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INFORMATION MANAGEMENT

CONTENTS...

* What is data?

* Transformation of Data into Information using a Data Process

* What is Information?
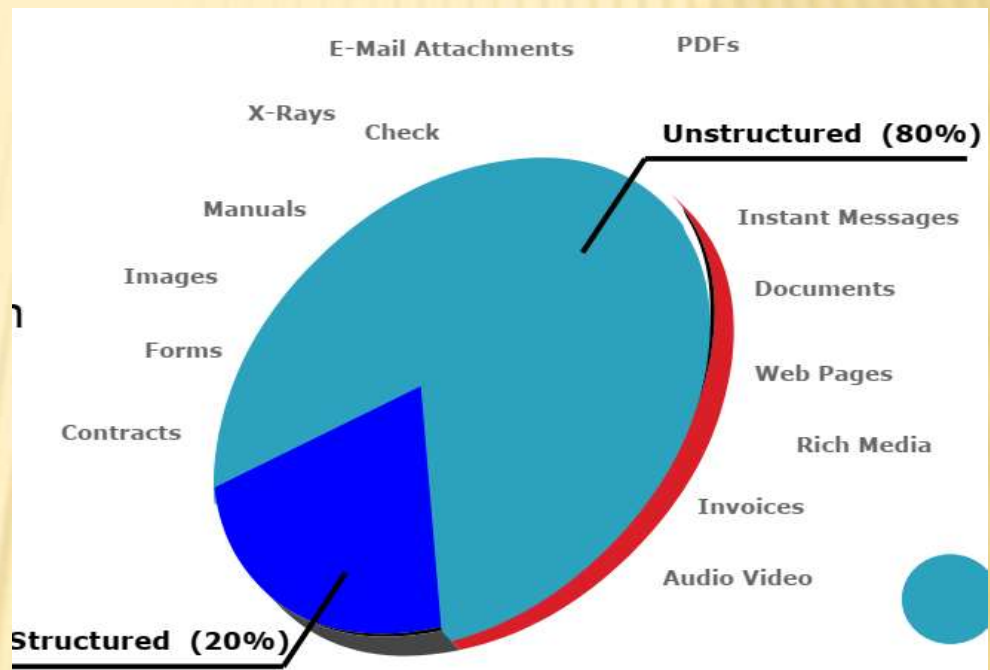
* What is Management?

* What is Information Management?

1. WHAT IS DATA?

* Information in raw or unorganized form(such as alphabets, numbers, or symbols) that refer to, or represent, conditions , ideas, or objects. Data is limitless and present everywhere in the universe. Most data is being converted into a digital format

* Driven by user demand

* Facilitated by

✓ Increase in data processing
capabilities

✓ Lower cost and increased speed of
 storage

✓ Affordable and faster Network
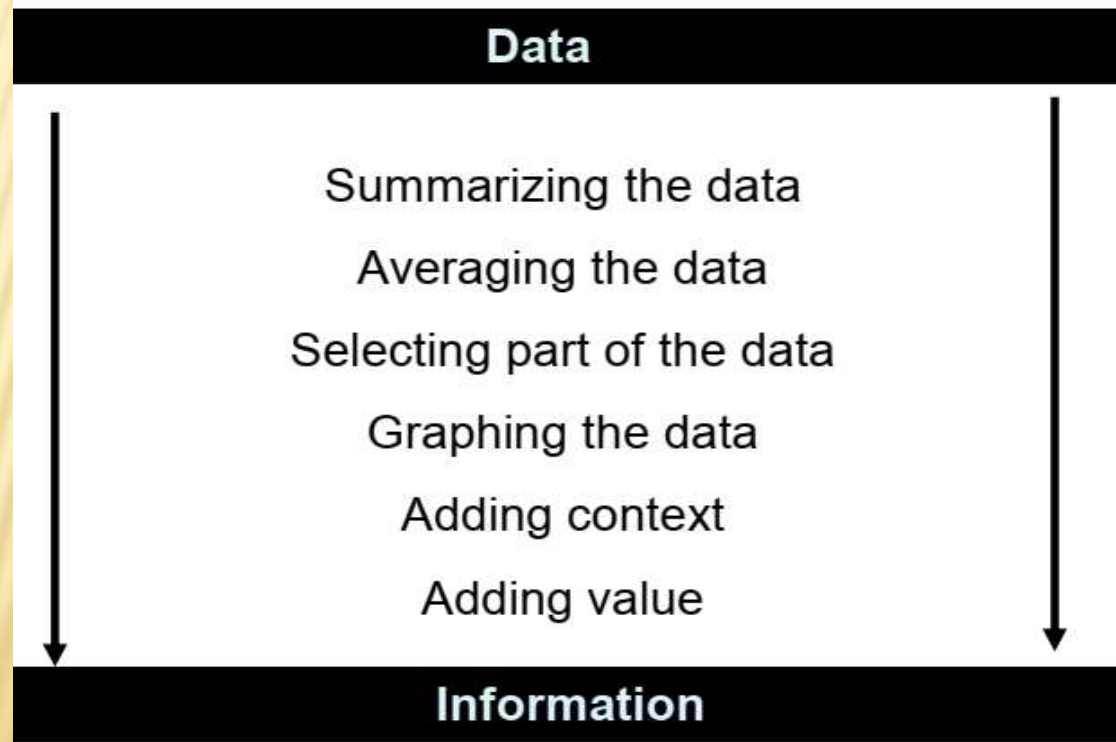Who creates data?

* Individuals

* Businesses
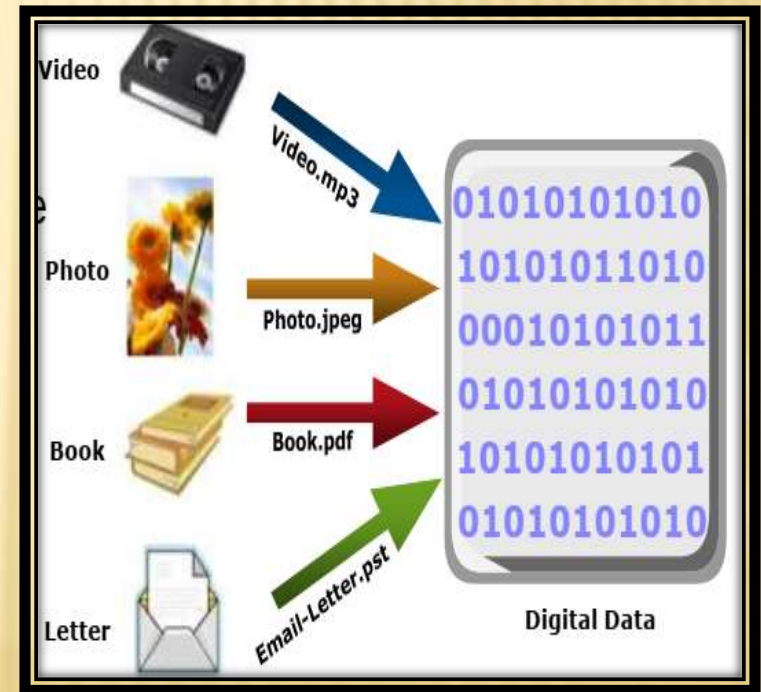
CATEGORIES OF DATA

- Data can be categorized as either structured or unstructured data
- **Structured**
  - Data Base
  - Spread Sheets
- **Unstructured**
- Forms
- Images
- Audio
- Movies
- Over 80% of Information is unstructured

E-Mail Attachments PDFs

X-Rays Check Unstructured (80%)

Manuals Instant Messages

Images Documents

Forms Web Pages

Contracts Rich Media

Invoices

Audio Video

Structured (20%)

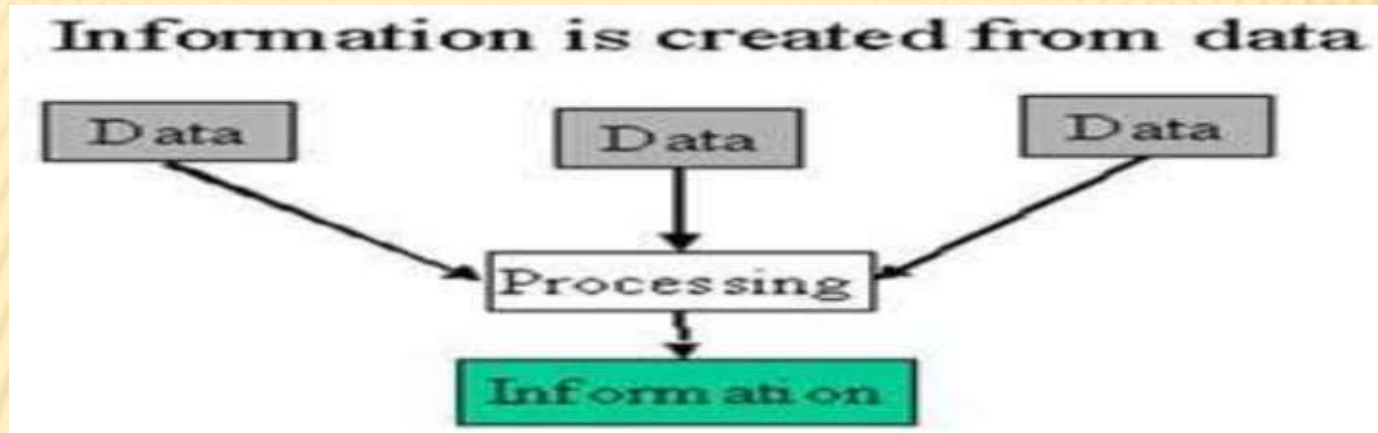# TRANSFORMATION OF DATA INTO INFORMATION USING A DATA PROCESS

2. INFORMATION

Organize form of data is known as information

Definitions:

* ❖ data that have been processed so that they are meaningful;

* ❖ data that have been processed for a purpose;

* ❖ data that have been interpreted and understood by the recipient.

DATA VS. INFORMATION

Information is created from data

Data and information are interrelated. Data usually refers to raw data, or unprocessed data. It is the basic form of data, data that hasn't been analyzed or processed in any manner. Once the data is analyzed, it is considered as information.

INFORMATION EXPLANATION

- Information is the summarization of data. Technically, data are raw facts and figures that are processed into information, such as summaries and totals. But since information can also be the raw data for the next job or person, the two terms cannot be precisely defined, and both are used interchangeably. It may be helpful to view information the way it is structured and used, namely: data, text, spreadsheets, pictures, voice and video. Data are discretely defined fields. Text is a collection of words. Spreadsheets are data in matrix (row and column) form. Pictures are lists of vectors or frames of bits. Voice is a continuous stream of sound waves. Video is a sequence of image frames.

- Any fact or set of facts, knowledge, news, or advice, whether communicated by others or obtained by personal study and investigation; any datum that reduces uncertainty about the state of any part of the world; intelligence; knowledge derived from reading, observation, or instruction.

IMPORTANCE OF INFORMATION IN TODAY'S WORLD

* Three perspectives:

   1. The Information Society

   2. The Information Economy

   3. The Information Age

I.THE INFORMATION SOCIETY

* Information Society was defined by the UK INSINC working party on social inclusion in the information society in 1997 as:

* '*A society characterized by a high level of information concentration in the everyday life of most citizens, in most organizations and workplaces; by the use of common or compatible technology for a wide range of personal, social, educational and business activities; and by the ability to transmit and receive digital data rapidly between places irrespective of distance.*'

II. THE INFORMATION ECONOMY

* '...*every business is an information business... information is the glue that holds together the structure of all businesses*' (Evans and Wurster, 1997)
  1. *Reach*. How many in a market who are exchanging information.
  2. *Richness*. The depth and media used for information.
  3. *Affiliation*. Effectiveness of links with partners.

* *Source*: Evans and Wurster (1997). Strategy and the New Economics of Information. *Harvard Business Review*. September-October, 1997, 70-82.

III. THE INFORMATION AGE– WHEN DID IT START?

* 300 BC Basic Chinese characters

* 387 BC Plato founded his academy

* AD 1455 The printing of the Bible with moveable type by Gutenberg in Germany

* 1651 – first modern library at Oxford University

III. THE INFORMATION AGE- MODERN DEVELOPMENTS

* 1860 Typewriters use the QWERTY keyboard
* 1876 Alexander Graham Bell introduced the first telephone
* 1901 Marconi sends a radio signal
* 1937 Atanasoff-Berry Computer (ABC), the world's first electronic digital computer
* 1947 First commercial computer – ENIAC (Electronic Numerical Integrator And Computer). It weighted thirty tons and used 18,000 vacuum tubes
* 1969 First node on the US ARPANET, forerunner of the Internet
* 1971 First e-mail sent; a computer engineer named Ray Tomlinson sent the first e-mail message. He can't remember the message, but he does remember choosing the @ symbol!
* 1991 First web site (http://info.cern.ch) published by Tim Burners' Lee

3. WHAT IS MANAGEMENT?

* According to **Theo Heimann**, management has three different meanings,
   * **Management as a Noun** : refers to a Group of Managers.
   * **Management as a Process** : refers to the Functions of Management i.e. Planning, Organizing, Directing, Controlling, etc.
   * **Management as a Discipline** : refers to the Subject of Management.

* Management is an individual or a group of individuals that accept responsibilities to run an organization. They Plan, Organize, Direct and Control all the essential activities of the organization. Management does not do the work themselves. They motivate others to do the work and co-ordinate (i.e. bring together) all the work for achieving the objectives of the organization.

* Management brings together all **Six Ms** i.e. Men and Women, Money, Machines, Materials, Methods and Markets. They use these resources for achieving the objectives of the organization such as maximum sales and profits, business expansion, etc.

4. WHAT IS INFORMATION MANAGEMENT?

* Application of Management techniques to collect information, communicate it within and outside the organization, and process it to enable managers to make quicker and better decisions.

* According to Wikipedia, Information management (IM) is the collection and management of information from one or more sources and the distribution of that information to one or more audiences.

* **Information management** is a cycle of processes that support the organization's learning activities: identifying information needs, acquiring information, organizing and storing information, developing information products and services, distributing information, and using information (Choo, 1995).

INFORMATION MANAGEMENT CONT...

* Information management (IM) is the process by which relevant information is provided to decision-makers in a timely manner (Davis, 1997).

* IM is a generic term that encompasses all the systems and processes within organizations for the creation and use of corporate information.

* IM aims to get the right information to the right person at the right place and at the right time (Robertson, 2005).

* **Information management** is the management of organizational processes and systems that acquire, create, organize, distribute, and use information. According to a process view of information management, IM is a continuous cycle of six closely related activities:

* identification of information needs;

* acquisition and creation of information;

* analysis and interpretation of information;

* organization and storage of information;

* information access and dissemination;

* information use

* (http://choo.ischool.utoronto.ca/IMfaq/)

INFORMATION MANAGEMENT CONT…

* **Wilson** (2002) notes that the term 'information management' is used ambiguously in the literature of several fields: in **computer science** and its applications it is used as a synonym for information technology management (Synott and Gruber 1981) or as identical to 'data management', where the emphasis is on the structures underlying quantitative data and their relationship to the design of databases.

* In **business or management** studies it has similar implications to technology management, with an emphasis on the relationship of information technology to business performance and competitiveness (Synott 1987 as cited in Wilson, 2002).

* In the field of **librarianship and information science** it is identified with the 'emerging market' for information workers (managers), whose perception of information embraces data, organizational intelligence, competitive intelligence, external information resources of all kinds and the associated technology (manual or machine) for handling these different sources. Compared with the other areas, information management in this concluding context is more widely concerned with the meaning of information for the information user and with information retrieval issues (Wilson, 2002).