

工商管理外语阅读教程系列丛书
Business Administration Foreign Languages Series

总策划 李桂山



管理信息系统 英语阅读

Selected Readings

in Management

Information System

编著 邢文凤

主审 李健



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图书在版编目(CIP)数据

管理信息系统英语阅读/邢文凤编著. —北京:北京
航空航天大学出版社, 2005. 2

(工商管理外语阅读教程系列丛书)

ISBN 7-81077-587-1

I. 管… II. 邢… III. 管理信息系统——英语
IV. H31

中国版本图书馆 CIP 数据核字(2005)第 005668 号

管理信息系统英语阅读

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北京航空航天大学出版社出版发行

北京市海淀区学院路 37 号(100083) 发行部电话:010-82317024

<http://www.buaapress.com.cn> E-mail: bhpress@263.net

北京时代华都印刷有限公司

*

开本: 787×960 1/16 印张: 12.25 字数: 259 千字

2005 年 2 月第 1 版 2005 年 2 月第 1 次印刷 印数: 3 000 册

ISBN 7-81077-587-1 定价: 18.00 元

前 言

《工商管理外语阅读教程系列丛书》是天津理工大学国际工商学院的教师们在经过中外合作办学的教学实践和经验总结后编写出的一套外语阅读教材。

本套丛书所选的国外原版阅读文章,涵盖了工商管理专业核心课程的重要领域,反映了当前许多国外工商管理学科最前沿的知识信息。专业语言的语料具有原汁原味的真实性,它能使学生所获取的专业英语技能在将来的工作中具有实用性。借助本套丛书,读者们能够跟踪了解工商管理科学发展的最新动态。

本套丛书中的每一本都给出了该专业学生应掌握的核心理论知识。为使学生们所学的专业领域中的语言知识得到应用、巩固、扩展和提高,课文后均配有大量的练习。

《工商管理外语阅读教程系列丛书》包括:1) 市场营销英语阅读;2) 财务会计英语阅读;3) 国际商务文化英语选读;4) 管理信息系统英语阅读;5) 战略管理英语阅读;6) 国际商法英语阅读;7) 人力资源管理英语阅读;8) 组织行为学英语阅读;9) 物流管理日语阅读。

本套丛书可作为工商管理专业学生的专业英语阅读教材。对于那些接受短期培训的企业管理者、MBA 学员和教师来说,这套丛书将会更有参考价值。我们希望这套丛书的出版,能进一步促进工商管理专业教学的推广和普及。

我们在此要感谢许多人,他们在本套丛书的编写过程中给予了我们极大的鼓舞和帮助。

我们要感谢加拿大开瑞博大学(the University of the Cariboo)商学院院长布洛克·戴克曼博士(Dr. Brock Dykeman)给予的支持和帮助。

我们要感谢大阪产业大学(Osaka Sangyo University)经营学部流通学科的教授和老师给予的支持和帮助。

我们要感谢 Ms. Connie Chen 抽出自己的空闲时间来阅读这套书,并提出了宝贵的意见和有益的建议。我们非常欣赏她的耐心和乐于助人的精神。

我们还要感谢工商管理学科同仁们给予我们的热情指导和帮助,他们是李健教授、张忠明教授、魏津瑜博士等。

天津理工大学国际工商学院

2004 年 2 月

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PART I

第一部分讲述了管理信息系统的概况、管理信息系统的商业应用以及管理信息系统的技术特征。

Chapter 1

A Basic Overview of Information Systems

Computers have become pervasive¹ in every aspect of our lives. To be successful, managers must be able to identify computer-based information systems² needs that create a business advantage.

The Levels of Management

Management is the process of planning, organizing, directing, and controlling people and activities to achieve organizational goals.³ The levels of management consist of top, middle, and ***first-line*** management. At each level of management, the responsibilities for handling organizational tasks differ.

Top-level managers are the organization's senior executives. Their most important role is establishing the long-term goals of the organization. They are typically responsible for interacting with representatives of the external environment, such as financial institutions, ***political figures***, and important suppliers and customers.

Middle-level managers are responsible for allocating ***organization's resources*** to achieve the objectives of top management. They do so by implementing plans and by supervising lower-level managers under their functional area of responsibility. Some types of middle-level managers, for example, are sales managers, research directors, plant managers, market research directors, and directors of information systems.

First-line supervisors are responsible for supervising ***day-to-day operations***. They typically supervise functions such as order entry, credit checking, inventory

control, and preventive maintenance.⁴

The Activities of an Organization

The activities of an organization are of three kinds: operational, tactical, and strategic planning.⁵ Operations are the day-to-day activities of the firm that involve acquiring and consuming resources. First-line supervisors must identify, collect, and register all **transactions** that result in acquiring and expending these resources. For example, when sales are made or goods are shipped, a department manager needs to record these events.

The tactical function of an organization is the responsibility of its middle-level managers. They review operational activities to make sure that the organization is meeting its goals and not wasting its resources. The time frame for tactical activities may be month-to-month, quarter-to-quarter, or year-to-year. For example, orders for raw materials might be monitored monthly; **productivity** might be assessed quarterly, and department budgets might be reviewed annually.

The top management of the organization carries out strategic planning. Though managers responsible for operational and tactical decision-making are primarily involved in reviewing internal data, the managers responsible for planning are also interested in external information.⁶ They need to set the organization's long-term goals, for example, by deciding whether to introduce new products, build new physical plant facilities, or invest in technology. Strategic planners address⁷ problems that involve long-range analysis and prediction and often require months and years to resolve.

A Framework for Information Systems

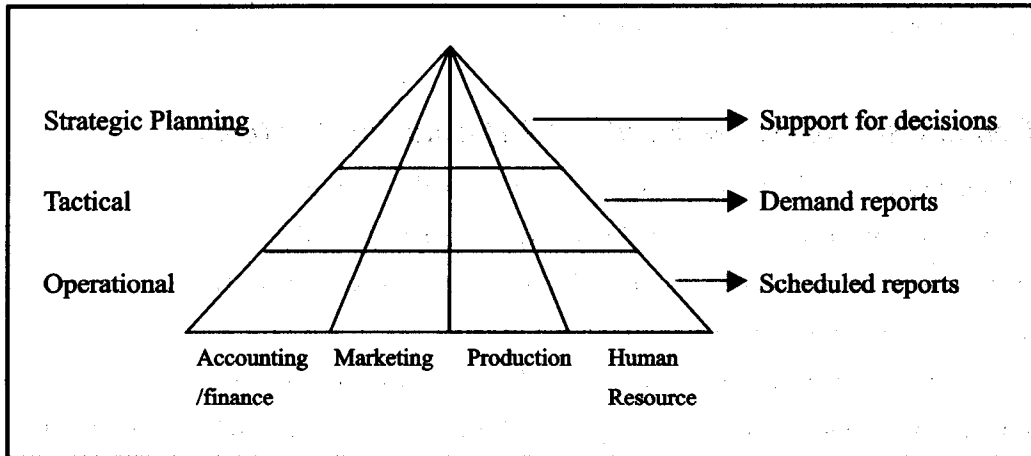
Each level—operational, tactical, and strategic planning—requires specific information systems. Applications of these information systems involve in four business areas: accounting/finance, marketing, production, and human resource

management.

A framework for information systems is shown in Figure 1.1.

FIGURE 1.1

A framework for information systems



Operational information systems process transactions describing the acquisition and disbursement of corporate resources.⁸ Financial data on accounts receivable⁹, accounts payable¹⁰, payroll¹¹ and cash receipts¹² must be recorded as they occur. When a sale occurs, data on the items ordered are recorded, the **inventory** level for these items is adjusted, a shipping label and packing slip are prepared, and an **invoice** is generated. The original transaction—the sale of the item—creates numerous transactions in order processing, inventory, and billing.¹³ Operational systems must collect, validate, and record these transactional data in order to help first-line supervisors monitor day-to-day activities.

Tactical information systems provide middle-level managers with the information they need to monitor and control operations and to allocate organizational resources effectively. In tactical systems, transactions data often

generated from operational systems are summarized, aggregated, or analyzed.¹⁴ Tactical systems generate a variety of reports, including summary reports, exception reports, and ad hoc reports.¹⁵

Strategic planning information systems help senior managers identify new business opportunities and threats so that they may establish goals for the organization. Information for strategic planning often comes from external sources such as demographic data and competitive industry statistics.¹⁶

A Comparison of Three Kinds of Information Systems

Operational information systems primarily produce routine, repetitive, descriptive, expected, and objective data that describe past activities. The information they produce is usually detailed, highly structured, accurate, derived from internal sources, and produced regularly.

Tactical information systems differ from operational information systems not only in their intended purpose but also in the regularity with which information is produced, the predictability of the results, the comparative nature of the information, the amount of detail produced, and the rigidity of the structure of the information.¹⁷

The distinction between strategic planning information systems and tactical information systems is not always clear because both types of information systems may use some of the same data. For example, when middle-level managers use budgeting information to allocate resources to best meet organizational goals, budgeting becomes a tactical decision activity. When top managers use budgeting information to plan the long-term activities of an organization, budgeting becomes a strategic planning activity. In either case, accurate ***budget*** information delivered in a timely fashion to managers is an important function of the financial information system of the organization. However, the key differences between the systems have to do with who uses the data and what they are using it for.

Generally, first-line supervisors use operational information systems,

middle-level managers use tactical information systems, and the top executives of the organization use strategic planning information systems.



NOTES

1. pervasive 渗透的
2. computer-based information systems 基于计算机的信息系统
3. Management is the process of planning, organizing, directing, and controlling people and activities to achieve organizational goals.

管理是通过计划、组织、领导和控制人与活动来实现组织目标的过程。

■ 计划、组织、领导和控制是管理的基本职能。

计划是对未来某种活动进行的一种预先筹划。计划工作主要包括：研究活动条件、制定经营决策和编制行动计划。

组织(Organizing)在作为管理的一个职能时的含义是管理者所开展的组织行为、组织活动过程。组织(Organizing)工作主要包括组织(Organization)设计和组织(Organization)变革。

领导是指管理者利用权力去指挥、影响和激励组织成员为实现组织目标而努力工作的一种具有很强艺术性的管理活动过程。

控制，是监视组织各方面的活动，保证组织各部门、各环节能按预定要求运作而实现组织目标的一项管理活动过程。

管理过程就是上述各项职能活动相互交差、周而复始地不断反馈和循环的过程。

4. ... order entry, credit checking, inventory control, and preventive maintenance.

……订单输入、信用调查、库存控制和预防性维护/维修。

5. The activities of an organization are of three kinds: operational, tactical, and strategic planning.

组织的活动包括三种类型：操作层活动、战术层活动和战略规划层活动。

6. Though managers responsible for operational and tactical decision-making are primarily involved in reviewing internal data, the managers responsible for planning are also interested in external information.

负责在操作层和战术层作决策的管理者主要专注于对(组织)内部数据的审查,而负责制定(战略)计划的管理者同时还要关心(组织)外部的信息。

7. address 对付;处理(问题)

8. ... transactions describing the acquisition and disbursement of corporate resources.

.....(这些)事务描述了组织资源的获得与支出(的过程)。

9. accounts receivable 应收账款

■ 应收账款是企业因为销售商品,提供劳务或其他行为而拥有的在未来向购货单位收取货币资金的权利。这种权利常常是在一种信用的基础上靠赊销记录而形成的。

10. accounts payable 应付账款

■ 应付账款一般指企业在正常的经营过程中,赊购商品、材料或劳务而发生的负债。它是由于购买与付款的时间存在间隔,付款迟于购买而产生的。

11. payroll (应付)薪金

12. cash receipts 现金收入

13. The original transaction—the sale of the item—creates numerous transactions in order processing, inventory, and billing.

初始的一个事务——某个产品的销售——派生出了大量的涉及订单处理、库存(调整)和票据(处理)等方面的事务。

14. In tactical systems, transactions data often generated from operational systems are summarized, aggregated, or analyzed.


战术层(信息)系统对操作层(信息)系统所产生的事务数据进行汇总、综合或分析(处理)。

■ 从信息系统的使用者和技术的角度来看,事务处理和分析处理是截然不同的。事务处理是对发生在组织内部的事务进行处理,用于处理事务的技术本身就能够应付所有的事务信息处理。例如:超市利用 IT 计算顾客购买的物品的金额,没有人在拿到自动出纳机的收据后,再自己核对计算是否准确,因为每个人都认为计算机的计算结果是正确的。

但是,分析处理是为支持决策工作进行的信息创建活动,许多信息的处理还要依赖信息系统使用者的决策。例如:投资者可以利用电子表格软件计算出各种投资组合方案,但是,最终采用哪种方案来分配投资,仍然取决于投资者本人。

15. Tactical systems generate a variety of reports, including summary reports, exception reports, and ad hoc reports.

战术层(信息)系统可产生多种报告,包括总结性报告、例外报告和特别报告。

 总结性报告(summary reports)是指那些以某种方法汇总信息的报告。它可以为管理部门提供重要的总计数据、平均数据、关键数据,以及组织中各项活动的摘要。例如:一份按照销售人员汇总的每周销售总额清单就是一种综合报告。

例外报告(exception reports)用来警告管理者可能存在(或潜在)的问题与机遇。当某个特定的操作(在数量或质量方面)超过或者没有达到组织的期望标准时,信息系统将产生例外报告。譬如:在上个月公司所有销售人员的销售额都至少下降了10%的情况下,信息系统就会产生一份例外报告来显示这一情况。

特别报告(ad hoc reports)为管理者提供解决某个独特问题的信息。因为特别报告通常具有紧急性和惟一性,所以一般来说,管理者不会重复使用同一份特别报告。

16. ... demographic data and competitive industry statistics.
.....人口统计数据和相关行业统计资料。
17. Tactical information systems differ from operational information systems not only in their intend purpose but also in the regularity with which information is produced, the predictability of the results, the comparative nature of the information, the amount of detail produced, and the rigidity of the structure of the information.

战术层信息系统不仅在预期目标上与操作层信息系统不同,而且在生成信息时所依循的规则、结果的可预测性、信息的可比性、产生细节(数据)的数量、信息结构的严格性上都不同。



KEY VOCABULARY

- ☆ information system 信息系统
- ☆ operational information system 操作层信息系统
- ☆ tactical information system 战术层信息系统
- ☆ strategic planning information system 战略规划层信息系统



VOCABULARY ENLARGING

- first-line 一线;基层

First-line management is a management-level that is lower than middle-

management-level.

一线管理是低于中层管理级别的一种管理级别,例如: first-line manager 的意思是“班组长”。

● political figure 政治人物

An important person who has an effect on politics and/or government.

对政府和(/或)某些政党有一定影响力的重要人物。

● organization's resources 组织资源

■ 在管理学中,组织资源是指组织拥有的、可以直接控制、运用的各种要素。组织资源是管理的基本对象,通过管理组织资源可以为组织、组织成员带来利益。组织资源既包括那些原先就属于组织的各种资源,也包括原先不属于组织,但经过合法程序借用的资源。

按照组织资源的内容,可以把组织资源分为物质资源、金融资源、人力资源、权利资源和信息资源五大类。按照组织资源的表现形态,可以把组织资源分为有形资源 and 无形资源两大类。

组织资源的特性主要包括客观性、有限性、系统性和可控性。

● day-to-day operation 日常经营活动

An activity that occurs on a routine or daily basis.

例行公事或日常工作。

● transaction [电信科技] 事务(元)

[经贸] 交易,一个会计单位和另一个会计单位之间发生的经济业务。

The act or process of transacting.

交易发生的过程或行为。

● productivity 生产力;生产率

The (measured) ability to grow things or the (calculated) rate of making goods.

(经过测量的)生产能力,或(经过计算的)生产比率。

● inventory 库存;存货清单

A company's merchandise, raw materials, and finished and unfinished products which have not yet been sold.

(库存)是一个公司的商品、原材料,以及还未销售出去的成品或半成品。

■ 在某些行业,例如制造业中,库存成本往往比存货价值的增值还要大(库存成本也包括运输成本——订货成本、运货成本、仓库成本、公用设备和保险成本等等,这些成本约占库

存总成本的 25%)。因此,库存的管理对于企业是很重要的。

● **invoice** 发票,发货单

A bill issued by one who has provided products and/or services to a customer. In asset-based lending, invoice means account receivable.

由已经向顾客提供了产品和(/或)服务的人所签发的票据。在以资产为基础的贷款(业务)中,发票意味着应收账款。

● **budget** 预算

An itemized forecast of an individual's or company's income and expenses expected for some period in the future.

对个人或公司在将来某段时期内的收入和支出的一种明细的预测。



TRUE/FALSE

Circle the "T" if the statement is true. Circle "F" if it is false.

- T F 1. Planning isn't the function of first-line management.
- T F 2. It is the responsibility of company's senior executives to interact with some political figures.
- T F 3. First-line supervisors are responsible for supervising day-to-day operations.
- T F 4. Middle-level managers are responsible for allocating organization's resources to achieve the objectives of top management.
- T F 5. It is usually the middle-level manager's responsibility to decide whether to introduce new products into markets.
- T F 6. Information for strategic planning often comes from external sources such as demographic data.
- T F 7. The distinction between strategic planning information systems and tactical information systems is clear.
- T F 8. Operational information systems primarily produce routine, repetitive, descriptive, expected, and objective data that describe current and future activities.
- T F 9. Problems addressed by strategic planners often require months and

years to resolve.

- T F 10. Tactical information systems always produce more regular data than operational information systems.



VOCABULARY CHECK

Fill in the blanks in the following sentences with the correct words/phrases from this list. You may change the tense, number, or form of the words/phrases to fit the context. Use each word/phrase only once.

first-line

political figure

transaction

organization's resources

day-to-day operation

invoice

productivity

inventory

budget

1. Information systems allow companies to send _____ to customers as soon as goods are shipped.
2. The committee is presenting its _____ report next week.
3. This journalist has a free-speech right to use Kennedy's name because he is a _____.
4. In individual cases, some people might indeed lose their jobs because improved usability led to such high _____ that fewer employees were needed.
5. She wrote a technical article to compare various _____ processing technologies.
6. Maintaining as lean an _____ as possible while suffering from minimal stock-outs is an important goal.
7. The activities of an organization include _____, effective allocation of resources, and strategic planning.
8. Information is one intangible kind of _____.
9. The workers making little jokes with their _____ manager are common occurrences in many companies.