February 17, 2021
Kawasaki Kisen Kaisha, Ltd

Adopting full scale of AI data analysis technology for environmental load reduction

～ Confirmed high accuracy on ship performance evaluation～

Kawasaki Kisen Kaisha, Ltd. ("K" LINE) has decided to adopt Artificial Intelligence (AI) developed by Bearing, Inc. (Note 1) for the ship ICT system "Kawasaki Integrated Maritime Solutions" (Note 2) on 300+ ships under our operation for the purpose of improving performance evaluation accuracy. By combining the high-quality data collection technology that we have made over 20 years with the world's most advanced AI technology of Bearing, Inc., we will realize higher accuracy of performance evaluation and reduce environmental load by economical and safe navigation.

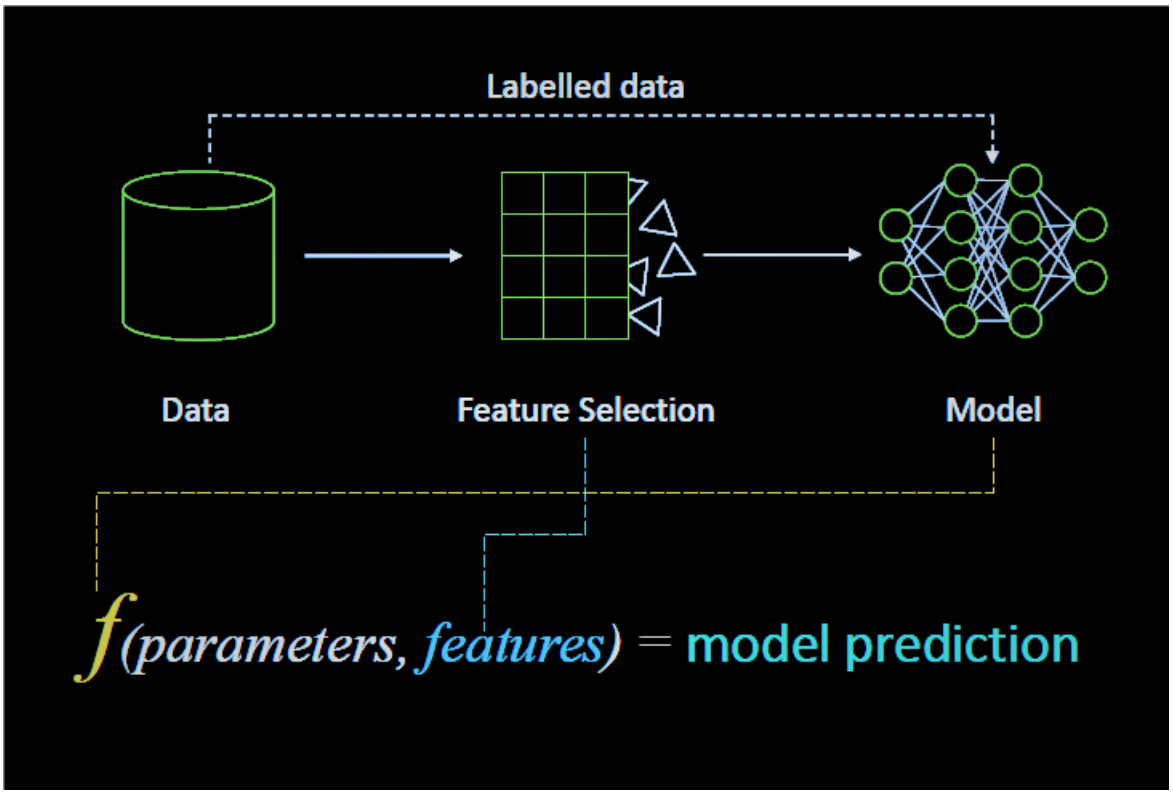
Accurate evaluation of vessel operational performance in the actual sea area is highly important for enhancing economical operations and environmental friendly measures. With existing IoT technologies, certain level of operational performance evaluation with a certain accuracy using big data obtained in real time is still possible, but further improvement in accuracy is necessary in the shipping, shipbuilding, and marine equipment industries.

For many years, we have focused on "collection of high-quality data" and "advanced data analysis technology" and have made various efforts to improve the accuracy of performance evaluation technology. As a part of this, from the end of 2019, we have conducted a demonstration experiment to verify and evaluate data analysis technology by AI developed by Bearing, Inc.. As a result, we have confirmed that we could see the result with significantly higher accuracy compared with existing performance evaluation technology.

According to Bearing, Inc. other reason of successful result by the AI adoption is high quality operational data which "K" LINE has been piling up as our long-standing efforts, which makes Bearing, Inc's AI analysis more accurate, and it can be said that our long-standing efforts have paid off.

In the future, by utilizing Bearing, Inc.'s technology and high quality operational data, we will not only accurately grasp the operational performance of each vessel in the actual sea area and use it for operational management, but also accurately evaluate various fuel reduction efforts in both software and hardware, improve operational performance and advance ship management.

"K" LINE pursues safety, environment and quality as priority initiatives for our value creation in the management plan and accelerate those issues by DX utilizing big data and AI technology.



Data Analyzing by AI

(Note 1) Bearing, Inc.
Bearing, Inc is one of the portfolio companies backed by the AI Fund and MITSUI & CO., LTD. The AI Fund was founded by Dr. Andrew Ng who is a leading pioneer for AI in the world. Bearing, Inc has access to the latest AI technologies developed in the world's most advanced AI research labs and the best-known machine learning practices used in the industry.
https://www.bearing.ai/

(Note 2) Kawasaki Integrated Maritime Solutions
Announcement on June 28, 2016
Joint development project of “K-IMS”; Integrated vessel operation and performance management system
https://www.kline.co.jp/en/news/other/other3295047094663452046.html