

CHAPTER 2 : INFORMATION AS A CORPORATE RESOURCE

Introduction

Every staff deals with different types and amounts of information. Information is also created, accessed, and exchanged through numerous modes.

Information

Data are raw facts about people, objects, and events in an organisation. They constitute the main elements of information.

People normally use the rod information, which is actually the product of processed data in a form suitable for human interpretation. Information is also described as data in context, where meaning deepens on the surrounding circumstances or usage.

Information is data that have been converted into a meaningful and useful context for specific end users.

Technological change

Technology can convert information into a competitive advantage. Technology refers to human knowledge about and the way the products and services are made and delivered. Technological innovations can take the form of new products, services or processes.

Sources, management and storage of information

Sources of information flow in an organisation through various channels-oral, written, printed and electronic communication.

Internet is international network of networks that is a collection of hundreds of thousand of private and public networks. It allows one to access massive amounts of data via computers and related electronic equipment. Organisations use it to exchange information internally or to communicate externally with other organisations.

Intranet is an internal company network that takes advantage of the Internet's infrastructure, telecommunication protocols and browsers.

Extranet is a portion of an intranet that is made available to outsiders, often suppliers, customers, or subscriber.

Information storage

Physical records – Documents are kept in paper and card files, indexed, and placed under lock and key in safe cabinets. In spite of increasing growth of electronic communications and transaction, all organisations process physical documents on a daily basis.

Floppy or compact disks (CD's) – Personnel store data in the form of floppy and similar disks. Floppy disks have limited storage capability and back up limited amount of data. With CD writers, executives have the option back up huge amounts of data on blank CDs.

Electronic databases – The databases store data and allow processing for intended objectives. Their contents could be specific functions, or all important functions in the organisation. They could be accessed by individual, selected or all staff.

Information security

A virus is a computer program that attaches to or overwrites other programs to replicate itself.

A worm is similar to a virus and spreads and infects files on its own over a network, without having to be attached to another program.

Hacking is unauthorised access to a host computer, either by a direct intrusion or via a computer virus. An organisation uses firewall to protect against hacking.

Sniffing refers to the interception and reading of electronic messages in the communication networks. An organisation protects its system against sniffing by encrypting messages before they are being sent over the Internet.

Spoofing is the assumption of a false identity and execution of fraudulent transactions. An organisation insures against this by requiring identity authentication.

Confidentially and access

Unauthorised disclosure of confidential information could be prejudicial to the national interest. Private information is intended for or restricted to the use of a particular person, group, or class, or belonging to or concerning an individual person, company or interest; not related to one's official position; or, not known or intended to be known publicly.

Secret information is revealed only to the initiated; kept from knowledge or view; remote from human frequentation or notice; containing information whose unauthorised disclosure could endanger national security.

Privilege information is attached to a position or an office. It is a right or an immunity given to the person as a peculiar benefit, advantage or favour.

Information as a corporate resource

Information and knowledge are a resource to an organisation. A resource is anything that an organisation controls. It includes an asset, competency, process, skill, or knowledge. It can be a source of strength or weakness. A resource is strength if it gives a company a competitive advantage, but a weakness if the company manages it poorly.

The information will become a critical asset if it fulfils four criteria:

Value – does it provide competitive advantage?

Rareness – does other competitors possess it?

Imitability – is it costly for others to imitate?

Organisation – is the organisation competent to exploit it?

The organisation should take note that a specific resource may lose its advantage if it can be easily duplicated. There are three factors that determine whether or not a resource is copiable.

Barriers to imitability

Transparency – Competitors can understand the relationship the organisation's resources and capabilities.

Transferability – Competitors are able to obtain the resources and capabilities to challenge.

Replicability – Competitors can use duplicated resources and capabilities to imitate the organisation.

Knowledge is a resourceful asset that should be managed properly. It has two aspects: tacit and explicit. **Explicit knowledge** can easily be acquired. Explicit knowledge includes data, documents physical or stored in the computers. **Tacit knowledge** resides and is absorbed in its owner, can be a source of competitive advantage.

Learning Outcomes

- Students should be able to define information.
- Students should be able to describe Internet, intranet, and extranet.
- Students should be able to review information storage devices
- Students should be able to recognise the importance of security for electronic information system.

Basic Reading

1. Greenstin, Marylyn. (2002). Electronic commerce; security, risk management, and control. 2nd Ed. Boston

Revision Questions

1. Differentiate between intranet and extranet.
2. Can an organisation avoid dealing with physical documents in its operation? Discuss.
3. Which is more disastrous to an organisation electronic database, virus or worm? Why?