

Part 1: MIS and You

Chapter 1

Information Systems and You

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Running Case: Café Italiano

- Josie needs a strategy to improve services at Café Italiano
- The café is set up as a true European café
- The café offers higher quality coffee drinker a coffee house experience
- Café Italiano sells a “good” and also provides a “service”
- Josie is thinking of different things to do to improve services and expand customers’ base

Study Questions

1. What is an information system?
2. What is MIS?
3. How does IS differ from IT?
4. How important are IS to our economy?
5. How do successful business professionals use IS?
6. What is the shape of things to come?
7. What is this class about?

What is an Information System?

- A *system* is a group of components that interact to achieve some purpose
- An **information system (IS)** is a group of components that interact to produce information
- Five fundamental components of computer-based information systems are:
 1. Computer hardware
 2. Software
 3. Data
 4. Procedures
 5. People

Five Components of an Information System



Figure 1-1

Five Components of an Information System

Source: Courtesy of Industry Canada. Reproduced with the permission of the Minister of Public Works and Government Services, 2012.

What Is MIS?

- Management Information Systems
- MIS, comprise the development and use of information systems that help organizations achieve their goals and objectives
- Key elements:
 - Development and use
 - Information systems
 - Goals and objectives

Development and Use of Information Systems

- You need to:
 - Take an *active role* in order to ensure that system will meet your needs
 - Understand how they are constructed
 - Consider the user's needs during development
 - Learn how to employ the system
 - Take into account other important functions
 - Security
 - Backup
 - Recovery

Achieving Business Goals and Objectives

- MIS aids businesses in achieving objectives
 - Organizations themselves don't do anything
 - People within an organization or business who: sell, buy, design, produce, finance, market, account, and manage

- MIS empowers users to reach goals
 - Exist to assist business people
 - Need to be developed for right reason

Ask Questions

- What will a system do for you?
- What is the purpose?
- What will using it enable us to do?
- What goal can we accomplish through its use?
- Will it aid us in reaching our objectives?

MIS in Use

Social Media: Changing the Relationship between Customers and Business

- Social media connect people, and when people get connected they talk, share, and let friends know what they think about the world
- When instant messaging (IM), web logs (blogs), wikis, video logs, podcasts, and social networking (SN) sites first became popular, many business organizations responded by simply passing them by

Mabel's Labels example

- Has a blog, a podcast, a Facebook fan page, a Twitter account, a photostream in Flickr, and a YouTube account
- All of these social media channels help Mabel's Labels connect with customers and increases the size of the network familiar with their products
- Social media are changing the way small business connects with its customers and that is a message that businesses everywhere are listening to

How Does IS Differ from IT?

- **Information system (IS)** is a system of hardware, software, data, procedures, and people that produces information
- **Information technology (IT)** represents raw technology components of IS
 - Hardware
 - Software
 - Data components
- IT refers to:
 - Methods
 - Inventions
 - Standards
 - Products

IT within IS

- IT alone will not help an organization achieve goals
- IT must be embedded into an IS to help accomplish objectives
 - Technology must be combined with people and procedure components
 - IS will make IT useful

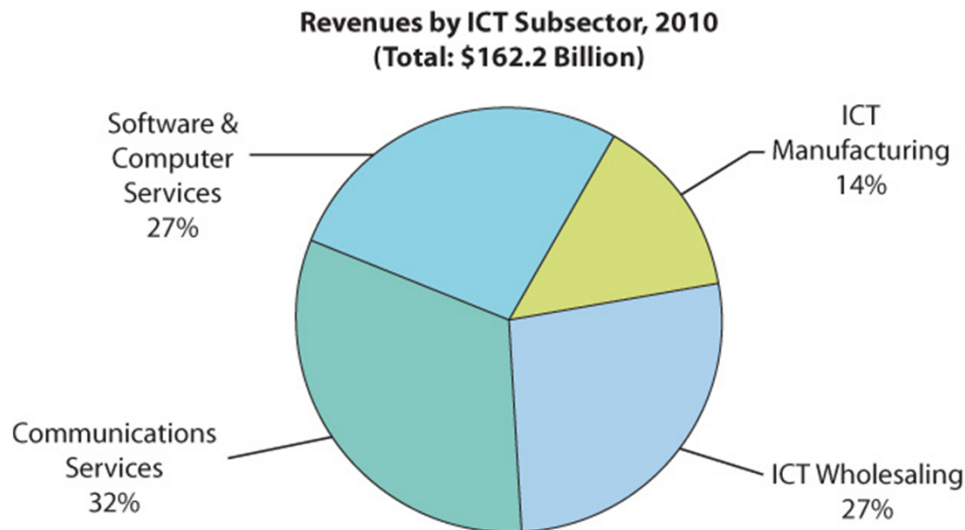
Real Difference between IS and IT

- IS includes people in the equation
- Including people in the system impacts how you design and implement systems
- Successful business people take advantage of crucial differences between IT and IS to improve their systems

How Important Are IS to Our Economy?

- The Information and Communications Technology (ICT) sector includes companies involved in:
 - software and computer services
 - cable and other program distributors
 - telecommunications services
 - ICT manufacturing
 - ICT wholesaling

Revenues by ICT Sub-Sector, 2010



Source: Industry Canada, Canadian ICT Statistical Overview

Figure 1-2

Revenues by ICT Sub-sector, 2010

Source: Courtesy of Industry Canada.
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the Minister of Public Works and
Government Services, 2012

www.ic.gc.ca/eic/site/ict-tic.nsf/eng/h_it07229.html

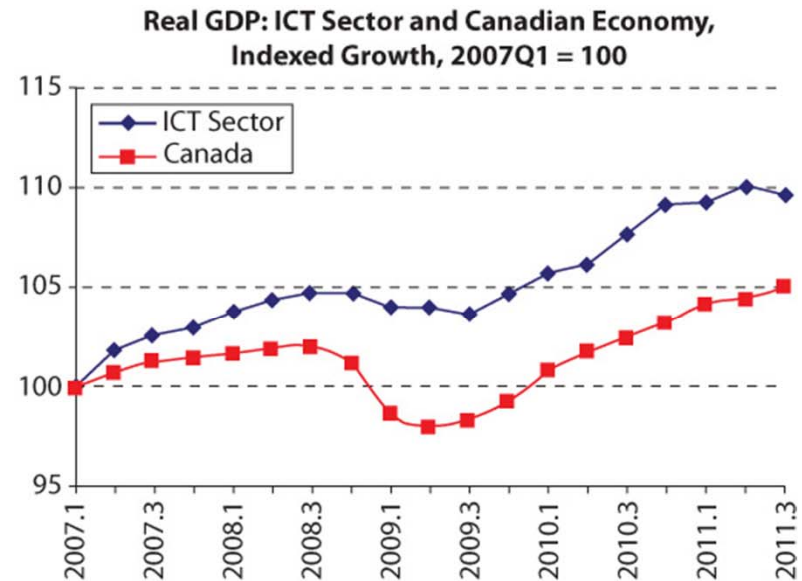
ICT Sector GDP, 2007-11

Figure 1-3

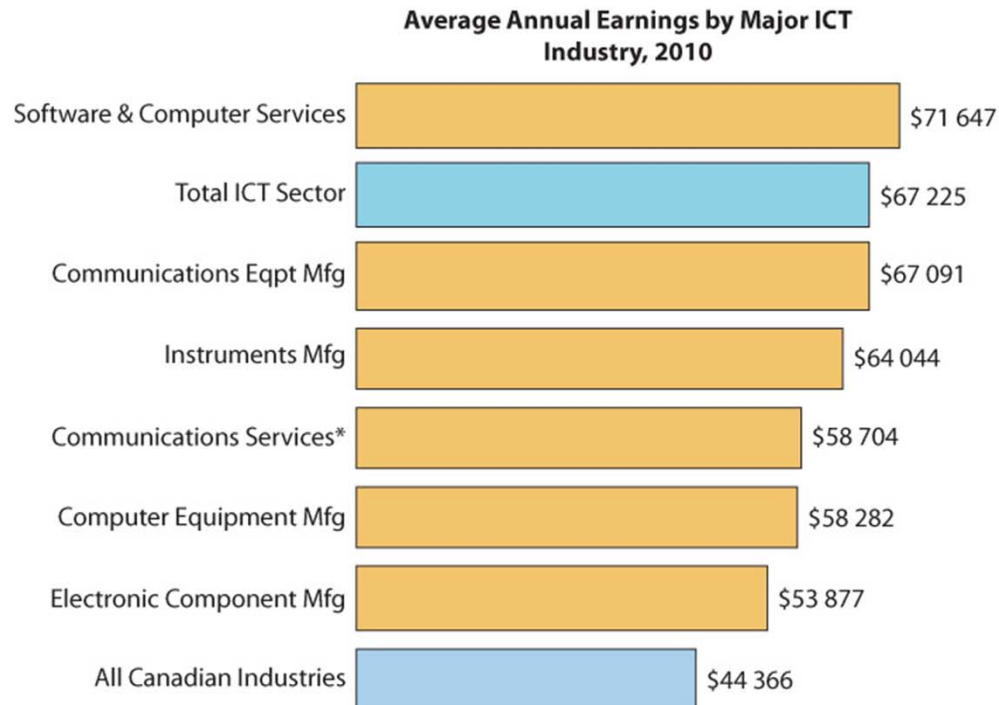
ICT Sector GDP, 2007-11

Source: Courtesy of Industry Canada.
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Government Services

www.ic.gc.ca/eic/site/ict-tic.nsf/eng/h_it07955.html



Software & Computer Services Average Annual Earnings by Major ICT Industry, 2010



*Including Cable and Other Program Distribution
Source: Statistics Canada. Survey of Employment.

Figure 1-4

Average Annual Earnings by Major ICT Industry, 2010

Source: Courtesy of Industry Canada. Reproduced with the permission of the Minister of Public Works and Government Services, 2012.

www.ic.gc.ca/eic/site/ict-tic.nsf/eng/h_it07229.html

How Do Successful Business Professionals Use IS?

- Today, every business professional uses numerous information systems
- Some of basic information systems are:
 - E-mail
 - Accessing web pages
 - Using word processors and spreadsheets
 - Creating presentations with PowerPoint
 - Talking on a cell phone
 - Instant messaging and location-based services on their smart phones

Beyond the Basics

- To be effective in today's economy, you need more than the basics
- Business professionals need to expand their knowledge to include the following:
 - Use of mobile devices and applications
 - Use of project-management software – Microsoft Project, OpenProject
 - Business graphics – MS Visio, SmartDraw
 - Collaborative systems such as Google Docs

Gaining a Competitive Advantage

- Think about IT and IS when you consider the problems and opportunities that confront your department or organization
- To remain productive, there is need for innovation
- You need not be a developer of technology
- Think creatively about problems, challenges, and opportunities in your business/organization
- Apply new technology and a knowledge of IS to your business needs

What Is the Shape of Things to Come?

- Moore's Law noted that the density of circuits on an integrated chip was doubling approximately every two years or so
- This prediction has been generally accurate for more than 40 years
- Moore's Law is one of the few predictions in area of IT that has really stood the test of time
- The cost of computers has declined over the past 55 years or, the same amount of money can buy increased computer capacity

Computer Price/Performance Ratio Decreases

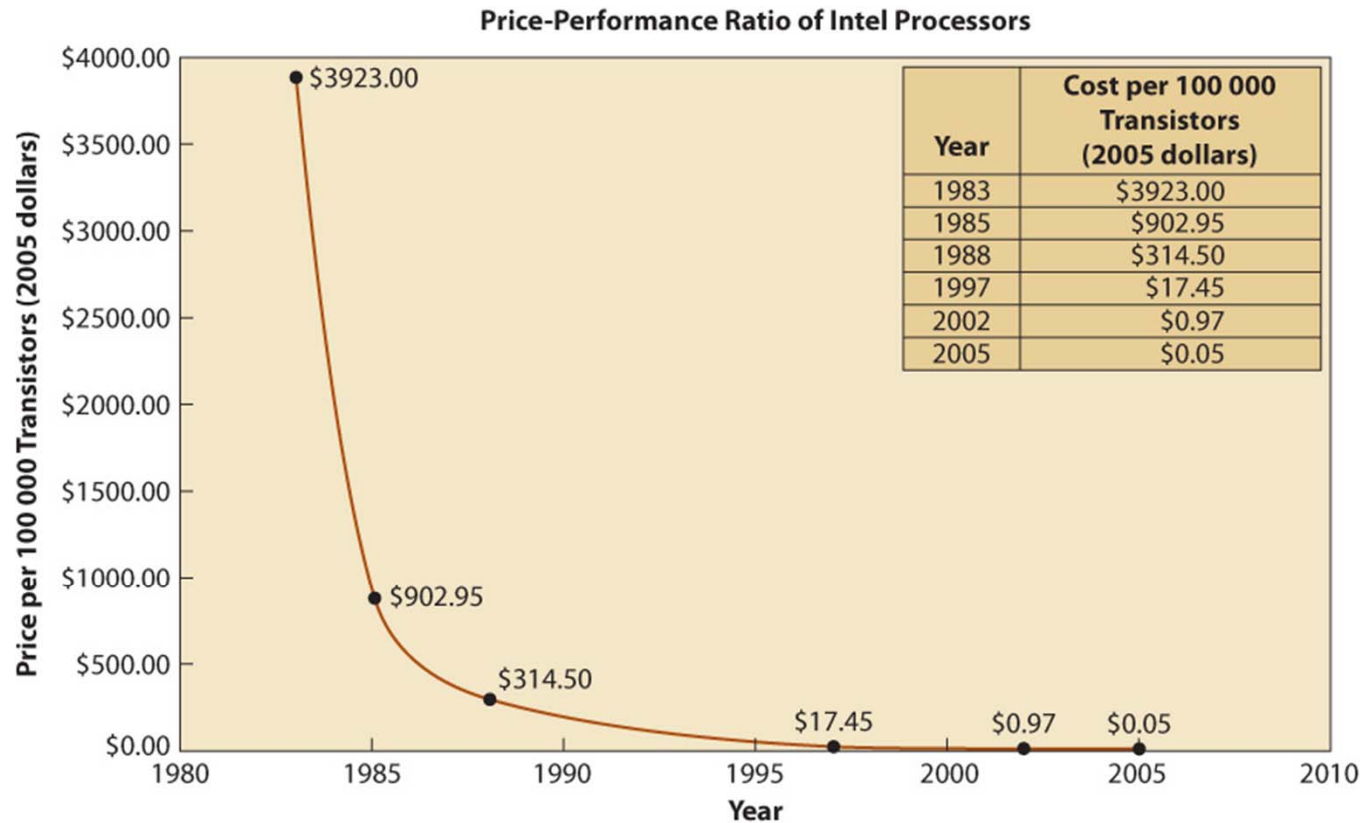


Figure 1-5

Computer Price/
Performance Ratio
Decreases

Business of IT and IS

- How will IT and IS affect the way we live and work?
- Hal Varian suggested that:
 - Business is changing because of advances in IS and IT
 - Mobility devices will change what it means to go to work
 - Industries are undergoing significant change because of the shifts in technology

ICTS Jobs 2.0 report

- David Ticoll suggested that within the next decade:
 - Unlimited storage will be almost free
 - Analytical software will reveal hidden treasures
 - The real and virtual world will collide as wide-area networks become cheap, reliable, and widely available
 - These technology trends will enable deep, powerful, performance-enhancing innovations that will be felt in almost every industry

Talking about the Future of IT

- Canadian economy is undergoing fundamental changes – past and future shifts
- The need to innovate and to adapt to the changing world
- *The Running Room* extends the services provided by a traditional retail business
 - Their website not only provides information more efficiently to customers, but also provides services that could not be found at the store

MIS in Use

Google Knows Best

- Millions of people worldwide daily log in to Gmail, Google's free web-based mail service
- Launched four years ago, Gmail is supported entirely by advertising and can be considered a success by almost any standard
- When email is sent or received, a fresh column of ads appear on the right-hand side of the screen

What Is This Class About?

- Focus is on:
 - Learning to use tools to accomplish a business purpose
 - Understanding both business and technology
 - Relating business to technology
 - Using technology to gain a competitive advantage

What Do YOU Think?

Duller Than Dirt?

- This course subject can seem duller than dirt
- The secret is to personalize the material
- Jump onto Google and search for MIS careers or use some other phrase from this chapter and see what you get
- Challenge yourself to find something that is important to you personally in every chapter

What Do YOU Think?

1. Are you awake to your life? How do you know? What can you do once a week to ensure that you are awake?
2. What are your professional goals? Are they yours, or are they someone else's? How do you know?
3. How is this class relevant to your professional goals?
4. How are you going to make the material in this class interesting?