



PEARSON

管理科学与工程经典教材
MANAGEMENT SCIENCE AND ENGINEERING CLASSICS

管理信息系统

英文版 · 第2版

戴维·M·克伦克 (David M. Kroenke) 著
冯玉强 改编

EXPERIENCING MIS

..... Second Edition

 中国人民大学出版社

全新版

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总 序

随着我国加入 WTO,越来越多的国内企业参与到国际竞争中来,用国际上通用的语言思考、工作、交流的能力也越来越受到重视。这样一种能力也成为我国各类人才参与竞争的一种有效工具。国家教育机构、各类院校以及一些主要的教材出版单位一直在思考,如何顺应这一发展潮流,推动各层次人员通过学习来获取这种能力。双语教学就是这种背景下的一种尝试。

双语教学在我国主要指汉语和国际通用的英语教学。事实上,双语教学在我国教育界已经不是一个陌生的词汇了,以双语教学为主的科研课题也已列入国家“十五”规划的重点课题。但从另一方面来看,双语教学从其诞生的那天起就被包围在人们的赞成与反对声中。如今,依然是有人赞成有人反对,但不论是赞成居多还是反对占上,双语教学的规模 and 影响都在原有的基础上不断扩大,且呈大发展之势。一些率先进行双语教学的院校在实践中积累了经验,不断加以改进;一些待进入者也在模仿中学习,并静待时机成熟时加入这一行列。由于我国长期缺乏讲第二语言(包括英语)的环境,开展双语教学面临特殊的困难,因此,选用合适的教材就成为双语教学成功与否的一个重要问题。我们认为,双语教学从一开始就应该使用原版的各类学科的教材,而不是由本土教师自编的教材,从而可以避免中国式英语问题,保证语言的原汁原味。各院校除应执行国家颁布的教学大纲和课程标准外,还应根据双语教学的特点和需要,适当调整教学课时的设置,合理选择优秀的、合适的双语教材。

顺应这样一种大的教育发展趋势,中国人民大学出版社同众多国际知名的大出版公司,如麦格劳·希尔出版公司、培生教育出版公司等合作,面向大学本科生层次,遴选了一批国外最优秀的管理类原版教材,涉及专业基础课,人力资源管理、市场营销及国际化管理等专业方向课,并广泛听取有着丰富的双语一线教学经验的教师的建议和意见,对原版教材进行了适当的改编,删减了一些不适合我国国情和不适合教学的内容;另一方面,根据教育部对双语教学教材篇幅合理、定价低的要求,我们更是努力区别于目前市场上形形色色的各类英文版、英文影印版的大部头,将目标受众锁定在大学本科生层次。本套教材尤其突出了以下一些特点:

- 保持英文原版教材的特色。本套双语教材根据国内教学实际需要,对原书进行了一定的改编,主要是删减了一些不适合教学以及不符合我国国情的内容,但在体系结构和内容特色方面都保持了原版教材的风貌。专家们的认真改编和审定,使本套教材既保持了学术上的完整性,又贴近中国实际;既方便教师教学,又方便学生理解和掌握。

- 突出管理类专业教材的实用性。本套教材既强调学术的基础性,又兼顾应用的广泛性;既侧重让学生掌握基本的理论知识、专业术语和专业表达方式,又考虑到教材和管理实践的紧密结合,有助于学生形成专业的思维能力,培养实际的管理技能。

● 体系经过精心组织。本套教材在体系架构上充分考虑到当前我国在本科教育阶段推广双语教学的进度安排,首先针对那些课程内容国际化程度较高的学科进行双语教材开发,在其专业模块内精心选择各专业教材。这种安排既有利于我国教师摸索双语教学的经验,使得双语教学贴近现实教学的需要;也有利于我们收集关于双语教学教材的建议,更好地推出后续的双语教材及教辅材料。

● 篇幅合理,价格相对较低。为适应国内双语教学内容和课时上的实际需要,本套教材进行了一定的删减和改编,使总体篇幅更为合理;而采取低定价,则充分考虑到学生实际的购买能力,从而使本套教材得以真正走近广大读者。

● 提供强大的教学支持。依托国际大出版公司的力量,本套教材为教师提供了配套的教辅材料,如教师手册、PowerPoint 讲义、试题库等,并配有内容极为丰富的网络资源,从而使教学更为便利。

本套教材是在双语教学教材出版方面的一种尝试。我们在选书、改编及出版的过程中得到了国内许多高校的专家、教师的支持和指导,在此深表谢意。同时,为使我们的后续推出的教材更适于教学,我们也真诚地期待广大读者提出宝贵的意见和建议。需要说明的是,尽管我们在改编的过程中已加以注意,但由于各教材的作者所处的政治、经济和文化背景不同,书中内容仍可能有不妥之处,望读者在阅读时注意比较和甄别。

徐二明

中国人民大学商学院

TO THE STUDENT

Experiencing MIS is the title and theme of this book. It is an important theme because no matter what you do in business, you will experience MIS. Whether you work in accounting, marketing, finance, operations, management, human resources—whatever your business specialty—you will experience MIS.

Because experiencing MIS is a given, the only important question is: What kind of an experience will you have? Will you be a helpless user, one who says, “I don’t know anything about computers, and I don’t want to?” Or will you be a manager who says, “I know there’s a way to use information systems to improve the productivity of my employees?” Will you be someone who finds an innovative application of information technology to push your company ahead of the competition? Or, will you be the user who “just doesn’t get it?”

Relating This Class to Your Business Career

Many students think this is “the computer class.” It is not. Experiencing MIS is not the same as computer literacy. Some students think the primary goal of this class is to teach you Excel or Access. Although you may learn about using those products in this class, you will do so on the way to learning something far more important: how to use computer-based systems to better accomplish business goals and objectives—your personal ones and those for the business in which you work.

Experiencing MIS is not something you will wait to do 20 years down the road when you are vice president of whatever. It starts your first day on the job. Imagine yourself that day, hired by the company you really want to work for. What happens that first day? Typically, your supervisor first gives you a desk and then assigns you a computer.

What are you going to do with that computer? Send emails to your parents? Surf the Web? IM your friends? Are you even allowed to use your work computer for personal email? (Maybe.) Can your employer read the email you send from work? (Yes, definitely.) *Will* your employer read the email you send from work? (Maybe.) But, more importantly, what are you going to DO with that computer to help your career? To help your department? To give your organization a competitive advantage?

Here’s the good news: You don’t have to wait until that first day to start experiencing MIS. This book is designed to help you experience MIS right now—in school, where you can ask “silly” questions without ruining your business reputation. Use Google Docs & Spreadsheets, or Microsoft Groove, or Microsoft SharePoint, or some other software to facilitate your group and team assignments. Experience MIS now, where you can propose infeasible projects, and where you can develop ideas that are not just “out of the box,” they’re out of the universe. Do it now while you have the support of a department of knowledgeable professionals (your professors) who are there to provide you consulting, at no extra charge!

Using This Book

Every part and every chapter in this book start with a real-life business scenario of someone experiencing MIS. For example, you can read about Dee Clarke in Part 1 (page 2). Dee wanted to sponsor a blog to provide information to 450 very demanding salespeople. Her blog had to be private; she couldn’t put it on some public space for competitors to look at. It also had to be very professional, and it needed the blessing of

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her internal computer department. How would you proceed if that idea occurred to you? How did Dee proceed? Each chapter will give you knowledge to apply to those scenarios.

The book consists of four parts and three chapters within each part. The chapters are relatively short and describe the minimum essentials of each topic. Additional material on each chapter topic can then be found in “Chapter Extensions,” which are grouped together near the back of the book. Some of the chapter extensions extend the technical content of a chapter and others extend the business/management content of a chapter.

Every chapter and chapter extension starts with a list of questions. Read those questions. Read the text material. Apply the knowledge to the scenario. Do the activities in the “Active Review.” You can stop reading when you know you can answer the list of questions.

Every chapter has two “Guides.” These are two-page spreads that present some experience of MIS. One of the guides poses an ethical problem, the other describes a scenario that will help you experience MIS now, today, in the classroom. Your professor may use the guides for discussion in class or may prefer that you read and think about them on your own. Whether you use them formally or informally in your course, talk about them with others. The experience of hearing others’ ideas and sharing your own is good practice for almost any career you choose to pursue.

This book comes with two different video programs. One video series shows the people in the scenarios. You can see Dee in action. You can see why she’s risen so far, so fast, and watch her maneuverings. In Chapters 7 through 12, you can meet the owner, employees, and clients of Majestic River Ventures and learn, in part, how Majestic is attempting to use social networking to accomplish its competitive strategy.

The second series is a collection of videos of me explaining key concepts. The video icon  in the margin of the book means there is a video available for that topic.

I hope you will experience MIS today, so that you are as ready as you can be to participate in the incredible opportunities coming your way. During your career, information systems will have a profound impact on business organizations. Business is a social activity. People “do business” with other people. In the coming years, computer networks and portable computing devices will radically change how people relate. Organizations will be virtual; people will work closely together, yet may never meet in person. Many jobs and tasks performed today will be eliminated, and jobs unforeseen today will become careers and professions. All this change will be animated by people experiencing MIS.

So, start your experience. Turn to page 2 and read about Dee. Ask yourself what you would do if you were “in her shoes.” And don’t forget to have some fun—experiencing MIS now!

David Kroenke
Whidbey Island, Washington

PART 1

MIS AND YOU

Knowledge of information systems will be critical to your success in business. If you major in accounting, marketing, management, or in another, less technical, major, you may not yet know how important such knowledge will be to you.

The purpose of Part 1 of this textbook is to demonstrate why this subject is so important to every business professional today. We begin with a real-life case.

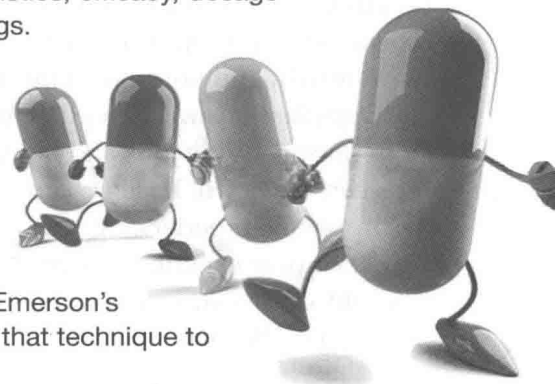
This
could happen
to you



Dee Clark is the Hospital Sales Marketing Director for the Academic and Hospital Division of Emerson Pharmaceuticals, a \$4 billion pharmaceutical company.¹ Emerson employs a team of 450 salespeople to present its drugs and information about their effectiveness and use to doctors in many different settings. Dee's division focuses on doctors and pharmacists in medical schools and in hospitals. Emerson introduces dozens of new drugs each year. It is both difficult and very important for the salespeople to learn about the new products. To be effective, salespeople need to be able to discuss the characteristics, efficacy, dosage recommendations, and relevant research for each of these drugs.

The pharmaceutical industry is competitive. Many other companies compete for medical professionals' attention and business. The competitors, too, employ large professional sales forces. Dee's job is to ensure that all of her reps have the information they need to succeed in this very competitive environment. When one rep develops a technique that successfully presents a product, overcomes a doctor's or pharmacist's reluctance, or causes the professional to choose Emerson's drugs over those of the competition, Dee wants to disseminate that technique to as many other salespeople as possible.

Thus, a big part of Dee's job is to inform the salespeople about the drugs she markets and to make sure the salespeople have all the information they need to succeed. Dee sometimes invites doctors and other professionals to seminars



¹The people and the events in this case are real. Everything related here actually happened. However, to protect the innocent, the guilty, and the publisher of this text, the name of the company and the company's industry have been changed. Dee does exist, and she does work with a 450-person sales force.

conducted by leading medical researchers, and sometimes she herself makes presentations to hospitals. She wants the sales force to know about these events and the sales that result from them.

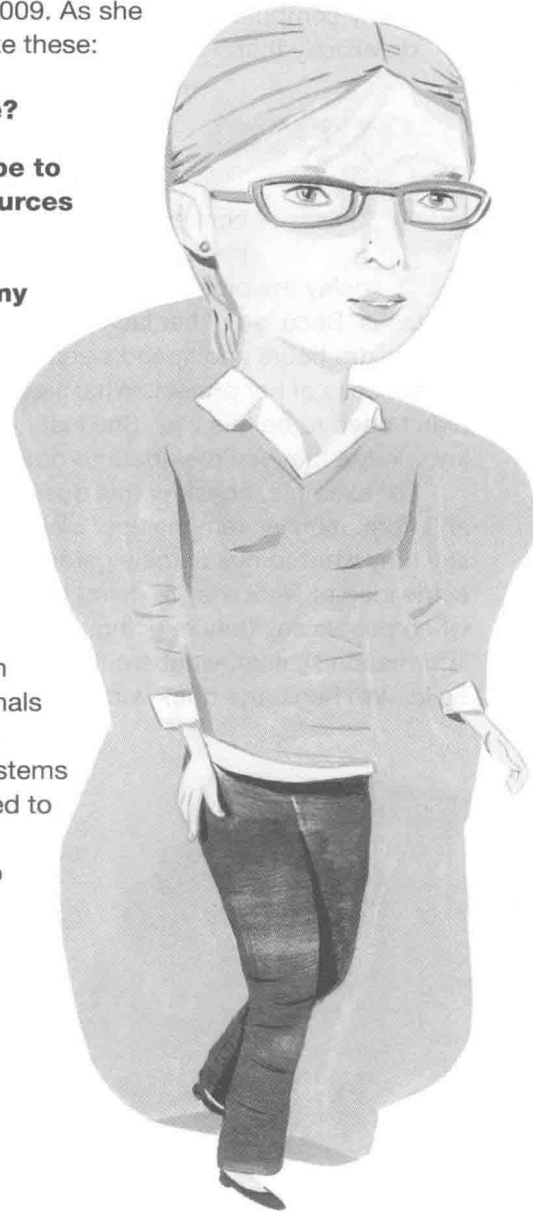
In the fall of 2008, Dee was looking for better ways to connect with her salespeople. She was discussing this need with some of her friends, who suggested that she use a blog to disseminate the latest product news, current competitive threats and responses, recent successes, and other information. A **blog**, or **Weblog**, is an online journal. Blogs use information technology to publish information over the Internet. One of the first and most famous blogs is www.drudgereport.com. (If you are not familiar with blogs, visit that site now.)

Dee liked the idea of a blog, but time was pressing. Her friend suggested the blog in November 2008, and she needed the blog to be up and running by the company's national sales meeting in January 2009. As she pondered this idea, she asked herself questions like these:

- **Is this possible? Can I have it done on time?**
- **What will I need to learn? How hard will it be to post my thoughts, pictures, and other resources on the blog?**
- **How can I keep competitors from reading my blog?**
- **Will the salespeople use the blog? What can I do to make it easy for them to do so?**
- **What kind of computer do I need to support the blog?**
- **Where do I begin?**

Dee's situation illustrates why the knowledge in this class is vitally important to business professionals today. Dee is a *marketing manager*. In college, she majored in marketing. She is not an information systems professional, and she never thought she would need to know how to manage the construction of an information system. Yet that is exactly what her job now requires her to do.

Keep thinking about Dee as you read this text. This exact scenario could happen to you!



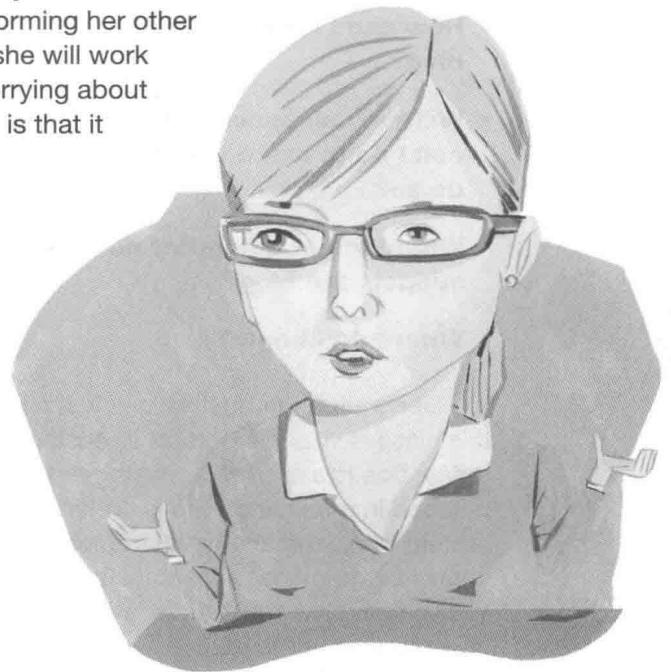
IS in the Life of Business Professionals

Dee Clark does not know it, but she needs to build an information system (IS). As a marketing manager, she will not build the system herself. She will not buy the computer hardware and hook it up. She will not acquire or write any computer programs. She will, however, hire and manage the people who will do exactly that. As you will see, she will also be confronted along the way with the need for knowledge that she does not possess.

Dee's lack of knowledge will cost her company, and it will impede her progress. Her ignorance about MIS (management information systems) will leave her at a disadvantage in conversations with technical people and make it difficult for her to do her job. Her uncertainty about what to do will

delay the project and keep her from performing her other job tasks. Because of her lack of IS knowledge, she will work many extra hours and spend sleepless nights worrying about the success of her project. What's especially sad is that it didn't need to be this way. She just needed the knowledge that you are about to obtain.

For example, consider this question: What is an information system made of? When people say they want to build a new garage, you have some idea of what they're going to do. But when people say they're going to build a new information system, what are they going to build? We begin the book with that question.



I've got this great idea for a blog!

**This
could happen
to you**





Study Questions

- Q1** What is an information system?
- Q2** What is MIS?
- Q3** How does IS differ from IT?
- Q4** How do successful business professionals use IS?
- Q5** What new opportunities for IS are developing today?
- Q6** What is your role in IS security?
- Q7** What is this class about?

How does the knowledge in this chapter help Dee and you?

Q1 What Is an Information System?



A **system** is a group of components that interact to achieve some purpose. As you might guess, an **information system (IS)** is a group of components that interact to produce information. That sentence, although true, raises another question: What are these components that interact to produce information?

Figure 1-1 shows the **five-component framework** of **computer hardware, software,¹ data, procedures, and people**. These five components are present in every information system—from the most simple to the most complex. For example, when you use a computer to write a class report, you are using hardware (the computer, storage disk, keyboard, and monitor), software (Word, WordPerfect, or some other word-processing program), data (the words, sentences, and paragraphs in your report), procedures (the methods you use to start the program, enter your report, print it, and save and back up your file), and people (you).

Consider a more complex example, say, an airline reservation system. It, too, consists of these five components, even though each one is far more complicated. The hardware consists of dozens or more computers linked together by telecommunications hardware. Further, hundreds of different programs coordinate communications among the computers, and still other programs perform the reservations and related services. Additionally, the system must store millions upon millions of characters of data about flights, customers, reservations, and other facts. Hundreds of different procedures are followed by airline personnel, travel agents, and customers. Finally, the information system includes people, not only the users of the system, but also those who operate and service the computers, those who maintain the data, and those who support the networks of computers.

¹In the past, the term *software* was used to refer to computer components that were not hardware (e.g., programs, procedures, user manuals, etc.). Today, the term *software* is used more specifically to refer only to programs, and that is how we use the term throughout this book.