Ultimate Guide to Supply Chain Management

The supply chain is probably one of the more complex systems that all managers have to be knowledgeable about. Its broad coverage, which includes entire organizations, people, information, various activities and all other resources that play a role in the flow of products or services from producers to suppliers to customers to end users. This complexity, coupled with its dynamic nature, calls for a way to keep that flow going in such a way that facilitates and does not, in any way, hinder the operations of the business. This discipline is called supply chain management.

In this article, we'll Look into

- ✓ **what supply chain management** is all about,
- ✓ **which elements play an important role** in supply chain management,
- ✓ **what activity levels SCM entails**,
- ✓ The **major components** of a supply chain management, as well as
- ✓ **Some challenges** in SCM.

SUPPLY CHAIN MANAGEMENT

The simplest definition of supply chain management, or SCM, as it is popularly known, is the "management of the flow of goods and services through interconnected or linked networks or channels, operating as if in a chain". These goods may also refer not only to finished goods or final products, but also raw materials and work-in-process inventory. If we are going to be more technical about it, however, the definition of SCM would be the

"design, planning, execution, control and monitoring of supply chain activities, with the objective of creating value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand, and measuring performance on a global scale."

The application of SCM is also seen to be as complex as the network or chain that it manages, since it does not draw from one or two disciplines alone. It takes on an integrated approach that takes its cues from various areas or disciplines, such as procurement, operations management and logistics. Recent decades have also seen information technology figuring more and more into SCM.

Ultimately, managing the supply chain will improve the visibility of inventory, and the velocity of its movement. To break it down, SCM is concerned with the management of:

- The flow of raw materials (from suppliers) into the organization, to be used in its operations;
- The process undergone by materials within the organization to turn it into finished goods;
- The flow of the resulting finished goods from the organization, through distribution channels, to arrive into the hands of the end user, customer or consumer.

Businesses can **benefit** from SCM because, when done right, it can make supply chain more cost-effective and efficient. It will:

- Improve the supply chain network
- Minimize delays
- Reduce costs and inefficiencies
- Increase productivity
- Promote collaboration and enhance relationships
- Boost customer satisfaction

Aside from the above, SCM has also become an important business tool in the sense that it improves the relationship between the organization and its partners along the supply chain, which may include suppliers, distributors, and logistics operators.

ELEMENTS OF SUPPLY CHAIN MANAGEMENT

Business experts have narrowed down the elements of SCM into four: demand management, effective communication, process integration, and collaboration.

Demand management

These involve activities that are used in predicting or forecasting the future demand for an organization's products or services, so it could plan the flow of its manufacturing processes better.

Just as supply and demand go together, so do supply management and demand management. The focus is not on the supply or even the production process, because the main concern is the customers: their needs and their preferences, as these will dictate the demand. Activities will be carried out in order to find out what the customers want or need and, in the process, make decisions that will put the company in a competitive advantage in the industry.

Effective Communication

Businesses benefit a lot from effective communication, and the supply chain is no different. An organization has identified sources of demand and operational information, and it should ensure that the same information will be disseminated to all its members, especially those who are directly involved in the supply chain.

By keeping the members of the organization apprised with the latest and correct information, they will also be reminded of their duties and responsibilities in the supply chain or network, so they can deliver what is expected of them. It also enables them to make the necessary adjustments, should there be a need to do so.

Business Process Integration

Before SCM, businesses were focused on managing the individual functions of workers and departments within the company. SCM changed that approach as it involves the

integration of business processes, particularly the processes along the supply chain, in order to facilitate a continuous flow or movement of resources.

In other words, SCM entailed collaboration and partnership between and among the players of business processes. It covers the relationship between the suppliers and the buyers, the product developers and end users, the systems in use that are common to the parties, and the information being shared or exchanged among them.

Some of the identified processes in the supply chain that may be integrated include the following:

- **Customer management:** These processes involve customer relationship management and customer service management. The organization has to pay attention to its relationship with its customers or end users and, at the same time, become a reliable source of customer information, providing real-time information about its products and services, such as availability, logistics and other information that customers may be interested in.
- **Manufacturing flow management:** The predictive value of the demand management processes will enable the organization to produce and supply products and services more reliably and in a more flexible manner. Depending on the demand, the organization can make better decisions on matters related to its manufacturing processes, such as scheduling, batches or lot sizes, and work intervals.
- **Procurement:** Procurement is more than just the simple act of purchasing. There are a lot of details to pay attention to when obtaining raw materials and products from suppliers outside of the organization. These include actually sourcing for supplies by looking for suppliers, resource planning, assessing the need of supplies of the organization, placement of order, as well as the transport, handling, storage and warehousing of the purchased supplies.
- **Product development:** One of the concerns of organizations is to shorten product life cycles, and one way of achieving that is to decrease the time to market these products. Thus, product development should also be integrated with customer service and customer relationship management.
- **Inventory management:** Businesses also have to maintain an inventory of their supplies or raw materials. After all, not all businesses adopt the Just-in-Time method of procuring inventory, where they will purchase supplies and receive them just as they are about to be placed in production. In most cases, companies maintain inventory or stock of these materials until such time that they will be needed in the manufacturing process. This is also part of SCM. Of course, inventory management processes also cover keeping track of their inventory of the finished goods that came out of the production process, awaiting delivery to the customers. Inventory management will be conducted in order to keep the amount of wastage low, as well as the cost of storing inventory.
- **Supplier relationship management:** This is closely related to the procurement processes, because a huge part of being able to conduct procurement processes smoothly and more efficiently relies on the relationship of the organization with the suppliers or the providers of the materials that are being procured.
- **Order management:** There are separate processes for tracking orders from customers, assigning products to these orders, and scheduling the delivery of the orders to the customers.

- **Distribution:** This could also be termed as physical distribution, as it involves physically delivering a service or moving a product to the customer, with the use of an appropriate marketing channel.
- **Relationship management through outsourcing:** Reducing life cycles can also be accomplished by outsourcing key activities that used to be performed in-house. Examples of partners through outsourcing that an organization will closely be working with in the supply chain include transport and delivery service providers, and warehousing or storage agents.

Collaboration

This is another key term in supply chain management, because much of the activities involve relationships: the relationship between top management and its people, between members of the organization particularly those who work in teams, and between the organization and its partners in the supply chain.

Maintaining good relationships with suppliers, for instance, will increase the likelihood of reducing costs as well as provide a guarantee that the quality of the materials or products that they supply will be high. You may have seen companies remaining partners with certain suppliers for years – decades, even. There is a great probability that this is because they have excellent SCM, with focus on collaboration and partnerships.

SCM LEVELS OF ACTIVITIES

SCM involves a lot of activities that are all geared towards improving the flow of materials through the supply chain. To make things easier, these activities have been grouped into three:

1. Strategic

This involves decisions made by top management, and they encompass the issues that will affect the entire organization, not just a single department or unit. Examples are decisions on what sales market to penetrate, which suppliers or partners to collaborate with, and where to set up a major manufacturing plant or warehouse.

Often, these decisions are made by top management.

2. Tactical

Decisions that are more focused on the financial side of things will fall under this category. The main concern will be in minimizing costs. For example, the company can enter into agreements with its distributors to conduct their activities in a more cost-efficient manner. It can also strike a deal with their warehousing partners to find ways to lower their cost of inventory storage.

3. Operational

These involve decisions that are made on a daily basis within the organization, such as arranging and rearranging production schedules, taking orders from customers, transporting raw materials from storage to the production site, and moving finished goods from the production site to the warehouse.

There are three main flows that are tackled in SCM.

1. **Product Flow:** This was the simple definition of supply chain management, since it involves the movement of products or goods from a supplier to a customer. But it also includes the movement of products or goods from a customer that is returning them.
2. **Information Flow:** This pertains to the flow of data or information – in real-time – on orders, availability of products, and the status of orders and the delivery thereof.
3. **Finances Flow:** This covers all matters related to the financial side of the transactions, such as the pricing, the applicable credit terms, the payment schedules and terms. If there are consignment arrangements entered into, they will also belong to the finances flow.

COMPONENTS OF SUPPLY CHAIN MANAGEMENT

SCM has the following basic components:

Planning and Control

As in every other process, the first stage involves coming up with a plan or strategy on how the company's product or service will meet the needs of its target customers or end users, while allowing the business to earn a profit. This involves taking into consideration all the resources that will be used in the manufacture and delivery of these products to the customers.

It does not end there, either. Once a strategy has been developed, there is a need to monitor the supply chain and see to it that the plan is being followed.

Development

We have reiterated how collaboration and partnerships play very important roles in SCM, and that is especially apparent in this stage. The organization has to build and maintain strong relationships with its raw materials suppliers and service providers.

This covers identifying the suppliers that the organization feels most comfortable working with, and coming up with plans and agreements on pricing, shipping, delivery, and payment.

Manufacturing

This is where the raw materials are placed into production to come up with the finished product, which will then undergo testing and packaging. The activities involved in this component include scheduling, resources allocation, finished goods inventory management, and quality control measures.

Delivery

We now come to the logistics. At this point, all the finished products that were packaged will now be brought along the distribution channels so they can reach the customers. It covers order receipt and fulfillment, warehousing, shipping and payment collection.

Building strong relationships with carriers or transport companies that will handle the shipping and delivery processes will also fall under this component.

Return

Part of supply chain management is how the organization will handle when customers return defective products to the company, and find ways to deal with any potential negative effect of such returns.

One of the strategies in SCM to address returns-related issues is to set up a network that will be dedicated to receiving the defective products and providing assistance to customers who are returning these products, as well as responding to customers' questions, if any.

We can never take out the organization structure as one of the components of SCM, because they will have an effect on how SCM is carried out. We can further break that down into the following.

- **The power and leadership structure.** At the end of the day, it is the decision of top management that will prevail. They have the final decision on the conduct of SCM.
- **The management methods or styles used.** How the management runs or supervises the company will also affect how SCM is carried out.
- **The overall organizational culture or attitude.** Much of the corporate culture or attitude toward SCM will be dictated by those in power. It is a sad reality that, although the concept of the supply chain has been around for a very long time, there are still many business that do not pay much attention to it.
  With the advancement of technology, SCM has become automated, thanks in large part to the many software applications or programs developed specifically for the management of supply chains. Of course, before choosing which program will work for your specific business, you still have to do your research.

CHALLENGES TO SCM

If we are to name a disadvantage of SCM, it would be the huge amount of investment it requires, both in money, time, manpower, and other resources to plan, implement and monitor it. This is further aggravated by the fluctuating costs in the global market today.

Today, businesses also have greater chances of bringing their operations global. The internet has certainly made it possible for companies to have a wider reach in terms of their target market. But this has also posed a challenge to the logistics because, when they used to think about their supply chain only within their state or country, now they have to expand it on an international or even global scale, too.

Competition has also risen to a global scale, which means companies now have to pour more resources into ensuring that their supply chain or supply network can compete with that of their rivals. Again, this will go back to the issue of whether the company has enough resources to meet the required investment. Clearly, SCM does not come cheap. But with proper implementation, it can bring greater benefits.