Constant pursuit of innovations leading to ongoing change in the convenience store industry

Convenience stores are the innovators in the retail and distribution sectors. This is especially visible in the significantly accelerated transfer to the retail industry in general over the past 20 years of improvements in efficiency and labor-saving mechanisms making full use of IT technologies that were first disseminated among convenience store chains. Lawson, a leader in the development and introduction of such systems as the semi-automatic ordering system and POS cash register with automatic change dispenser, has been working actively to improve efficiency and productivity in the face of a serious labor shortage.

Today, we are committed to continuing this tradition of change. We believe that next-generation convenience stores should take various forms, depending on the community in which they are located and the makeup of their customers. The store crews and customers will also demand technologies that are not only more advanced, but also more diverse. In a notable response, Lawson established the Open Innovation Center in May 2017 to investigate the future of convenience stores from multiple directions, and to pursue new innovations applying leading-edge digital technologies.

The Center's mission is to determine what actions we should take, now and in the future, that are difficult to implement under the existing organizational structure, and to collaborate with domestic and overseas corporations and government bodies in conducting experiments and verifications in connection with Lawson's digital transformation. Our use of a laboratory inside the Center that mirrors an actual store to repeat a cycle of "introductory examination → laboratory verification → actual store experiment" over and over helps to facilitate fast, smooth deployment of technologies in the stores. The Center has also tested walk-through checkout, real-time inventory management and register-free checkout systems with



Kunitsugu Makino General Manager, Open Innovation Center

biometric authentication in actual stores. Other innovations under consideration include the deployment of robots in stores and the use of drones for home deliveries.

These efficiency enhancement efforts stem first and foremost from our desire to serve people. Introducing leading-edge technologies enables us to acquire an accurate grasp of customer needs and reduce the burden on workers, facilitating provision of more detailed services and increasing value for customers by welcoming them to pleasant, convenient stores designed to delight community residents. We ourselves take great pleasure in the days spent in research for this purpose.







Lawson Go Shinkawasaki Customers gain entrance to the store by holding the QR code displayed on a dedicated smartphone

app over the gate.

Use of digital technologies for enhanced efficiency and labor savings

The chronic labor shortage and soaring labor costs have emerged as major issues for the convenience store industry. Lawson has strengthened support for its stores by making full use of various IT technologies to save labor in daily store operations and to create comfortable work environments for seniors and foreign nationals. Automation of checkout operations using innovations such as POS cash registers with automatic change dispensers and LAWSON smartphone cash registers has reduced the burden on store crews and shortened waiting times for customers at the checkout counter. In 2019, we speeded up the introduction of self-checkout services that enable electronic payment to all the stores. We also installed new computers in all the stores, improving work efficiency by accelerating processing speeds. We provide strong support for multiple-store owner management by leveraging an owner portal function that permits checking of management and other information for any store, and a remote login function that enables multiple-store managers to place and receive orders remotely. We are experimenting at the same time with a system in which stores are open for business without staff during five late-night hours. Customers unlock the door with a dedicated smartphone app and conduct self-checkout or LAWSON smartphone checkout when they finish shopping. Experiments are also underway with cashier-less stores that employ biometric sensors on product shelves to enable customers to make payments simply by picking up products and exiting the store with them. We will make active use of the results of these and other experiments, including shelf stocking by robots and product management using electronic tags, in stores that need them.

Ongoing efforts in pursuit of a digital transformation

Further deployment of digital technologies is indispensable to Lawson's efforts to increase the profit margins of the franchise stores and ensure job satisfaction while seeking to become our community residents' "No.1 most recommended store" by constructing the next-generation convenience store model. Looking ahead to future changes in the market and working environment, Lawson is deploying a digital transformation to implement Companywide system reforms and changes in a committed pursuit of medium-to-long-term strategies to effect convenience store innovations for the fast-emerging new era.

During the current fiscal year, Lawson established the Digital Transformation Promotion Committee under the direct control of the President and charged it with the responsibility indicated by the slogan "Digital IT Strategy 2020." Structural reform employing digital technologies, restructuring of the Headquarters organization and culture, and corresponding reinforced penetration of IT human resources strategies and development are all on the agenda. We are also pursuing a steady approach to realizing the SDGs through application of IT technology. As concerns the various core systems that support Lawson's IT, meanwhile, we will sort out currently existing complications, strictly review the IT cost structure, and conduct planned investment to promote a gradual reduction in IT costs.

Steps to improve efficiency and productivity by utilizing digital technologies

2017 Optimizing the operation of Machikado Chubo in-store kitchens



In 2017, we reorganized the operations of our Machikado Chubo in-store kitchens, which prepare freshly made boxed meal and bakery Items at LAWSON stores, to optimize the operational efficiency of their work procedures. We are developing a lineup that can be prepared easily by unifying the product packaging and product quantities. This has led to a reduction of about 1.5 working hours/day per crew member. We are also moving quickly to facilitate the work of food preparation further by introducing automatic dishwashers into stores with Machikado Chubo in-store kitchens installed.

2018 Introduction of LAWSON smartphone cash register



LAWSON smartphone cash register, a mobile payment system using customers' smartphones, was introduced at some stores. in 2018. Customers pay for purchases simply by downloading the app and scanning barcodes printed on product packages with their smartphones. The process is completed in approximately a quarter of the time required for payment by the conventional method. Combined use of manned cash registers and the LAWSON smartphone cash register system during peak shopping periods in the morning and at lunchtime can significantly reduce waiting time at the checkout counter. The system is in operation in 115 stores in Japan (as of August 2020), with sequential expansion of its deployment under way.

2020 Lawson Go (Demonstration experiments initiated



This service allows customers to pay in advance automatically with a pre-registered credit card by holding the QR code displayed on a dedicated smartphone app over a terminal at the store entrance when they arrive, and then simply exiting the store with their purchases after shopping. Cameras installed in the store follow the customer's movements, and sensors on the store shelves detect and count the products the customer picks up. Customers enjoy the new experience of shopping without stopping to pay at a cash register, and stores benefit by saving labor at the cash register and reducing opportunity loss during neak hours.

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2010

2015 Semi-automatic ordering & planned ordering systems

Lawson introduced an Al-based semi-automatic ordering system in 2015. The system analyzes data on such various factors as the weather and sales situations at other stores to predict consumer demand for boxed meals, sandwiches and other items and recommend appropriate product offering and order quantities based on the observed purchasing behavior of its over 96.71 million Ponta Card members (as of end August 2020). This system, combined with our planned ordering system for beverages and processed foods, saves about 2.0 working hours/day per crew member.

2017 Introduction of digital tablets



Tablets introduced into all the LAWSON stores in 2017 have facilitated smooth work procedures by displaying work schedules in terms of "when, what and how," and by accompanying some tasks with photos to assist less experienced crew members. The devices have improved productivity further by recommending fast-food selections and quantities based on sales data for individual stores.



2018
Introduction of POS cash registers with automatic change dispensers

2019 Introduction of a selfcheckout system

POS cash registers with automatic change dispensers have been installed in all LAWSON stores since 2018. Easy for both foreigners and seniors to use, the registers are reducing the burden on crew members at checkout counters by eliminating the need to count cash received and paid out manually. The working hours required for checkout and cash register inspection have been reduced by 1.5 hours/crew member. Since cash cannot be paid into or removed from the registers, moreover, losses due to robbery are also decreasing. We took a further step forward in 2019 with the introduction of a self-checkout system.