

IoT-Big Data Strategy Department (IB Strategy Department)

Mission

The mission of the IB Strategy Department is to closely watch changes in the business environment resulting from rapid advances in digital technology, promote utilization of leading-edge digital technologies such as IoT and AI in all of the Marubeni Group's business domains, and drive optimization of existing business and creation of new business models.

The Marubeni Group is now implementing differentiation strategies to increase business uniqueness and bolster strengths in each business domain. There are various approaches to differentiation, and the objective of the IB Strategy Department is to enhance the value of the Marubeni Group's existing businesses and peripheral businesses through an approach involving utilization of digital technologies.

Functions and Activities

The IB Strategy Department is making full use of networks within and beyond the Marubeni Group to pursue enhancement of the Group's business value by combining a vertical approach (product axis) and a horizontal approach (group-level axis).

The vertical approach involves formulating and promoting digital strategies, providing business seeds that make use of leading-edge digital technologies, and assisting with proof of concept (PoC) of business ideas on behalf of Marubeni's divisions and corporate staff departments.

The horizontal approach in the other hand involves taking up project themes that are important from a groupwide perspective and considering their utilization within the Marubeni Group. The department is currently addressing a number of such themes, including predictive maintenance, optimal operation, operational efficiency improvement, and digital marketing, and is gradually adding new themes.

The IB Strategy Department's Principal Activities

●Formulation and promotion of digital strategy

Formulation and promotion of utilized digital strategy aligned with groupwide strategies and strategic vectors

●Incubation

Assistance in embodying bottom-up ideas that boost new value creation

●Fusion of digital technologies and existing businesses

Maximization of value dormant in the Marubeni Group and response to changes that transcend the product axis



Takayuki Furuya

General Manager,
IoT Big Data Strategy Department

Eight Months after the Launch — Feeling the Passion in Workplaces

Our initiatives to enhance business value from the perspective of digital technologies involve rethinking from the ground up how to increase earnings. Many of our businesses have made existing resources, networks that span the globe, and information gathering capabilities as their source of competitiveness. With differentiation strategies, however, we are required to use ideas to earn profits more efficiently. What's important is not digital technologies themselves, but how we create new value by skillfully using them as tools. Eight months after the launch of the IB Strategy Department, we have received many business ideas involving the use of digital technology and feel the power of ideas and passion in Group workplaces.

Use Case

1



Video Study

Searching for a “Success Formula” Using Video Analysis — Start of a Demonstration Experiment at MERRELL Stores —

Visualizing Customer Approaches with Video and POS Data, with a View to Future Utilization of AI

Since the efficiency of retail store operation depends largely on the experience of store employees, Marubeni started a project in response to workplaces’ desire to quantify the effectiveness of various selling methods and devise a “success formula”.

In partnership with Konica Minolta, Inc., the department is conducting a demonstration experiment that involves installing cameras in retail stores operated by MERRELL, a U.S. outdoor clothing and footwear company, analyzing data on the number of customers in stores, their movements, and their purchase behavior, identifying correlations among the data, and attempting to link the findings to examination and visualization of marketing measures.

Marubeni plans to visualize the impact of layout changes, sales promotions, and other measures and analyze factors such as the correlation between customer service or trying on products and purchasing of merchandise. This will also be beneficial in preparation

of demand forecasts that combine weather and other external data in discovering key factors that contribute to purchasing.

Utilization of AI is expected to further expand the scope of application in the future to include store improvement proposals, trend study through analysis of store visitor images, sophisticated forecasting of customer behavior, and other ideas, limited only by the imagination.

Camera installed in stores



Stores carrying out demonstration experiment

- 1 MERRELL Futakotamagawa store
- 2 MERRELL Kichijoji store



Use Case

2

Image Diagnosis System

Contributing to the Development of Medical Technology in Japan — A Business Partnership with a Leader in AI Diagnostic Imaging in the U.S.—

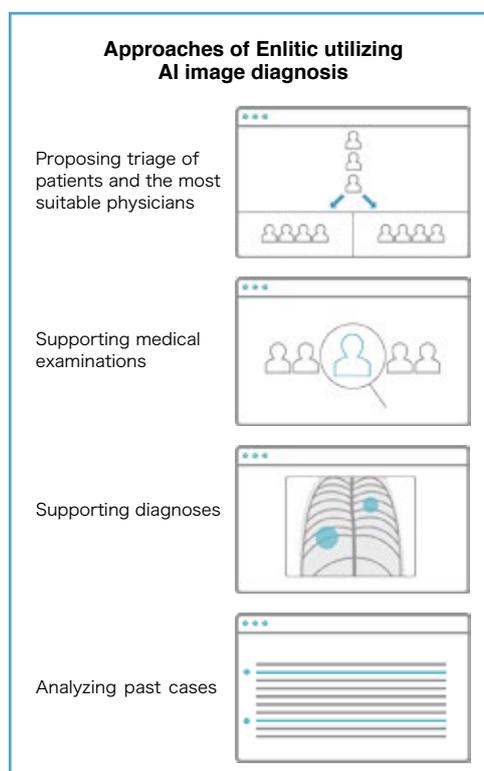
Utilizing AI Technology to Support Image Diagnosis by Physicians

Marubeni has concluded an exclusive business partnership agreement with U.S.-based Enlitic, Inc. to support business development in the Japanese market for an image diagnosis system developed by Enlitic that uses AI technology.

While Japan is said to be the world leader in the number of CT and MRI systems per capita, there is a shortage of radiologists who perform image diagnosis, while image diagnosis using AI has not yet been commercially applied. Enlitic's image diagnosis system is equipped with deep learning artificial intelligence that examines more than 200 million images, is capable of automatic

and early discrimination of malignancies and other diseases from chest X-ray and CT data, and can support image diagnosis by physicians. The system is expected to not only contribute to the early detection of diseases as an excellent diagnostic aid, but also to have great social significance as a means of reducing medical costs.

Under this business partnership, Marubeni will promote business development of the system by joining forces with partners that sell medical equipment to proceed with verification in preparing for commercialization in Japan and by assisting with the regulatory approval process.



The Opportunity for Digital Technologies in the Marubeni Group

The Marubeni Group began digital technology utilization initiatives on a full-scale basis in the previous fiscal year. However, while there was enthusiasm in the workplace for new value creation through utilization of AI and other technologies, there were times when employees didn't clearly know what to do nor could they find the appropriate data. In these circumstances, in supporting various programs, the IB Strategy Department serves as a guide in defining issues and goals and properly proceeding on the basis of hypotheses. At the same time, since nothing is created when the generation of ideas slows down, the department intends to place importance on motivation and enthusiasm at workplaces and engage in initiatives that balance these factors.

There are two scenarios for AI utilization in the Marubeni Group in the future. One is to utilize AI to increase internal productivity. The other is to leverage our advantage of doing business around the world to create a brand new form of businesses utilizing AI and other new technologies. This can be considered the mission of the Marubeni Group. Since the functions of the IB Strategy Department will become increasingly necessary, the department will collaborate with internal and external organizations and continue striving to become a dependable partner in the Group.