Nippon Telegraph and Telephone Corporation

MC and NTT to Establish DX Joint Venture

Mitsubishi Corporation (MC) and Nippon Telegraph and Telephone Corporation (NTT)

are pleased to announce their decision to establish a new joint venture company that will

provide cross-industry Digital Transformation (DX) services aimed at promoting

digitalization and structural transformations. Industry One, Inc. (Industry One) will be

launched in 20211 as part of the industrial DX partnership formed between MC and NTT on

December 20, 2019².

■Overview of Industry One

In offering end-to-end solutions from DX planning to execution, Industry One will partner

businesses in implementing the kind of reforms that will encourage DX throughout Japan's

industries and help them to realize sustainable and internationally competitive corporate

growth. Because Japanese industries are linked by complex value chains, many of their

inherent challenges are difficult for individual companies to address on their own. Industry

One will combine MC's industry-wide expertise with NTT's information-and-communication

technologies (ICT) to help its partners find the best solutions, while at the same time

providing them with value-added DX services. These include accelerating internal DX

initiatives, optimizing cross-company processes that take advantage of digital technologies,

and otherwise working with each partner to tailor its unique DX foundations and ultimately

create new digital businesses.

<Industry One, Inc.>

Representative: Ryo Serizawa

Capital: 900 Million Japanese Yen (MC 51%, NTT 49%)

Location: Chiyoda-ku Tokyo

Main Operations: DX project planning and management and development of DX strategies

and solutions

■ MC and NTT's Initiatives to support DX in the Food Distribution Industry

MC and NTT are developing an inventory-optimization solution for food wholesalers in the food distribution industry. The two companies, together with NTT DATA Corporation, are jointly developing an infrastructure that capitalizes on new digital technologies to seamlessly and securely link data that are scattered within and among companies. These data include information on retail, wholesale, and manufacturers' inventories, order receipts, demand forecasts and weather forecasts. In proof-of-concept (PoC) inventory-reduction trials, which took advantage of a patent-pending, proprietary AI engine developed with MC Digital, Inc.³ and which covered roughly 10,000 products at various distribution centers, inventories were reduced by an average of 30%, and as much as 40% in some cases. The trials also demonstrated that they could cut down on the rate of product shortages, which tend to be a necessary trade off when working to minimize inventories. In fiscal year 2021, the partners aim to provide this solution to Lawson's distribution centers operated by Mitsubishi Shokuhin Co., Ltd. (Mitsubishi Shokuhin), and will thereafter work with Mitsubishi Shokuhin to roll it out to other companies in a stepwise fashion.

In cooperation with Industry One, MC and NTT plan to conduct a PoC study in fiscal year 2021 on smart contracts that cover the application of blockchain and other advanced technologies, their aim being to address food waste, labor shortages and other problems. This initiative will help to achieve the UN's Sustainable Development Goals (SDGs) by contributing to sustainable development in food distribution. The partners intend to announce more initiatives designed to expand DX services throughout Japanese industry.

< Comments from Major Parties>

1. Sadanobu Takemasu, President and CEO, Lawson, Inc.

The Lawson Group's philosophy to create happiness and harmony is what drives our businesses, each of which is designed to make Lawson the "hub of refreshment in every community." This initiative to optimize food distributors' inventories is significant inasmuch as it demonstrates a proactive attitude towards achieving the SDGs; but it is equally important as a means of addressing societal challenges such as reducing food waste and making logistics networks more efficient. Lawson remains committed to working alongside valued partners like MC and Mitsubishi Shokuhin to fulfill its social responsibilities.

2. Toru Moriyama, President and CEO, Mitsubishi Shokuhin Co., Ltd.

As defined by the slogan, "From Intermediary to Innovator," our corporate mission underpins our evolution into a new type of wholesaler, one whose role transcends that of a traditional food distributor and rides the wave of digitalization to help solve the problems facing our society. To drive that evolution, we are applying data and digital technologies to boost operational efficiency and create more demand. This particular project involves an inventory-optimization platform developed together with MC and NTT, which will be employed at our own distribution centers and openly shared with other companies as well. Not only does it promise to raise efficiency at Mitsubishi Shokuhin, but it should also help to address problems faced by our customers, optimize the food distribution industry as a whole, and contribute to the sustainable development of regional communities across Japan.

■Business Alliances with New Partners

In its aim to further the DX movement in Japan, MC is proactively connecting with other companies to look into jointly developing and commercializing DX services. By combining each company's unique industry expertise and DX capabilities, these partnerships will focus on encouraging structural reforms and solving problems inherent to various Japanese industries. MC also plans to incorporate Industry One into this mission in the not-too-distant future.

< Overview of Business Alliances>

1. Toshiba Tec Corporation (Toshiba Tec)

Through its Tec Coupon Deli⁴ retail solution, Toshiba Tec is helping retailers to address some of the problems plaguing Japan's food distribution industry, including food waste and labor shortages. In addition to assisting food retailers with their operations, the solution enables Toshiba Tec to generate statistical sales data and consensually provide them to MC, which MC can then use to develop solutions for demand forecast. Those solutions can help food manufacturers to optimize their production and delivery plans.

2. Fujitsu Limited (Fujitsu)

Fujitsu and MC are considering ways to automate orders to food wholesalers. At present, the procedures to determine order volumes are done manually, but automating them should reduce both operating costs and excess inventories.

3. LaKeel, Inc. (LaKeel)

LaKeel DX is a microservice architecture⁵ that provides the tools necessary to build and operate business application systems. LaKeel and MC plan on adopting this architecture to the aforementioned inventory-optimization solution for food wholesalers, which will enable the swift and flexible operation of a wide variety of applications and accelerate DX throughout the industry.

■ Contact

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² Mitsubishi Corporation and NTT Agree to Form A Business Partnership to Pursue "Industrial Digital Transformation (DX)"

 $https://www.mitsubishicorp.com/jp/en/pr/archive/2019/html/0000038991.html \\ https://www.ntt.co.jp/news2019/1912e/191220a.html$

³ MC Digital, Inc.: MC's wholly owned tech subsidiary dedicated to advancing digital strategies.

https://www.mcdigital.jp/

⁴ Tec Coupon Deli: A coupon service that encourages customers to revisit stores. Not only does it allow food retailers to issue their own coupons and conduct targeted marketing according to consumer preferences, but it also enables manufacturers to pay commissions to food retailers to promote specific products.

https://www.toshibatec.co.jp/products/coupondeli.html

⁵ Microservice architecture: A type of architecture where software applications function as independently deployable services, which improves agility and flexibility.

¹ Completion pending relevant regulatory approvals.