

## **Preface**

I would like to express my special thanks of gratitude to my professor T. Shahidan Abdulmana as well the advisor. This report documents is a part of Business Information System subject. This report is about conclusion all topic of 4 chapter. It can know total of student or each I hope that reader receive knowledge from this report.

**Nik-Husnee Nik-Uma**

## Chapter:4

### Organizations and Information System

**Information** is stimuli that has meaning in some context for its receiver. When information is entered into and stored in a computer, it is generally referred to as data. After processing (such as formatting and printing), output data can again be perceived as information.

**Organization** is Formal collection of people and other resources established to accomplish a set of goals.

**information system (IS)** is a set of interrelated components that collect, manipulate, store, and disseminate information and provide a feedback mechanism to meet an objective.

**Input :** The activity of gathering and capturing data.

**Processing :** Converting or transforming input into useful outputs

**Output :** Production of useful information, often in the form of documents and reports.

**Feedback :** Output that is used to make changes to input or processing activities.

**System** is a set of elements or components that interact to accomplish goals.

This chapter presents an overview of information systems. The sections on hardware, software, databases, telecommunications, types of business information system, systems development, and ethical and societal issues

**Customer relationship management (CRM)** is a term that refers to practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle, with the goal of improving business relationships with customers, assisting in customer retention and driving sales growth.

- Help companies manage all aspects of customer encounters.
- Can get customer feedback to help design new products and services.

**Value chain:** Series (chain) of activities that includes inbound logistics and warehouse and storage must have value.

**Supply chain management(SCM)** is the control of the supply chain as a process from supplier to manufacturer to wholesaler to retailer to consumer.

**Organizational structure** is a system used to define a hierarchy within an organization.

### **Types of organizational structures:**

- Traditional is usually have a leader and multiple layers of subordinates. In a functional organization, occupations are grouped together.
- project is many project teams are temporary
- Team can be temporary or permanent, depending on tasks
- Virtual teams can be organised whether or not members are in reasonable proximity to each other.
- Collaborative work managers and employees can effectively work in groups, even those composed of members from around the world

**Organizational culture** is major understandings and assumptions and it influences information systems.

**Organizational change** is how organizations plan for, implement, and handle change.

- Unfreezing
- Moving
- Refreezing

**Reengineering** is the process redesign of business processes, organizational structures, information systems, and values of the organization to achieve a breakthrough in business results.

**Quality** is about making organisations perform for their stakeholders – from improving products, services, systems and processes, to making sure that the whole organisation is fit and effective.

**On-demand** is an enterprise-level model of technology and computing in which resources are provided on an as-needed and when-needed basis.

**Downsizing** is reducing the number of employees on the operating payroll.

**Competitive advantage** is a business concept that describes the attribute of allowing an organization to outperform its competitors.

### **The five forces model:**

- Rivalry among existing competitors
- Threat of new entrants
- Threat of substitute products and services

- The bargaining power of buyers

## **Chapter:5**

### **Developing and Acquiring Information System**

#### **Making the Business Case :**

Describe how to formulate and present the business case for technology investments.

#### **Acquiring Information Systems**

Explain how organizations acquire systems via external acquisition and outsourcing.

#### **Making the Business Case :**

- It is often presented in a well-structured written document.
- A business case document should examine cost, benefits, feasibility and risks.
- A well-crafted business case explores all feasible approaches to a given problem and enables business owners to select the option that best serves the organization.

#### **Business Case Objectives**

- Lays out the costs and benefits
- May be used to justify continued funding
- Ensures an investment is adding value

#### **Making a Successful Business Case: Identifying Costs and Benefits**

##### **Identifying Costs**

- Tangible costs—total cost of ownership (TCO)
  - Non-recurring costs (acquisition)
  - Recurring costs (use and maintenance)
- Intangible costs (e.g., loss of customers)

##### **Identifying Benefits**

- Tangible benefits (e.g., estimated sales gains)
- Intangible benefits (e.g., improved customer service)

#### **Presenting the Business Case**

- Know the Audience is know who you are presenting
- Convert Benefits to Monetary Terms is show benefits as Bath/\$ per time period

- Measure What Is Important to Management
- Customized Software is tailored to unique needs or pay per used
- Off-the-Shelf Software (Packaged Software) is software packaged ,acquisition method that involves direct purchase of a pre-written application used by more than one company.

**Business case** is used to examine cost, feasibility, benefits and risks.

**Open source software** is the program's source code is freely available for use and modification.

**Acquiring Information Systems** is explain how organizations acquire systems via external acquisition and outsourcing.

**External acquisition** is getting information system from outside for example outsourcing.

### **Reasons for External Acquisition**

- 1: limited IS staff
- 2: IS staff has limited skill set
- 3: IS staff is overworked

### **External Acquisition: Steps**

1. Systems planning and selection
2. Systems analysis
3. Development of a request for proposal is a summary of existing systems and applications
4. Proposal evaluation is the assessment of a proposal to determine the offeror's ability to successfully perform the prospective contract.
5. Vendor selection is typically multiple feasible solutions

## Chapter: 6

### Information Systems Security and Control

#### System Security?

- An unprotected computer without firewall or antivirus software
- Disabled within minutes and may take days to recover
- An Make security and control a top policy

#### What is Security?

Policies, procedures and technical measures used to prevent unauthorized access, alteration, theft, or physical damage to information systems

#### What is Control?

Methods, policies, and organizational procedures that ensure safety of organization's assets; accuracy and reliability of its accounting records; and operational adherence to management standards

#### System vulnerabilities

- **Vulnerability** is a weakness which allows an attacker to reduce a system's information assurance.
- **Vulnerability** is a cyber-security term that refers to a flaw in a system that can leave it open to attack.

#### Concerns for System Builders and Users

Disaster → Destroys computer hardware, programs, data files, and other equipment files, and other equipment

Security → Prevents unauthorized access, alteration, theft, or physical damage or physical damage

Errors → Cause computers to disrupt or destroy organization's record-keeping and operations organization's record-keeping and operation

#### System Quality Problems: Software and Data

Bugs → Program code defects or errors

Maintenance→ Maintenance costs high due to organizational change, software complexity, and faulty system analysis and design.

Data Quality Problems→ Caused due to errors during data input or faulty information system and database design.

## **Controlling Information Systems**

- **Nowaday there are many numerous threats to Information Systems**

- Hardware
- Software
- Upgrade issues
- Disasters
- Hacker/Cracker

**There are two types of controls that can be put in place which**

1. General control is combination of hardware, software, manual procedures to create overall control environment
  - Controls for policy, design, security
  - Implementation controls
  - Software controls
  - Hardware controls
  - Computer operations controls
  - Data security control
  - Administrative controls
2. Application control is automated and manual procedures that ensure only authorized data are processed by application, Unique to each computerized application
  - Specific controls for each application
  - Input
  - Output
  - Process

### **How to protecting Information Systems?**

**Firewalls** are essential devices or programs that help organizations protect their networks and systems, and help home users protect their computers, from hostile attacks, break-ins, and malicious software. Firewalls control the flow of network traffic between networks and between hosts that employ different security policies.

**Encryption** is the process of encoding messages so that it can only be viewed by authorized individuals. An encryption key is used to make the message unreadable, and a secret decryption key is used to decipher the message.

**Authentication** is used to ensure that the person accessing the information is, indeed, who they present themselves to be.

## **Chapter:7**

### **Globalization and future trends in information system**

**Globalization** is a process that encompasses the causes, course, and consequences of transnational and transcultural integration of human and nonhuman activities.

Further advances in telecommunication and transportation technologies accelerated globalization.

**Global Firm** is a company which has multinational branches and headquarters in many of the countries. It is also called as International Firm. It should be duly noted that it is different from a locally based company selling its products globally or to other countries.

#### **Advantages of Globalization**

1. Goods and people are transported with more easiness and speed
2. The flexibility of corporations to operate across borders increases
3. The communication between the individuals and corporations in the world increases
4. Environmental protection in developed countries increases
5. The possibility of war between the developed countries decreases

#### **Disadvantages of Globalization**

1. Increased flow of skilled and non-skilled jobs from developed to developing nations as corporations seek out the cheapest labor
2. Threat that control of world media by a handful of corporations will limit cultural expression
3. Decreases in environmental integrity as polluting corporations take advantage of weak regulatory rules in developing countries

The Internet is truly a worldwide phenomenon. As of 2012, the Internet was being used in over 150 countries by a staggering 2.4 billion people worldwide, and growing.

#### **Internet Speed**

##### **The country with the fastest internet**

- South korea 26.3
- Hongkong 20.1
- Norway 20.0
- Sweden 19.7

##### **Top 10 Internet country in Asia**



- China 721.4
- India 462.1
- Indonesia 132.7
- Japan 115.1

### **OLPC is stand for One laptop per child**

One Laptop per Child (OLPC) is a non-profit initiative established with the goal of transforming education for children around the world; this goal was to be achieved by creating and distributing educational devices for the developing world, and by creating software and content for those devices.

### **The future trends in information system**

#### **global**

The first trend to note is the continuing expansion of globalization.

Social media is the collective of online communications channels dedicated to community-based input, interaction, content-sharing and collaboration.

#### **Here are some prominent examples of social media:**

**Facebook** is a popular free social networking website that allows registered users to create profiles, upload photos and video, send messages and keep in touch with friends, family and colleagues.

Countries where Facebook is growing rapidly include Indonesia, Mexico, and the Philippines.

1.23 billion people log onto Facebook daily active users (Facebook DAU) for September 2016, which represents a 18% increase year over year.

**Twitter** is a free microblogging service that allows registered members to broadcast short posts called tweets. Twitter members can broadcast tweets and follow other users' tweets by using multiple platforms and devices.

Pinterest gets over 50% of its users from outside the US, with over 9% from India.

Twitter now has over 230 million active users.

Social media sites not based in the US are also growing.

**Mobile** is a small computing device, typically, small enough to hold and operate in the hand and having an operating system capable of running mobile apps.

#### **Here are some key indicators of this trend:**

In 2014-2016, Mobile device sales smartphones began outselling personal computers.

The number of smartphone subscribers worldwide grew at 4.61 billion in 2016.

80% of Internet users used their smartphone to access it.

Facebook reported that 68% of its active users used their mobile platform to access the social network.

The rise of tablets. While Apple defined the smartphone with the iPhone, the iPad sold more than three times as many units in its first twelve months as the iPhone did in its first twelve months.

Tablet shipments now outpace notebook and desktop PCs.

The research firm IDC predicts that 87% of all connected devices will be either smartphones or tablets by 2017.

**Wearable technology** (also called wearable gadgets) is a category of technology devices that can be worn by a consumer and often include tracking information related to health and fitness

Perhaps the best known of these is Google Glass, an augmented reality device that you wear over your eyes like a pair of eyeglasses.

Visible only to you, Google Glass will project images into your field of vision based on your context and voice commands.

The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

## **Conclusion**

### **How you can apply your knowledge for your future business?**

In the future if I have some business, I will use knowledge of information system for manage ,analyst and distenation my business. I will use CRM system is a strategy for manage all company relationships and interactions with customers and potential customers. It helps business grow because it tracks the history of customer interactions.

## Reference

[https://en.wikipedia.org/wiki/Vulnerability\\_\(computing\)](https://en.wikipedia.org/wiki/Vulnerability_(computing))

[https://ist.mit.edu/security/protecting\\_data](https://ist.mit.edu/security/protecting_data)

<http://study.com/academy/lesson/systems-security-firewalls-encryption-passwords-biometrics.html>

<https://www.google.co.th/search?q=Protect+Information+Systems&source>

<https://bus206.pressbooks.com/chapter/chapter-6-information-systems-security/>

<https://bus206.pressbooks.com/chapter/chapter-11-globalization-and-information-systems/>

<https://bus206.pressbooks.com/chapter/chapter-13-future-trends-in-information-systems/>