions partner, we are broadly contributing to the sustained development of the Kobe area.

Intellectual property strategy

1. Basic approach

In conjunction with our open innovation activities, we recognize the importance of building an intellectual property strategy that secures and maximizes the results of open innovation in the form of intellectual property. We therefore actively work to acquire intellectual property rights, including patents.

We are working to acquire intellectual property and visualize our intellectual property portfolio, with a focus on "defensive" intellectual property that contributes to the safe, stable continuous operation of railways, and "offensive" intellectual property that has high social applicability and the potential to create new value. We are also working to enhance the vitality of our intellectual property assets by providing intellectual property education to employees and collaborating with technology development management, while sorting out intellectual property that have not yet led to practical application. Through these efforts, we aim to build a strong intellectual property portfolio aligned with business strategy and that contributes to realizing our Long-Term Vision.

2. Number of intellectual property rights acquired and examples of acquired rights

The following is the status of our patents (inventions), utility models (devices), and designs (including pending applications). This includes seven intellectual property rights currently held or pending overseas.

■ Number of intellectual property rights acquired

Patents	Utility models	Designs	Total
300	3	19	329

(As of March 31, 2025)

■ Major IP

Patents	● Self-driven caravan BRT system ● Bridge deformation inspection system (BBMAPS) ● Ticket gate equipment failure prediction AI system ● Driving notification transmission system ● Twilight Express Mizukaze rolling stock and bathtub ● Shinkansen derailment prevention system, vehicle fall prevention system ● Platform screen doors (Osaka Station Umekita area) ● Rope-type platform gates ● LED signal flares
Utility models	● Wall foundation structure
Designs	● GranClass seat operation display ● Movable gates (station platform screen doors)