1.1.10. Traditional Commerce *Versus* E-Commerce

The **table 1.1** shows the difference between traditional commerce and e-commerce:

Table 1.1: Difference between Traditional Commerce and E-Commerce

Traditional Commerce	E-Commerce
Cost is associated with the middleman for selling the products.	As the overhead cost to run an e-commerce is comparatively less, it is very cost effective in nature.
A lot of time is needed for the completion of a transaction.	A significant amount of valuable time of both the firm and customer is saved.
In order to purchase the product, the customer has to visit the firm directly.	Both the customer and business can carry out their activities conveniently. The customer can order the product from anywhere in the world by simply browsing the respective e-commerce website.
As a lot of cost is associated with the expansion of the business, it is not easy to expand.	The market size of business can be easily expanded from regional to international.
Significant amount of time and money is needed to introduce a new product in the market and examine the customer response.	The customer feedback can be immediately obtained by introducing a new product over e-commerce website.
The profit of the organisation is pulled down because cost is incurred on inventory, middleman and limited sales.	Streamlining of operations, increase in sales and cutting down of costs allows the company to increase sales and in return get more profits.
The goods can be physically inspected before the actual purchasing is made.	The goods cannot be physically inspected at the time of purchasing.
Business operations take place during specific time of the day.	E-commerce services are available 24 hours.
Those items that can be touched and felt are most suitable to be sold by this process.	It is suitable for purchasing books, software, music and tickets. Purchasing of perishable goods and valuable items is not suitable in e-commerce.
There is a "face-to-face" interaction between the merchant and the customer.	As the personal touch is missing in e-commerce, the interaction between customer and business is "screen-to-face".
Chances of clerical errors exist as the transactions are processed manually.	The clerical errors are significantly reduced due to the fact that the business transactions are processed automatically.
A linear or vertical relationship exists in traditional commerce.	An end-to-end business relationship exists in e-commerce.

1.1.11. E-Commerce in Perspective

There are several ways of looking at e-commerce:

1) **Communication:** It has the ability to deliver products, services, information, or payments via networks like the internet.
2) **Interface:** E-commerce means information and transaction exchange: Business to business, Business to consumer, Consumer to consumer, and business to government.

3) **Business Process:** E-Commerce means activities that support commerce electronically by networked connections. **For example,** business processes like manufacturing and inventory etc.

4) **Online:** E-commerce is an electronic environment that allows sellers to buy and sell products, services, and information on the internet. The Products may be physical like Cars, Computers, Books or services like news or consulting.

5) **Structure:** E-commerce deals with various media like data, text, video, web pages, and internet telephony.

6) **Market:** E-commerce is a World Wide Network. A local store can open a web storefront and find the world at doorstep- customers, suppliers, competitors, and payments services, of course, an advertising presence is essential.

1.2. SUPPLY CHAINS/VALUE CHAINS

1.2.1. Introduction

Supply Chain encompasses all activities associated with the flow and transformation of goods from the raw materials stage (extraction), through to the end user, as well as the associated information flows. Materials and information flow both up and down the supply chain.

Supply Chain Management is the integration of these activities, through improved supply chain relationships, to achieve a sustainable competitive advantage.

Supply chains may be long and complex, and may involve many different business partners. One frequently see problems in the operation of the supply chains. These problems may result in delays, in customer dissatisfaction, in lost sales, and high expenses that result from fixing the problems once they occur. World-class companies, attribute much of their success to effective Supply Chain Management (SCM), which is largely supported by IT and e-commerce technologies.

When a supply chain is managed electronically, usually with web technologies, it is referred to as an **e-supply chain**.

Supply Chain Management (SCM) involves the coordination of all supply activities of an organisation from its suppliers and delivery of products to its customers (**figure 1.8**):

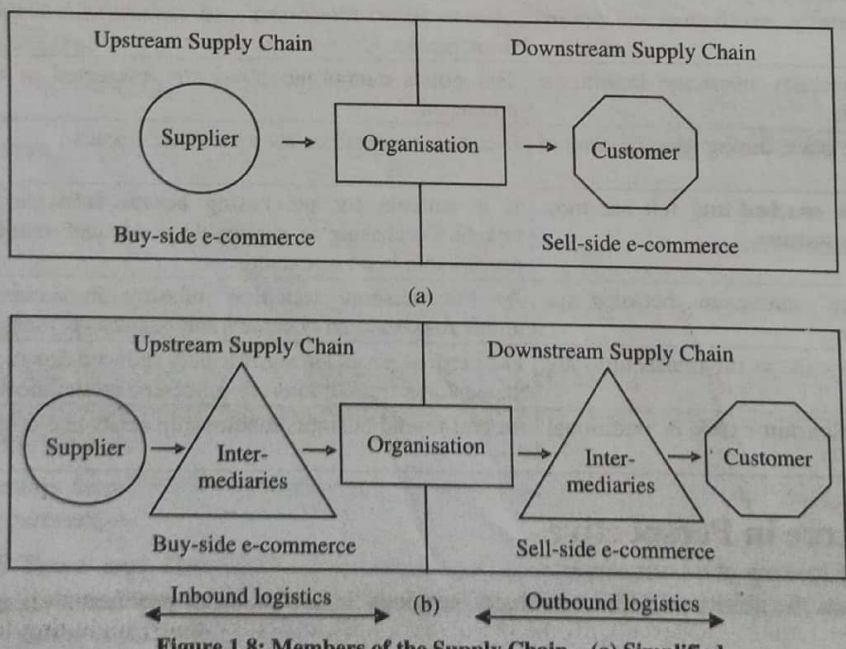

Figure 1.8: Members of the Supply Chain – (a) Simplified View, (b) Including Intermediaries

Figure 1.8 introduces the main players in the supply chain. In **figure 1.8(a)** the main members of the supply chain are the organisations that manufacture a product and/or deliver a service.

For most commercial and not-for-profit organisations one can distinguish between upstream supply chain activities which are equivalent to buy-side e-commerce and downstream supply chain activities which correspond to sell-side e-commerce.

Supply chain management includes not only supplier and buyer, but also the intermediaries such as the supplier's suppliers and the customer's customers **(figure 1.8(b))**. Indeed, **figure 1.8(b)** is a simplification of some companies which may have first-tier suppliers, second-tier and even third-tier suppliers or first-, second-, and higher-tier customers. Because each company effectively has many individual supply chains for different products, the use of the term 'chain' is limiting and supply chain network is a more accurate reflection of the links between an organisation and its partners. The existence of this network increases the need for electronic communications technology to manage and optimise this network.

Technology is vital to supply chain management since managing relationships with customers, suppliers and intermediaries is based on the flow of information and the transactions between these parties. The main strategic thrust of enhancing the supply chain is to provide a superior value proposition to the customer, of which efficient consumer response is one method.

Success of an e-supply chain depends on the following factors:

1) **Ability of All Supply Chain Partners to View Partner Collaboration as a Strategic Asset:** It is the tight integration, and trust among the trading partners that generates speed, agility, and lower cost.
2) **Information Visibility along the Entire Supply Chain:** Information about inventories at various segments of the chain, demand for products, delivery times, and any other relevant information must be visible to all members of the supply chain at any given time. Therefore, information must be managed properly – with strict policies, discipline, and daily monitoring.
3) **Speed, Cost, Quality, and Customer Service:** These are the metrics by which supply chains are measured. Consequently, companies must clearly define the measurements for each of these four metrics together with the target levels to be achieved. The target levels should be attractive to the business partners.
4) **Integrating the Supply Chain more Tightly:** An e-supply chain will benefit from tighter integration, both within a company and across an extended enterprise made up of suppliers, trading partners, logistics providers, and the distribution channel.

Benefits of Using Internet Technologies in Supply Chain Management

1) Share information about changes in customer demand.
2) Receive rapid notification of product design changes and adjustments.
3) Provide specifications and drawings more efficiently.
4) Increase the speed of processing transactions.
5) Reduce the cost of handling transactions.
6) Reduce errors in entering transaction data.
7) Share information about defect rates and types.