

## What is Supply Chain Management?

There are many explanations and definitions of supply chain management. A common consensus is that:

*“Supply Chain management is the integration of key business processes from end user through original suppliers that provides products services and information that add value for customers and other stakeholders” (Lambert and Enz (2017 p 2)*

Obviously, depending on your product, your supply chain can be basic or much more complex. It may only include a handful of suppliers or include a network suppliers and customers throughout the world.



BMW have over 1200 suppliers across 70 countries. However, they have only 40 strategic suppliers. 50% of its strategic suppliers are in Germany or owned by German subsidiaries.

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The supplier relationships, sourcing and portfolio purchasing sessions will provide you with more detail and skills on supplier selection, supplier types, and relationship development.

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## Supply Chain Terms

Figure 1 highlights key terms and flows within a simple supply chain. Primarily, product flows from left to right. However, information flows are multidirectional; the better the understanding the manufacturer has of the customers' requirements, then the less distortion and more effective and efficient his entire supply chain can be.

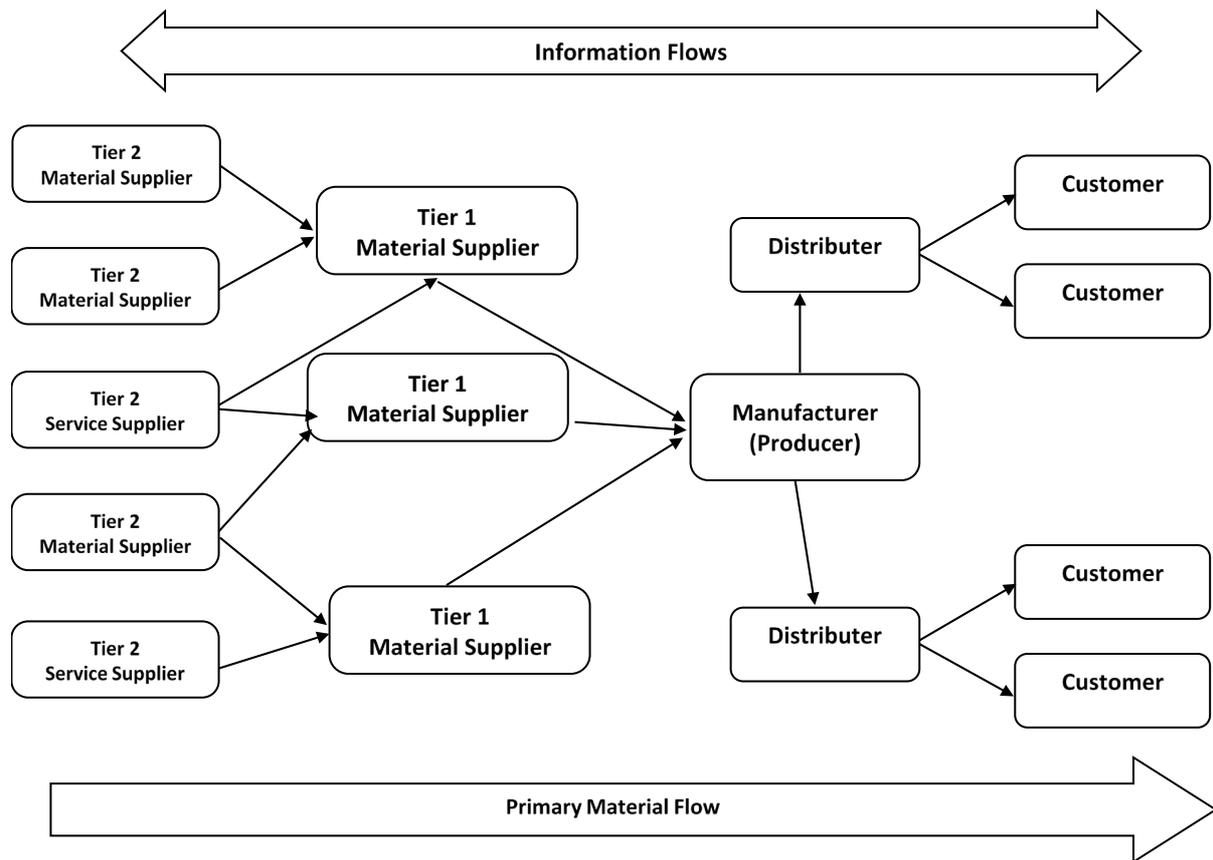


Figure 1: Supply Chain Management Key Stages

Table 1 outlines the key terms you are likely to encounter daily throughout your supply chain:

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Table 1: Supply Chain Terminology

Supply Chain Management Terminology	Basic Definition
Buyer	The buyer is the person or organisation that purchases products or services from suppliers
Supplier/Procurement/Purchasing	The supplier is the person or organisation that provides the product or services.
O.E.M/Focal Firm/Producer/Manufacturer	Original Equipment Manufacturer. The company that assembles parts and equipment bought from suppliers into the final product.
Tier 1 Supplier	Companies that supply parts or systems directly to OEMs are called Tier 1 suppliers.
Tier 2 Suppliers	Companies that supply parts or systems directly to Tier 1 suppliers. Typically, smaller companies with limited geographical reach.
Supply Management	The process of planning, sourcing, buying and managing products or services required to support the business needs.
3 <sup>rd</sup> Party Logistics/Distributor	If firms are not vertically integrated, i.e., have their own distribution fleet, then quite often a logistics firm manages elements of the distribution, warehousing, and fulfilment for a firm. This is known as 3PL or third party logistics.
4 <sup>th</sup> Party Logistics /Lead Logistics Provider	A strategic management firm that manages all the logistical elements (including managing a range of 3PLs), across a range of products for a firm.

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## Role of Supply Chain Relationships

Every manufacturing company has a supply chain. It was felt in the early 2000's that companies simply competed supply chain versus supply chain. This mind-set has evolved; since many larger firms may have many of the same suppliers, and many of the same customers.

For example, let's look at Coca-Cola Company versus PepsiCo:



They both purchase their sweeteners from the same supplier (Cargill), and purchase their packaging from the same supplier (Graham Packaging Company). In many cases, Coca Cola Company and PepsiCo sell to similar retailers. If both firms have many of the same suppliers and many of the same retailers, then it is not just about supply chain versus supply chain.

“Supply Chain Management is about relationship management. A supply chain is managed, link by link, relationship by relationship and the organisations that manage these relationships the best will win”

(Lambert and Pohlen, 2001; cited by Lambert and Enz, 2017, p5)

Competitive advantage in Supply chain management is achieved through successful **integration** through relationship management. Customer relationship management and supplier relationship management are the two key links that will determine the success of your supply chain.

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## Supply chain types

There are a range of supply chain types. Each supply chain has its own set of characteristics. Understanding which type of supply chain is best for your product type will help you with key strategic and operational decisions. The two most common types of supply chain are:

1. Lean
2. Agile

### Lean Supply Chain

A lean supply chain is a set of organisations that work collaboratively to reduce costs and waste. The key objective of the lean supply chain model is efficiency. Firms focus on maximising end-to-end supply chain efficiency to lower costs.

This type of supply chain tends to suit functional products (such as men's 'classic' black shoes or black buckets) with the following demand characteristics:

- Predictable demand
- Few changes in orders
- A low variety of offerings
- Prices remain stable
- Lead times are long
- High volume
- Low profit margins.

The supply chain objectives of this type of supply chain are:

- Low throughput times
- High volume
- High utilisation
- Deployed inventory
- Flexible suppliers.

In this type of supply chain, it is vitally important to:

1. Understand the customer requirements, such as quantities and rates.
2. Create velocity through reducing lead-times and increasing speed throughout the supply chain.
3. Create linear and stable flows of information and materials through the supply chain.

Ways to do this include:

1. Developing a culture of collaboration.
2. Customer and relationship management.
3. Technology integration to share information efficiently and accurately.

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## Agile Supply Chain

An agile supply chain **focuses primarily on** responsiveness rather than solely cost and waste reduction. The ability to be flexible to changing customer demands is central. This type of supply chain tends to suit innovative products with the following demand characteristics:

- Unpredictable demand
- Many changes in orders
- High variety
- Prices fluctuate
- Short lead times
- High profit margins.

The agile supply chain model is recognised within the smartphone and PC industries. Innovation is critical to the company's success and products tend to be built for the customers' unique specifications. For example, in the PC industry customers can choose from a range of specifications. This model is mostly used in industries characterised by unpredictable demand. Firms attempt to manage their inventory by using many common components across several production lines.

To ensure agility in the supply chain, more inventory is normally kept closer to the customer and shorter run production processes are designed.

See Figure 3 for an overview of lean vs agile characteristics (Slack, N., Chambers, S. and Johnston, R. (2016) *Operations Management*; Eighth Edition, Pearson Education Limited, Harlow, UK)

		Nature of Demand	
		Functional Products	Innovative Products
		Predictable Few Changes Low variety Price stable Long lead-times Low margin	Unpredictable Many Changes High variety Price markdowns Short lead-times High margin
Supply Chain Objectives	Efficient	Lean supply chain management	Mismatch
	Responsive	Mismatch	Agile supply chain management

Figure 2: Lean versus Agile Characteristics

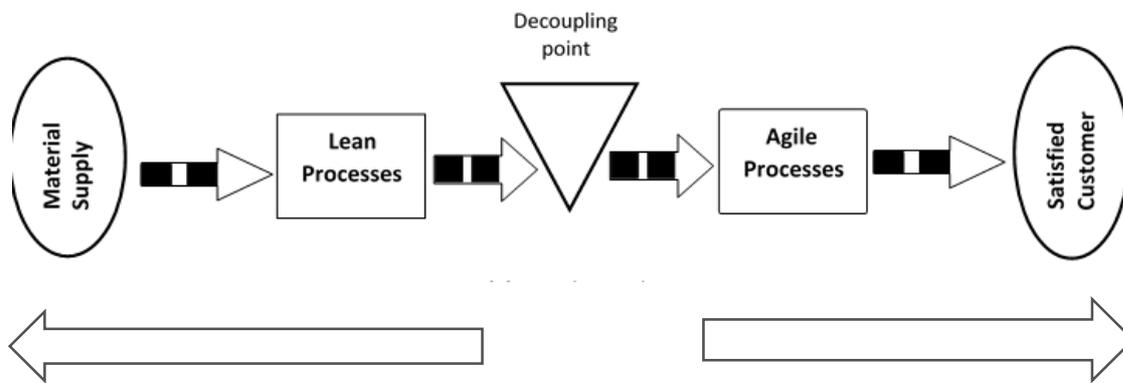
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In summary, most products fit into one of two types of these supply chains, i.e., Lean or Agile. However, more recently larger firms are trying to maximise their supply chain efficiency and flexibility further and increasingly firms are moving towards what is known as a 'le-agile' supply chain.



Companies like Dell are employing a Le-Agile supply chain strategy to provide customers with increased choice whilst also keeping costs at a minimum.

A le-agile supply chain (see Figure 3) aims to deliver the best of both worlds, by being efficient and flexible. A le-agile firm is one where firms are lean in the supplier side of their supply chain and then have decoupling point where they marry this with agility at the customer side. It attempts to have the best of both efficiency and responsiveness. PC firms try to adopt this whereby they build products to a standard level, and then customise at the point of order.



Adapted from Peck and Towill, (2006)

Upstream towards supplier network (tier 1,2,3) lean is the dominant strategy	Decoupling point to allow customer customisation	Downstream towards customer network, agile is the dominant strategy
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Figure 3: Le-Agile Supply Chain

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## References

Lambert, D.M., Enz, M.G. (2017), "Issues in supply chain management: progress and potential" *Industrial Marketing Management*, Vol. 62 pp. 1-16

Christopher, M & Peck, H & Towill, D. (2006). A Taxonomy for Selecting Global Supply Chain Strategies. *International Journal of Logistics Management*, The. 17. 277-287.

Slack, N., Chambers, S. and Johnston, R. (2016) "Operations Management", Eighth Edition, Pearson Education Limited, Harlow, UK