

Experiencing MIS

Fifth Canadian Edition



Chapter 11

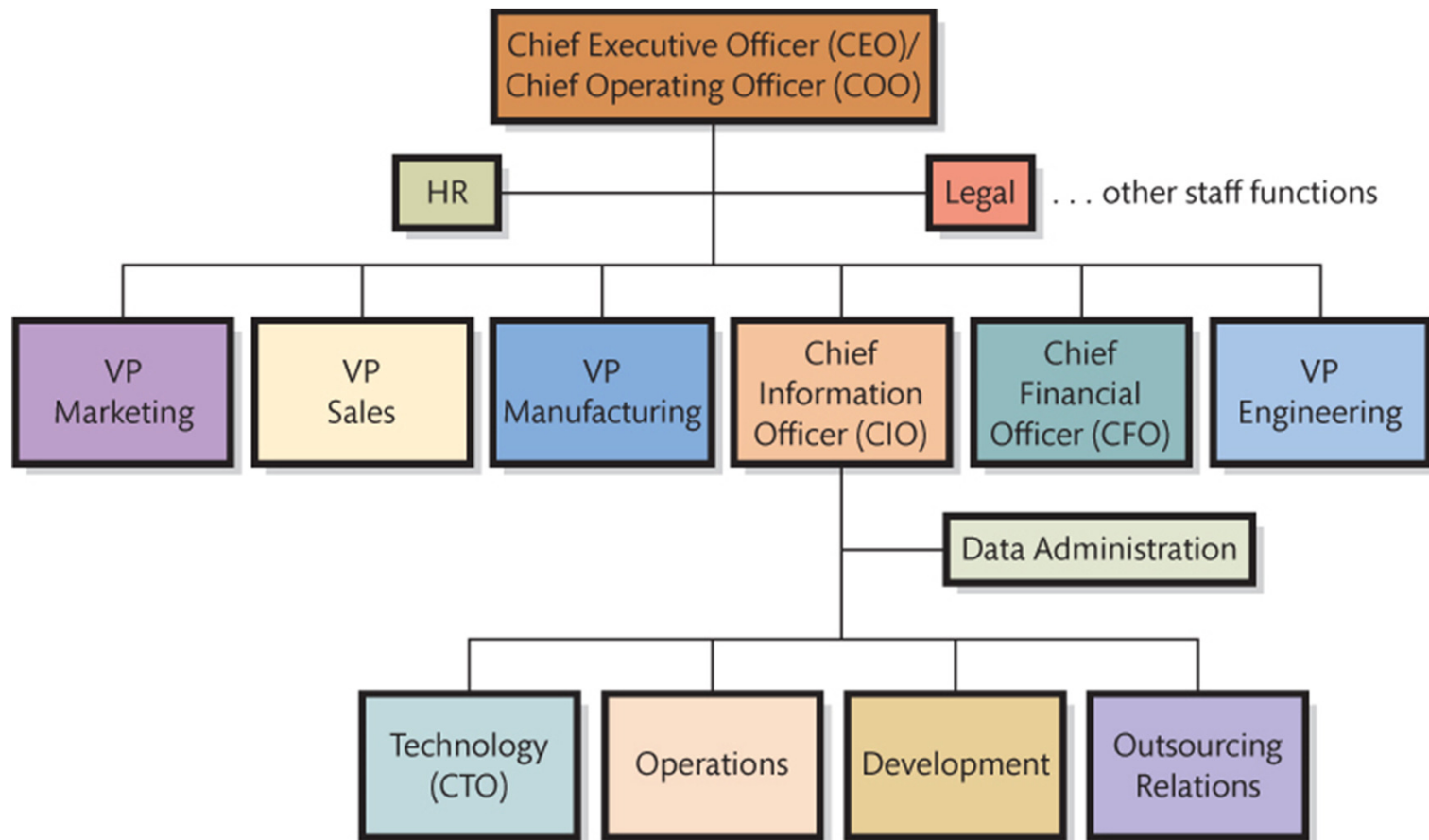
Structure, Governance, and Ethics

How Is the IT Department Organized?

- Organizational structure varies, depending on the organization's size, culture, competitive environment, industry, etc.
- All IS -- email systems used in an organization require some form of technical support
- The department of people who support this is often referred to as “IT Services” or “Information Systems Services”

Figure 11-1

Typical Senior-Level Reporting Relationships



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What About the Web?

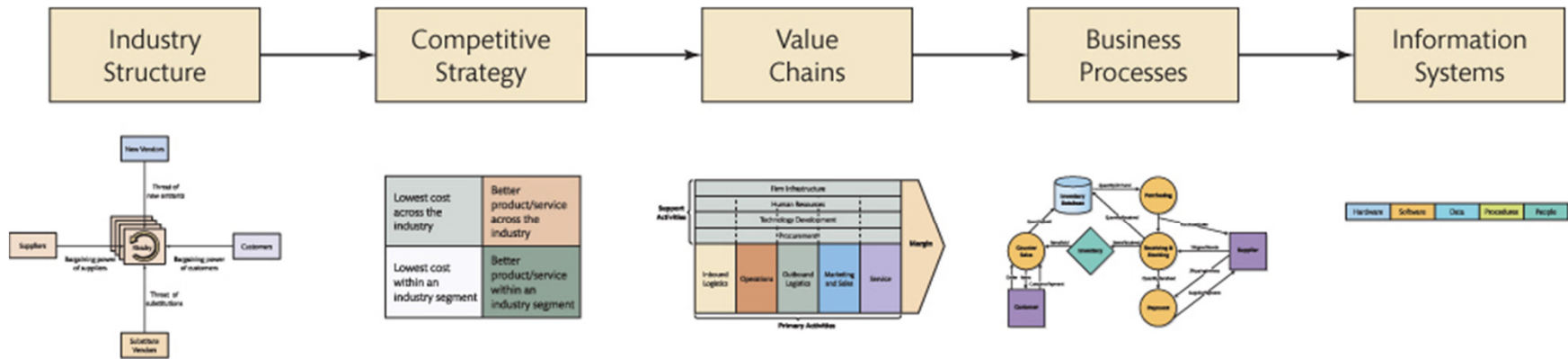
- Web has had a significant impact on the organization of IT departments
- Traditionally, IT department was responsible for designing and maintain a website
- This task now belongs to marketing department to keep up with branding and control of content while IT provides technical support for the website
- Creating well-designed company web pages requires knowledge of branding and marketing, plus technical skills

Q11-3: What Is IT Architecture? (1 of 2)

- Like a city plan that lays out the street network, water systems, emergency system, power grids
- **IT architecture:** Basic framework for all the computers, systems, and information management that supports organizational services
- **Enterprise architect:** new title being used to describe person who manages IT architecture
 - Create a blueprint of an organization's IS and the management of these systems
 - Must understand current investments in technology and plan for changes

Figure 11-3

Organizational Strategy and Information Systems



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Q11-3: What Is IT Architecture? (2 of 2)

- Few standards since companies are diverse
- Usually a long document with complicated diagrams, management policies, discussion of future changes
- **Zachman framework:** helps in designing IT architecture
 - Systems divided into two dimensions:
 - 5 reasons for communication
 - Stakeholder groups

Q11-4: What Is Alignment, Why Is It Important, and Why Is It Difficult? (1 of 2)

- **Alignment:** process of matching organizational objectives with IT architecture
- Ongoing process: fitting IT architecture to business objectives is continuous challenge

Q11-4: What Is Alignment, Why Is It Important, and Why Is It Difficult? (2 of 2)

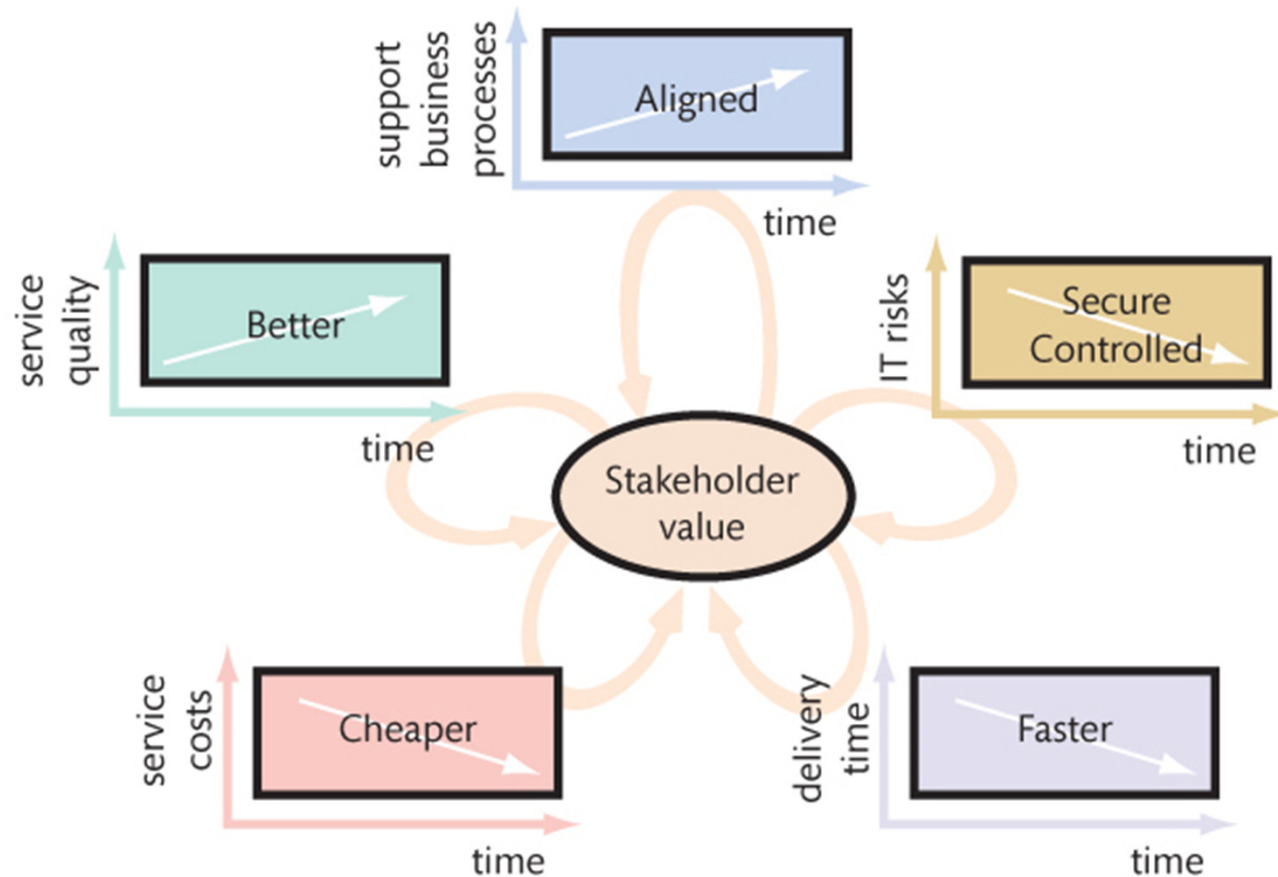
- Measured as the **degree** to which the IT department's missions, objectives, and plans **overlapped with the overall business missions**, objectives, and plans
- **Communication** between **business** and **IT** executives is the most important indicator of alignment

Q11-5: What Is Information Systems Governance?

- **Governance:** development of **consistent**, **cohesive**, **management policies** and **verifiable internal processes** for IT and related services
- Goal is to improve the benefits of an organization's **IT investment** over time

Figure 11-5

Creating Benefits from IT Governance



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The Sarbanes-Oxley Act and the Budget Measures Act (1 of 2)

- **Sarbanes-Oxley Act (SOX)** in USA and Budget Measures Act (Bill 198) in Canada
- Require management to create **internal controls** sufficient to produce **reliable** financial statements and to protect the organization's assets
 - e.g., separation of duties and authorities
- Expose both management and the external auditor to **financial** and **criminal liability**
- To prevent corporate **frauds**

The Sarbanes-Oxley Act and the Budget Measures Act (2 of 2)

Example:

- The computer-based accounting information system used by the company must have **appropriate controls**, and management must **assert** that they do
- The order-processing information system used by the company, which stores credit card data and customer identifies, must prevent **unauthorized persons from access**

Q11-6: What Is an Information Systems Audit, and Why Should You Care About It?

- Examination and verification of a company's information resources that are used to collect, store, process, and retrieve information – including organization's IS policies and procedures
- Many firms offer **IS audit** services
- **Control Objectives for Information and Related Technology (COBIT)** is a framework of best practices designed for IT management

Why Should You Care About Information Systems Governance and Information Systems Audits?

- Increased need to **report** and **disclose** IS operational information will require employees at all levels of an organization to become more familiar with the **issues** facing information technology management
- **Senior business managers** are required to make **assertions** about the **controls** on IS that will expose them to both financial and criminal penalties

What Is Information Systems Ethics?

- people involved with the system, not hardware or software
- understanding our own behaviour—the way we think and act in situations where our choices affect others
- **Ethical principles**
 - United Nations Declaration of Human Rights
 - Canada's Charter of Rights and Freedoms
 - Association of Computing Machinery's code of ethics

Sarbanes-Oxley: Boon or Bane?

- Goal to **strengthen** and **upgrade financial reporting**, and thus maintain and improve trust in public companies' financial reports
- Large companies expect to divert more than **15 percent of their IS budgets** to Sarbanes-Oxley compliance
- Sarbanes-Oxley Act will provide full employment for internal and IT auditors

Q11-8: What Is Green IT, and Why Should You Care About It? (1 of 2)

- **Green IT** (green computing) - using IT resources to better support the triple bottom line for organizations
- The **triple bottom line** - a concept that expands the notion of traditional financial reports (based solely on financial performance), to take into account ecological and social performance

Q11-8: What Is Green IT, and Why Should You Care About It? (2 of 2)

- Primary goals to improve **energy efficiency**, promote **recyclability**, and **reduce** the use of materials that are hazardous to the environment

Green IT

- Green IT considers the effects of choices on people and the environment
- **ENERGY STAR** program - is an international government/industry partnership to produce equipment that meets high-energy efficiency specifications or promotes the use of such equipment
- **E-cycling** or the recycling of electronic computing devices