Chapter 2: A Proposal for User-Oriented Company Libraries

One of the primary purposes of any library is to control information (i.e., to keep it from getting lost). Acquiring information, organizing information, storing information, etc., are all types of information control, but whether or not true control can be achieved depends on how the system has been designed from a technical standpoint. There are three primary characteristics which have to considered in the design of a library:

- 1. How is the information stored in the library?
- 2. What points of access have been provided to the stored information so that it can be recovered?
- 3. How and what has been recorded about the access points to the information and what has been recorded about the information itself?

Let us examine each of these points separately.

Storage

Information usually has its own internal structure, but this structure is not always capable of being adapted directly by the library designer. For instance, you can't store a slide next to a book on the shelf even though they are on the same subject; and you wouldn't file a sketch of a tree planter with a tree-cutting ordinance in Leon County, Florida. Although two items may be similar in terms of the subject covered— internal structure— they are different in other ways—external structure.

There are three basic considerations for determining how to store the information you may have:

- 1. What form is it in?
- 2. How is it oriented?
- 3. Is it to be stored permanently or only temporarily?

The form of the information determines its external structure. Some of the basic forms of information include monographs (e.g., books, magazines), vertical file materials (e.g., pamphlets, small reports, brochures, etc.— anything which can be filed in a filing cabinet), tube file materials (i.e., anything which can be rolled without being damaged), flat file materials (e.g., maps, mounted pictures), slides, cards (e.g., index cards, microcards), microfilm, magnetic tapes, video tapes, compact discs, computer diskettes, etc. This would then be the first division on which to organize information in the library.

How information is oriented is also important. It may deal with a specific subject or subjects; it may be geographically-oriented. It could also deal with case histories (such as brochures of projects, minutes of meetings, newsletters, expense account records, etc.), or simply projects worked on by the individual or organization using the library. This breakdown must be based on the purpose of the agency using the library.

The third aspect to consider in storage is whether the information is to be stored permanently or only temporarily. Temporary information includes that which has to be stored for a period of time in one place before being stored permanently in another place. For instance, newspaper clippings may only be stored temporarily for a short period of time. At the end of the prescribed period of time, the clippings may be either destroyed or filed permanently elsewhere in the library. Another case— a typical one in landscape architecture, land planning, urban planning, and engineering firms— is that of project drawings. When a job is in progress, the drawings for that job must be stored in some way temporarily. After the job has been completed, the drawings have to then be stored permanently. (It should be noted that even permanent materials are temporary in the sense that any information collected becomes dated and should be weeded periodically, and many files which do not have to be legally kept after a certain length of time should be removed from the information files and discarded.)

By combining these three considerations in the specific situation, the best method of storing the information can be achieved. Thus, the organization of a library should be based on what kinds of materials are being organized rather than organizing the materials using some prior organizational system.

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Monographic
     Books — stored on shelves
     Magazines — filed in boxes on shelves
Vertical Files
     Geographic — filed according to country, state, county or
        municipality
     Subject — filed by subject heading
     Newsletters — filed by title
     Report Originals — for internal projects only
     Project Brochures — brochures of other planners' projects
    Consultant Brochures — brochures of services or products of other
        companies or individuals
     Organizations — annual reports, notices, etc., of various
        organizations or agencies (material of a temporary nature)
     Photographs — either promotional or project-oriented
     Dead Projects — files of correspondence, memos, internal reports,
        accounting records, etc., of finished projects
 Slides
 Tube Files
 Flat Files
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Figure 1: Organization of Permanent Materials

All of the above three considerations will overlap. Subject-oriented materials may be books, vertical files, slides, etc. For instance, information in a land use planning firm could be organized according to the method outlined in Figure 1.

Access

The second characteristic we have to be concerned with once a method of storage has been decided upon is the points of access to the stored information. In other words, how do we find something we have stored, and how do we refer to it? For instance, if you have a certain book, some of the points of access may include the author, title, subtitle, publisher, series title, subject headings, and geographic headings.

Most pieces of information can be referred to in many different ways, some of which mean the same thing. For instance, the subject headings 'city wastes,' 'municipal wastes,' 'burning of waste,' 'controlled burning,' and 'incineration' may all be used to describe the subject content of a document. Two problems arise here: (1) Many of these terms are redundant—the first two refer to the same thing and the last three mean the same thing; and (2) since at least two concepts apply to the item, there is no unique designation for the document.

Two methods have been designed to meet these difficulties. The first is the use of a standardized language and the second is the use of a coding system. A standardized language eliminates redundancy by specifying what terms may be used to refer to a piece of information, and it standardizes the format of the referral terms.

For instance, in the above example the redundancy can be eliminated by specifying that only the two terms 'Waste management' and 'Solid waste management' be used to refer to the two concepts being considered. A standardized subject heading list is called a thesaurus, and there are some thesauri available for certain subject areas such as urban and regional planning [4] or in land use planning and landscape architecture. [5] A sample page from a thesaurus of planning terms is shown in Figure 2; Appendix E contains a description of how to prepare a thesaurus for a small library.

Also, suppose you were looking for the zoning ordinance from Mentor, Ohio. Would you look for it under the heading 'Mentor, Ohio', 'Ohio - Mentor', 'Ohio - Lake County - Mentor'? A standardized language format would eliminate such a problem because only one choice would be the correct one.

The problem of uniqueness is handled through the use of a coding system. Regardless of the content of an informational item, the code which is used to designate the item applies to that item and to no other item. However, to accomplish its purpose effectively, a coding system cannot be applied haphazardly. It should reflect the storage organization, provide a mechanism for keeping items in order, and in some cases even convey information about the item.

Environmental Engineering
-The application of engineering principles

to the measurement of environmental characteristics and the planning of projects which have strong environmental considerations.

x Agricultural engineering

Hydrological engineering

Soils engineering

201 planning

sa Disaster technology

Engineering

Environmental planning

Hydraulics

Land planning

Landscape architecture

Planning

Site planning

Waste management

Environmental factors
Use Environment

Environmental impact analysis

-The process of determining the ecological, physical, cultural, socio-economic, and aesthetic impacts of a project.

x Cover models

Ecological impact

Environmental assessment

sa Analysis models

Impact analysis

Environmental impact standards
Use Performance standards

Figure 2: Subject Heading Thesaurus

A classification system is a type of coding system, but a coding system does not have to be a classification system. In fact, if the library designer is trying to maintain simplicity, the necessity for complicated classification should be avoided. For instance, suppose the librarian has an article which covers the subject areas of Impact zoning, Performance standards, Development impact analysis, and Carrying capacity analysis. Using a classification system the librarian would have to determine which was the primary heading in order to apply a classification number. Using a simple coding system the librarian could file the item under any of the above headings and still be able to find the item easily using any of the headings. Chapter 3 contains a detailed discussion of how a coding system might be developed for a library.

Records

The nature of the records used in the library is the third requirement that must be addressed. These records should serve four major functions:

- 1. They indicate that a particular piece of information exists within the library.
- 2. They describe the nature of the piece of information.
- 3. They provide the user with the means of finding the access points to a piece of information.
- 4. They supply the user with the code or unique designation for the piece of information.

A records system must be designed to fulfill all four functions and not just one or two of them.

One of the primary means of keeping physical records in a library is the use of the card catalog. A centralized catalog is used to index and record information that is placed in the system. A card exists for every item to show that the item exists within the system. Information concerning the author, title, publisher, date, number of pages, subject headings, geographic headings, notes, or whatever, are all recorded on the card to describe the nature of the item. A card for each of the access points (e.g., author, title, subject heading, geographic headings—referred to as tracings on the catalog card) is also placed in the card catalog so that the item can be located from any of its major access points. And each card contains the indexing code number for the item.

Physical records do not have to be necessarily kept on cards. Notebooks in some cases can be used for certain types of information. But the important thing to remember is that cards can be placed in the card catalog between already existing cards. If some type of list is used, references for access points cannot be placed between two others, and the system may become unusable for certain types of materials. Some types of materials do have only one point of access (e.g., project reports, project drawings, etc.), so notebooks might be better used in such cases.

Of course, the use of a computer can simplify matters even more because it can preclude the need for any physical record at all, and the need for multiple records for each possible access point is eliminated. Only a single record for each piece of information is needed in a computer record, and a search based on any of the possible access points will take the user directly to that single record.

One question still remains to be answered: "In what way is the proposed approach to library design user-oriented?" It was noted in Chapter 1 that what makes a system user-oriented is simplicity and rapidity of use for both patrons and the librarian.

Let's begin by examining the librarian's point of view. If the primary method of organizing information is based first, on form, and second, by orientation, the librarian should be able to

make a 'snap' judgment regarding where the item is to be stored. (And even if the snap judgment is incorrect, the unique code number and the library catalog will make it possible for the item to be found in the system.) Second, if the descriptive information concerning the content of an informational item is standardized, the access points can be determined by a rapid perusal of the item and redundancy of both effort and descriptive information is unnecessary. Third, if the coding systems have been kept simple, the assigning of a code number can be done relatively easily. And fourth, if records are simple and uncluttered, the process of descriptive cataloging is also rapid. Thus, simplicity results in 'use' of the library.

Likewise, the process of retrieving information from the library becomes easier for the patron. Through the use of a thesaurus the patron can pinpoint which terms he needs to use as access points to the information he is seeking. Since records are simple, they are self-explanatory. And properly designed codes will convey to the patron not only a unique code but information regarding how the information is stored. And finally, since the librarian is freed of much of the time-consuming task of handling technical details, he is free to help the patron 'use' the library properly.

Although the previously described approach still requires a trained professional to implement, the resulting library should not only be user-oriented, but the technical aspects of maintaining the library will not require a professional— an obvious advantage in today's world of rising labor costs and proliferating downsizing. Thus, the professional can actively participate in the affairs of the parent firm, providing better service and anticipating information needs. The technical details can be left to the non-professional to perform under the professional's direction.

The following chapters provide technical information on coding systems and record keeping for a typical small land planning library.