To Overcome the Logistics Crisis
Building of Logistics/Commercial Distribution Data Platform to Connect Supply Chains.

Amid calls for solutions to the logistics crisis, which includes the current shortage of drivers and workers, we are looking forward to manufacturers, logistics companies, retailers, and others joining hands to utilize logistics/commodity distribution data across boundaries, improving the productivity and efficiency of the entire supply chain. We interviewed PD Yorimasa Tanaka on the current status of logistics in Japan.

"We seek optimization in the entire supply chain."

Q: I want you first give us an overview of the smart logistics service program.
PD: The idea of the “logistics crisis” triggered the smart logistics service. The explosive increase of online shopping and the shortage of truck drivers has caused a steep rise in the cost of logistics, which is passed on to the consumer through the product price, and has also exacerbated the relocation crisis, which also affects the average consumer. How we should sustainably overcome this logistics crisis is a significant issue.

The supply chain in Japan has developed through partial optimizations, but this method has found its limits. We seek overall optimization, that is, the target of this program is the optimization of the entire supply chain.

Q: Logistics services are both B2C and B2B. Are the conditions for them different?
PD: In B2C logistics, when the phrase “home delivery crisis” began to be used, before “logistics crisis,” each company started working on solutions. In this smart logistics service, focused on the more critical B2B situation, we are working on optimizing the entire supply chain, from manufacturing to the wholesale and retail of fast-moving consumer goods, essential in our daily lives, processed foods, and medicine.

"How we collect quality information is very important."

Q: How is the situation in B2B logistics?
PD: I believe that there are two angles. The first one is, in, for example, major apparel companies, where the entire supply chain is focused. The second one is a conventional mainstream method, in which manufactured products are sold on commission through a wholesaler. Between manufacturing and sale warehouses exist. Each company stores and delivers products from its warehouses. In the first type, it is easier to collect logistics and product information. I think, though, that the second one may be in trouble if we do not swiftly consider what type of collaborative team should be created. Of course, major supermarkets and convenience stores with great buying power will be stronger from now on, but I believe that collecting information through the supply chain is not easy. I think how we collect information is the key.

"Each company consciously collaborates toward innovative change."

Q: Are there any hurdles this program needs to overcome to build a logistics/commercial distribution data platform?
PD: In Japan, information on the supply chain is not transferred because it is still dealt with on paper and formats are not standardized, which must be corrected. To do this, I think that we can utilize the latest image recognition technology and AI. Moreover, to share data, we need to clarify the regulations on the handling of data including personal information, for sure. One more thing is the key word, “logistics crisis.” It is important for every company to cooperate consciously to innovate and change logistics/commodity distribution. For example, by utilizing standard cardboard boxes, loading efficiency and the dissemination of automation are expected to be improved.

Q: It is related to the corporate strategy of each company.
PD: Take, for example, delivery to retailers. If the number of deliveries is reduced from the current four times to three times a day, from the standpoint of the efficiency of logistics, the freshness of products deteriorates slightly. It is difficult to strike a balance there, but in a smart logistics service, we think that we should improve overall efficiency while maintaining the advantages that the fine-tuned service of logistics in Japan has.
"Swift development of technology to visualize the logistics of things is required."

Q: What do you think is the logistical bottleneck in Japan now?
Pd: One is, for example, that picking robots can handle cardboard boxes of the same size, but not various sized boxes. Therefore, products like gift baskets that customers can customize, have to be arranged in the basket by someone in a warehouse. It is very difficult to automate this operation. I think that is a bottleneck. Also, the number of people who want to be truck drivers is decreasing. This is an especially significant issue.

Q: What do you think the merits of industry-academia-government cooperation are for smart logistics services?
Pd: I talked with many people through the process of considering research and development plans. In the process, many people voiced their opinion that we are extremely weak in our fostering of logistics human resources. Since we are thinking of utilizing the latest image recognition technology, AI, mathematical optimization, and other technologies, we will aggressively cooperate with universities from now on, to contribute to fostering young human resources who will be active in logistics in the future. I believe that it would be good to put effort into collaborative research to develop new solutions utilizing data collected via a logistics/product data platform in the future. In addition, we hope that venture companies take full advantage of these sorts of opportunities in order to create new value, which may also lead to the growth of venture companies in Japan. For industry, it is important to create strong teams which share the issues. We want to make friends with an awareness of implementation in society in order to advance industry-academia-government cooperation. One more thing is that we want to adopt a method for the practical application of next-generation electronic tags, where industry will be able to invest early on.

"Logistics is Japan’s circulatory system, and it cannot be disrupted."

Q: As a PD, what is your ideal image of logistics?
Pd: I think that logistics, in a sense, is like a circulatory system, distributing goods across Japan, and we must not disrupt it only for profit. I also think that we need to discuss the universal service issue in the future. Talking about possible ways to accomplish it, a large scale mobilization of labor will not work in the future, and I believe that the day will surely come when drones and automated operation will replace human labor. I think that the need for labor isn’t easy to cover with just people, so the need to depend on technology to some extent is there, particularly with the working population already decreasing.

Q: In that sense, the building of a logistics/commercial distribution data platform is important.
Pd: Solutions such as drones and autonomous vehicles, which utilize the data platform, are likely to change, but this logistics/commercial distribution data platform will absolutely be useful.

It is important first to have a plan for implementation in society.