

LOGISTICAL SUPPLY CHAIN MANAGEMENT			Economics
		Keywords: change management logistics, enterprises, development logistics, economy.	
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Abstract			
<p>The terms logistics and supply chain management are sometimes used interchangeably. Some say there is no difference between the two terms, that supply chain management is the “new” logistics. To compound this, what is considered supply chain management in the United States is more commonly known as logistics management in Europe, according to the blog for PLS Logistics Services, a logistics management firm in Pennsylvania. When the question was posed in an <i>Inbound Logistics</i> article, the answers varied based on the functions of a supply chain (or logistics) professional handled.</p>			

The terms logistics and supply chain management are sometimes used interchangeably. Some say there is no difference between the two terms, that supply chain management is the “new” logistics. To compound this, what is considered supply chain management in the United States is more commonly known as logistics management in Europe, according to the blog for PLS Logistics Services, a logistics management firm in Pennsylvania. When the question was posed in an *Inbound Logistics* article, the answers varied based on the functions of a supply chain (or logistics) professional handled. Some thoughts from their readers:

“There isn’t a difference today,” said Wayne Johnson of American Gypsum.

“Supply chain management incorporates the field of logistics and logistics is a number of sub-processes within SCM,” said Michael Kirby of National Distribution Centers. “A ‘supply chain management’ company is generally a third-party operator managing the total overall movement of product whether inbound or outbound,” said William Behrens of Associated Transport Systems, Inc. Purchasing, materials handling, logistics, transportation, inventory control, and supply chain management have continued to evolve, causing many of these functional areas to intersect with one another. This intersection has resulted in blurred definitions for some of these terms such as logistics and supply chain management.

While these two terms do have some similarities they are, in fact, different concepts with different meanings. Supply chain management is an overarching concept that links together multiple processes to achieve competitive advantage, while logistics refers to the movement, storage, and flow of goods, services and information within the overall supply chain.

1. Business logistics management templates

Managing a logistics facility can be a nightmare. From hazardous chemicals and large moving vehicles to the simple nightmare of running out of printer ink before a vital meeting, there are countless potential roadblocks in both you and your employees' paths. All of that pain can be eliminated, however, by running this facility inspection checklist just once every month.

Although this checklist doesn't cover all safety regulations (that's for a template further down this post), it will let you consistently check anything and everything that can get in your employees' way and prevent them doing their tasks when they next clock on. From restocking water coolers and toiletries to fueling vehicles and checking safety equipment, this checklist contains everything you need to make sure your facility is prepared for your employees to get to work straight away when they clock in.

Performing regular forklift inspections is vital to any operation uses them frequently. Aside from the inconvenience of having a forklift break down in the middle of lifting a heavy object, a lack of at least monthly inspections poses an incredibly large safety hazard to the operator and those around them.¹ At the same time, having regular inspections and documenting them effectively can prove difficult. Not only do you have to consistently perform every necessary check, but you also need to store each inspection in a way that can be easily reviewed later on. If a forklift breaks down unexpectedly, you need to be able to access the last inspection was carried out in order to see if the problem could have been avoided.

Aside from giving you specific instructions to follow to effectively assess every forklift, this checklist can be scheduled to run every month so that you don't even need to worry about triggering it. The person responsible for the inspection can even be automatically assigned to the checklist when it is due. An inventory management process isn't the first thing that springs to mind when you're creating your logistics management templates. Without a system in place, however, you're leaving your stock levels and storage up to random chance and human error.

"46% of SMBs either don't track inventory or use a manual method." – *Andrew Marder*, 10 Shocking Inventory Management Statistics Couple the above with the fact that, on average, U.S. businesses have \$1.43 of inventory for every \$1 in sales, and you have a potentially endless cycle of overspending and overstocking.²

Don't fall into the trap of wasting money on stock you don't need due to inaccurate figures or improper storage. Use this inventory management process instead.

¹ Cozzolino Alessandra, Humanitarian Logistics and Supply Chain Management, In Humanitarian Logistics, Springer Berlin Heidelberg 2012

² L. Torre, I.S. Dolinskaya, K.R. Smilowitz, Disaster relief routing: Integrating research and practice Socio-Economic Planning Sciences vol46, March 2012

Picture 1. Inventory management process



Sources: L. Torre, I.S. Dolinskaya, K.R. Smilowitz, Disaster relief routing: Integrating research and practice Socio-Economic Planning Sciences vol 46, March 2012

It's all too easy to take your shipping containers for granted, but if you aren't carefully keeping track of their condition you stand to lose everything they contain when the whole thing gives way. With around 90% of purchased items traveling by ISO container at some point, that's one risk any large business can't afford to take.³ Hence why we created this ISO container inspection checklist. By following the checks described here you (or anyone you assign to it) and be 100% certain of the condition of your containers and have documented information on every defect, no matter how minor.

You can easily inspect bulks of containers one after the other with this checklist, since it takes you through checks with the efficiency of an assembly line. All you have to do is check every side of the container as laid out inside, and look for each element in the task's sub-checklists. When a customer orders an item they expect it to be delivered on time, in good condition, and with regular updates or some kind of tracking system. On a small scale this isn't a problem – you can oversee the packaging and delivery yourself, so there's no question that everything's done correctly.

However, as soon as you grow, expand your staff, and gain more customers, you'll soon get to a stage where you can't oversee this process. You need to be sure that whoever you've delegated is performing the necessary steps to keep everything on track.

Enter our order fulfillment checklist. Using this you can sit safely in the knowledge that every order you have will be fulfilled with the same accuracy as the last. Nothing (including special delivery preferences or add-ons) will slip through the cracks, since your various departments can all work from this single source of information. If our order fulfillment checklist was a little too in-depth for your operations, you can instead use this order processing checklist. These two templates let you do effectively the same thing, but order processing focuses on a high-level overview with a little more attention to customer feedback.

This is a great alternative to make sure that your customers' orders are processed and fulfilled effectively and in a trackable manner, but while keeping a high-level, top-down approach

³ Nyhuis P., Wiendahi Hans-Peter., Fundamentals of Production Logistics, Springer Berlin Heidelberg 2009.

to the process. Instead of monitoring every step and having any number of different people working on the same process, this checklist can be kept to managers only, thus avoiding a little clutter.⁴

Whether you're using cars, vans, or trucks in your business, you need to be inspecting them for damage and faults at least once every year. Even if your location doesn't legally require these inspections, the damage a broken vehicle causes to your business' operations can be catastrophic.

Put it this way – at best you're going to have to tow the vehicle to a safe location and find a replacement, with a minor delay to regular operations if you have another vehicle handy. At worst you're going to miss your delivery deadlines until the vehicle's fixed, inconveniencing both your company and customers and costing a large chunk of unbudgeted money for repairs. Don't get caught off guard. By just running this vehicle inspection checklist once a year for each vehicle, you'll have an accurate picture of the condition your fleet is in, what potential work is required, how much that work will cost, and how long the vehicle will be out of action for.

2. The Council of Supply Chain Management

The Council of Supply Chain Management Professionals defines logistics as “part of the supply chain process that plans, implements and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customer's requirements.”

Bowersox, Closs, and Cooper define logistics as activities – transportation, warehousing, packaging and more – that move and position inventory and acknowledge its role in terms of synchronizing the supply chain.⁵

The objective behind logistics is to make sure the customer receives the desired product at the right time and place with the right quality and price. This process can be divided into two subcategories: inbound logistics and outbound logistics.

Inbound logistics covers the activities concerned with obtaining materials and then handling, storing and transporting them. Outbound logistics covers the activities concerned with the collection, maintenance and distribution to the customer. Other activities, such as packing and fulfilling orders, warehousing, managing stock and maintaining the equilibrium between supply and demand also factor into logistics.

⁴ J.P. Roth, The logistics of Roman army at war (264 B.C. -A.D. 235)

https://www.academia.edu/2450333/Logistics_of_the_Roman_Army_at_War

⁵ Donald W. Engels, Alexander the Great and the Logistics of the Macedonian Army, University of California 1980

Picture 2. Supply Chain Management



Sources: Troy T. Kirby, *The Duke of Wellington and the Supply System During the Peninsula War*, Create Space Independent Publishing Platform 2014

Sounds logistics management depends on tracking data and using it to make key business decisions. For example, tracking product sales data gives you an accurate demand picture and helps you forecast correct reorder quantities. Without data, your purchasing decisions are based on guesswork, which often leads to costly over-ordering or running out of stock and losing sales. Both are logistics management errors that data can help you solve.

Nowadays, insightful data is readily available to help you refine logistics decisions, like purchasing, plus pinpoint areas for cost-savings, growth opportunities, and everything in between. Here are some key data groups that most order management tools and fulfillment partners readily provide:⁶

- Product sales over a date range
- Product profitability
- Shipping costs per order
- Product top sellers
- Product slow movers
- Overall sales by channel
- Product sales by channel
- Fulfillment and delivery rates
- Packaging costs per order
- Inventory stock-on-hand & low-level reports
- Open purchase order reports
- Returns, exchanges & reships

⁶ Ayrault Dodge Theodore, *Hannibal: A History of the Art of War Among the Carthaginians and Romans Down to the Battle of Pydna, 168 BC*. Da Capo Press. 1995

Of course, if you or your fulfillment center tracks detailed sales, inventory, and purchasing data, you can pull all types of custom reports. But the common ones listed above provide much of the data you need to make smart purchasing, product expansion, and cost-control decisions. Here are three ways to use these reports to make data-backed logistics management decisions:

2.1. If You Use Drop-shipping for Some or All Orders

The logistics management of drop-shipping can be approached 2 ways. You can use drop-shipping to handle occasional large or special orders for items you generally stock. Using this method, your usual vendors ship large or special orders directly to your customers so you don't have to store large quantities of stock yourself. Process-wise, sending special drop-ship purchase orders and clear communication are all this option generally requires.⁷

Or, you can use drop-shipping as a primary business model. You can tap drop-ship vendors to handle your fulfillment logistics on an order-by-order basis. For this, you list items for sale, and when sold, the order is routed to your drop-ship vendor for fulfillment. In drop-shipping, you store no inventory and are only charged the cost of a good when an item sells. The primary tools used to manage this are drop ship vendor apps that seamlessly forward orders to their fulfillment system and make the process hands-off for you.

2.2. Order Fulfillment Logistics Management

Order fulfillment logistics management involves all of the tasks related to managing inventory, packing and shipping orders, and handling returns. How you approach fulfillment logistics depends on what you sell, the volume of orders you ship each day, how much inventory you store, and your available facilities and staffing. Despite these variables, daily fulfillment tasks are pretty straightforward, and include:⁸

- Receiving stock shipments and sorting and storing inventory
- Monitoring inventory levels as stock is sold
- Tracking inventory damages and resolving shortares
- Processing orders from different sales channels
- Picking products to fill customer orders
- Packing customer orders to ensure safe transit
- Comparing shipping rates among carriers
- Updating customer orders with tracking data
- Following up on customer delivery issues
- Handling returned goods and restocking needs

⁷ Troy T. Kirby, *The Duke of Wellington and the Supply System During the Peninsula War*, CreateSpace Independent Publishing Platform 2014.

⁸ Troy T. Kirby, *The Duke of Wellington and the Supply System During the Peninsula War*, CreateSpace Independent Publishing Platform 2014.

The real challenge of order fulfillment is that it's a time-consuming process and makes it hard to focus on other business-building activities. For most small businesses, the question isn't how to get this done, it's who should do it — you or an outsourced fulfillment partner like our recommended provider ShipBob. Here are four ways you can answer this particular logistics management question:

Picture 3. Order Fulfillment Logistics Management



Sources: Troy T. Kirby, *The Duke of Wellington and the Supply System During the Peninsula War*, Create Space Independent Publishing Platform 2014

Wholesalers, manufacturers, and fulfillment companies typically are high-volume shippers, so they know how to get the best rates. This is a great way to hand off your transportation logistics tasks, but you want to ensure their prices are competitive. So compare shipping rates between your supplier and/or fulfillment company, and a freight broker. If costs are close, you can be comfortable letting your supplier or fulfillment company handle your transportation logistics tasks like freight booking, scheduling, and paperwork. All you need to do is track the shipment to ensure on-time arrival and pay the bill.

Product sourcing logistics covers the tasks involved in keeping the products you sell in stock so you can fill orders without interruption. You can purchase goods from wholesale vendors, make products yourself, or have them made for you. However you source your goods, the logistics management tasks that play a major role in product sourcing include:⁹

- Forecasting product demand
- Researching new product opportunities based on market needs
- Identifying or developing products to sell
- Researching wholesale or manufacturing suppliers
- Placing and managing supplier purchase orders
- Tracking supplier turnaround times
- Managing production schedules (if applicable)

⁹ Lambert, D., Stock, J., Ellram, L. *Fundamentals of Logistics*, McGraw-Hill 1998.

- Tracking inbound stock shipment delivery dates, delays, or issues
- Balancing stock orders against cash flow and budget
- Routinely getting competitive bids to lower costs

If you wish to trump over your competitors, you should adapt the latest technology and innovative approach. The aim of effective logistics management is to improve the efficiency of the operations, ensuring customer satisfaction, and increase productivity.¹⁰ These tips and strategies are necessary for process optimization. Every logistics firm that is struggling to boost their operations, they can incorporate these suggestions for logistics network optimization

Conclusion

Supply chain management, as explained by Michigan State University professors Donald Bowersox, David Closs and M. Bixby Cooper in *Supply Chain Logistics Management*, involves collaboration between firms to connect suppliers, customers, and other partners as a means of boosting efficiency and producing value for the end consumer. The book considers supply chain management activities as strategic decisions, and set up “the operational framework within which logistics is performed.”

Supply chain management is a way to link major business processes within and across companies into a high-performance business model that drives competitive advantage.

Logistics refers to the movement, storage, and flow of goods, services and information inside and outside the organization.

The main focus of supply chain is a competitive advantage, while the main focus of logistics is meeting customer requirements.

Logistics is a term that has been around for a long time, emerging from its military roots, while supply chain management is a relatively new term.

Logistics is an activity within the supply chain.

¹⁰ D.F. Bozutti, M.A. Bueno-Da-Costa, R. Ruggeri, *Logística: Visão Global e Picking*, EdUFSCar 2010

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