

Lesson 7 - Logistics Management

In this lesson, we will gain an understanding of the process involved in delivering a product to a local, national, and an international market. We will also learn about the benefits of Radio Frequency Identification (RFID) and the potential impact it could have on tracking products.

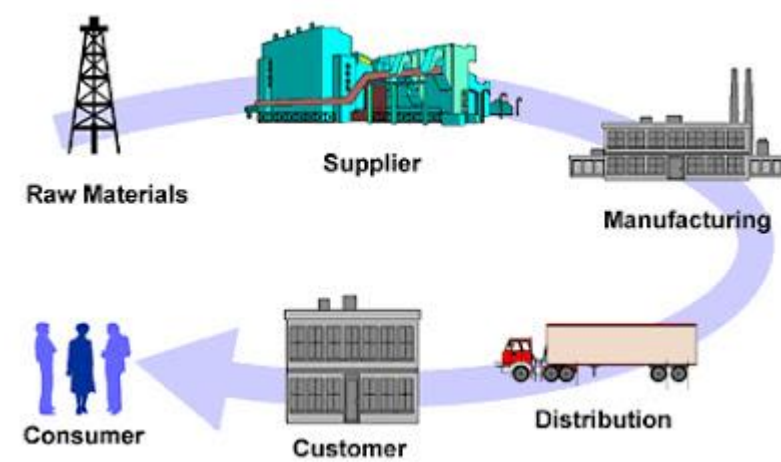


Logistics (1 of 2)

When a company exports to a single market it selects a dependable mode of transportation to ensure the safe arrival of the product within a reasonable time for a reasonable carrier cost. But once a company becomes global, such a solution to the movement of products could prove inefficient and costly. Sometimes the hardest part of international trade isn't the sale itself. Getting the correct quantity of the product to the customer in the required time frame at a cost that ensures a profit can be the most difficult challenge in international business.



Logistics (2 of 2)



When an international business begins producing and selling in more than one country and becomes global, it needs to consider the concept of logistics management. Logistics management is a total systems approach to management of the distribution process that includes all activities involved in physically moving raw material, in-process inventory, and finished goods inventory from the point of origin to the point of use or consumption.

Question: *What is Logistics?*

“Logistics is the process of strategically managing the sourcing, movement and storage of materials, parts and finished inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfillment of orders.”

Christopher, M. (1999) Logistics and supply chain management: strategies for reducing cost and improving service. Financial Times Prentice Hall

Assignment #1 - Supply Chain and Logistics Association Canada

- ▶ See Assignment #1 on Handout

Radio Frequency Identification (RFID) (1 of 3)

Canadian cattle and haute couture from Prada might not seem to have much in common, but they do. Each is a valuable asset tracked by radio frequency identification (RFID) technology. In the case of the cows, a small plastic "smart tag" affixed to the animal's ear contains pertinent information about its bloodlines, date of birth, and vaccine records. The tag Prada (officially known as I Pellettieri d'Italia SpA) used on merchandise carries information about a garment's style, size, colour and other details, including price.



Radio Frequency Identification (RFID)

(2 of 3)

The RFID tag in the cow's ear contains a silicon chip to store data and a miniature antenna. The Prada tag and antenna can be printed or etched on an electronic substrate, which is then embedded in a plastic or laminated paper garment tag. Data from these tags is captured by a reader unit, which consists of an antenna and radio transmitter, attached to a stationary or handheld device. The reader emits radio waves, and when a tag comes within the range of the reader, the tag wakes up and starts sending data. The reader captures this bit stream, decodes it and sends it back over a network to a host processor.

Radio Frequency Identification (RFID)

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These systems have a relatively short range—inches to a few feet—but that's enough for inventory control or payment applications, such as the Citi Petro-Points Mastercard PayPass. A gas-pump-based reader interrogates the key-fob PayPass (which contains a chip and an antenna) waved inches from the pump, obtains its identifier, passes that on via a Very Small Aperture Terminal (VSAT) network to a back-end system for credit approval and then turns on the pump—all in seconds.



Article: The Canadian RFID Centre

- ▶ [Read Article on The Canadian RFID Centre on Handout](#)

Assignment #2 - Canadian Radio Frequency Identification Centre

▶ See Handout for Assignment #2