

Financial Systems

1 Risk Simulator for Insurance that Generates New Value through Integration of IoT and Insurance

The risk simulator for insurance provides tools that assist with the development of new insurance products and services that use digital technology (a tool that uses analysis of medical big data to predict hospitalization risk is already available).

To this, Hitachi has now added a new simulation feature for fault prediction that converts Internet of Things (IoT) data on production machinery and other facilities and equipment into a financial “risk value” that is easy for insurance companies to interpret. This new tool derives the incidence of faults from information on past fault causes (cumulative damage) up to the present day, and also quantitatively simulates the financial risks that faults pose to the business based on future fault incidence.

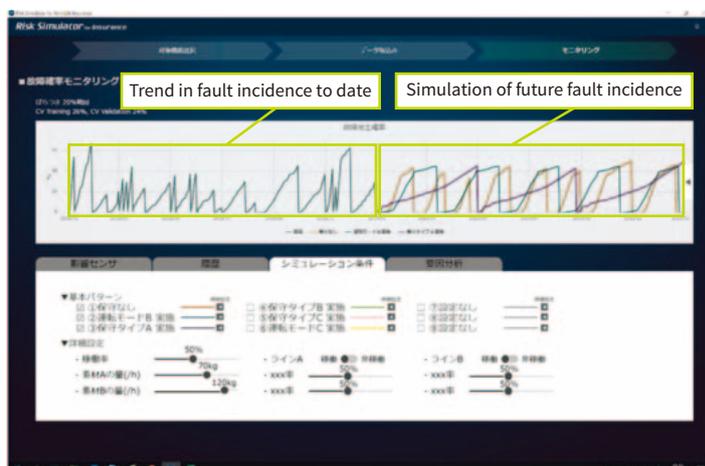
Hitachi is also currently engaging in collaborative creation with Tokio Marine & Nichido Fire Insurance Co., Ltd. to expand tool functions. As a solution that brings the IoT together with insurance, the risk simulator for insurance is intended to facilitate progress in the digital transformation of industry.

2 Scoring Service for Loan Screening that Uses AI to Predict the Occurrence of Rare Events

In collaborative creation with SBI Sumishin Net Bank, Ltd., Hitachi established Dayta Consulting Co., Ltd. in May 2019 as a joint venture for using artificial intelligence (AI) to provide loan screening services.

Dayta Consulting supports initiatives such as regional revitalization and business efficiency improvement by using data handling techniques from SBI Sumishin Net Bank in tandem with “Hitachi AI Technology/Prediction of Rare Case,” a Hitachi AI for predicting the occurrence of rare events, to provide loan screening services to regional banks and other financial institutions. The service itself was launched in October 2019 and provides AI-based loan screening service for housing loans.

The screening of personal loan applicants by financial institutions requires a high level of expertise, involving prediction of the risk of future default based on an assessment of the applicant’s income and assets and with reference to other factors such as the state of the wider economy. Dayta Consulting, SBI Sumishin Net Bank, and Hitachi have jointly developed an AI-based scoring model that estimates the probability of default on housing loans.

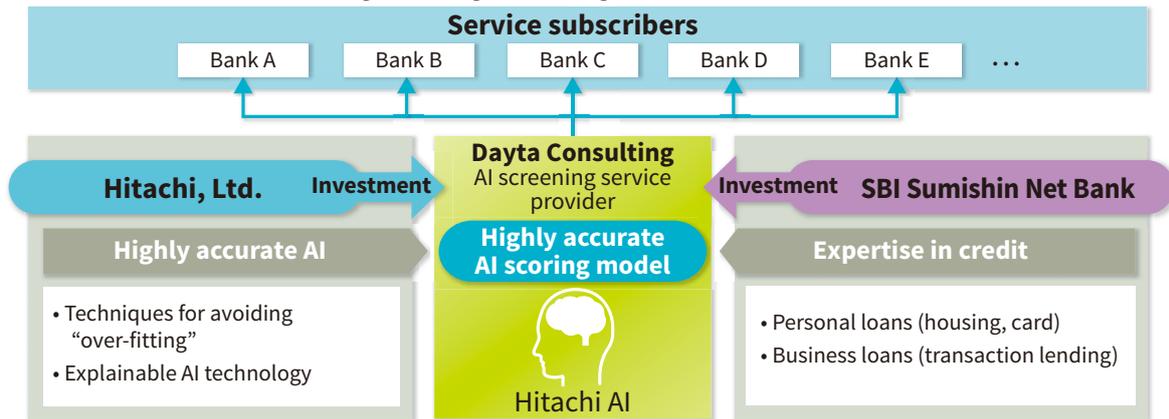


1 Risk Simulator for Insurance Screen

Benefits of using simulator

- (1) Support for identifying fault causes and extending part life
- (2) Use of IoT data to show trends in fault incidence to date
- (3) Support proper maintenance planning by showing likely future fault incidence
- (4) Demonstration of benefits by showing comparison of costs before and after adoption of life estimation

- Services**
- (1) Use AI scoring model to estimate probability of default and inform financial institution
 - (2) Monitoring of credit conditions of loan product
 - (3) Consulting on building credit strategies, etc.



2 AI-based loan screening service

Dayta Consulting intends to continue providing AI-based loan screening services and will consider expanding the scope to other forms of credit, including card loans and transaction lending.

open systems so as to facilitate the adoption of digital technologies.

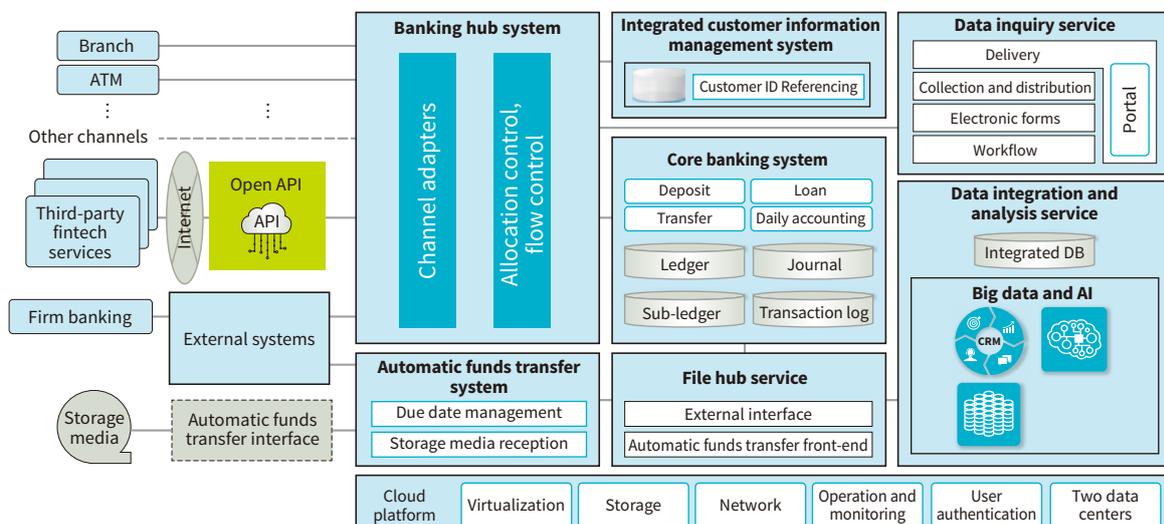
In addition to delivering an open platform with the robustness and reliability to legacy core bank systems, the system developed by Hitachi makes it easy to incorporate the latest technologies and addresses the issues of data utilization and flexible cross-industry interconnection that have been a problem for legacy systems. A newly developed banking hub system also enables a rapid response to digital transformation by making it easy to incorporate third-party fintech services via an open application programming interface (API).

Hitachi intends to continue supplying comprehensive banking solutions that are able to cope with a changing business environment and increasingly diverse user needs.

* See "Trademarks" on page 151.

3 Core Banking System Running on Open Platform

Hitachi has recently commissioned an open core banking system running on Linux[®] at The Higo Bank, Ltd. To maintain and improve their growth and competitiveness, companies need systems that have the flexibility to keep up with business innovation and make timely use of new digital technologies such as the IoT, AI, and blockchain. Most banks, however, are still using legacy computer systems that run on mainframes, meaning that they face an urgent need to upgrade to



ATM: automated teller machine DB: database CRM: customer relationship management

3 Block diagram of bank computer system