Organizing information what is means
Ch1 – organizing information from the shelf to the web

Outline

- Introduction
- Information services in today word
- Think for a minute about what you do when you are in need of information!!
- Information organization
- Why organize information?
- How do we organize information?
- The way and tools of information organization
**Introduction**

- User today can obtain access to information from a variety of **sources** through a wide range of **channels** from conventional bibliographic resources (ex: book) to many electronic resources (ex: e-book).

- One of the major challenges is how best to **organize** these information resources, **available** as they are in their widely differing forms and format.

**Information services in today word**

- User today can access information resources and services through a variety of channels such as:
  - **Library OPAC** (online public access catalogues)
  - Online bibliographic or fulltext database
  - **E-book and e journal**
  - **Websites**
  - **Subject gateways**: it is provide access to selective web resources in one or more specific discipline.
  - **Digital libraries**: Ex ACM (American computing machinery).
Think for a minute about what you do when you are in need of information.!!

- *First,* you recognize that information might help you solve a problem or answer a question.
- *Second,* you know that there might be an article or a book or a website that has the information you need.
  - You set off to the library in search of that article or book or use the internet.
  - You start looking up the topics you are interested in, or maybe you know an author who writes about what you are interested in, or maybe someone mentioned a title of a book.
In the library catalogue or any search engine you find records that describe items in the collection. When you discover just the item that seems relevant to your question or problem:
- You either head to the shelves to retrieve the item or click the link.
- Once at the shelves, you see the orderly arrangement of the books and can quickly find the one you are interested in using the call number on the spine of the book. Or you see similar items in the website.

Information organization

- Information organization: is the processes and practices of describing and representing information objects (containers and content), and identifying the connections and relationships between the objects and the people responsible for their creation and/or production.

- Information organization is fundamentally about information access.


Why organize information?

1. To create order from chaos.
2. To find what we need more efficiently.
3. To manage large collection of items.
4. Creating better ways to find information is a critical reason for organizing it.
5. Help users access to the information.
6. To facilitates information easy identification and retrieval.

Why organize information? (cont)

7. To find the information again easily.
8. Save users time.
9. Think about the value that add to the information by organizing it.
10. The better information organization systems respond to our users, the more likely they will continue to use our services.
Why organize information? (cont)

As professionals
1. Help and connect users with relevant information.
2. Helping users to decide between several items (i.e., Make judgments about The items).

• How do they do it?

Information professionals do this through (representations) they create catalogues, indexes, and other finding aid.

How do we organize information?(1)

• The "how" of information organization is the way that add the value. Have we organized it in such a way that users will be satisfied and return again and again for information services and centers?

First:
• We organize information by representing it.
• We represent both the container that holds the information and we represent the content: what the information is about.
• The metadata is representation of the information resource.
How do we organize information? (2)

- How we organize information must be linked to the users of our system.
  - We can imagine all kinds of ways to organize information (e.g., by color of the cover, number of pages, etc.)
  - but if our organization system is not responsive to our users we will not produce a system that adds value and ultimately may not be used.

- Second: Organize information based on the tried and true methods of lumping and splitting.
  - We lump information together by showing similarities between two items.
    - For example, Mark Twain was the author of many books. We can lump all books by Mark Twain together based on the similarity of authorship.
  - We split information into groups based on how items are different.
    - For example, Mark Twain has been the subject of many books (e.g., critical essays, biographies, etc.) We can split the books that are by Mark Twain from those that are about Mark Twain based on the differences between those written by versus those written about him.
Basic Concepts
Representing Information

- **Overview**
  This section introduces the concept of representation as it applies to information organization.
  - Representation is a central concept and is a foundation for our explanation and exploration of information organization. Because it allows us to explore different ways to represent the same information object for different users.
  - We should not assume there is just one way to represent an object. In addition, we will see that there are multiple levels and types of representation involved when we organize information.

Recorded information as representation

- A person's thoughts, feelings, opinions, and ideas can be information to share with another.
  - Writers record their ideas and feelings in creating an essay or book.
  - Artists express their artistic ideas in a painting or sculpture.
  - Musicians write scores and play instruments.
- All of these are instances of an expression of the person. Are they exactly what is inside the person?
A first phase of representation, then, is a person’s expression. When the expression is recorded in a book, a painting, or a music score, we now have an instance of recorded information -- an information object.

In some cases, such as a musical performance or a dance, the expression may or may not be recorded. But if we record the sound of the performance on audio tape or video tape the dance performance, we now have information objects that represent those events.

The role of the information organizer, the cataloger, the indexer, the metadata specialist begins at the point when an instance of recorded information exists.

Information professionals follow rules and standards to create a representation of the information object. The representation "stands in for" the object. Typically, a user interacts with this representation when they are seeking information through any systems of organization.

Let’s take an example of a book. The book represents the thoughts, feelings, etc. of its creator. We can put the book on a shelf in a library and hope someone passes by and finds it! A better approach is to set up a system in which we collect representations of all the books in a collection.

We provide an orderly arrangement of those representations so users can systematically search the representations to find objects that may contain the information they are interested in.
Representing the container

- The container is the physical, tangible manifestation of an information object. We begin by representing aspects of the container.
- Any physical object (e.g., a person, a house, a car) has characteristics or features.
- We call these features "attributes." We can describe a person, house, or car to another person by discussing the object's attributes.
- For example, a person has a specific hair color, a certain height, an approximate weight, and a date of birth.
- We can describe a person using these attributes: hair color, height, weight, date of birth. Although the values of each of these attributes will vary from person to person, these attributes provide a representation for the person (e.g., the representation of someone provided by their driver's license).

- An information object has many attributes: the name of the object, a creator, a date of production, a size, a color, etc.
- These attributes become the basis for representing the container. The following example shows a representation of a book from library catalog:

**Author:** Taylor, Arlene G., 1941-

**Title:** The organization of information

**Imprint:** Englewood, Colo. : Libraries Unlimited, 1999.

**Descript:** xx, 280 p. ; 26 cm.

**Series:** Library and information science text series

**Note:** Includes bibliographical references and index.

**ISBN/ISSN:** 1563084937 (hardbound) 1563084988 (softbound)
Representing the content

- In the previous example, if that was the entire representation of the book, a user would need to know the title or author of the object if they were searching the library catalog.
- But we know from personal experience that people look for information "about" a certain topic. They search for information based on subject.
- The next step in representing information objects is to communicate to the user what the object is about, what intellectual content it contains.
- Many information objects, for example books, can be characterized by what they are about, what topics they cover, what themes or perspectives are presented. So, we can say that one more attribute of the object is its intellectual content or subject.

- The library catalog record for the book also includes the following in its representation:
  - **Subject:** Information organization. Metadata.
  - According to the person who created the representation for the book, the book is about "information organization" and "metadata." Often the intellectual content of an object is represented by subject headings, index terms, and other techniques we will discuss later.
  - In the case of this library catalog record, the values of the subject attribute come from the Library of Congress List of Subject Headings. These two subject headings provide the user with a sense of what the books are about.
  - Adding this attribute to our representation now provides the user with the ability to search for objects based on subject as well as title, author, and other attributes.
metadata and representation

- The term "metadata" metadata can be defined simply as "data about data." Information organization is in some ways about providing users with information about other information!
- Metadata is structured information representing an information object. In the example of the catalog record before, we structure the representation of the attributes of the object into separate pieces of information: information about the creator, information about the title, etc. Each of these pieces of information is labeled (e.g., Author, Title, Subject).
- What is the relationship between attributes and metadata? An attribute is a general characteristic or features of the object. Metadata elements provide the way to label these attributes. In the above example, then, the labels of Author, Title, Subject, etc. can be called metadata elements. Metadata elements are used to label pieces of information in our representation.
- A metadata record is a representation of an information object. Each piece of information that our users need to know about the object is represented, and the metadata elements provides the labeling and structuring of the representation.

summary

- In this lecture, we discussed two central concepts related to information organization:
  - Representation
  - Metadata
- Representation allows us to think how we can best present information about an information object to our users.
- Representation gives us the pieces of information to highlight for the user and, metadata becomes the organizing principle for structuring the representation. Users and computers interact with these structured representations. Metadata records representing information objects are a critical tool for connecting users with information.