In March, 2017, UJIE SUPER CO., LTD (hereinafter UJIE) renewed its core and EDI systems along with the introduction of Ryutsu BMS, a standard EDI in Japan, to improve operation efficiency of order placement and logistics as the infrastructure to support supply of goods.

**About UJIE SUPER CO., LTD**

UJIE is a food supermarket chain founded in 1947 and headquartered in Miyagi Prefecture. It operates 31 stores mainly in central and northern Miyagi Prefecture with annual sales of 31.6 billion yen (*1). Some outlets were severely damaged in the Great East Japan Earthquake in 2011, which resulted in a renewed appreciation for the societal role supermarkets play in supporting the regional lifelines. UJIE decided to introduce more efficient and stable systems.

**Shift to Shared service**

Previously, the core systems were operated via an on-premises server. Primarily aimed at dealing with aging servers and responding to the reduced tax rate (*2), UJIE switched to using cloud systems provided by CGC Group, a voluntary chain of which UJIE is a member. At the same time, the EDI system, which had been operated on JCA Protocol (*3), was replaced to Ryutsu BMS. In order to change the EDI system, UJIE held a briefing session for all its suppliers in October, 2016. At the session, “improved paperless and efficient operation” was identified as the main objective for introducing the new EDI. Cooperation from suppliers was also requested and a GS1 Japan representative explained the significance of introducing the EDI standard and its current level of popularity.

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*1 As of February, 2017.

*2 In Japan, plans are set to reduce the consumption tax on foodstuffs and the like as of October, 2019.

*3 This is the standard communications protocol for electronic ordering, established in 1980 by the Japan Chain Stores Association (JCA). The communication circuits available for the protocol are public circuits (2,400 bps) and DDX circuits (9,600 bps), and it cannot transmit Kanji and images. DDX circuits are packet-type communication services that use telephone circuits.
12,000 Purchase Slips a Month
Before Ryutsu BMS was introduced, the data of order placement was sent to suppliers through regional VAN. Some of suppliers used Web-EDI to send ASN, indicating a certain degree of paperless operation had been achieved. However, some smaller suppliers couldn't afford to use EOS (Electronic Ordering System) and in such cases, there was no choice but to use paper slips. Furthermore, many local suppliers deliver goods directly to the outlets, rather than UJIE’s distribution centers. While the purchases were finalized at outlets, all result data was processed at headquarters. As the outlets increased in number and size, the number of necessary delivery slips to be processed also increased, reaching an average of 12,000 per month. This made paper slips a huge bottleneck in enhancing operational efficiency.

Choice between Two Systems
As a result suppliers can now choose between the two systems; Ryutsu BMS or Web-EDI. The new EDI flow is shown in Fig 1.4.1-1. By way of CGC Group’s VAN system, the data of order placement, dispatch advice, receiving advice, returned goods, and payment is exchanged. The dispatch advice is uploaded on the server on or before the delivery date, so that the purchase data can be added the next day.

As mentioned above, suppliers can choose between the two EDI systems, Ryutsu BMS (either Server-to-Server Protocols: ebMS or Client-to-Server Protocol: JX Protocol) or Web-EDI, which has the same data items as Ryutsu BMS. With the less expensive Web-EDI, smaller suppliers are now able to start EDI transactions with a small initial investment, leading to improved paperless and efficient operation. The utilization ratio of the two communication systems is almost even.

In terms of both data utilization and delivery slips issued upon delivery of goods to the distribution centers, efforts, such as layout change, are being made to reduce paper consumption.

More Efficient and Sophisticated Operation through EDI
Introduction of EDI is also making the process of billing and payment more and more efficient. Firstly, as receiving advice is sent, suppliers can check the data of UJIE’s accounts payable on a daily basis, allowing incorrect calculations to be corrected as they are found.

In addition, with regard to the payment data, the
CSV data, which had been sent to suppliers at the end of each month, is now sent as XML data using Ryutsu BMS, simplifying operation (*4). There is also a high expectation that sophisticated unit article management will enable previously impossible operations. According to Mr. Funajima, Director of the Information System Office of UJIE, orders were previously placed while referencing previous sales and order records on a handheld terminal to forecast demand. In this way, although the number of placed orders could be confirmed, it was impossible to see how much stock was in inventory without stock-checking. This meant there was room for improvement in terms of order placement accuracy.

The introduction of Ryutsu BMS made it possible to keep track of the quantity of received items. Combining receiving data with the POS sales data enabled accurate inventory management and order placement. Since July, 2017, pilot operation of automated order placement has been continuing in two outlets, one large and one small. Introduction of EDI, which enables accurate and swift data transmission, is expected to promote further operational efficiency in future.

*4 In Japan, it’s a general practice to combine and pay the total value of monthly transactions and service charges, and the like. Therefore, it’s difficult to identify which transaction has been paid for, in some cases. To deal with this issue, retailers transmit and provide the data of payment breakdown, as a popular countermeasure.