

## Chapter 20

# Organisation of Information and the Information Retrieval System

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### **ABSTRACT**

*Since the 19<sup>th</sup> century, the world has witnessed an exponential growth in the number and variety of information products, sources, and services. This development has resulted in technological innovations for faster and more efficient processing and storage of information, as individuals and organisations strive to keep up with increasing demands. The value of information organisation cannot be overemphasized. The volume of information generated, transmitted and stored is of such immense proportion that without adequate organisation, the retrieval process would be cumbersome and frustrating. This chapter will highlight and describe the roles of an information retrieval system and the context of information organisation in several institutions. It will also discuss the various information retrieval tools and the different models used in information retrieval process. The ultimate goal of this chapter is to enable students, practicing librarians, and others interested in information services to understand the concepts, principles, and tools behind information organisation and retrieval. The conclusion of the chapter will emphasize the need for continuous evaluation of these principles and tools for sustained improvement.*

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## **INTRODUCTION**

The need for organization is driven by the general explosion of knowledge and exponential growth in publication. There are specific organizational activities necessary to accomplish the planned library's goals. Effective organization provides for effective retrieval and use of the resources.

According to Nakpodia (2010) Information system refers to a system of people, data records and activities that process the data and information in an organization. A data storage device is a device for recording or storage of information. In a narrow sense, the term information system refers to the specific application software that is used to store data records in a computer system. It also automates some of the information-processing activities of the organization to facilitate the retrieval of these documents when needed.

The growth of information and its distributed unorganized repositories of information have compounded the problem of information retrieval. In addition to information overload, there is the vocabulary problem with respect to the retrieval of relevant information from systems. Information professionals and scientists are facing challenges to develop and to work with information retrieval and its systems not only in knowledge-based research but also in their daily activities.

Well-organized information centres enable researchers find bibliographic information in their fields and make the library a clearinghouse for bibliographic information. When Information resources are effectively organised, it promotes efficiency and user confidence in information provision services.

## **BACKGROUND**

Information organisation and retrieval are part of the core functions of information professionals. Since the turn of the nineteenth century, considerable time, money, and effort have been spent to

design and maintain local, regional, national and international systems of bibliographic control to ensure that the universe of published information is made accessible to its users. Organising information saves time for both the user and the information professional. Recorded information goes beyond written text. Video and audio recordings, images, cartographic representations and web pages are also included. Taylor (2009).

In our society today, information professionals are concerned with developing systems and principles for the effective creation, organisation, storage and dissemination of information to ensure easy retrieval by users. The effectiveness of information retrieval depends largely on its organisation. This makes the efficient organisation of information sources a very crucial requirement for the information retrieval.

Information organization, which is often used interchangeably with the term bibliographic control, is described by Hagler in Taylor (2009) as the process of describing information resources and providing name, title and subject access to descriptors, resulting in records that serve as surrogates for the actual items of recorded information.

These surrogate records (sometimes called entries, bibliographic records or simply metadata) are then placed into information retrieval tools such as bibliographies, catalogues, indexes, finding aids, museum registers, bibliographic databases and search engines where they act as pointers to the actual information resources. The descriptors found in these records provide users with enough information to determine the potential value of the resources without actually having to view them directly.

One of the most basic tools for organizing information is the database. Electronic Databases are organized collections of data. They provide the structure that underlies many of our information system. A database is a set of records, each representing a specific entity, all constructed in the same way with common attributes and connected by relationships. The records in an electronic

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