

Preface

Welcome to your logistics management course. This book presents a state-of-the-art view of logistics management. Logistics is an exciting area of management that has a profound effect on productivity and effectiveness of the business processes. Indeed, few other activities have as much impact on the quality of our lives especially now in the pandemic time. The goal of this text is to present a broad introduction to the field of logistics in a realistic, practical manner. Even if you are not planning on a career in the logistics area, you will likely be working with people here and it helps you understand how logistics affects society and your life.

I welcome comments by email from students, managers and other people. Hopefully, you will find this material useful and interesting.

Introduction

This edition of the book discusses issues pertaining to logistics and supply chain management (SCM) and is different from other books as it contains not just logistics definitions but mostly presents basic elements, operations and functions of logistics in according chapters. This way provides the readers with an underlying knowledge and helps to improve their English in the logistics field.

Logistics and supply chain activities permeate almost every aspect of our lives and this is why five chapters present the contents.

Chapter 1 discusses an overview of logistics and SCM activities, shows differences between logistics operators and presents the trends in logistics fields a little.

Chapter 2 then discusses the basic elements of logistics. Topics here include the basic logistics functions; the logistics activities; logistics channels, logistics network; pros & cons of distribution channels.

The following three chapters consider issues such as inventory management, using storage facilities and some transportation indicators.

Chapter 3 leads off by considering procurement activities: described ABC-XYZ, EOQ model and discuss the reorder level, lead demand, safety stock & cycle stock. The chapter also includes issues about sales forecasting, such as short-, long-term sales forecasting. Describing a few sales forecasting methodology: forecast sales by the units and revenue.

Chapter 4 discusses warehousing; after transportation, storage facilities in the form warehouse and distribution centres contribute to the second-largest impact on the effectiveness of the business process. The topic includes the types of warehouses (the A-D classification of warehouses), describes warehouse layout and operations shows storage and handling equipment.

Chapter 5 takes the logistics discussion further by considering issues related to transportation. The topic here includes a discussion of transportation modes, shows core freight KPIs of the transportation management system such as LDM, the volume of the truck, the weight of the entire order. At the end of the chapter contains a little information about a new rule Incoterms 2020.

Logistics: basic terms and their definitions

- *The definition of logistics management*
 - *Logistics operators*
 - *The trends in logistics fields*
-

In this part of the book, we will introduce various elements of logistics channels and how they work together. Logistics in generally is a network of people, processes, resources, and technologies in an organization that works collectively to produce products and services for an end-user, or customer. Logistics (or the new version of its – supply chain) consists of multi-national, global networks of companies working together to build products and provide services.

The definition of logistics management

Firstly, let's talk a little about the definition of logistics because nowadays we have a wide variety of it. You can read newspapers or business magazines and notice different terms describing the same process in details, for example, logistics, business logistics, physical distribution, logistics management, supply chain management. In general, they are the same terms.

Talking about goods delivery from suppliers to the end-customers – we mean **logistics**. It is a process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods. They include services and related information from the point of origin to the point of consumption for the purpose of conforming customer's requirements [1].

There are 2 directions in this process: physical supply and physical distribution. You can see it on the figure 1. Physical supply means work with the raw material, which suppliers transport to the manufactures for transformation this raw into the end-product. Another direction of logistics is physical distribution. In this way, the end-goods deliver to the point of their sale (to retailers) for customers buying.

The functions of both directions are the same: transportation, warehousing, order processing, information maintenance. But the operations of these functions are different. That's why logistics is a common term for describing the process of goods delivery without any refinements. If we mention the operators and concretize their activities, we use the definitions of business logistics: physical supply or physical distribution.

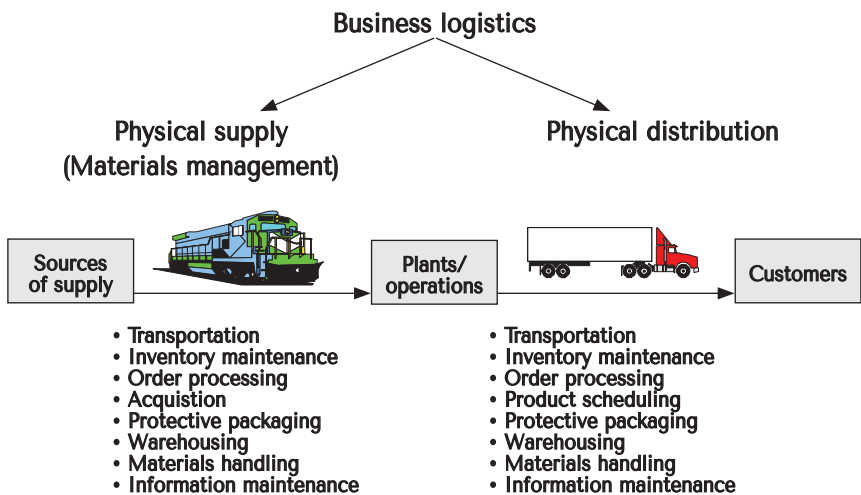


Figure 1 – Typical Activities in a Firm's Immediate Supply Chain

Source [2]

Talking about exchange the information, ordering or transportation between the operators, we pay attention to logistics management. As defined by the Council of Supply Chain Management Professionals (CSCMP) [1]: “**Logistics management** is a part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and consumption in order to meet customers’ requirements. Logistics management activities typically include inbound and outbound transportation management, fleet management,

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