Automatic Data Processes

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ARTICLE INFO	ABSTRACT
Published Online: 12 October 2021 Corresponding Author: **Sheyla Yadira Esquivel**	Well, the data process is created by the need to process the data more quickly and efficiently since the manual process that was carried out no longer met the expectations of people and companies, for this reason the data process arises automatic. In an automatic data process, the computer has different physical elements that allow it to carry out these same processes. That is, practically the speed of operation of the system is limited by human control. The entry by electromechanical type machines, as well as the exit, have a higher operating speed than the conventional one (until then this was achieved by tachy-typing). We can define data processing as the technique of converting data into information by any means, whether manual or automatic. Manual data processing is the technique of converting data into information using tools such as pencil, pens, typewriters, etc. The automatic data process within its objectives is the technique of converting data into information using appropriate methods, procedures and equipment for this purpose; such as interviews, surveys, computer. Automatic data processing came to renew the world, creating a special science for its study, such as computer science.
KEYWORDS: Process, data, automatic, information.	

INTRODUCTION TO DATA PROCESSING

The input and output systems supply and extract information from the computer, both in the form of data and computers. This type of information must then be stored on some type of physical medium that allows it to be transferred to the corresponding system. Organizations are systems in adaptation, with constantly changing data and information needs. For any growing or changing business, data management can become quite complex. One of the most basic ways to handle data is through files, since a file is a set of related records, all those of the latter that relate to a particular application can be collected and managed together in a specific file of Applications. Without data and the ability to process it, an organization could not successfully complete most of its business activities.

AUTOMATIC DATA PROCESSING

The database method for data management includes a combination of Hardware and Software. Due to problems associated with the traditional method of managing data, many managers sought a more efficient and effective means of organizing data. The database method. In a database method, a variety of application programs share a group of related data. Instead of having separate data files, each application uses a collection of data that can be joined or related in the database. The database method offers significant advantages over the traditional file-based method.

DATA MODEL

Due to the multitude of items in today's businesses, it is essential to keep data organized so that it can be used more efficiently. The database should be designed so that it stores all the relevant data for the company and provides quick access.

DATA MODELING

Key considerations when organizing your data in a database include determining what data to collect in the database, who will have access to it, and how they might want to use it. The logical design of a database shows an abstract model of how the data should be structured and ordered to meet the information needs of the organization. The logical design of a database includes identifying the relationships between different data sessions and grouping them in an orderly way. One of the tools that database designers use to show the logical relationship between data is the data method. A data model is a map or diagram of entities and their relationships, generally, data modeling includes understanding a specific business problem and analyzing the data and information necessary to produce a solution.

Through Entity and Relationship diagrams, one-to-one relationships can also be revealed, between the data entities in a database that are logically structured so that application programs can be developed that better meet user needs.

DATABASE MODELS

In most databases, the structure of relationships follows one of three logical database models. Hierarchical network and relational. These links show how users can access data with application programs. Since different models include different links between data, each model has its unique advantages and disadvantages. Hierarchical (tree) models.

In many situations, the data follows a hierarchical, or tree-like structure. In a hierarchical database model, the data is organized in a top-down structure, or in the form of an inverted tree. We consider a characteristic project.

CONSTITUENT ELEMENTS OF THE DATA PROCESSING

- Cards
- Historical review

When some people realized that PCS lost value by being alone in an isolated world without the ability to share data quickly and efficiently, then they asked themselves why not connect them, why not share that data, and the network of data. The creation process took a long time to reach current standards but it is worth investigating a little how the beginnings were, this is not a monograph on networks but on device architecture and network media, but I believe despite what others say that these little introductions are essential. At the end of 1960 and in the decade of the 70 the computers called Mainframe big computers that were used with punch cards began to use some data transmission technology such as Alohanet. With the creation of transistors and integrated circuits, the commercialization of desktop PCs became popular, which had great momentum with the creation of the IBM PC in 1981 in homes and companies, this is how the need for the network arose of data.

Data networks developed in the late 1970s and early 1980s as a consequence of commercial applications designed for microcomputers. Back then, microcomputers weren't connected to each other like Mainframe computer terminals were, so there was no efficient way to share data between multiple computers. For this reason, the development of different data network technologies began, but before that we will mention a special type of network, the so-called pedestrian network.

WHAT IS DATA PROCESSING?

It is the Technique that consists of collecting the primary input data, which are evaluated and ordered, to obtain useful information, which will then be analyzed by the end user, so that he can make the decisions or perform the actions that he deems appropriate.

HISTORY OF DATA PROCESSING

Since ancient times, man has been processing data. It is very likely that primitive man used the fingers of his hands to carry out very simple operations and store all the possible information in his memory, so it was necessary to use all the means that would allow solving slightly more complicated operations, such is the case of the abacus which, in fact, was one of the first inventions (tools for information processing).

DATA PROCESSES

In essence, a computer carries out data processes, with the particularity that it can quickly operate large amounts of data automatically, without human intervention.

As a first step to locate in the operation of a computer it is important to be clear about the four main threads that it performs (Input, Memorization, Processing and Output), and to see that they are familiar to us, because they are present in any data process - mental, manual, or with a calculator - we do without a computer.

When we think about any topic, we mentally perform operations on symbolic representations (images and words). These symbolic representations are data that we select, collect, and operate on. The operation carried out results in information, which are also symbols, which we did not know before.

Next we will determine four threads into which a mental data process can be divided in order to obtain information.

Input: selectively incorporate necessary pertinent data, typically using sight and hearing to census from outside.

Memorization: recording the data in the mind.

Elaboration or Process: relate the data, in principle disordered. Perform operations (for example: subtract, compare). The values thus found from the known data will be new processed data (information). When performing the above calculations, order relationships were also established, by assuming what is done first and what is done later. As a result of the data processing carried out, you will have information.

Output: the achieved result ("internal" information) can be externalized as external information, either in verbal or written form. In an automatic data process, the computer has different physical elements that allow it to carry out these same processes.

SUGGESTIONS

The input and output systems supply and extract information from the computer, both in the form of data and computers. This type of information must then be stored on some type of physical medium that allows it to be transferred to the corresponding system. Organizations are systems in adaptation, with constantly changing data and information needs. For any growing or changing business, data

management can become quite complex. One of the most basic ways to handle data is through files, since a file is a set of related records, all those of the latter that relate to a particular application can be collected and managed together in a specific file of Applications.

OBSERVATIONS AND COMMENTS

Due to problems associated with the traditional method of managing data, many managers sought a more efficient and effective means of organizing data. In a database method, a variety of application programs share a group of related data. Instead of having separate data files, each application uses a collection of data that can be joined or related in the database. The database method offers significant advantages over the traditional file-based method.

CONCLUSIONS

1. It is called a data processing center to that location where all the necessary resources for the information processing of an organization are concentrated.

2. The data processing also provides a record in the time of the repairs that have been carried out in the equipment of the installation, it also reduces the high cost of offices.

3. The maintenance data process provides a method to reduce downtime or the number of stops, ensuring preventive maintenance on production equipment.

4. Automatic processes are small programs that preferably run on an application server and allow data to be processed, modified, or calculated. E-mail alerts can also be programmed according to the result obtained.

5. With an automated process, you can verify the data on your systems, copy your data to a backup location, perform calculations that allow you to sort your information for faster access, or simply go through all the records in a database. data to find incontinences.

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