



教育部高校工商管理类教学指导委员会双语教学推荐教材

工商管理经典教材·核心课系列 BUSINESS ADMINISTRATION CLASSICS

管理信息系统

英文版・精要版第9版

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ESSENTIALS OF MANAGEMENT INFORMATION SYSTEMS

[美]

Ninth Edition

☑ 中国人民大学出版社



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,双语教学的规模和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,则充分考虑到了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

Preface

We wrote this book for business school students who wanted an in-depth look at how today's business firms use information technologies and systems to achieve corporate objectives in 2010. Information systems are one of the major tools available to business managers for achieving operational excellence, developing new products and services, improving decision making, and achieving competitive advantage. Students will find here the most up-to-date and comprehensive overview of information systems used by business firms today.

When interviewing potential employees, business firms often look for new hires who know how to use information systems and technologies for achieving bottom-line business results. Regardless of whether you are an accounting, finance, management, operations management, marketing, or information systems major, the knowledge and information you find in this book will be valuable throughout your business career.

What's New in This Edition

CURRENCY

The 9th edition features all new opening, closing and "Interactive Session" cases. The text, figures, tables, and cases have been updated through October 2009 with the latest sources from industry and MIS research.

NEW FEATURES

- 2 new Management Decision Problems per chapter
- New Video Cases Package: 26 video case studies (2 or more per chapter) and 12 instructional videos
- New Collaboration and Teamwork Projects in each chapter using open-source collaboration tools
- New online Learning Tracks extend learning beyond the book

NEW TOPICS

- Emerging mobile digital platform
- Collaboration systems and tools
- Cloud computing
- Cloud-based software services and tools
- Windows 7 and mobile operating systems
- Office 2010 and Google Apps
- Green computing
- · 4G networks
- Unified communications
- Network neutrality
- Search engine optimization (SEO)
- Free/Freemium e-commerce business models

- · The 'wisdom of crowds' and crowdsourcing
- · E-Commerce revenue models
- · Building an e-commerce Web site
- · Business process management
- · Web mining and text mining
- Unified threat management
- · Security issues for cloud and mobile platforms
- Next-generation enterprise applications

What's New in MIS?

Plenty. In fact, there's a whole new world of doing business using new technologies for managing and organizing. What makes the MIS field the most exciting area of study in schools of business is the continuous change in technology, management, and business processes. (Chapter 1 describes these changes in more detail.)

A continuing stream of information technology innovations is transforming the traditional business world. Examples include the emergence of cloud computing, the growth of a mobile digital business platform based on smartphones and netbook computers, and not least, the use of social networks by managers to achieve business objectives. Most of these changes have occurred in the last few years. These innovations are enabling entrepreneurs and innovative traditional firms to create new products and services, develop new business models, and transform the day-to-day conduct of business. In the process, some old businesses, even industries, are being destroyed while new businesses are springing up.

For instance, the emergence of online music stores—driven by millions of consumers who prefer iPods and MP3 players—has forever changed the older business model of music on physical devices, such as records and CDs. Online video rentals are similarly transforming the old model of distributing films through theaters and then through DVD rentals at physical stores. New high-speed broadband connections to the home have supported these two business changes.

E-commerce is back, generating over \$230 billion in revenues in 2009, and estimated to grow to over \$330 billion in 2014. Amazon's revenues grew 19% annually in 2009 despite the recession, while offline retail declined 14%. E-commerce is changing how firms design, produce and deliver their products and services. E-commerce has reinvented itself again, disrupting the traditional marketing and advertising industry and putting major media and content firms in jeopardy. Facebook and other social networking sites such as YouTube, Twitter, and Second Life, exemplify the new face of e-commerce in the 21st Century. They provide services and sell ad space. When we think of e-commerce we tend to think of a selling physical products. While this iconic vision of e-commerce is still very powerful, and the fastest growing form of retail in the U.S., growing up alongside is a whole new value stream based on selling services, not goods. It's a services model of e-commerce. Information systems and technologies are the foundation of this new services-based e-commerce.

Likewise, the management of business firms has changed: With new mobile smart-phones, high-speed wireless Wi-Fi networks, and wireless laptop computers, remote salespeople on the road are only seconds away from their managers' questions and oversight. Managers on the move are in direct, continuous contact with their employees. The growth of enterprise-wide information systems with extraordinarily rich data means that managers no longer operate in a fog of confusion, but instead have online, nearly instant, access to the really important information they need for accurate and timely decisions. In addition to their public uses on the Web, wikis and blogs are becoming important corporate tools for communication, collaboration, and information sharing.

The Ninth Edition: The Comprehensive Solution for the MIS Curriculum

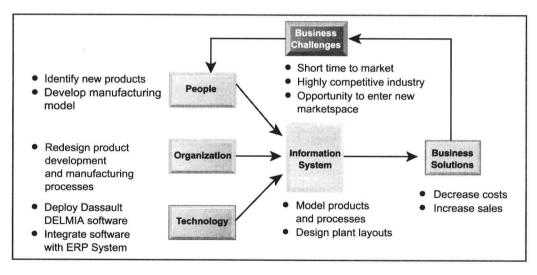
Since its inception, this text has helped to define the MIS course around the globe. This edition continues to be authoritative, but is also more customizable, flexible, and geared to meeting the needs of different colleges, universities, and individual instructors. This book is now part of a complete learning package that includes the core text and an extensive offering of supplemental materials on the Web.

The core text consists of 12 chapters with hands-on projects covering the most essential topics in MIS. New to the core text this year is the Video Case Study and Instructional Video Package: 26 video case studies plus 12 instructional videos that illustrate business uses of information systems, explain new technologies, and explore concepts. Videos are keyed to the topics of each chapter. In addition, for students and instructors who want to go deeper into selected topics, there are forty-seven online Learning Tracks that cover a variety of MIS topics in greater depth.

MyMISLab provides more in-depth coverage of chapter topics, career resources, additional case studies, supplementary chapter material, and data files for hands-on projects.

THE CORE TEXT

The core text provides an overview of fundamental MIS concepts using an integrated framework for describing and analyzing information systems. This framework shows information systems composed of people, organization, and technology elements and is reinforced in student projects and case studies.



A diagram accompanying each chapter-opening case graphically illustrates how people, organization, and technology elements work together to create an information system solution to the business challenges discussed in the case.

Chapter Organization

Each chapter contains the following elements:

- A chapter-opening case describing a real-world organization to establish the theme and importance of the chapter
- A diagram analyzing the opening case in terms of the management, organization, and technology model used throughout the text
- A series of Learning Objectives
- Two Interactive Sessions with Case Study Questions and MIS in Action projects
- A Hands-on MIS Projects section featuring two Management Decision Problems, a hands-on application software project, and a project to develop Internet skills
- A Learning Tracks section identifying supplementary material on MyMISLab

- A chapter Review Summary keyed to the Student Learning Objectives
- · A list of Key Terms that students can use to review concepts
- · Review Questions for students to test their comprehension of chapter material
- Discussion Questions raised by the broader themes of the chapter
- Video Cases. Instructors can download step-by-step instructions for accessing the video cases from the Instructor Resources page at www.pearsonglobaleditions.com/laudon.
- A Collaboration and Teamwork project to develop teamwork and presentation skills,
 with options for using open-source collaboration tools
- · A chapter-ending case study for students to apply chapter concepts

KEY FEATURES

We have enhanced the text to make it more interactive, leading-edge, and appealing to both students and instructors. The ninth edition includes the following features and learning tools:

Business-Driven with Real-World Business Cases and Examples

The text helps students see the direct connection between information systems and business performance. It describes the main business objectives driving the use of information systems and technologies in corporations all over the world: operational excellence; new products and services; customer and supplier intimacy; improved decision making; competitive advantage; and survival. In-text examples and case studies show students how specific companies use information systems to achieve these objectives.

We use current (2010) examples from business and public organizations throughout the text to illustrate the important concepts in each chapter. All the case studies describe companies or organizations that are familiar to students, such as Google, Facebook, Twitter, CocaCola, eBay, the New York Yankees, Procter & Gamble, and the Boston Celtics.

Interactivity

There's no better way to learn about MIS than by doing MIS! We provide different kinds of hands-on projects where students can work with real-world business scenarios and data, and learn first hand what MIS is all about. These projects heighten student involvement in this exciting subject.

- New Online Video Case Package. Heighten your students' interest in MIS by having them watch short videos online, either in-class or at home or work, then apply the concepts of the book to the analysis of the video. Every chapter contains two or more business video cases (26 videos in all) that explain how business firms and managers are using information systems, describe new management practices, and explore concepts discussed in the chapter. Each video case consists of a video about a real-world company, or a concept in MIS, a background text case, and case study questions. These video cases enhance students' understanding of MIS topics and the relevance of MIS to the business world. In addition, there are 12 Instructional Videos that describe developments and concepts in MIS, keyed to respective chapters.
- New Management Decision Problems. 2 new Management Decision Problems per chapter teach students how to apply chapter concepts to real-world business scenarios requiring analysis and decision making.
- New Collaboration and Teamwork Projects. Each chapter features a collaborative
 project that encourages students working in teams to use Google sites, Google Docs, and
 other open-source collaboration tools. The first team project in Chapter 1 asks students
 to build a collaborative Google site.
- Hands-on MIS Projects. Every chapter concludes with a Hands-on MIS Projects section containing three types of projects: two Management Decision Problems, a hands-on application software exercise using Microsoft Excel, Access, or Web page and blog creation tools, and a project that develops Internet business skills. A Dirt Bikes

MANAGEMENT DECISION PROBLEMS

1. U.S. Pharma Corporation is headquartered in New Jersey but has research sites Germany, France, the United Kingdom, Switzerland, and Australia. Research and development of new pharmaceuticals is the key to ongoing profits, and U.S. Pharma researches and tests thousands of possible drugs. The company's researchers need to share information with others within and outside the company, including the U.S. Food and Drug Administration, the World Health Organization, and the International Federation of Pharmaceutical Manufacturers & Associations. Also critical is access to health information sites, such as the U.S. National Library of Medicine and to industry conferences and professional journals. Design a knowledge portal for U.S. Pharma's researchers. Include in your design specifications relevant internal systems and databases, external sources of information, and internal and external communication and collaboration tools. Design a home page for your portal.

Two real-world business scenarios per chapter provide opportunities for students to apply chapter concepts and practice management decision making.

The database includes fields for store identification number, sales region number, item number, item description, unit price, units sold, and the weekly sales period when the sales were made.

ID -	Store No -	Sales Region .	Item No -	Item Description -	Unit Price -	Units Sold •	Week Ending -
1	1	South	2005	17" monitor	\$229.00	28	8/28/2009
2	1	South	2005	17" monitor	\$229.00	30	9/25/2009
3	1	South	2005	17" monitor	\$229.00	9	10/30/2009
4	1	South	3006	101 Keyboard	\$19.95	30	8/28/2009
5	1	South	3006	101 Keyboard	\$19.95	35	9/25/2009
6	1	South	3006	101 Keyboard	\$19.95	39	10/30/2009
7	1	South	6050	PC Mouse	\$8.95	28	8/28/2009
8	1	South	6050	PC Mouse	\$8.95	3	9/25/2009
9	1	South	6050	PC Mouse	\$8.95	38	10/30/2009
10		South	8500	Desktop CPU	\$849.95	25	8/28/2009

Students practice using software in real-world settings for achieving operational excellence and enhancing decision making.

Develop some reports and queries to make this information more useful for running the business. Sales and production managers want answers to the following questions:

- Which products should be restocked?
- Which stores and sales regions would benefit from a promotional campaign and additional marketing?
- When (what time of year) should products be offered at full price, and when should discounts be used?

You can easily modify the database table to find and report your answers. Print your

IMPROVING DECISION MAKING: USING INTELLIGENT AGENTS FOR COMPARISON SHOPPING

Software skills: Web browser and shopping bot software Business skills: Product evaluation and selection

This project will give you experience using shopping bots to search online for products, find product information, and find the best prices and vendors.

You have decided to purchase a new digital camera. Select a digital camera you might want to purchase, such as the Canon PowerShot SX120 or the Olympus Stylus-7010. To purchase the camera as inexpensively as possible, try several of the shopping bot sites, which do the price comparisons for you. Visit MySimon (www.mysimon.com), BizRate.com (www.bizrate.com), and Google Product Search. Compare these shopping sites in terms of their ease of use, number of offerings, speed in obtaining information, thoroughness of information offered about the product and seller, and price selection. Which site or sites would you use and why? Which camera would you select and why? How helpful were these sites for making your decision?

Each chapter features a project to develop Internet skills for accessing information, conducting research, and performing online calculations and analysis. USA Running Case in MyMISLab provides additional hands-on projects for each chapter.

• Interactive Sessions. Two short cases in each chapter have been redesigned as Interactive Sessions to be used in the classroom (or on Internet discussion boards) to stimulate student interest and active learning. Each case concludes with two types of activities: Case Study Questions and MIS in Action. The Case Study Questions provide topics for class discussion, Internet discussion, or written assignments. MIS in Action features hands-on Web activities for exploring issues discussed in the case more deeply.

Each chapter contains two Interactive Sessions on People, Organizations, or Technology using realworld companies to illustrate chapter concepts and issues.

180

Part II: Information Technology Infrastructure

INTERACTIVE SESSION: PEOPLE

Credit Bureau Errors—Big People Problems

You've found the car of your dreams, you have a good job and enough money for a down payment. All you need is an auto loan for \$14,000. You have a few credit card bills, which you diligently pay off each month. But when you apply for the loan you're turned down. When you ask why, you're told you have an overdue loan from a bank you've never heard of. You've just become one of the millions of people who have been victimized by inaccurate or outdated data in credit bureaus' information systems.

Most data on U.S. consumers' credit histories are collected and maintained by three national credit reporting agencies: Experian, Equifax, and TransUnion. These organizations collect data from various sources to create a detailed dossier of an individual's borrowing and bill paying habits. This information helps lenders assess a person's credit worthiness, the ability to pay back a loan, and can affect the interest rate and other terms of a loan, including whether a loan will be granted in the first place. It can even affect the chances of finding a job, since employers increasingly check credit reports before hiring new employees.

U.S. credit bureaus collect personal information and financial data from a variety of sources, including creditors, lenders, utilities, debt collection agencies, and the courts. These data are aggregated and stored in massive databases maintained by the credit bureaus. The credit bureaus then sell this information to other companies to use for credit assessment.

The credit bureaus claim they know which credit cards are in each consumer's wallet, how much is due on the mortgage, and whether the electric bill is paid on time. But if the wrong information gets into their systems, whether through identity theft or errors transmitted by creditors, watch out! Untangling the mess can be almost impossible.

The bureaus understand the importance of providing accurate information to both lenders and conIdentifying personal information includes items such as first name, last name and middle initial, full current address and zip code, full previous address and zip code, and social security number. The new credit information goes into the consumer credit file that it best matches.

The credit bureaus rarely obtain all the information matching in all the fields, so they have to determine how much variation to allow and still call it a match. Imperfect data lead to imperfect matches. A consumer might provide incomplete or inaccurate information on a credit application. A creditor might submit incomplete or inaccurate information to the credit bureaus. If the wrong person matches better than anyone else, the data could unfortunately go into the wrong account.

Perhaps the consumer didn't write clearly on the account application. Name variations on different credit accounts can also result in less-than-perfect matches. Take the name Edward Jeffrey Johnson. One account may say Edward Johnson. Another may say Ed Johnson. Another might say Edward J. Johnson. Suppose the last two digits of Edward's social security number get transposed—more chance for mismatches.

If the name or social security number on another person's account partially matches the data in your file, the computer might attach that person's data to your record. Your record might likewise be corrupted if workers in companies supplying tax and bankruptcy data from court and government records accidentally transpose a digit or misread a document.

The credit bureaus claim it is impossible for them to monitor the accuracy of the 3.5 billion pieces of credit account information they receive each month. They must continually contend with bogus claims from consumers who falsify lender information or use shady credit-repair companies that challenge all the negative information on a credit report regardless of its validity. To separate the good from the bad, the credit

MIS in Action projects encourage students to learn more about the companies and issues discussed in the case studies.

CASE STUDY QUESTIONS

- Assess the business impact of credit bureaus' data quality problems (for the credit bureaus, for lenders, for individuals).
- Are any ethical issues raised by credit bureaus' data quality problems? Explain your answer.
- Analyze the people, organization, and technology factors responsible for credit bureaus' data quality problems.
- 4. What can be done to solve these problems?

MIS IN ACTION

Go to the Experian Web site (www.experian.com) and explore the site, with special attention to its services for businesses and small businesses. Then answer the following questions:

- List and describe five services for businesses and explain how each uses consumer data. Describe the kinds of businesses that would use these services.
- Explain how each of these services is affected by inaccurate consumer data.

Preface vii

ASSESSMENT AND AACSB ASSESSMENT GUIDELINES

The Association to Advance Collegiate Schools of Business (AACSB) is a not-for-profit corporation of educational institutions, corporations and other organizations that seeks to improve business education primarily by accrediting university business programs. As a part of its accreditation activities, the AACSB has developed an Assurance of Learning Program designed to ensure that schools do in fact teach students what they promise. Schools are required to state a clear mission, develop a coherent business program, identify student learning objectives, and then prove that students do in fact achieve the objectives.

We have attempted in this book to support AACSB efforts to encourage assessment-based education. The front end papers of this edition identify student learning objectives and anticipated outcomes for our Hands-on MIS projects. In the Instructor Resource Center and MyMISLab is a more inclusive and detailed assessment matrix that identifies the learning objectives of each chapter and points to all the available assessment tools for ensuring students in fact do achieve the learning objectives. Because each school is different and may have different missions and learning objectives, no single document can satisfy all situations. The authors will provide custom advice on how to use this text in their colleges with different missions and assessment needs. Please e-mail the authors or contact your local Pearson representative for contact information.

For more information on the AACSB Assurance of Learning Program, and how this text supports assessment-based learning, please visit the Instructor Resource Center and MyMISLab.

Customization and Flexibility: New Learning Track Modules

Our Learning Tracks feature gives instructors the flexibility to provide in-depth coverage of the topics they choose. There are over forty Learning Tracks available to instructors and students. A Learning Tracks section at the end of each chapter directs students to short essays or additional chapters in MyMISLab. This supplementary content takes students deeper into MIS topics, concepts and debates; reviews basic technology concepts in hardware, software, database design, telecommunications, and other areas; and provide additional hands-on software instruction. The Ninth Edition includes new Learning Tracks on Cloud Computing, Managing Knowledge and Collaboration, Web 2.0, The Mobile Digital Platform, and A Primer on Business Process Management, plus additional coverage of Computer Hardware and Software technology.

Author-Certified Test bank and Supplements

- Author-Certified Test Bank. The authors have worked closely with skilled test item
 writers to ensure that higher level cognitive skills are tested. Test bank multiple choice
 questions include questions on content, but also include many questions that require
 analysis, synthesis, and evaluation skills.
- Annotated Slides. The authors have prepared a comprehensive collection of fifty PowerPoint slides to be used in your lectures. Many of these slides are the same as used by Ken Laudon in his MIS classes and executive education presentations. Each of the slides is annotated with teaching suggestions for asking students questions, developing in-class lists that illustrate key concepts, and recommending other firms as examples in addition to those provided in the text. The annotations are like an Instructor's Manual built into the slides and make it easier to teach the course effectively.

Globalization

This edition has even more global emphasis than previous editions. New material on globalization (Chapter 1), global workgroup collaboration (Chapter 2), software localization (Chapter 4), global security threats (Chapter 7), global supply chains (Chapter 8), global marketplaces (Chapter 9), and offshore outsourcing (Chapter 11), accompanied by numerous examples of multinational and non-U.S. companies, show how to use IS in a global business environment.

Student Learning-Focused

Student Learning Objectives are organized around a set of study questions to focus student attention. Each chapter concludes with a Review Summary and Review Questions organized around these study questions.

MyMISLab

MyMISLab is a Web-based assessment and tutorial tool that provides practice and testing while personalizing course content and providing student and class assessment and reporting. Your course is not the same as the course taught down the hall. Now, all the resources both you and your students need for course success are in one place—flexible and easily organized and adapted for your individual course experience. Visit www.mymislab.com to see how you can Teach. Learn. Experience. MIS.

Career Resources

MyMISLab also provides extensive Career Resources, including job-hunting guides and instructions on how to build a Digital Portfolio demonstrating the business knowledge, application software proficiency, and Internet skills acquired from using the text. The portfolio can be included in a resume or job application or used as a learning assessment tool for instructors.

Instructional Support Materials

Instructor's Resource CD-ROM

Most of the support materials described in the following sections are conveniently available for adopters on the Instructor's Resource CD-ROM. The CD includes the Instructor's Manual, Lecture Notes, Test Item File, PowerPoint slides, and the helpful lecture tool "Image Library."

Image Library (on Web and Instructor's Resource CD-ROM)

The Image Library is an impressive resource to help instructors create vibrant lecture presentations. Almost every figure and photo in the text is provided and organized by chapter for convenience. These images and lecture notes can be imported easily into Microsoft PowerPoint to create new presentations or to add to existing ones.

Instructor's Manual (on Web and Instructor's Resource CD-ROM)

The Instructor's Manual features not only answers to review, discussion, case study, and group project questions but also an in-depth lecture outline, teaching objectives, key terms, teaching suggestions, and Internet resources.

Test Item File (on Web and Instructor's Resource CD-ROM)

The Test Item File is a comprehensive collection of true—false, multiple-choice, fill-in-theblank, and essay questions. The questions are rated by difficulty level and the answers are referenced by section. The test item file also contains questions tagged to the AACSB learning standards. An electronic version of the Test Item File is available in TestGen and TestGen conversions are available for BlackBoard or WebCT course management systems. All TestGen files are available for download at the Instructor Resource Center.

PowerPoint Slides (on Web and Instructor's Resource CD-ROM)

Electronic color slides created by Azimuth Interactive Corporation, Inc., are available in Microsoft PowerPoint. The slides illuminate and build on key concepts in the text.

Video Cases and Instructional Videos

Instructors can download step-by-step instructions for accessing the video cases from the Instructor Resources page at www.pearsonglobaleditions.com/laudon.

The following is a list of video cases and instructional videos:

Chapter	Video W Min 101 200 Min Homorphia mo of the shiring a re-
Chapter 1: Business Information Systems in Your Career	Case 1: UPS Global Operations with the DIAD IV Case 2: IBM, Cisco, Google: Global Warming by Computer
Chapter 2: Global E-Business: and Collaboration	Case 1: How FedEx Works: Enterprise Systems Case 2: Oracle's Austin Data Center Instructional Video 1: FedEx Improves Customer Experience with Integrated Mapping & Location Data
Chapter 3: Achieving Competitive Advantage with Information Systems	Case 1: National Basketball Association: Competing on Global Delivery With Akamai OS Streaming Case 2: Customer Relationship Management for San Francisco's City Government
Chapter 4: IT Infrastructure: Hardware and Software	Case 1: Hudson's Bay Company and IBM: Virtual Blade Platform Case 2: Salesforce.com: SFA on the iPhone and iPod Touch Instructional Video 1: Google and IBM Produce Cloud Computing Instructional Video 2: IBM Blue Cloud is Ready-to-Use Computing Instructional Video 3: What the Hell is Cloud Computing? Instructional Video 4: What is AJAX and How Does it Work? Instructional Video 5: Yahoo's FireEagle Geolocation Service
Chapter 5: Foundations of Business Intelligence: Databases and Information Management	Case 1: Maruti Suzuki Business Intelligence and Enterprise Databases Case 2: Data Warehousing at REI: Understanding the Customer
Chapter 6: Telecommunications, the Internet, and Wireless Technology	Case 1: Cisco Telepresence: Meeting Without Traveling Case 2: Unified Communications Systems With Virtual Collaboration: IBM and Forterra Instructional Video 1: AT&T Launches Managed Cisco Telepresence Solution Instructional Video 2: CNN Telepresence Instructional Video 3: Microsoft: Unified Communications and Pos MalaysiaManagement
Chapter 7: Securing Information Systems	Case 1: IBM Zone Trusted Information Channel (ZTIC) Case 2: Open ID and Web Security Instructional Video 1: The Quest for Identity 2.0 Instructional Video 2: Identity 2.0
Chapter 8: Achieving Operational Excellence and Customer Intimacy: Enterprise Applications	Case 1: Sinosteel Strengthens Business Management with ERP Applications Case 2: Ingram Micro and H&R Block Get Close to Their Customers
Chapter 9: E-Commerce: Digital Markets, Digital Goods	Case 1: M-Commerce: The Past, Present, and Future Case 2: Ford AutoXchange B2B Marketplace
Chapter 10: Improving Decision Making and Managing Knowledge	Case 1: L'Oréal: Knowledge Management Using Microsoft SharePoint Case 2: IdeaScale Crowdsourcing: Where Ideas Come to Life Case 3: Antivia: Community-based Collaborative Business Intelligence Case 4: IBM and Cognos: Business Intelligence and Analytics for Improved Decision Making
Chapter 11: Building Information Systems and Managing Projects	Case 1: IBM: Business Process Management in a Service-Oriented Architecture Case 2: Startup Appcelerator For Rapid Rich App Development Instructional Video 1: Salesforce and Google: Developing Sales Support Systems with Online Apps
Chapter 12: Ethical and Social Issues in Information Systems	Case 1: Net Neutrality: Neutral Networks Work Case 2: Data Mining for Terrorists and Innocents

Acknowledgments

The production of any book involves valued contributions from a number of persons. We would like to thank all of our editors for encouragement, insight, and strong support for many years. We thank Bob Horan for guiding the development of this edition and Kelly Loftus for her role in managing the project.

We praise Karalyn Holland for overseeing production for this project. Our special thanks go to our supplement authors for their work. We are indebted to William Anderson for his assistance in the writing and production of the text and to Megan Miller for her help during production. We thank Diana R. Craig for her assistance with database topics.

Special thanks to colleagues at the Stern School of Business at New York University; to Professor Edward Stohr of Stevens Institute of Technology; to Professors Al Croker and Michael Palley of Baruch College and New York University; to Professor Lawrence Andrew of Western Illinois University; to Professor Detlef Schoder of the University of Cologne; to Professor Walter Brenner of the University of St. Gallen; to Professor Lutz Kolbe of the University of Gottingen; to Professor Donald Marchand of the International Institute for Management Development; and to Professor Daniel Botha of Stellenbosch University who provided additional suggestions for improvement. Thank you to Professor Ken Kraemer, University of California at Irvine, and Professor John King, University of Michigan, for more than a decade's long discussion of information systems and organizations. And a special remembrance and dedication to Professor Rob Kling, University of Indiana, for being my friend and colleague over so many years.

We also want to especially thank all our reviewers whose suggestions helped improve our texts. Reviewers for this edition include the following:

Sherry L. Fowler, North Carolina State University

Richard Grenci, John Carroll University

Shohreh Hashemi, University of Houston-Downtown

Duke Hutchings, Elon University

Jeffrey Livermore, Walsh College

Michelle Parker, Indiana University—Purdue University Fort Wayne

Peter A. Rosen, University of Evansville

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Werner Schenk, University of Rochester

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Fan Zhao, Florida Gulf Coast University

简明目录

第Ⅰ篇	数字时代的信息系统	
第1章	管理信息系统和职业发展	
第2章	全球电子商务与合作	
第3章	利用信息系统获得竞争优势	78
第Ⅱ篇	信息技术基础设施	
第4章	信息技术基础设施:硬件和软件	
第5章	商务智能基础:数据库与信息管理	
第6章	通信、互联网与无线技术	
第7章	信息系统安全·····	232
第Ⅲ篇	数字时代的关键系统应用	
第8章	实现卓越运营和亲近客户: 企业应用	
第9章	电子商务:数字化市场与数字化商品	
第 10 章	决策优化与知识管理	340
第Ⅳ篇	开发和管理系统	
第 11 章	信息系统开发与项目管理	
第 12 章	信息系统中的道德和社会问题(网上内容)	416

Contents

D C	
Preface	1

	Information	S	vstems	in	the	Digital	Age	1
-		_	,					

- 1 Business Information Systems in Your Career 2
 - Chapter-Opening Case: The New Yankee Stadium Looks to the Future 3
 - 1.1 The Role of Information Systems in Business Today 5
 - Interactive Session: Organizations MIS in Your Pocket 8
 - 1.2 Perspectives on Information Systems and Information Technology 13

Interactive Session: Technology UPS Competes Globally with Information Technology 18

- 1.3 Understanding Information Systems: A Business Problem-Solving Approach 20
- 1.4 Information Systems and Your Career 24
- 1.5 Hands-On MIS Projects 30

Business Problem-Solving Case What's the Buzz on Smart Grids? 35

- 2 Global E-Business and Collaboration 38
 - Chapter-Opening Case: The Tata Nano Makes History Using Digital Manufacturing 39
 - 2.1 Components of a Business 41
 - 2.2 Types of Business Information Systems 47

Interactive Session: Organizations 'Fresh, Hot, Fast'—Can Information Systems Help Johnny's Lunch Go National? **52**

2.3 Systems for Collaboration and Teamwork 56

Interactive Session: Technology Virtual Meetings: Smart Management 62

- 2.4 The Information Systems Function in Business 68
- 2.5 Hands-On MIS Projects 69

Business Problem-Solving Case Innovation and Collaboration at Coca-Cola: It's the Real Thing **74**

3 Achieving Competitive Advantage with Information Systems 78

Chapter-Opening Case: Verizon or AT&T: Which Company Has the Best Digital Strategy? 79

3.1 Using Information Systems to Achieve Competitive Advantage 81

Interactive Session: People How Much Do Credit Card Companies Know About You? 86

3.2 Competing on a Global Scale 95

Interactive Session: Organizations Will TV Succumb to the Internet? 96

- 3.3 Competing on Quality and Design 99
- 3.4 Competing on Business Processes 101
- 3.5 Hands-On MIS Projects 105

Business Problem-Solving Case EBay Fine-Tunes its Strategy 111

II Information Technology Infrastructure 113

4 IT Infrastructure: Hardware and Software 114

Chapter-Opening Case	Cars.Com's I	T Infrastructure	Drives	Rapid	Business
	Growth 115				

4.1 IT Infrastructure: Computer Hardware 117

Interactive Session: Organizations Is Green Computing Good for Business? 128

4.2 IT Infrastructure: Computer Software 129

Interactive Session: Technology New to the Touch 132

- 4.3 Managing Hardware and Software Technology 142
- 4.4 Hands-On MIS Projects 146

Business Problem-Solving Case Salesforce.com: Cloud Software Services Go
Mainstream 152

5 Foundations of Business Intelligence: Databases and Information Management 156

Chapter-Opening Case: R.R. Donnelley Tries to Master Its Data 157

- 5.1 The Database Approach to Data Management 159
- 5.2 Database Management Systems 165
- 5.3 Using Databases to Improve Business Performance and Decision Making 169

Interactive Session: Organizations The IRS Uncovers Tax Fraud with a Data Warehouse 171

5.4 Managing Data Resources 178

Interactive Session: People Credit Bureau Errors—Big People Problems 180

5.5 Hands-On MIS Projects 181

Business Problem-Solving Case Trouble with the Terrorist Watch-List Database 187

6 Telecommunications, the Internet, and Wireless Technology 190

Chapter-Opening Case: Los Angeles International Airport Soars with New Networking Technology 191

- 6.1 Telecommunications and Networking in Today's Business World 193
- 6.2 Communications Networks 198
- 6.3 The Global Internet 202

Interactive Session: Organizations Should Network Neutrality
Continue? 206

Interactive Session: People Monitoring Employees on Networks: Unethical or Good Business? 210

- 6.4 The Wireless Revolution 218
- 6.5 Hands-On MIS Projects 224

Business Problem-Solving Case Google Versus Microsoft: Clash of the Technology Titans 229

7 Securing Information Systems 232

Chapter-Opening Case: Boston Celtics Score Big Points Against Spyware 233

7.1 System Vulnerability and Abuse 235

Interactive Session: Organizations The Worst Data Theft Ever 243

7.2 Business Value of Security and Control 246

- 7.3 Establishing a Framework for Security and Control 248
- 7.4 Technologies and Tools for Protecting Information Resources 252

Interactive Session: Technology How Secure Is the Cloud? 260

7.5 Hands-On MIS Projects 261

Business Problem-Solving Case Are We Ready for Cyberwarfare? 266

III Key System Applications for the Digital Age 269

8 Achieving Operational Excellence and Customer Intimacy: Enterprise Applications 270

Chapter-Opening Case: Enterprise Applications Help Severstal Create a Global Production Platform **271**

- 8.1 Enterprise Systems 273
- 8.2 Supply Chain Management Systems 276

Interactive Session: Technology Procter & Gamble Tries to Optimize Inventory 281

8.3 Customer Relationship Management Systems 285

Interactive Session: Organizations Customer Relationship Management
Helps Chase Card Services Manage Customer
Calls 288

- 8.4 Enterprise Applications: New Opportunities and Challenges 291
- 8.5 Hands-On MIS Projects 295

Business Problem-Solving Case Border States Industries Fuels Rapid Growth with ERP 299

9 E-commerce: Digital Markets, Digital Goods 302

Chapter-Opening Case: Nexon Games: E-Commerce Goes Social 303

9.1 E-commerce and the Internet 305

Interactive Session: Technology Turner Sports Marries TV and the Internet, then Goes Social 311

9.2 E-commerce: Business and Technology 314

Interactive Session: Organizations Twitter Searches For a Business Model 318

- 9.3 The Mobile Digital Platform and Mobile E-commerce 327
- 9.4 Building an E-commerce Web Site 329
- 9.5 Hands-On MIS Projects 332

Business Problem-Solving Case Facebook's Dilemma: Profits (Theirs) versus Privacy (Yours) 337

10 Improving Decision Making and Managing Knowledge 340

Chapter-Opening Case: P&G Moves from Paper to Pixels for Knowledge Management 341

- 10.1 Decision Making and Information Systems 343
- 10.2 Systems for Decision Support 347

Interactive Session: People Data-Driven Schools 349

10.3 Intelligent Systems for Decision Support 356