

现代物流管理系列教材

物流英语

WULIU YINGYU

景 平 主 编
姚 薇 副主编




上海财经大学出版社

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总 序

随着我国社会主义市场经济体系的建设、世界经济全球化进程的加快和科学技术的飞速发展,物流业作为国民经济中的一个新兴的产业部门,已成为本世纪我国产业和国民经济中新的增长点。从中央到地方以及许多市场意识敏锐的企业,已经把物流作为提高市场竞争能力和提升企业核心竞争力的重要手段,把现代物流理念、先进的物流技术和现代经营模式引入国家、地方经济建设和企业经营与管理之中。

物流是使商品在需要的时间到达需要的地点的经营活动过程,是提高商品流通效率的重要途径,是企业的“第三利润源泉”。物流、商流和信息流共同构成商品流通的完整体系,三者缺一不可。具体而言,物流是指在从原材料和零部件的采购、装卸、运输、转运、生产、包装、储存、配送与销售,到最终将商品送达用户手中的过程中,所涉及的各个环节的物品移动和滞留的流程形态。研究物流的现实目的在于,通过综合运用科学技术手段和组织管理方法,来降低物流流程的广义成本,从而提高商品生产和流通的效率及经济效益。

物流活动是人类经济活动中必不可少的重要环节,并随着生产力的发展而发展。当生产力发展到一定阶段,出现了剩余产品,交换过程中的物流便应运而生。工业革命之后,随着大批量生产和消费的产生,物流获得了较快的发展。现代意义上的物流业发端于 20 世纪五六十年代,成熟于七八十年代,从全球看,只有不到半个世纪的发展史。因此,国外有些著名经济学家和管理学家把它称为“经济管理领域最后一块神秘未知的土地”。当前,物流业已经成为经济全球化过程中最主要的话题之一。国际学术界和业界公认,物流业正在成长为潜力最巨大的利润源泉。

我国直到 20 世纪 90 年代中后期,才开始重视发展现代物流业,长期以来存在的“重商流、轻物流、重生产、轻流通”的现象开始得以扭转,目前正处于高速增长的上升阶段,存在着巨大的市场潜力和广阔的发展前景。现代物流的发展趋势是信息化、自动化、网络化、智能化和柔性化,我国物流业必须在快速发展中,高度重视中国加入 WTO、现代科学技术发展和全球经济一体化步伐加快的大背景,时刻关注世界物流技术发展的最新动态,利用先进技术改造仓储、运输和包装等物流环节,以提高物流效率,增强物流企业在国际物流市场上的竞争能力,加快物流现代化的步伐。

科技是第一生产力,人才是第一资源。我国要发展物流业,首先要加强物流人才的培养,物流教育无疑将担当起培养新一代物流人才的重任。目前,我国的物流教育与现代物流发展的需求仍有较大距离,现代物流综合性人才、企业尤其是流通企业现代物流管理人才、城市规划物流系统运筹人才、第三方物流企业的运作技术操作人才严重匮乏,阻碍了经济的发展和经济效益的提高。加速启动现代物流业的人才教育工程,实施多层次、多样化的物流教育,是我国 21 世纪物流业大发展中保证形成合理的人才结构,提高物流管理水平和经济效益的决定性因素。

实施现代物流业的人才教育工程,必须在以下四个方面给予足够重视:一是要加强普通高等院校、高等职业技术学院的高层次学历教育,培养高级物流经营管理人才;二是要重视继续教育,开展多层次的物流人才培养与教育;三是要大力发展物流职业技术教育,培养一大批第一线物流技术的操作实用型人才;四是推行从业人员职业或岗位资格管理制度,造就一大批具有物流专业知识和技能特长的一流物流师人才。无论哪一个层面的教育,其教育工具,既要涵盖现代物流理念、现代物流技术,又要符合现代教育规律,并且具有现代教育技术的教材以及教学软件包,是至关重要的。

由上海第二工业大学牵头,一批长期从事物流管理、教学与研究的专家、学者和企业家共同编写的“现代物流管理系列教材”,是学校教学改革、产学研合作的具体成果,其重要特征是将物流技术和管理结合起来,既不开技术单纯地谈管理,也不舍弃管理而陷于技术的细节中。这套教材包括:《现代物流管理学》、《物流运输管理》、《物流英语》、《物流运筹学》、《物流成本管理》、《集装箱多式联运》、《企业物流管理》、《供应链管理》、《仓储与配送管理》、《物流法规》、《物流信息管理》,既可作为普通高等院校、高等职业技术学院的物流专业和相关课程的选用教材,也适合广大物流企业从业人员作为学习参考用书。

这套教材在编写过程中,得到了许多院校和研究机构的专家、学者以及物流企业领导的大力支持,在此一并致谢。由于编写时间仓促,加上编者水平所限,书中存在不足之处在所难免,恳望广大读者提出宝贵意见,我们将不断努力,广纳良言,为现代物流产业的人才教育工程继续奉献绵薄之力。

编委会主编 李进教授
2004 年 3 月 1 日

前 言

随着市场经济的发展、企业间竞争的加剧,各行业、各企业都在争相发掘新的利润源泉,长久不被人们重视的物流在今天得到了越来越多的关注,企业纷纷设立物流部门,第三方物流业蓬勃兴起,国际物流的发展也进入了新的阶段。物流成为当前最热门的话题之一。人们开始要求了解物流的概念、学习物流管理方法、研究物流的发展趋势。

我们都知道,物流这一概念源于美国。许多新兴的物流管理理念、管理方法以及管理技术都产生于发达国家,同时,经济全球化的浪潮也促使我们更快地与国际接轨,因而,我们应不断学习国外最前沿的物流知识,掌握物流知识的英文表达。

为此,我们编写了这本物流英语教材,本书既可作为高等职业技术学院、普通高等院校相关专业和课程的选用教材,也适合各层次教育、物流从业人员作为教学与学习的参考用书。

本书内容涉及现代物流理论和物流管理过程的基本环节。全书共分 15 个单元,每一单元由课文、词汇、难句注释、习题和补充阅读材料等 5 个部分构成。

本书由上海第二工业大学和浙江宁波纺织职业技术学院的老师合作编写。具体参编人员如下:

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由于编写时间仓促,作者水平有限,书中不足之处难免。敬请读者不吝赐教。

编 者
2004 年 3 月

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Unit 1

An Introduction to Logistics

Text

In the early part of 1991 the world was given a dramatic example of the importance of logistics. As a precursor to the Gulf War it had been necessary for the United States and its allies to move huge amounts of materials great distance in what were thought to be impossibly short time. Half a million people and over half a million tons of materials and supplies were airlifted 12,000 kilometers with a further 2.3 million tons of equipment moved by sea—all of this achieved in a matter of months.

Throughout the history of mankind wars have been won and lost through logistics strengths and capabilities—or the lack of them. It has been argued that the defeat of the British in the American War of Independence can largely be attributed to logistics failure. The British Army in America depended almost entirely upon Britain for supplies. At the height of the war there were 12,000 troops overseas and for the most part they had not only to be equipped, but also fed from Britain. For the first six years of the war the administration of these vital supplies was totally inadequate, affecting the course of operations and the morale of the troops. An organization capable of supplying the army was not developed until 1781 and by then it was too late.

In the Second World War logistics also played a major role. The Allied Forces' invasion of Europe was a highly skilled exercise in logistics, as was the defeat of Rommel in the desert. Rommel himself once said, "*before the fighting proper, the battle is won or lost by quartermasters*".

However while the Generals and Field Marshals from the earliest times have understood the critical role of logistics, strangely it is only in the recent past that business organizations have come to recognize the vital impact that logistics can have in the achievement of competitive advantage. This lack of recognition partly springs from the relatively low level of understanding of the benefits of integrated logistics. Arch Shaw, writing in 1915, pointed out:

'The relations between the activities of demand creation and physical supply ... illustrate the existence of the two principles of interdependence and balance. Failure to coordinate any one of these activities with its group-fellows and also with those in the other group, or undue emphasis or outlay put upon any one of these activities, is certain to upset the equilibrium of forces which means efficient distribution.

... The physical distribution of the goods is a problem distinct from the creation of demand ... Not a few worthy failures in distribution campaigns have been due to such a lack of coordination between demand creation and physical supply ...

Instead of being a subsequent problem, this question of supply must be met and answered before the work of distribution begins.

It has taken another 70 years or so for the basic principles of logistics to be clearly defined.

The Definition of Logistics

What is logistics in the sense that it is understood today? There are a number of definitions of what is understood by the word logistics and, in some senses, the use of the word is simple, while in others it is more complex. The following definitions will help understand the term:

Logistics: The procurement, maintenance, distribution, and replacement of personnel and material.

——Webster's Dictionary

Logistics (business definition): A business-planning framework for the management of material, service, information and capital flows. It includes the increasingly complex information, communication and

control systems required in today's business environment.

——Logistics Partners Oy, Helsinki, FI

Logistics: The process of planning, implementing, and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from point of origin to point of consumption for the purpose of meeting customer requirements.

——Canadian Association of Logistics Management

Logistics: The art of maintaining control over worldwide supply chains by a combination of transport, warehousing skills, distribution management and information technology.

——Benson, R. and Whitehead, T.S. Transport and Logistics

Logistics: The process of strategically managing the movement and storage of raw materials, component parts and finished goods throughout the business from suppliers to final delivery to customers.

——Christopher, M. Logistics: the Strategic Issues

From these definitions logistics can be briefly described like this: Logistics means having the right thing, in the right place, at the right time. But in this book the underlying concept might be defined as follows:

Logistics is the process of strategically managing the procurement, 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.

This basic definition will be extended and developed as time goes by, but it makes an adequate starting point.

The Summarization of Logistics

Logistics is concerned with the total movement of materials through the enterprise, including the movements of documents and other facilitators to movement. It includes the management of the interruptions to movement, such as storage, if storage is necessary to the efficiency of the production process. Logistics can only be successfully undertaken as an integrated activity in the business environment if it is allied to information systems that IT developments have provided.

In addition, manufacturing and retail companies have been able to contract out parts of their logistics operation to third parties like distribution companies, while still retaining effective control by the use of accurate and timely information transfer. This information transfer involves the use of the latest developments, such as satellite technology, barcodes, hand-held terminals, EDI and EPOS. The use of open information systems providing clearer, more reliable information can be shared by different organizations using electronic data transfer and enabling the development of a logistics chain. These developments can result in reduced lead time from ordering a product to delivery, lower inventory because of better production and distribution planning, reduced total logistics costs and better customer service.

Seen in the light of the definitions, logistics touches a wide range of activities within the business. If logistics as a system within the business is to play its part in making the business successful, all managers must understand the result of their decisions on the logistics function.

Like any other part of the business, the logistics function must have objectives. These can be summed up as follows:

1. Set the standards for, and control customer service performance.
2. Keep inventory to a minimum and, whenever possible, set in motion a policy of inventory reduction.
3. Have a minimum of disruption to planned operations to eliminate inessential costs.
4. Strive for a minimum total cost of operations and in the procurement function.
5. Set standards for product and distribution quality control.

Like any other manager in the company, it is the function of the logistics manager to help achieve the objectives of the organization by planning and supervising the activities concerned with the supply chains into, within and out of the business and keeping them free from holdups, breakdowns and documentation difficulties. It has to be remembered that production is rarely a one-site activity where all production functions are carried out. Manufacturing involves raw materials, components and partly finished goods moving from site to site and being processed until final assembly and distribution to the customer. In many cases,

this movement is international, involving movement across national frontiers with all the logistics problems that this entails.

The costs of the logistics function can be split into three categories:

1. Material handling and transport costs.
2. Inventory or storage costs.
3. System costs such as computer costs, order processing, planning and forecasting.

As has been stated before, the logistics function can either be carried out in-house by a manufacturing company or a retailer, or contracted out to a third party or specialist logistics company. If the company decides on a policy of third party logistics, it is the logistics manager's job to make sure that the contract can meet the requirements for logistics of the contracting company.

Activities of Logistics System

A logistics system can be composed of many different functional activities, some of which are briefly described below:

Customer service is a multi-dimensional and very important part of any organization's logistics effort. In a broad sense, it is the output of the entire logistics effort; that is, customer service and some resulting level of satisfaction are what the logistics system ultimately provides for the buyers. However, many organizations do have a more narrow functional view of customer service as something that they actually perform. For example, a firm may have a customer service department or customer service employees that handle complaints, special orders, damage claims, returns, billing problems, etc. For all intents and purposes, these employees are the organization as far as many buyers are concerned, so their role in the entire logistics system becomes crucial. Disappointment at this level can lead to dissatisfaction with the organization as a whole that effectively neutralizes the entire logistics effort.

Demand forecasting aims at the need for accurate information on future customer needs so that the logistics system can assure the right products and/or services are available to meet those requirements. Logistics requires not only forecasting market sales but obtaining specific data on the timing, mix, and quantity desired by buyers. Without this information, the logistics system runs the risk of

compromising customer satisfaction rather than enhancing it.

Order processing may be compared to the human body's central nervous system, bringing about the distribution process and directing the actions to be taken in satisfying order demand. The components of the order processing activity may be made up of three groups: (1) operational elements, such as order entry/editing, scheduling, order-shipping set preparation, and invoicing; (2) communication elements, such as order modification, order status inquiries, tracing and expediting, error correction, and product information requests; and (3) credit and collection elements, including credit checking and accounts receivable processing/collecting. The speed and accuracy of a firm's order processing have a great deal to do with the level of customer service that the company provides. Advanced systems can reduce the time between order placement and shipment from a warehouse or storage facility. In many cases orders are transmitted from the buyer's computer to the vendor's computer. Advanced systems, although initially expensive to the company, can substantially improve both orders processing accuracy and order response time. Often, saving in other logistics expenses (such as inventory, transportation and/or warehousing) or increasing sales from improved customer service will justify the cost of the system.

Effective communication plays an important role in a logistics system. Success in today's business environment requires the management of a complex communication system. Effective communication must take place between: (1) the firm and its customers and its suppliers; (2) the major functional components of the company—marketing, manufacturing, logistics, and finance/accounting; (3) the various logistics-related activities such as customer service, traffic and transportation, warehousing and storage, order processing, and inventory management; and (4) the various components of each logistics activity (within inventory management, for example, would be in-plant inventory, inventory in transit, and inventory in field warehouse). Communication is the vital link between the overall logistics processes and the firm's customers. Accurate and timely communication is the cornerstone of successful logistics management. A firm's communication system may be as sophisticated as a computerized management information system (MIS) or as simple as word-of-mouth communication between individuals. No matter what type of system used, vital information must be available and commu-

nicated to individuals who “ need to know ”.

Procurement deals with the buying of goods and services that keep the organization functioning. Since these inputs can have a direct impact on both the cost and quality of the final product/service offered to the consumer, this activity is vital to the all success of the logistics effort. In addition, the move away from local sourcing in favor of global buying has complicated this entire process significantly in recent years.

Production planning can be involved under logistics because manufacturing needs components and raw materials in order to make finished goods that are, in turn, demanded by a customer. Thus, production planning is arguably at the center of the entire logistics process, yet it is often regarded as an independent entity with its own objectives and procedures. The risk here is that production rather than customer needs becomes the primary issue, a situation that can result in customer dissatisfaction.

Packaging focuses on protecting the product while it is being shipped and stored. Too much packaging increases costs while inadequate protection can result in merchandise damage and, finally, customer dissatisfaction. In addition, since every bit of packaging is ultimately discarded, logistics managers must also consider the societal costs associated with waste disposal. Increasingly, firms are working to develop materials that provide required levels of protection yet are recyclable or quickly biodegradable.

Storage and materials handling address the physical requirements of managing inventory. Storage includes the tasks necessary to manage whatever space is needed; materials handling is concerned with the movement of goods within that space. Thus, the former considers issues related to warehouse number, size, layout, and design; the latter concentrates on the systems needed to move goods into, through, and out of each facility. Obviously, an organization's inventory policies have a direct impact on their storage and handling needs. Thus, one result of the move to smaller inventories is the requirement for less storage space.

Inventory management deals with balancing the cost of maintaining additional products available against the risk of not having those items when the customer wants them (i.e. the cost of lost sales). This task has become more complex as firms have gradually lowered inventory levels. The challenge in this situation is to

manage the rest of the logistics system to coordinate the lack of inventory so that customer service does not suffer. Although all of the interest focuses on reducing inventories, the fact remains that they are still necessary for serving customers in many markets. So managers must decide whether they need additional products in a given market and, if so, how many of which items. It is also worth mentioning that for inventories of raw materials and component parts, the customer is the firm's own production line; for finished goods the customer is the final user of the product. Both "customers" have different needs which must be evaluated in formulating an appropriate inventory policy that balances the cost of maintaining stocks on the one hand with the costs that could result from not having necessary items (i. e. production line stoppages, lost sales) on the other. There is no doubt that holding inventory costs money, so firms don't want to have any more than is absolutely necessary to keep themselves and their customers satisfied.

Transportation refers to the physical movement of goods from a point of origin to a point of consumption and can involve raw materials being brought into the production process and/or finished goods being shipped out to the customer. Transportation has assumed a greater role in many logistics systems for two reasons. First, the liberalization of transportation laws in many countries has provided opportunities for knowledgeable managers to obtain better service at lower prices than they could in the past. Second, as inventory levels have dropped in response to the popularity of just-in-time (JIT) strategies, transportation is frequently used to offset the potentially damaging impact on customer service levels that would otherwise result from those inventory reductions.

Facility location addresses the strategic placement of warehouses, plants, and transportation resources to achieve customer service objectives and minimize cost. Although not necessarily made often, these decisions can have very long-term and potentially costly implications for the organization.

Salvage and scrap disposal can also be included under logistics because waste material is one by-product of the logistics process. If this material cannot be used to produce other products, it must be disposed of in some manner. Whatever the by-product is—scrap, residue, or radioactive waste—the logistics process must effectively and efficiently handle, transport, and store it. If the by-product is reusable or recyclable, logistics administers its transportation to re-manufacturing or

reprocessing locations.

Return goods handling, often referred to as reverse distribution, is an important part of the logistics process. Buyers may return items to the seller due to product defects, overages, incorrect items received, or other reasons. Reverse distribution has been likened to going the wrong way on a one-way street because the great majority of product shipments flow in one direction. Most logistics systems are ill-equipped to handle product movement in a reverse channel. In many industries consumers return products for warranty repair, replacement, or recycling. Reverse distribution costs may be high, the cost of moving a product back through the system from the consumer to producer may be as much as nine times the cost of moving the same product from producer to consumer. Often the returned goods cannot be transported, stored, and/or handled easily, resulting in higher logistics costs. Reverse distribution promises to become even more important as customers need more flexible and lenient return policies.

Information processing is what links all areas of the logistics system together. The growth of reasonably priced computers and software has put sophisticated management information systems within the reach of even the smallest organization. Indeed, firms are now connecting their internal logistics information systems with those of their vendors and customers as a means of adding more value to the entire channel. Such an open exchange of information can result in faster order processing, quicker benefit delivery, and greater accountability throughout the logistics process.

Words & Expressions

precursor <i>n.</i>	先驱, 前身
proper <i>adj.</i>	严格而言的, 本来的
quartermaster <i>n.</i>	军需官
integrated <i>adj.</i>	综合的; 整体的; 一体化的
undue <i>adj.</i>	过度的; 过分的; 未到期的
outlay <i>n.</i>	花费, 开支
equilibrium <i>n.</i>	平衡, 均衡