CHAPTER 3: IT roles and Responsibilities

Structure: Employees across the organization must work closely together to develop strategic initiatives that create competitive advantages. Understanding the basic structure of a typical IT department including titles, roles, and responsibilities will help an organization build a cohesive enterprise-wide team

IT roles and responsibility
IT is a relatively new functional area, only around 40 years; nonetheless, clear trends are developing toward elevating some IT positions within an organization to the strategic level.
- Executives
  - Chief information officer CIO: responsible for 1) overseeing all uses of MIS and 2) ensuring that MIS strategically aligns with business goals and objectives
  - Chief security officer CSO: Responsible for ensuring the security of business systems and developing strategies and safeguards against attacks by hackers and viruses
  - Chief technology officer CTO: responsible for ensuring the speed, accuracy, availability, and reliability of the MIS
  - Chief privacy officer CPO: responsible for ensuring the ethical and legal use of information within a company
  - Chief knowledge officer CKO: responsible for collecting, maintaining, and distributing company knowledge
- Managers: ensure the delivery of all IT projects, on time and within budget
- Leaders: ensure the strategic vision of IT is in line with the strategic vision of the organization
- Communicator: advocate and communicate the IT strategy by building and maintaining strong executive relationship

Gap between Business personnel and IT personnel
- Expertise area: they possess expertise in different functional areas, such as marketing, accounting, sales and information technology
- Communication: communication gap do often exist between the two
  - Vocabularies: acronyms and technical terms
    - Ebitda, Dot per inch (DPI) in mouse, ROA, ROE
  - Experience influence the way you communicate with one another, context and past events
    - Function in sales, function in IT….
- Understanding each role and including others
  - Improving communication: increase their understanding of each other. Understand what they can accomplish or can't accomplish with/without one another.

- Including people from other department into the meeting and etc
- Read IT magazine and vice versa
- Integrate IT personnel into various different function
  - ✓ Help them to understand others

Organizational Fundamental: Ethic and security
Example of Enron and WasteMGT, Figure Enron and WasteMGT
- Ethic: the principles and standards that guide our behavior toward other people
  - Ex. Ian Clarke, the inventor of a file swapping service called Freenet, decided to leave United States for United Kingdom, where copyright laws are more lenient
  - Advance technology makes it easier for people to copy everything from music, picture to academic work.

ENRON SCANDAL (2001)

COMPANY
Houston-based commodities, energy and service corporation

WHAT HAPPENED
Shareholders lost $74 billion, thousands of employees and investors lost their retirement accounts, and many employees lost their jobs.

MAIN PLAYERS
CEO Jeff Skilling and former CEO Ken Lay

PENALTIES
Lay died before serving time; Skilling got **24 years in prison.** The company filed for bankruptcy. Arthur Andersen was found guilty of fudging Enron's accounts.

HOW THEY DID IT
Kept huge debts off the balance sheets.

HOW THEY GOT CAUGHT
Turned in by internal whistle-blower Sherron Watkins; high stock prices fueled suspicions.

FUN FACT
Fortune Magazine named Enron "America's Most Innovative Company" for six years in a row prior to the scandal.

= 1 year

- Privacy: is the right to be left alone when you want to be, to have control over your own personal possessions, and to not be observed without your consent.
  - Safety Vs. Privacy
    - Ex. The rights for gov't to look thru your emails and files….

- o Trust between companies, customers, partners, and suppliers are the support structure of the e-business world. One of the main ingredients in trust is privacy
  - Ex. Vertical integration
  - Personal privacy on the website, eg. Porn site or your accounting history
- o Primary reasons privacy issue reduce trust for Business
  - Loss of personal privacy is a top concern for Western civilization in 21st century
  - Among internet users, 37% would be "a lot" more inclined to purchase a product on a website that had a privacy policy
  - Privacy/ security is the no. 1 factor that would convert internet researchers into internet buyers

WASTE MANAGEMENT SCANDAL (1998)

COMPANY

Houston-based, publicly traded waste management company

WHAT HAPPENED

Reported **$1.7 billion** in fake earnings.

= $100 million

MAIN PLAYERS

Founder/CEO/Chairman Dean L. Buntrock and top executives & Arthur Andersen Company (auditors)

HOW THEY DID IT

The company allegedly falsely increased the depreciation time length for their property, plant and equipment on the balance sheets.

HOW THEY GOT CAUGHT

A new CEO and management team went through the books.

PENALTIES

Settled a shareholder class-action suit for **$457 million;** SEC fined Arthur Andersen **$7 million.**
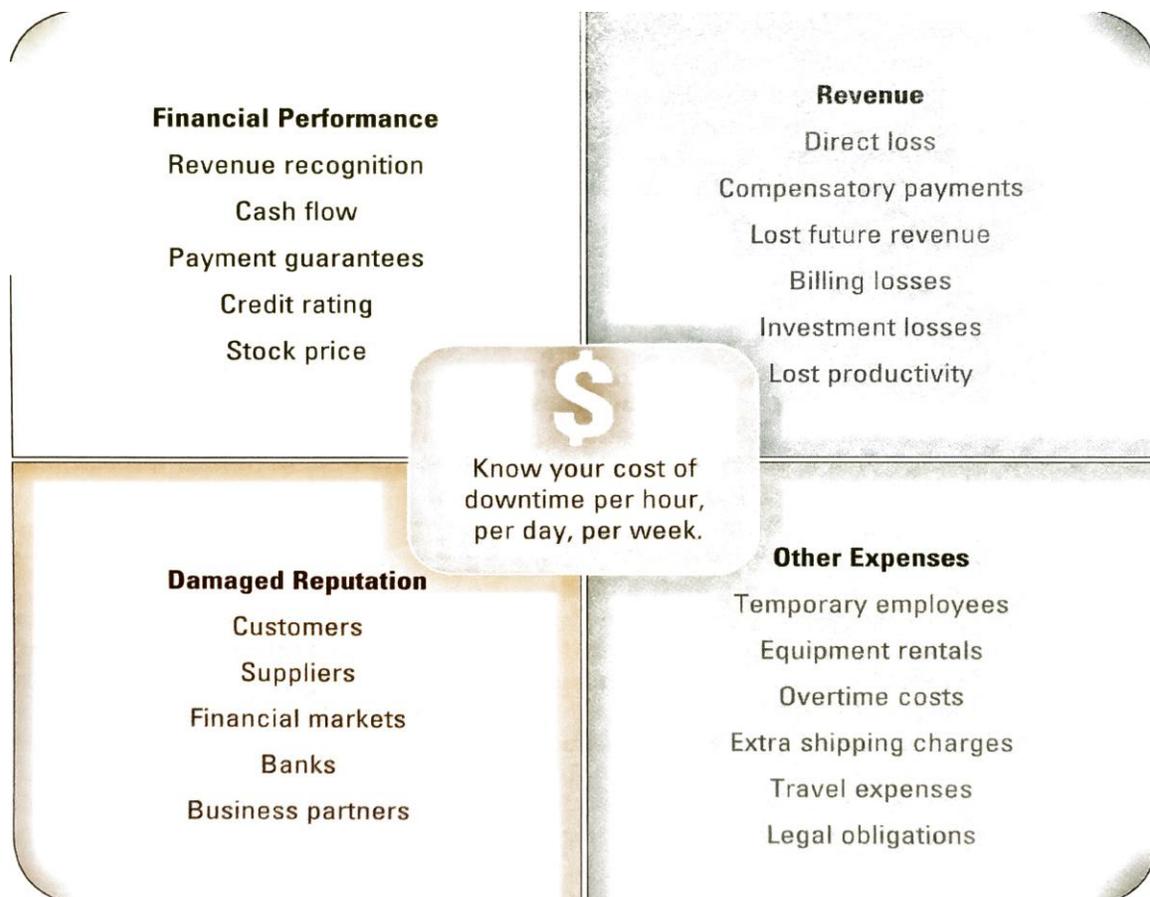
$7m

$457m

FUN FACT

After the scandal, the new CEO A. Maurice Meyers set up an anonymous company hotline where employees could report dishonest or improper behavior.

- Issue affected by technology advances
  - o Intellectual property: intangible creative work that is embodied in physical form
  - o Copyright: the legal protection afforded an expression of an idea, such as a song, video game, and some types of proprietary documents
  - o Fair use doctrine: in certain situations, it is legal to use copyrighted material

- o Pirated software: the unauthorized use, duplication, distribution, or sale of copyrighted software
- o Counterfeit software: software that is manufactured to look like the real thing and sold as such
- Security
  - o Downtime: the old business axiom "time is money" needs to be updated to more accurately reflect the crucial interdependence between IT and business processes. It should be "uptime is money"
    - ▪ Leading cause of downtime is human error
    - ▪ According to Gartner Group, on average enterprises lose $108,000 of revenue every hour their IT infrastructure is down
    - ▪ Ex. JIB downtime, what is the effect of that?
    - ▪ Figure 5.8 the cost of downtime

Financial Performance

Revenue recognition

Cash flow

Payment guarantees

Credit rating

Stock price

Revenue

Direct loss

Compensatory payments

Lost future revenue

Billing losses

Investment losses

Lost productivity

$

Know your cost of downtime per hour, per day, per week.

Damaged Reputation

Customers

Suppliers

Financial markets

Banks

Business partners

Other Expenses

Temporary employees

Equipment rentals

Overtime costs

Extra shipping charges

Travel expenses

Legal obligations

Protecting Intellectual asset
- Smoking area example
  - o Study by NTE monitor Ltd. – a UK based internet security tester
    - ▪ Sneaking using back entrance for smoking, then ask around for a meeting room, claiming that the IT department had sent him.

(With no pass or anything). At the end, he was able to plug in his laptop onto the company's network
- Organizational information is intellectual capital, imaging what can other people do with your information
  - Eg. Personal health records
- Information security: broad term encompassing the protection of information from accidental or intentional misuse by persons inside or outside an organization
  - CRM information to determine valuation information such as 80:20
  - Eg. Many people freely give up their passwords or leave them on sticky notes next to their computers, leaving the door wide open to intruders
  - Eg. Picking up the phone for others, THAI vs. Other culture

- IT budget (security budget)
  - 75% of companies spend less than 5% of their IT budget on the security purpose