

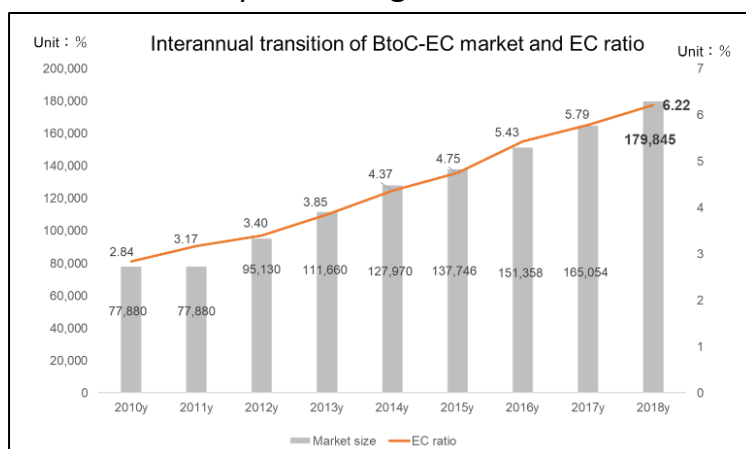
November 2020 Report

Logistics situation after COVID-19 in Japan

In the past days, there was news that a cluster by COVID-19 had occurred at a large logistics facility with 700 people in the Kanto area. Since then, the number of infected people has continued to increase at a rate of more than 10% of employees. On the other hand, the EC market is booming due to the restrictions on self-restraint from going out and the accompanying telework. As a result, the logistics business is faced with two conflicting issues. One is to improve the efficiency and labor-saving in warehouse, and the other is to increase inventory to respond to the increase in quantity and avoid risks.

1. EC market trends

The graph and table below show the transition of the EC market in Japan. The market has been expanding at an annual rate of 6-10% in recent years. Among them, product sales are the largest at 10,000 billion yen, followed by service fields. The growth of the product sales market is over 8%, and the EC conversion rate is about 6%. However, the EC conversion rate of the Japanese market is significantly lower than that of neighboring China, and there are potential for great growth opportunities in all fields. By the way, the market size forecast for 2020 is expected to reach a record high, partly due to the impact of goods to be consumed inside the house.

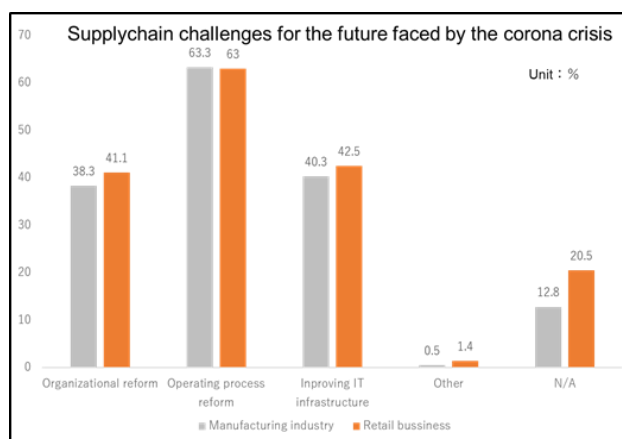


Composition rate of B toC-EC market and field

		2017y	2018y	Advance rate
1	Digital field (EC ratio)	8.6 trillion yen (5.79%)	9.2 trillion yen (6.22%)	8.12%
2	Servicing field	5.9 trillion yen	6.6 trillion yen	11.59%
3	Digital field	1.9 trillion yen	2.3 trillion yen	4.64%
	total	16.5 trillion yen	17.9 trillion yen	8.96%

2. Issues on the Supply Chain

What challenges are companies recognizing due to the market environment created by COVID-19? Nomura Research Institute conducted the questionnaire on "issues in the supply chain that we will focus on in the future." According to the graph (right), the issues are roughly classified into three types.



Although there are some differences between the manufacturing industry and the wholesale / retail industry, what can be said for both companies is "strengthening SCM functions" (reform of organizational structure) and "standardization and efficiency improvement of business flow" (business process reform). The first and most important function during a pandemic is end-to-end coordination. However, there are few companies in Japan that have an SCM department, and many companies are still in the area of logistics. In that sense, it is considered that the enhancement of SCM functions, the cross-organizational business process, and the simplification and efficiency of that process flow are required. Next is "strengthening IT / infrastructure". Let's dig a little deeper into this. Then, the difference between the manufacturing industry and the wholesale / retail industry becomes apparent.

In the wholesale / retail industry, "visualization of supply chains using electronic tags and IoT" was the highest at 45.2%. The background to this is

the complexity of the supply chain due to “the number of products” x “number of supply bases” x “number of business partners”. Therefore, in the event of an unforeseen situation, it becomes difficult to control and coordinate the supply chain.

On the other hand, as for the manufacturing industry, the main issues are "improving the accuracy of demand forecasting using AI" (40.5%) and "labor saving and unmanned operation of factories and warehouses" (22.8%). In the manufacturing industry, it can be seen that the need for DX (including mechanization) is recognized at a high level in terms of reducing the labor force and responding to pandemics.

3. Changes in logistics companies

<Warehouse company>

The warehouse market is booming due to the expansion of the Internet business. In the first quarter of 2009, the vacancy rate in the Kanto region fell below 1%, and in the Kyushu area, the vacancy rate was 0%, and the reality is that the needs of borrowers cannot be met with virtually no vacant floors. Meanwhile, the two companies, Daiwa House and Prologis, have undergone major changes. These two companies not only lend warehouses to borrower companies, but also enhance building facilities such as nursery schools and cafeterias and provide solutions by material handling companies and logistics system companies, which sets them apart from other companies. For example, the lender owns the material handling and charges the amount as equipment usage fee and provides a service to assemble the solution on behalf of the contracted company. In addition, it has repeatedly invested in and formed alliances with venture companies that provide logistics solutions, and has begun to actively support solutions for borrower companies. Warehouse companies are changing from mere floor leasing to "solution proposal type" companies.

<3PL>

The other day, I heard something unexpected from 3PL vendors. The

number of shippers who want to eliminate the three densities in the warehouse and to realize the work in the warehouse that can cope with the reduction of personnel due to lockdown etc. is increasing due to COVID-19. Therefore, what is required by the shipper is to improve the efficiency of work inside the warehouse. It means the reduction in the number of workers, which leads to a decrease in sales and profits. It is recognized that a tough era has arrived for 3PL companies that have continued their business model of increasing sales and profits by investing people. In other words, 3PL companies are also required to provide solutions to solve the problems of shipper companies and there is a sense of crisis that it will not be so far in the future that the work inside warehouse will be replaced by machines.

<Material handling>

While automation is progressing in corporate warehouses, it is sometimes seen that the material handling introduced there does not work as expected and does not fulfill its purpose. The side that introduces material handling cannot use up material handling. Therefore, it is easy for a material handling company with abundant knowledge and experiences to carry out everything from designing and introducing material handling to contracting in-house work using material handling, which can be a great advantage for the supplier company. For example, it would be effective measures such as risk hedging against confusion at the time of release, utilization rate of introduced material handling, improvement of Occupancy rate, system renovation according to actual operation, KPI design, etc. In this way, it is suggested that material handling company will change its value chain as well as the warehousing business and 3PL. The companies that put conveyors at the center of their business will be required to transform their business model as soon as possible due to the booming AGV.

<Suggestions for the future>

Until now, in the supply chain, it has been better just to provide a service specialized in functions. However, with COVID-19 as the boundary, each company is under pressure to rebuild its value chain.

It does not specialize in the services of its own specialty company but provides services that integrate the functions in the supply chain horizontally and vertically. In other words, how can we propose horizontal and vertical integration of the needs of shipper companies while specializing in services based on our strengths? In the future, competition among different industries will be promoted in the logistics-related business as well.

<Source>

- LOGI-BIZ 2020 JUNE P50-P51

「Abstract of "19 Years Survey on EC" by Ministry of Economy, Trade and Industry」

- LOGI-BIZ 2020 AUGUST P18-P21

Global Corporate Supply Chain Strategy

「How the SCM organization of Japanese companies worked」