Introduction 1

The structure of this book is oriented towards the componential functions of logistics. The logistical task spectrum is characterized by a great degree of variety and dissimilarity. This is due firstly to logistics' roles, functioning within both overall economic as well as business processes, in all value-added steps from the processing of raw materials to the end-user. The persons concerned with these value-added steps are suppliers, manufacturers, producers, and service providers but even wholesalers and retailers whose goal is to satisfy the demands and wishes of their customers. Secondly, complexity arises due to dynamics that are simultaneously a result of business activities and promoted by logistics. In doing so, logistics finds itself constantly seeking a balance within the competing fields of performance, cost, and quality.

Figure 1.1 positions the individual topics addressed in this book into the broader context of the functions of logistics.

Chapter 2 lays the groundwork for the range of logistical concepts. The ensuing Chap. 3 puts this basic knowledge into a topical context, thereby illustrating the broad range of application of logistics currently used in the economy. Both chapters are a prerequisite for the study of logistics; therefore, they are placed above the tripartite model of performance, cost, and quality.

As logistics needs its own specific infrastructure, Chap. 4 presents logistical infrastructure facilities. In addition to the familiar traffic infra-and traffic suprastructure, this chapter also discusses other logistically significant facilities; namely, logistics real estate and structures of information and communication networks.

Chapter 5 about transport services and logistics services, Chap. 6 about warehousing, transshipment and picking, as well as Chap. 7 about inventory and provisioning management give a detailed account of the logistical core functions and therefore assume a central role in this book. They constitute the most essential body of knowledge for any future logistics expert.

Chapter 8 deals with logistics network planning. In particular, basic decision-making processes and possible structures of warehousing networks and transportation networks are addressed.

2 1 Introduction

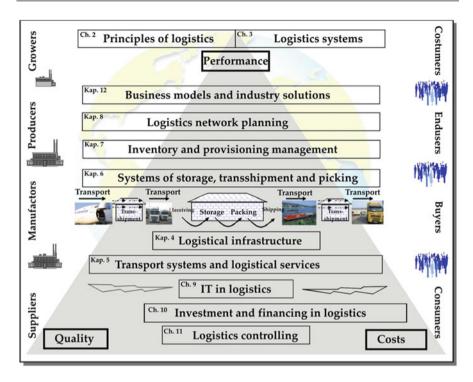


Fig. 1.1 Logistics and its branches

Logistics systems have become inconceivable without the professional use of data processing. Thus, Chap. 9 presents the most important and functionally necessary supporting instruments of information technology, identification technology, and communication technology.

Chapter 10 introduces the reader to the topic of financing operations for stock, logistics real estate, and movable properties (equipment). This financial approach leads to an extended view on the supply chains including the monetary flows and generating the financial supply chain.

Controlling (used in the sense of managerial accounting) plays a pivotal role in the planning and monitoring of logistics systems. Chapter 11 will discuss both the basic approaches to cost and performance accounting in logistics and the functionalities of logistics controlling. Thus, the topics of Chaps. 9 and 11 provide a frame for the core functions outlined in Chaps. 5, 6, and 7. All systems, facilities, and processes mentioned in the previous chapters assume the expenditure of capital.

In order to provide a context to the practice of logistics companies, Chap. 12 presents the typical business models and industry solutions. Thus, the basic knowledge is brought into relation with applied logistics systems. At the same time, it illustrates the multi-faceted range of logistics solutions in practice.