

SCM Logistics Scorecard (LSC)

Entry date (yy/mm/dd): _____ / _____ / _____

Important notes previous to filling the Scorecard:

Please answer the questionnaire of company brief information below together with the score of LSC in the provided table, and please return us only this page.

- Fill in the score (1 to 5) according to the level that fits your company.
- If all the conditions of the level you think is best fitting are not satisfied, fill in the score of one level below. If you think the best fitting level is between two levels (let's say 2 and 3), then you can fill in an intermediate score (in this case 2.5).
- For the items that you think are clearly not applicable to your company, fill in "N/A" in the corresponding square.
- According to the item, while referring to the section in charge and suppliers/customers, we recommend group evaluation if possible.
- **In case, there are obvious differences between each section in the company, we recommend to answer the LSC separately.**
- The filled in Scorecard we receive from you is strictly confidential, and will not be transmitted to any party. Thank you for your cooperation.

Before filling in the Scorecard, please provide brief information about your company by answering the following questionnaire.

1. Company / Company Section name & location (_____)
Main Location (_____)

2. Type of Industry
 Manufacturing (Main product : _____)
 Foods Beer & Beverage (Daily delivery service products) Materials & Processed Foods
 Chemistry Materials Consumer Goods
 Fiber/Paper Fiber/Paper
 Pharmaceutical Pharmaceutical
 Electric Machinery For General Use For Business Use
 Automobile Automobile/Transports Automobile/Electric Parts
 Physical Distribution
 Subsidiary 3PL Independent
 Others (_____)

3. Company / Establishment's yearly sales
 (1) less than 0.3 Billion Yens (2) 0.3~2 BY (3) 2.1~5 BY (4) 5.1~10 BY
 (5) 10.1~20 BY (6) 20.1~50 BY (7) 50.1~100 BY (8) More than 100.1 BY

4. Company / Establishment number of employees
 (1) Less than 20 (2) 21~50 (3) 51~100 (4) 101~200
 (5) 201~500 (6) 501~1000 (7) More than 1001
 *Including part-time staff
 (1) Null (2) less than 10% (3) 10~20% (4) 20~30%
 (5) 30~50% (6) More than 50%

5. Business contents with exterior (please check for all items applicable - even partly)
 (1) N/A (2) Basic distribution business (3) Manufacturing business
 (4) Product distribution business (5) Information processing
 (6) Others (_____)

6. Person/Group name (_____)
 Contact: Tel. _____ Fax _____
 E-mail: _____

Please fill the score of each items on Scorecard (LSC).

1. Corporate strategy & inter-organizational alignment					2. Planning and execution capability					3. Logistics Performance							4. IT methods and implementation				
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1)	(2)	(3)	(4)	(5)

For inquiries please contact:

Enkawa-lab., Department of Industrial Engineering & Management, Tokyo Institute of Technology,
O-okayama 2-12-1, Meguro-ku, Tokyo 152-8552 Japan Tel/Fax : 03-5734-3606 E-mail : lsc@ie.me.titech.ac.jp

1. Corporate strategy & inter-organizational alignment

Item	Score	Level 1	Level 2	Level 3	Level 4	Level 5	Terminology
(1) Corporate strategy regarding logistics and its importance		Top executives have not formulated a strategy or policy regarding logistics/SCM. No department has responsibility for logistics/SCM improvement or innovation.	A department with responsibility for logistics system innovation exists, but action is limited to that department. Logistics/SCM strategy is not clearly defined. Top mgmt not actively involved.	Under leadership of a top executive, there is a program for logistics/SCM innovation, but the program does not extend company-wide.	Supported by a clear corporate-level strategy, a top executive (managing executive director or above) leads efforts for logistics/SCM innovation. The innovation program is making progress.	Under the CEO's leadership and a clear corporate strategy, there is an company-wide system that supports rapid adaptation of the supply chain to environmental change.	<u>Supply Chain Management (SCM)</u> : All measures that cope quickly with market change by sharing customer/ customer information and making it timely available all along the supply chain. According to the industry, or the form of alignment, various terms have appeared; ECR, QR, CRP, VMI, 3PL, CPFR, BTO, CTO
(2) Definition of supplier contract terms & degree of information sharing		No formal, written agreement or info sharing with main suppliers. Decision making is done independently.	Formal, written agreements exist with some suppliers. Agreements with other suppliers are under consideration	Formal, written agreements exist with some suppliers, but the agreements are not necessarily based on win-win solutions for both parties.	Formal, written agreements exist with nearly all suppliers. Some of these are aimed at win-win solutions based on info sharing.	Formal, written agreements exist with nearly all suppliers. Company has a well-established approach for seeking win-win solutions based on strategy and info sharing.	
(3) Definition of customer contract terms & degree of information sharing		No formal, written agreement or info sharing with main customers. Decision making is always done by customers.	Formal, written agreements with customers are under consideration	Formal, written agreements exist with some customers, but the agreements are not necessarily based on win-win solutions for both parties.	Formal, written agreements exist with nearly all customers. Company has a partly-established approach for seeking win-win solutions based on info sharing under a leadership of customers.	Formal, written agreements exist with nearly all customers. Company has a well-established approach for seeking win-win solutions based on strategy and info sharing.	
(4) System for measurement and improvement of customer satisfaction		No clear definition of customers. Customer complaints are resolved in a temporary and expedient way.	There is a clear definition of customers. However, there are no periodic surveys of customer satisfaction levels; no record of customer complaints is kept.	Periodic surveys of customer satisfaction levels are carried out. However, the survey results are acted upon only by the sales dept, with low cross-functional involvement.	Periodic, quantitative surveys of customer satisfaction levels are carried out. There is cross-functional involvement to improve customer satisfaction.	In addition to Level 4, the results of customer satisfaction surveys are shared with relevant customers and are used in the joint development of products/services.	
(5) System for employee training and evaluation		No particular training program exists to develop employee abilities to achieve customer satisfaction and system optimization.	Company slogans dealing with customer satisfaction or system optimization exist, but there are no corresponding training programs.	A training program for increasing employee abilities to achieve customer satisfaction and system optimization exists and is put into practice.	Meets Level 3, and in addition, the employee evaluation system directly considers employee abilities to achieve customer satisfaction and system optimization. Training leads to increased employee empowerment.	In addition to Level 4, there is a knowledge management system for sharing knowledge and know-how at the team and organization level.	<u>Knowledge management</u> : Accumulation and efficient sharing of employees' / sections' knowledge and know-how at the organizational level for business activity.

2. Planning and execution capability

Item	Score	Level 1	Level 2	Level 3	Level 4	Level 5	Terminology
(1) Strategies for optimizing logistics system resources based on design for logistics		Efficient utilization of logistics facilities and resources is not seen as a problem. No improvement strategy exists.	Importance of optimizing logistics system resources is recognized, but there is no strategic plan or review.	Strategic plan exists for review of transportation modes and inventory allocation among plant, distribution center, transfer center. Optimization efforts are making progress.	In addition to Level 3, suppliers and customers are involved in efforts to optimize logistics systems resources.	Clear strategy exists for collaboration and optimization across the supply chain, including product re-design based on design for logistics, and use of other approaches such as joint distribution and category management.	<u>Design For Logistics (DFL)</u> : General term of a measure / approach for product and load redesign that goes up to replenishment and distribution processes restructuring, in order to enhance efficient logistics while coping with diversification and constant changes. <u>Category Management</u> : Continual monitoring of expenditures and supplier performance in specific buying categories with the intent of driving ongoing cost or supplier performance improvements. Also sometimes referred to as supplier relationship management or commodity management.
(2) Understanding of market trends & accuracy of demand forecasting		Rely on the experience and judgment of the sales department to predict market trends and forecast demand.	Demand forecasting for certain products is based on a quantitative sales history combined with the judgment and experience of the sales department.	Demand forecasting for key products is based on an analysis of market trends and quantitative sales history, and includes the input of sales and related departments.	Level 3 approach is extended to all products, and forecasts for key products are broken down into items or categories. Demand forecasting system is in place.	Level 4 approach is carried out jointly with supply chain partners. Demand forecasts can be revised dynamically for changing market conditions.	
(3) Accuracy and adaptability of SCM planning		Planning for sales, replenishment and delivery is carried out separately, without consideration of inventory availability.	Plans for sales, replenishment, and delivery are intended to be coordinated with each other on a monthly basis, but in practice this is only partially achieved.	Plans for sales, replenishment and delivery are supposed to be coordinated with each other on a weekly basis, but individual departments may make their own adjustments during the week.	Linkage of weekly plans between departments is done on a rolling basis. Plan adjustments for customers can be done on a daily basis.	Linkage of daily plans between departments is done on a rolling basis. Plan adjustments for suppliers or customers can be done on an hourly basis.	
(4) Control and tracking of inventory (product/parts/WIP): accuracy and visibility		No tracking or visibility of inventory/WIP status. Management action is taken after-the-fact.	For most items, inventory status is tracked on a daily basis, and supply is adjusted to meet demand on a monthly basis.	A system is in place which enables the company to manage and track its own inventory and replenishment activities on a daily basis.	A system is in place which enables the company to manage and track inventory and replenishment activities for itself and its suppliers on a daily/hourly basis.	Inventory and replenishment activities are managed and tracked throughout the entire supply chain, including suppliers and customers. Information is strategically shared.	
(5) Process standardization and visibility		Little standardization of work methods or use of unit loads. Some process activities are treated as a "black-box".	Work methods are mostly standardized, but the overall work flow is not completely visible.	Work methods are standardized and unit loads are used, but interface activities with suppliers and customers are not made sufficiently visible.	Work flow, including interface activities with suppliers and customers, is standardized and made visible. There is continuous improvement of work activities within the company.	In addition to Level 4, partnerships are established for each business unit and the entire supply chain is made visible. Process innovation is continually pursued.	<u>Interface cost</u> : As logistics cost, it is generated on the interface between organizations. This includes the cost of information exchanges and order processings. When there is no information sharing, the various re-handlings will generate additional costs, which are mainly the parts in the logistics cost that are not fully understood.

3. Logistics Performance

Item	Score	Level 1	Level 2	Level 3	Level 4	Level 5	Terminology
(1) Just-In-Time (elimination of idle time and setup time through information sharing and synchronization of material and information flow)		Just-in-time philosophy is not part of the company's approach or practices	Company recognizes the importance of JIT philosophy, but has not implemented JIT practices in production, replenishment, material handling, or delivery.	JIT practices such as setup time reduction, lot-size reduction, load consolidation or floor-ready merchandise are implemented, but they are not synchronized with other activities.	Some JIT activities are synchronized (e.g. picking sequence is determined from delivery plan, delivery trucks allocated based on picking sequence, etc).	JIT activities are synchronized throughout the material flow and involve suppliers and customers.	
(2) Inventory turnover & cash-to-cash cycle time		Neither inventory turns nor cash-to-cash cycle time are measured. Inventory turnover is low, and cash flow is poor.	Inventory turnover is known at the aggregate level for each facility, but inventory management is not linked to cash flow.	Inventory turnover for each supplier and individual product is measured with accuracy at the week-level and actual performance level of less than 12 turns/year.	Inventory turnover for each supplier and SKU is measured with accuracy at the day-level and actual performance level of 12+ turns/year. Inventory management is linked with cash flow.	Exceeds Level 4, with inventory measured with accuracy at the hours-level and actual performance of 24+ turns/year. Cash-to-cash cycle time is less than 10 days.	<u>Cash-to-cash cycle time</u> : Cycle time of cash flow through income and expenditure. Speed of fund collection, defined as "receivables turnover period + inventory turnover period - receivables collection period."
(3) Customer lead time (from order placement to receipt) and load efficiency		Lead time from order placement to receipt is long. Company receives frequent requests from customer to shorten lead time.	Lead times for different customer categories are known, but orders with short lead time are covered by on-hand inventory. Little effort made to reduce lead times.	Lead time is known and managed for each customer or item category, and is linked to truck allocation planning to increase load efficiency.	In addition to Level 3, average lead time is less than 2 days. Continuous efforts made to further reduce lead times.	In addition to Level 4, achieves load efficiency of 80% or higher.	
(4) Delivery performance and quality		On-time delivery rate (on-time deliveries / total orders) and order fulfillment accuracy (accurate deliveries / total orders) are not known. Company faces many customer complaints.	On-time delivery rate and order fulfillment accuracy are measured, but actual performance level is less than 95%.	Performance is between 95 and 99% for both rates. To improve performance, efforts are made to collect data on the root causes of late deliveries, stock outs, miss deliveries, damage, etc.	Performance exceeds 99% for both rates. Based on data about root causes, error prevention measures such as mistake-proofing are implemented on an ongoing basis.	In addition to Level 4, suppliers and customers are involved in improvement efforts. While maintaining high performance, efforts to improve efficiency, such as elimination of incoming inspections, are promoted.	
(5) Supply chain inventory visibility & opportunity costs		Only on-hand inventories within one's own facility or company are known. Opportunity cost of lost sales is not known or estimated.	Inventory levels within the company are known. Some estimation is made of the opportunity cost of lost sales.	Inventory levels are known for the company and its immediate suppliers or customers. Some estimation is made of opportunity cost of lost sales for the company only.	Inventory levels are known for the company and its immediate suppliers and customers. Some estimation is made of opportunity cost of lost sales for the company only.	Inventory levels are known throughout the entire supply chain. Estimation is made of opportunity cost of lost sales at the end demand level.	
(6) Environmental activities		Low level of concern for environmental issues. No systematic efforts at the company or business-unit level to reduce environmental impacts.	Environmental issues are addressed at the company-level, such as through implementation of an environmental mgmt system. Within the company, a department has responsibility for coordination of environmental efforts.	Company is making progress in reducing its environmental impacts, as measured in its environmental management system, such as through recycling, source reduction, green purchasing, etc.	In addition to Level 3, innovations in logistics system have been implemented to reduce environmental impacts (transport. mode selection, route efficiency, reduction of packing materials, supplier selection, etc.)	In addition to Level 4, efforts also involve product design and development to consider design for logistics, design for environment, and other life cycle issues.	
(7) Total logistics cost (transportation costs, inventory holding costs, order management costs, administrative costs, etc)		Order management costs and product manufacturing costs are known, but logistics-related costs are not well-defined or separated out.	Most logistics-related costs for the company are known at an aggregate level (e.g. own transportation costs, freight payments to outside carriers, inventory holding costs).	In addition to Level 2, logistics-related costs are broken down to individual supplier and customer level well enough that they can be utilized in revenue management.	Total logistics costs (transport., inventory holding, order mgmt, admin. costs, etc) are broken down for each supplier and customer. Using activity-based costing approach, this information is used in revenue management and system improvement and innovation.	In addition to Level 4, total logistics costs throughout the supply chain are known and shared among supply chain members. Win-win scenarios for cost reduction are developed from the viewpoint of supply chain optimization.	<u>Activity Based Costing (ABC)</u> : Methods for cost accounting, that accounts precisely the overhead costs - particularly difficult to grasp in reality - not by assigning them automatically to products, but instead by allocating them to pre-defined activities.

4. IT methods and implementation

Item	Score	Level 1	Level 2	Level 3	Level 4	Level 5	Terminology
(1) Electronic Data Interchange (EDI) coverage		Company is not electronically linked to any customer or supplier.	EDI links are set up with some customers or suppliers at their request.	EDI is used with over 50% of customers or suppliers. Proprietary EDI standards are used in most cases.	In addition to Level 3, EDI is integrated with the company's internal systems so that manual re-entry of data is not necessary in most cases.	EDI is used for nearly all transactions and is integrated with internal systems. Open standards for EDI are adopted or in-process of adoption.	<u>Electronic Data Interchange (EDI)</u> : The computer-to-computer exchange of structured information, by agreed message standards, from one computer application to another by electronic means and with a minimum of human intervention. There are two types of EDI standard. Proprietary standard and open standard. UN/EDIFACT is used as the international open standard. Recently, Web EDI and XML EDI are also used as a simple standard.
(2) Usage of Bar Coding / Automatic Identification and Data Capture (AIDC)		Bar codes or other forms of automatic identification and data capture (AIDC) are not utilized.	Bar codes are utilized in some activities such as inspection, but the data is not used for other purposes.	Bar codes are utilized in some activities, such as inspection, and the data is shared with internal systems to synchronize the material and information flow.	Extending the scope of Level 3, bar codes are used as a means to accelerate innovation of the logistics system, in addition to synchronizing the material and information flow.	The best mix of bar codes, 2-dimensional symbols, IC tags and other AIDC methods is linked with EDI, and used to support innovation of the logistics system at the supply chain level.	<u>Automatic Identification and Data Capture (AIDC)</u> : The methods of identifying objects, collecting data about them, and entering that data directly into computer systems for the synchronization of material and information flow. Technologies typically considered as part of AIDC include bar codes, QR codes, biometrics, OCR, RFID (IC tags).
(3) Effective usage of computers in operations and decision-making (ERP, supply chain planning software, etc.)		PCs are not utilized anywhere in the business.	PCs are used to support some business operations and activities.	Most routine business operations and activities are computerized (e.g. accounting, production, etc.) but are not integrated with each other.	In addition to Level 3, decision support systems and other IT tools are utilized for logistics planning and optimization.	ERP, SCP, CRM and other IT tools are utilized for planning and optimization of the entire supply chain. Outsourcing and other means are considered for increasing the effective use of IT and related resources.	<u>Enterprise Resource Planning (ERP)</u> : Management information systems that integrate and automate many of the business practices and informations associated with the operations and accounting of a company. <u>Supply Chain Planning (SCP)</u> : Management Information system for planning and optimization of the entire supply chain. It integrate and support many of the business planning and decision making by synchronizing material and information flow of the supply chain.
(4) Open standards and unique identification codes		Company has no awareness of open standards and unique identification codes.	Company understands the importance of open standards and unique identification codes for improving the efficiency of logistics processes.	To exploit the potential of IT, unique identification codes are used within the company and process simplification is also carried out.	In addition to Level 3, usage of unique identifiers is extended to suppliers and/or customers. Open standards for EDI and other IT applications are adopted or under consideration.	In addition to Level 4, unique identification codes are extended to both suppliers and customers. Company is actively working towards adoption of open standards for EDI and other IT applications.	<u>Unique identification codes</u> : Unique code for cargos and products through departments, organizations, and the whole country, which prevents re-entering and re-handling. IT plays an important role for utilizing EDI or AIDC technologies.
(5) Decision-making systems and support to supply chain partners		No knowledge or interest in the decision-making processes and systems used by suppliers or customers.	Has a general understanding of how a supplier or customer makes its decisions, but does not know the details of the systems used.	Understands the systems used by a supplier or customer, but has made no proposals or efforts to bring about a win-win solution.	Exploring ways to modify or integrate the systems of the company and its suppliers or customers in order to realize win-win solutions.	Have succeeded in implementing a win-win solution with supply chain partners, and actively provide proposals and support to partners to improve their systems and innovate the supply chain.	