



Toridoll Holdings Co., Ltd.

Optimize shop operations and energy use through Fujitsu's AI Demand Forecasting



Under the corporate slogan, "Fill our Planet with KANDO Dining Experiences that will Move You." TORIDOLL Holdings Co., Ltd. (hereinafter referred to as TORIDOLL HD), which operates restaurants such as "Marugame Udon," a Sanuki udon specialty shop, is actively working on DX with the aim of growing into a global food company. Adopting Fujitsu's AI Demand Forecasting solution "Fujitsu Business Application Operational Data Management & Analytics Demand Forecasting SaaS" (hereinafter referred to as ODMA Demand Forecasting), we are rapidly reducing the burden of shop management operations, food waste loss, and energy costs.

Challenge

Reduce the burden of shop management operations to focus on creating a "passion for food" experience.

Reduce food waste and water, light, and heat energy consumption.

Solution

Predict the number of customers and sales by shop and by day

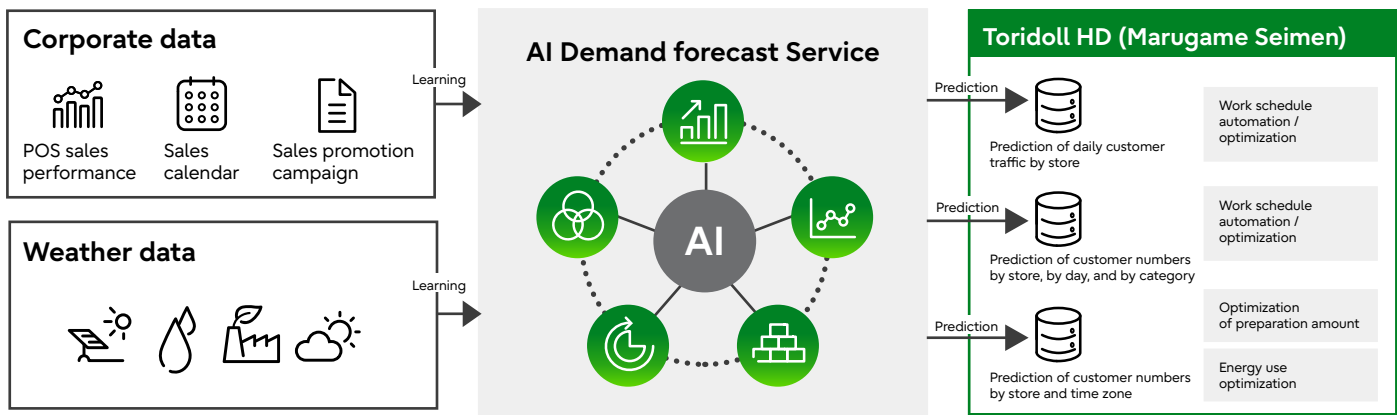
Predict the number of customers by shop and time of day.

Outcomes

- Automation of work schedule creation and food ordering
- Optimize preparation amounts and energy use.

"Demand forecasts lead to reduction of food waste and energy consumption and ultimately to the realization of carbon neutrality."

Yasunori Isomura, Executive Officer, CIO, and CTO BT Headquarters, TORIDOLL Holdings



Outline of AI Demand Forecasting Service



800+

Marugame Udon shops use ODMA Demand Forecasting SaaS

Forecasting demand as one of the DX strategies

Toridoll HD aims to become “a truly global food company.” For example, “Marugame Seimen” operates more than 1,000 stores worldwide, and plans to further increase the speed of its growth, and the DX strategy is essential to that end. Mr. Yasunori Isomura (Executive Officer, CIO and CTO BT Headquarters) said, “To compare favorably with the world’s food companies, we decided to work on DX for rapid growth and the “impressive experience of food”.



Optimize shop management operations

We started with the IT roadmap we created in 2019, and after that, we worked to remove the legacy system and “elimination of my own on-premise system migration, BPO utilization, VPN networks, adoption of Zero Trust, and so implementing “DX Vision 2022”. This is because we believe that not having to own IT assets of our own and thoroughly keeping things light will reduce the burden on the front line and lead to speedy business activities and growth,” says Isomura.

Following “DX Vision 2022,” we are challenging with the eight mainstays of “DX Vision 2028”.

1. Building automation functions for store management operations
2. Building a digital marketing platform
3. Building an education management system
4. Building an energy management system
5. Building a carbon management system
6. Group deployment of store management platform
7. Group deployment of financial accounting and internal control platforms
8. Group deployment of data management platform.

High prediction accuracy and understanding of business are the decisive factors

Therefore, Toridoll HD selected three companies’ products from various demand forecasting solutions for the Marugame Seimen business format and conducted a PoC study. As a result, Isomura chose Fujitsu’s ODMA demand forecast. “There are two main reasons for that. One is that the prediction accuracy is superior to that of other companies’ products, and the other is that they have a deep understanding of our business,” says Isomura.

ODMA demand forecasting is an AI demand forecasting solution that achieves stable and highly accurate demand forecasting using Fujitsu Laboratories’ patented technology “Dynamic Ensemble Model”. By combining multiple demand forecasting models with different features (combination ratios are automatically tuned by machine learning), it makes optimal forecasts according to fluctuating data characteristics. Isomura adds, “I felt the power of this technology because the prediction accuracy was higher than that of other companies.”

Industry: **Restaurant** People: **4,928**

Location: **Shibuya, Tokyo**

Website: toridoll.com

About the customer

TORIDOLL Holdings Corporation's business is business management of group subsidiaries mainly consisting of restaurant businesses such as Marugame Udon, Japan's largest chain of udon shops. It aims to be a leading food service company from Japan, expanding its business in a way that respects the culture and regional differences of each country, with a world-class spirit of hospitality that is second to none.



Optimized energy use

Another important point was that it was possible to make predictions with no big difference, regardless of who used it. "It is very important for anyone to get 80 points or more, rather than 100 points or 30 points depending on the user. On the other hand, even a part-time apprentice can get 80 points. Being able to make predictions in a stable manner without being influenced by people was a good fit for our business transformation," says Isomura.

In the past, Marugame Seimen's visitor predictions were carried out by people (store managers and store staff, sometimes including supervisors) based on the results of the same day of the previous year. In reality, stores are operated based on this forecast and a target amount, called a sales budget. If the forecast is inaccurate, the two numbers diverge and become unrealistic targets. By replacing this forecast with the ODMA demand forecast, more realistic and accurate budgeting becomes possible.

Effective for energy management

Alongside store management, another aspect where ODMA demand forecasts can contribute is energy management which is the mainstay of DX Vision 2028 (4). This is because energy consumption, such as heating power for cooking, water consumption, lighting and air conditioning power consumption, is proportional to the number of customers visiting the store, so it is possible to make precise adjustments.

"For example, the heating requirement of a pot that boils water increases when there are many customers, and decreases when there are not. By adjusting energy consumption according to such fluctuations, we can reduce costs," says Isomura.

Considering contribution to carbon neutrality

Toridoll HD has decided to adopt the ODMA Demand Forecasting for all Marugame Seimen stores in Japan. Demand forecasting is now almost complete, and we are in the process of testing for the next stage of automation.

Going forward, we will be more conscious of contributing to sustainability. According to Isomura, "demand forecasts leads to reduction of food waste and energy consumption and ultimately to the realization of carbon neutrality." In particular, CO₂ reduction is a global trend, and I think it is an essential condition for the food and beverage industry." This will also lead to the establishment of (5) a carbon management system in DX Vision 2028.

For Toridoll HD's business as a whole, we aim to expand this success to other business formats in Japan and Marugame Seimen's "Marugame Udon" overseas. Against this backdrop, expectations are rising for Fujitsu. Isomura comments, "I would like to consult with you about data management in overseas business. Also, it was a great help to have this demand forecast provided by SaaS. We are thinking about all future DX initiatives as SaaS, so we would like to ask for your cooperation."

Fujitsu

<https://www.fujitsu.com/jp/innovation/data-driven/capabilities/data-utilization/odma/demand-prediction/>

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