

Professional English

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管理专业英语

阅读教材

北京航空航天大学出版社

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(京)新登字 166 号

203/15
内 容 简 介

本书是为工科院校“管理工程”与“管理信息系统”专业编写的专业英语教材。内容包括管理工程与经济、工业系统工程和计算机在管理中的应用三个部分。内容涉及工程管理、战略规划、管理经济学、生产管理、质量管理、预测技术、统计分析、成本会计、系统工程与系统分析、数学规划、决策理论、网络分析、排队模型和系统仿真以及计算机基本知识、管理信息系统、办公自动化、数据库、人工智能与专家系统和计算机集成制造系统等。每课包括课文、单词与词汇解释、语法要点说明及习题等。

本书可作为工科院校管理工程与管理信息系统专业高年级本科生的专业英语教材,也可用作一般管理和经济院校的教材。本书也是广大科技人员、管理人员和具有一定英语水平的业务干部自学英语的参考用书。

管理专业英语阅读教材

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责任编辑 肖之中

北京航空航天大学出版社出版

新华书店总店科技发行所发行 各地新华书店经销

通县卷子店印刷厂印装

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850×1168 1/32 印张:18.125 字数:487千字

1993年5月第一版 1993年5月第一次印刷 印数:2000册

ISBN 7-81012-370-X/H·024 定价:5.55元

前 言

本书是高等工科院校中工业管理工程、管理信息系统、工业系统工程和企业管理等专业高年级本科生的专业英语教材。其任务是在一、二年级所学习英语的基础上,保持英语学习不断线,扩大学生的英语知识面,学习掌握经济管理、管理信息系统和工业系统工程等方面的专业英语。目的在于巩固已学到的基础英语知识;扩大专业词汇量;熟悉专业书刊中的语法现象和习惯用语。通过本课程的学习,使学生能熟练地阅读和理解英语专业文献的内容,便于学习最新的科学知识。同时,训练学生具有一定专业文献的笔译能力和专业英语的听力理解能力。

本教材的内容分为三个主要部分,即管理工程与经济学、工业系统工程(含运筹学)和计算机在管理中的应用(含管理信息系统)。教材内容均选自近年来国外出版的专业教科书、学报和期刊中的文章。内容涉及工程管理、战略规划、生产管理和质量管理、工程经济、预测技术、统计分析、成本会计、系统工程与系统分析、数学规划、决策理论、网络分析、排队模型和系统仿真以及计算机基本知识、管理信息系统、办公自动化、数据库、人工智能与专家系统和计算机集成制造系统等多个侧面。

学习本课程的基本要求如下:

(1) 巩固所学基础英语的语法知识,扩大英语词汇量,其中专业词汇量约增加 1000 个左右。

(2) 经过本课程的学习,应能在专业范围内,以每小时 4000~5000 印刷符的速度进行专业书刊的阅读,能正确理解专业内容。

(3) 能准确地进行专业文献的笔译,达到每小时 1500~2000 印刷符的笔译速度(英译中)。

(4) 具有专业英语的初步听力理解能力。

本教材分三个部分编写,每一部分涉及一个专业领域,即管理工程与经济,工业系统工程,以及计算机在管理中的应用。每一部分分为 15 个单元,每单元课文约含 4000~5000 印刷字符。并有单字和词汇解释;语法要点说明以及必要的习题,包含回答问题,语法和词汇填空及中译英和英译中练习等各 10 题。以辅助学生掌握语法和单词、词汇,逐步提高其阅读理解能力。

参加本书编写的有冯允成(第一课至十五课),夏国平(第十六课至第三十课)和朱稼兴(第三十一课至第四十五课)。由冯允成统稿。本书是我们多年来从事“专业英语”教学工作的基础上进行编写的,力求从工科院校管理工程、系统工程和管理信息系统专业的实际需要出发,来进行内容选编、词汇说明、语法要点阐述和习题设计等项工作,希望能适合广大工科院校管理学院师生的要求。由于水平有限,不妥或错误之处,敬请指正。

本书承清华大学卢谦教授进行了审校工作,提出许多宝贵的意见,特此表示衷心感谢。

编 者

1992. 2

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PART ONE

MANAGEMENT ENGINEERING AND ECONOMICS

Lesson One

TEXT

Management Concept and its Functions

There are probably as many definitions of management as there are books on the subject. Many of these definitions are relatively concise and often simplistic. For example, one early writer defined management as “knowing exactly what you want [people] to do, and then seeing that they do it in the best and cheapest way.” As we will see throughout this book, however, management is actually a very complex process — much more complex than this definition would lead us to believe. Thus, we need to develop a definition of management that better captures the true nature of the process.

Management is perhaps best understood from the viewpoint of systems theory. Systems theory suggests that organizations utilize four basic kinds of inputs, or resources, from their environments: human, monetary, physical, and information. Human resources include managerial talent, labor, and so forth. Monetary resources are the financial capital⁽¹⁾ the organization uses to finance both ongoing and long-term operations. Physical resources include raw materials, office and production facilities, and equipment. Information resources are usable data needed to make effective decisions.

The manager's job involves combining and coordinating these various resources to achieve the organization's goals. A manager at Mobil Corporation, for example, uses the talents of executives and drilling platform workers, profits earmarked for reinvestment, existing refineries and office facilities, and sales forecasts to make decisions regarding the amount of oil to be refined and distributed during the next quarter. Similarly, the mayor (manager) of New York City might use current police officers, a government grant (perhaps supplemented with surplus tax revenues), existing police station houses, and detailed crime statistics to launch a major crime prevention program in the city.

How do these and other managers go about combining and coordinating the various kinds of resources? They do so by carrying out four basic managerial functions: planning and decision making, organizing, leading, and controlling. Management, then, as illustrated in Figure 1.1, can be defined as follows:

Management is the process of planning and decision making, organizing, leading, and controlling an organization's human, financial, physical, and information resources to achieve organizational goals in an efficient and effective manner.

This last phrase identifies the purpose of management — to ensure that an organization's goals are attained in an efficient and effective manner. By efficient,⁽²⁾ we mean doing things in a systematic fashion without unnecessary waste. For example, a firm that produces quality products at the lowest possible costs and distributes them with minimal transportation charges is efficient. By effective, we mean doing the right things. A firm could produce slide rules and buggy whips very efficiently but

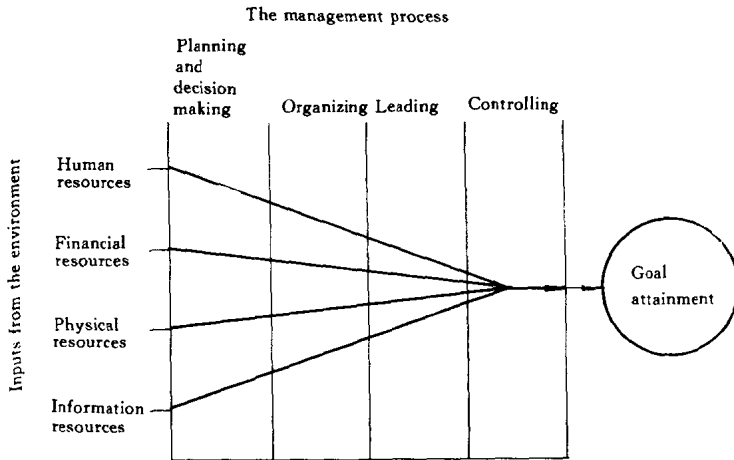


Fig. 1. 1 A Schematic Diagram of Management in Organizations

still not succeed. In general, successful management involves being⁽³⁾ both efficient and effective.

With this basic understanding of management, defining the term manager becomes relatively simple:

A manager is someone whose primary activities are a part of the management process. In particular, a manager is someone who plans and makes decisions, organizes, leads, and controls human, financial, physical, and information resources.

A useful way to illustrate the various aspects of the management process is to describe how it works in an actual organization. In 1982, Mitch Kapor entered the computer software business and introduced Lotus 1-2-3, destined to become the most successful piece of software ever developed. Kapor spent considerable time planning his new enterprise and making decisions about how various things would be done. He then designed an

appropriate organization for producing and marketing Lotus and other software packages. During the company's formative years, Kapor played a strong leadership role in first selecting the right people for his firm and then motivating them to work both efficiently and effectively. And, throughout the entire process, he imposed an appropriate control system to optimize human, financial, material, and information resources.

Planning and Decision Making: Determining Courses of Action

In its simplest form, planning means determining an organization's goals and deciding how best to achieve them. Decision making, a part of the planning process, involves⁽⁴⁾ selecting a course of action from a set of alternatives. Planning and decision making help maintain managerial effectiveness by serving as guides for future activities. A necessary first step in planning is to establish goals that define an expected or desired future state. Within the context of one or more overriding goals, the manager might also set several subgoals, or objectives.

Knowing where he or she wants the organization to be at a given time in the future, the manager next develops a strategy for getting there. This development process is called strategic planning. Once the strategic plans are developed, the next step is to implement them—to put the plans into effect. Specifying⁽⁵⁾ where the organization is to go and how it is to get there involves making many decisions, and many more will have to be made along the way.

Organizing: Coordinating Activities and Resources

Once a manager has developed a workable plan, the next

phase of management is to organize the people and other resources necessary to carry out the plan. At a very basic level,⁽⁶⁾ consider the following scenario. You have a \$ 90,000 budget and three subordinates to execute a plan. One approach might involve giving each subordinate a \$ 30,000 budget and having each one report to you. A different method might be to establish one of them as a supervisor of the other two, who would have budgets of \$ 45,000 each. Determining the best method for grouping activities and resources is the organizing process.

The basic elements of organizing include work specialization, departmentalization, authority relationships, spans of control, and line and staff roles.

Leading: Motivating and Managing Employees

The leading function consists of four different activities. One is motivating employees to expend effort. This activity involves giving employees the opportunity to attain individual goals and rewards through their performance on the job. A second aspect of leading, is leadership itself. Leadership focuses on what the manager does to encourage organizational performance⁽⁷⁾ (rather than on management activities geared to employee needs and expectations).

The third part of leading is dealing with groups and group processes. The initial creation of groups in a company is a part of the organizing process. However, the manager must then deal with group members and activities, on an ongoing basis,⁽⁸⁾ from an interpersonal perspective. Finally, Communication is the fourth component of leading.

Controlling: Monitoring and Evaluating Activities

The final phase of the management process is controlling. As the organization moves toward its goals, management must monitor its progress. It must make sure the organization is performing in such a way as to arrive at its "destination" at the appointed time. A good analogy is that of a space mission to Mars. NASA does not simply shoot a rocket in the general direction of the planet and then look again in four months to see whether it hit the mark. NASA monitors the spacecraft almost continuously and makes whatever course corrections are needed to keep it on track. Controlling helps ensure the effectiveness and efficiency needed for successful management.

budget

Summary of Key Points

Organizations, and therefore management and managers, play a significant role in most of our daily activities. Management can be defined as the process of planning, organizing, leading, and controlling an organization's human, financial, physical, and information resources to achieve organizational goals in an efficient and effective manner. A manager is someone whose primary activities are a part of the management process.

Managers face a variety of interesting and challenging situations. The basic activities within the management process are planning and decision making (determining courses of action), organizing (coordinating activities and resources), leading (motivating and managing employees), and controlling (monitoring and evaluating activities).

Most managers have ten basic roles to play, including three

interpersonal roles (figurehead, leader, and liaison), three informational roles (monitor, disseminator, and spokesperson), and four decisional roles (entrepreneur, disturbance handler, resource allocator, and negotiator). Effective managers tend to have technical, interpersonal, conceptual, diagnostic, and analytic skills.

Management skills may be acquired through education (formal coursework and continuing education) or experience (training programs and previous jobs). Increasingly, successful managers are drawing on both experience and education as a means of acquiring and developing the skills they need.

WORDS AND EXPRESSIONS

concise [kən'sais] adj. 简明的,扼要的。

(brief, giving much information in few words.)

simplistic [sim'plistik] adj. 过分简单化的。

(tending to simplify something unjustifiably.)

capture [kæptʃə] n. 捕获,获取;俘虏,战利品;vt. 捕获;占领;引起(注意)。

(take or obtain as a prize by force.)

monetary [mə'nɪtəri] adj. 货币的,钱的;金融的。

(of money or a currency.)

finance [faɪ'næns] n. 财政;财政学。

((science of) the management of money.)

executive [ɪg'zekjutɪv] adj. 执行的;行政上的。n. 行政部门,高级官员,总经理。

(having to do with managing or executing; administration, person or group in a business with administrative power.)

decision [di'siʒən] n. 决定, 决策, 决议。

(deciding, judging, settlement of a question)

grant [grɑ:nt] vt. 同意, 准予. n. 同意, 授予物(如拨款等)。

(consent to give..., sth granted, eg money from a government.)

destine ['destin] vt. 注定, 预定, 指定。(for, to)

(set apart, decide in advance.)

formative [fɔ:mətiv] adj. 形成的, 构成的。

(shape to.)

strategy ['strætɪdʒi] n. 战略, 策略。

(the art of planning operations in war, skill in managing any affair.)

scenario [si'nɑ:riou] n. 剧情说明; 方案。

(writtren outline of a play (film), alternative.)

budget ['bʌdʒɪt] n. 预算, 预算方案, vt. 编入预算, 安排。

(an estimate or plan of expenditure.)

motivate ['məʊtɪveɪt] vt. 作为……的动机, 激励, 促进。

(to give a motive or incentive to.)

ongoing and long-term operations: 经常的和长期的经营活动。

earmarked for 指定(款项)的用途。

(set sth. aside for a special purpose.)

tax revenue 财政税。

(One designed to produce revenue.)

along the way 在这方面。

software package 软件包。

gear to 使适合。

(make dependent to, adjust one thing to the working of another.)

course of action 行动方针。