

Logistics Concept

January 10, 2006

JAPAN INSTITUTE OF LOGISTICS SYSTEMS

Logistics Concept

- Seeking for the Enhancement of Corporate Value -

What is logistics?

Logistics is the management which synchronizes such providing actions as procurement, production, sales, and distribution with demands. It aims to enhance corporate competitiveness and increase corporate value by realizing fulfillment of customers' satisfaction, cutback of unprofitable inventory and minimization of its transfer, and reduction of supply costs.

To achieve those objectives mentioned above, collaboration of companies concerned is essential and development of logistics using supply chains is strongly required.

Environmental Changes Surrounding Corporate Management and Important Logistics Issues

Important logistics issues surrounding corporate management include globalization and reduction of environmental load, assurance of safety and ease of mind, response to a low birthrate and an aging population. We need to address these issues from a logistics point of view.

Further globalization

- Enhancement of international competitiveness
- Securing of transparent and visible businesses and acceleration of decision-making
- Promotion of standardization

Securing of compliance

- Improvement of safety measures
- Response to the growth of consumers' awareness of safety and ease of mind
- Response to international security

Logistics and Management

Enhancement of corporate competitiveness

- Creation and evaluation of logistics business management indicators
- Training for a CLO (Chief Logistics Officer) and restructure of organization functions
- Establishment of appropriate

Advancement of environmental load reduction

- Creation of a mechanism for a recycling-oriented society harmonized with the environment
- Promotion of CO₂ reduction, energy conservation and others
- Announcement of activities to reduce environmental load

Solution for changes in human resources and working environment

- Response to a low birthrate and an aging population
- Response to stronger needs for the fostering of experts
- Fostering of personnel who link management and practical operations

1. Important Logistics Issues Surrounding Corporate Management

1) Logistics and Management

Such providing actions as procurement, production, sales, and distribution were managed based on sector-specific evaluation indicators in the past. These optimum activities for individual sectors resulted in significant managerial losses including stock shortage, and excessive or bad inventory. Under the circumstances where synchronization of providing actions with trends for demands was required in order to eliminate such losses, logistics as management optimizing the entire providing actions developed. In logistics, all the providing actions function to synchronize with trends for demands.

For management, logistics is required to contribute to gain in profits by cutting down supply costs, and the reduction of assets by lowering inventory. It is important to assess it using ROA (Return On Assets) and/or others as the preliminary index/indexes.

Accumulation of this kind of effort may establish such business models that could produce new demands from a logistics point of view.

2) Logistics and Globalization

Recently Japanese companies have actively deployed manufacturing bases overseas. Such globalization of corporate activities has been supported by IT represented by the Internet and logistics. The establishment of systems and structures quickly responding to changes by visualizing worldwide production and inventory through the utilization of IT is crucial in realizing efficient global supply chains.

The international distribution connecting each function and player of globally conducted procurement, production, and sales also plays an extremely important role. There has been a great expectation for the advancement of 3PL (3rd Party Logistics) businesses as a counterpart of global SCM (Supply Chain Management). In the globalization of corporate activities, efficient and seamless logistics is necessary and when it is realized, it would make a huge contribution to corporate competitiveness.

3) Logistics and Environment

We are responsible for passing a global and local healthy environment as the most important asset in our society over to future generations. To fulfill our commitment, we need to place maximum priority on the harmony with the environment and to establish logistics which aims at reducing environmental load such as global warming, air pollution, waste, noise, and vibration, and creating a recycling-oriented society. It is important to broaden our perspective to material selection and waste disposal methods, and to consider reuse and recycling as well.

4) Logistics and Securing of Compliance

Since logistics is a foundation which supports not only economic activities, but also people's lives, the viewpoint of providing safety and ease of mind to consumers is essential. Therefore, the important issues include: securing of safety by eliminating accidents during transportation and by strictly complying with proper product handling

procedures throughout distribution processes, and pursuing ease of mind such as with the development of the product traceability system and/or others.

It is necessary to implement a safe and efficient international distribution mechanism in response to the enhancement of international security after the 9-11 terrorist attacks.

5) Logistics, and Human Resources and Working Environment

Logistics is regarded as the infrastructure supporting economic activities and people's lives and has an important role. Personnel with professional knowledge and a wide range of comprehension are required to establish and operate logistics. As for management, a CLO (Chief Logistics Officer) should be assigned as a member of top management to perform comprehensive planning and control of logistics such as procurement, production, sales, and distribution. Systematic training for personnel engaging in logistics practical operations is also an important issue. With a continuing tendency of a low birthrate and an aging population, it is necessary to improve the working environment and find a solution to the diversification of working styles, and it is obvious that education is required to make individual persons involved in logistics feel proud of their jobs which contribute to a society, and to enhance the quality of work.

2. Issues and Perspective Addressed by the Industry

- From the viewpoint of the practical area -

The advanced logistics systems are vital to establish totally optimized SCM. Industry-government-academia collaboration is strongly required, but the role of the industry implementing logistics is significant among them.

The following is the presentation of issues and perspective which the industry is required to address.

1) Logistics and Management

(1) Creation and evaluation of logistics business management indicators

For management, logistics contributes to an increase in cash flow and ROA by reducing inventory assets through appropriate inventory and supply costs and by improving the total asset turnover.

It is necessary to reorganize businesses from a logistics point of view in the relationship with each sector such as procurement, production, sales, and distribution as well as business partners, and to create, manage, and operate evaluation indicators such as KPI (Key Performance Indicator).

(2) Training for a CLO and restructure of organization functions

In order to plan and establish optimization of a supply chain as a managerial strategy, training and assignment of a CLO who integrates and manages performances using business management indicators and KPI are important issues. At the same time, it is essential to reorganize functions to make logistics work well in management organization.

(3) Establishment of appropriate service levels such as conditions of transactions

In order to build a win-win relationship between each company comprising supply chains, it is important to establish appropriate service levels by reviewing conditions of transactions and others, and to minimize costs and environmental load.

2) Logistics and Globalization

(1) Enhancement of international competitiveness

Under recent circumstances where procurement, production, sales, and distribution are globally conducted, facilitation of import and export operations has an important role for the enhancement of corporate competitiveness. Therefore, internationally competitive and smooth import and export operations need to be realized by the joint efforts between the public and private sectors.

(2) Securing of transparency and visibility

We are required to review traditional Japanese transaction practices and cost sharing mechanisms such as the multilayered distribution structure, due to the globalization of corporate activities. It is necessary to establish the most suitable transaction models matching international demands.

Also, it is important to accelerate decision-making using necessary information in suitable forms which becomes available when and where it is required via visualization of information through IT technologies.

(3) Promotion of standardization

The standardization of hardware and software has become an increasingly urgent issue along with the progress of globalization. When we promote the standardization, we need to consider the global standards, for example, by making JIS (Japanese Industrial Standards) comply with ISO (International Standards Organization).

3) Logistics and Environment

(1) Creation of a mechanism for a recycling-oriented society in harmony with the environment

In order to create a recycling-oriented society, the source management which has a perspective broadened to material selection and waste disposal methods, as well as the 3Rs, i.e. Reduce, Reuse, and Recycle. Logistics in harmony with the environment which is established by the partnership between cargo owners and distribution companies, considering the flow from supply chains to reverse chains is very important.

(2) Promotion of environmental load reduction in distribution activities

It is important to take measures for CO₂ reduction and energy conservation in the transportation field. Modal shift to means of transportation with lower CO₂ emission intensity and joint delivery should be promoted. In addition, lighter and returnable wrapping and packing materials are an important issue to be considered.

(3) Announcement of activities to reduce logistics environmental load

In order to utilize energy effectively and to restrict emission of greenhouse gases such as CO₂, it becomes important for companies to know the quantitative environmental load and to positively disclose information via environmental reports and/or other means.

4) Logistics and Securing of Compliance

(1) Improvement of safety measures in logistics

We need to prevent social losses by eliminating accidents caused by overloading, speeding, or excess driving, because distribution involves highly public activities utilizing transportation infrastructure. Distribution companies have responsibilities to strive to secure safety, and collaboration between cargo owners and distribution companies is required to manage transportation and operations based on appropriate conditions of transactions.

(2) Fulfillment of consumers' safety and ease of mind

When the developed product traceability system throughout the processes of logistics enables distinction of each cargo and control of distribution history, it can provide ease of mind to consumers and quickly address unexpected accidents.

At the same time, regarding response to large scale disasters, we need to consider what private companies can do from a logistics point of view and take the appropriate measures.

(3) Securing international security

Securing the security of international cargo such as the enforcement of the “U.S. Customs 24 Hour Advanced Manifest Filing Rule” on international container cargo after the 9-11 terrorist attacks has become an important issue. It is necessary to establish the security and safety system for plants, domestic storage and transportation, airports, and ports, and to promote computerization of cargo information.

5) Logistics, and Human Resources and Working Environment

(1) Response to a low birthrate and an aging population

Implementation of logistics is a managerial issue and the quality of on-site operations is also critical. Under the circumstances where a lower birthrate makes it more difficult to secure and foster human resources, on-site laborsaving and automation provides a better working environment which can secure and foster qualified personnel.

(2) Logistics CDP (Career Development Program) for fostering personnel

Companies need to create career development master plans and occupational skills requirements, and foster suitable personnel, so that they can train human resources who have systematic and professional knowledge and a wide range of comprehension from a logistics point of view.

(3) Fostering of personnel who link management and practical operations

Managers and supervisors who link management and practical operations have an important role to swiftly and accurately deliver the management decisions to practical operations and secure high-quality services. It is required to foster personnel with high-level management skills who have both managerial and practical viewpoints. For this issue, it is important for people to understand and apply knowledge management, and to share and hand down knowledge, information, personal experiences and know-how.

JAPAN INSTITUTE OF LOGISTICS SYSTEMS

January 2006

Japan Institute of Logistics Systems

Shiba-nichome Bldg 3F, 2-28-8 Shiba, Minato-ku, Tokyo 105-0014
Tel: +81-3-5484-4021 Fax: +81-3-5484-4031

HERBIS ENT Office Tower 19F, 2-2-22 Umeda, Kita-ku, Osaka-shi, Osaka 530-0001
Tel: +81-6-4797-2070 Fax: +81-3-4797-2071

Nittsu Bldg, 4-11-39 Meieki-minami, Nakamura-ku, Nagoya-shi, Aichi 450-0003
Tel: +81-52-588-3011 Fax: +81-52-588-3012