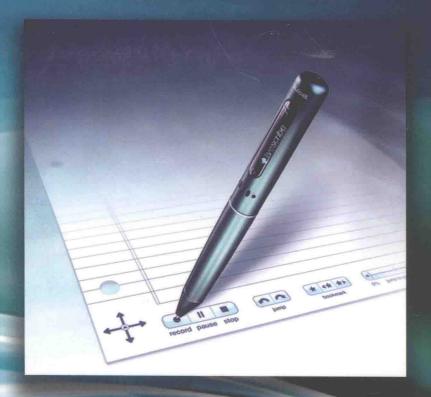
CHAPMAN & HALL/CRC TEXTBOOKS IN COMPUTING

# INFORMATION SYSTEMS

What Every Business Student Needs to Know



Efrem G. Mallach



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What Every Business Student Needs to Know

# Efrem G. Mallach

Rhode Island College, Providence, USA Kea Company, New Bedford, Massachusetts, USA



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# Introduction: Why This Book Matters

S TUDENTS OFTEN ASK "WHY bother learning about information systems?" Since you're about to spend a good deal of time doing that, you deserve an answer.

You don't need to be convinced that information systems matter to businesses. You know that. You register for classes online. You may have bought this book from Amazon or downloaded an electronic version, or perhaps you're reading it on a website. You probably buy music online and listen to it on an MP3 player (which may also be your phone, your camera, or both.) Your fancier camera probably didn't come with a full manual, but you can download one. When you fly to Mexico over winter break, you buy plane tickets at aa.com and get an e-mail or a text message if the flight schedule changes. These revolutionize how old types of organizations work and make new types of businesses possible. None of that is news.

You've also used personal computers for years. Word processing beats a typewriter for term papers. Without spreadsheets, you could never have survived introductory accounting. You keep up with your friends on Facebook or Google+, get the news from cnn.com and the weather from weather.com, laugh and cry with YouTube, and check rottentomato.com if you're unsure about a new movie. You know how to download or install apps, and you know how to use them. Isn't that what you'll do on the job? Why do you need a course for that?

Saying "I just have to use the apps my employer gives me" may let you survive at work, barely, but you'll soon be outclassed by people who can go further and deeper into information systems. You'd be like a boxer entering the ring with one hand behind his back. He might prevail if he's sufficiently larger, stronger, or more skilled than his opponent, but that hardly ever happens. Boxers don't take that risk. You shouldn't either. The people you compete with for raises and promotions, and the companies your employer competes with for business, won't be stupid or incompetent. You need every edge you can get.

Having the right information systems is vital to business success. Only people with the vision and insight to know what the right systems are will have those systems. Only people who understand how databases work can imagine new uses for the data in them. Only people who understand how information systems are developed can work effectively with their developers to ensure that new systems meet their needs. Only people who understand how organizations use information systems can take the lead in jobs that are beyond the

capabilities of their organization's technical staff, or even understand what those jobs are and why the technical staff can't do them. Only people who... You get the idea.

The course you're taking now, and this book, can help you become one of these people: one of the people who understand how information systems make companies successful and are able to lead their companies to success through their effective use. That may be the most important professional skill a businessperson can have in the twenty-first century.

#### PLAN OF THIS BOOK

This book is divided into four parts:

*Part I: About Information Systems* consists of Chapters 1 and 2. It covers general concepts that will be helpful throughout your study of information systems.

Part II: Technology Fundamentals, Chapters 3 through 6, is about IT: the technology foundations of information systems. Its aim is not to repeat what you already know as a person who grew up in the twenty-first century but to fill the gaps that everyone has when they learn through experience. Nobody can experience everything, so you and all your classmates have such gaps—though they're all in different places.

Part III: Information Systems at Work, Chapters 7 through 9, discusses the nitty-gritty of how real companies use real information systems to get the benefits you read about in Section 1.1.

Part IV: Managing Information Systems consists of the last three chapters, Chapters 10 through 12. It's about issues involved in selecting, developing, and managing information systems.

Since you can't possibly remember every detail in the chapter, each chapter begins with a list of key take-aways so you can focus on remembering them. Within the chapter, paragraphs headed "Where you fit in" explain why a subject will matter to you, personally, during your career.

After the body of the chapter, you'll find a short recap that summarizes its key points, focusing on the take-aways that were identified earlier. Review questions (which are answered in the chapter) and discussion questions (which aren't and which call for more thought on your part) come next. Then, you'll find an episode of a running case in which you'll follow Miguel and Elizabeth, Management Information Systems (MIS) majors at college, as they study the information systems of a medical practice. The end of Chapter 1 introduces that case, Springfield Metro Medical Associates. Finally, two mini cases show how the subject of that chapter plays out in the real world.

To the Information Systems (IS) major: As you've surely noticed, the great majority of business students major in another area. This book is written primarily for them. If you're an IS major, congratulations: you've chosen a fascinating field with great job potential—some of which is discussed in Chapter 12. This book, and the course you're taking, will give you perspective on the people who will use your systems, what they need, and how they'll get it. You'll also get an overview of the types of systems your employers will use and why they think these systems are worth spending money on. Your professional skills in technology will come from other courses you'll take, though—not this one.

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