

INFORMATION ARCHITECTURE: A LIBRARIAN VIEW

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Abstract :

Information Architecture (IA) is a professional practice and field of studies focused on solving the basic problems of accessing and using, the vast amounts of information available today. Information Architecture has become one of the latest areas of excitement of within the Library and Information Science community, largely resulting from the recognition it garners from those outside of the field for the methods and practices of information design and management long seen as core to information science. Here we discussed how an Information Architecture connected with information seeking process in library.

KEYWORDS :

Information Architecture , Librarian View , information design and management , information science.

INTRODUCTION

In today's information decade, information overload is buzzword to describe the problems resulting from the incredible amount of information. But information overload is only a facet of the problem. But these problems are only caused by the simple presence of information quantity. The research on cognitive overload differentiates between several facets of this problem. Kirsh identified four drivers of cognitive overload:

too much information supply,
too much information demand,
the need to deal with multi-tasking and interruptions,
Inadequate workplace infrastructure.

Kirsh argues that the oversupply of pushed and pulled information is caused by use information retrieval behavior as well as the heavily increased amount of available and accessible information. He implies that an exponential growth in overall information quantity but assumes only linear growth in quality information quantity. (see figure 1)

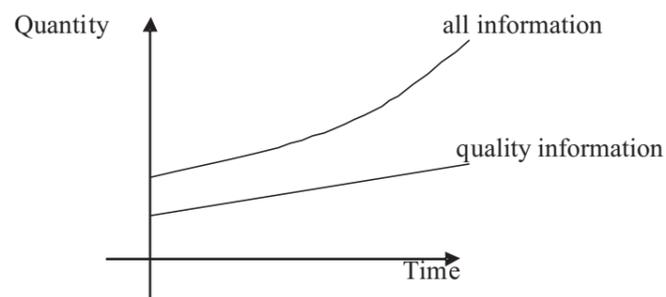


Figure 1: Quantity of all and Quality Information

LIS professionals are versed in many of the key concepts of Information Architecture such as information organization, categorization, and defining user requirements. Because of this similarity between LIS and Information Architecture, there is a unique opportunity for the LIS community to help focus the direction of Information Architecture.

Emergence of Information Architecture:

While the term information architecture used by Richard Saul Wurman in the 1960s, the growth of the Internet has played a vital role in pushing information architecture to the mainstream. Richard Saul Wurman an architect by trade was concerned with the gathering, organizing and presenting of information to achieve some purpose. In 1976, the national conference of the American Institute of Architects (AIA) and chose as "The Architecture of Information" as the conference theme. It is a curious historical coincidence that the AIA held a conference with this theme just 100 years after the first meeting of the American Library Association.

Here, Wurman (1996) developed the definition: "information architect. 1) the individual who organizes the patterns inherent in data, making the complex clear. 2) a person who creates the structure or map of information which allows others to find their personal paths to knowledge. 3) the emerging 21st century professional occupation addressing the needs of the age focused upon clarity, human understanding, and the science of the organization of information".

The professional interest in information is ensuring its future in the design and creation of information spaces. Since the field is in its defining stages, there are still many debates about the definition and scope of what information architecture is and does. LIS has an important role in this debate and an opportunity to shape the future of this important profession.

Needs of Information Architecture:

To understand why we need information architecture, how do you decide how to arrange the books? Ideally, you'd choose a strategy that makes it easiest for readers to find the books they want. If it's a big library or university library, for example, the people accessing the books may be looking for them by subject rather than by author and title.

The options you have for organizing digital information are typically much greater than for the books. Like the books though, the reason for choosing how to organize the information is to improve how users can access it. An approach that helps some users to find information faster might make the search slower or even impossible for other users. With the massive and ever-increasing amount of digital information, information architecture is essential to ensure that people can access what they want and when they need it.

User Information Needs and Information Seeking Behavior:

To design an adequate information space, it is necessary to understand the users' requirements and their information retrieval behavior. We can identify three different information needs which cause three different information retrieval behavior. A good information system/space must support all of them to satisfy users' demands.

The most structured proceeding in retrieving information is to know how the information is called and described and where to look after it. We call this sort of information retrieval "known-item seeking". A good example for this action is to look up a person's phone number and we know the name of the person and where his phone number is listed. One single search query should satisfy the user's information need.

A more unstructured information retrieval is performed if the user does not exactly know what he is looking for. In fact he is aware of the context and where he may find the information but not exactly. The process of searching is at the same time a process of learning about the information he is looking for. This results in a larger amount of information about the topic. This information retrieval is called exploratory seeking.

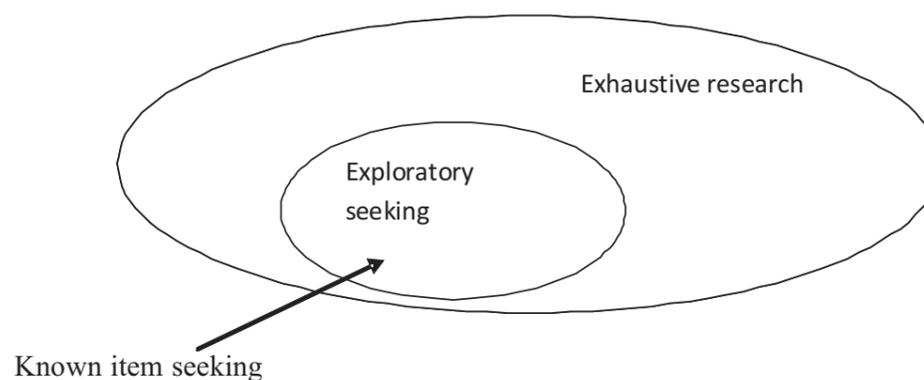


Figure 2: Three Types of Information Needs

The last type of information retrieval is called exhaustive research. The user wants to all information he could get on a certain topic. He will perform several search queries with different search terms like synonyms and broader and narrower

search terms. This may result in the largest amount of information and there is no single right answer on the information demand. An example would be a scientist who is investigating on a topic and desires all information publicized on his topic.

Information Architecture and Librarian:

According to Kalbach (2003), many information architects have a background in librarianship and both professions seek to match the user's particular information need with a resource. However the difference, is that information architects are concerned with all sorts of information, and usually on particular projects, whereas librarians deal on an ongoing basis with fixed format documents. The deep structuring of information by controlled vocabularies, thesauri and metadata is common to both professions.

Applications of Information Architecture:

Much of the above applies to situations where the information comprises documents created by an enterprise. How, information architecture is just as applicable in a traditional library, particularly as notions of Library 2.0 have done much to encourage greater accountability to the user.

Library 2.0:

Library information architecture comprises three layers:

the first where the users employ all sorts of devices to access library content
 the second dealing with requests on a web server and
 the third a series of object relational database management systems which will manage the library resources.

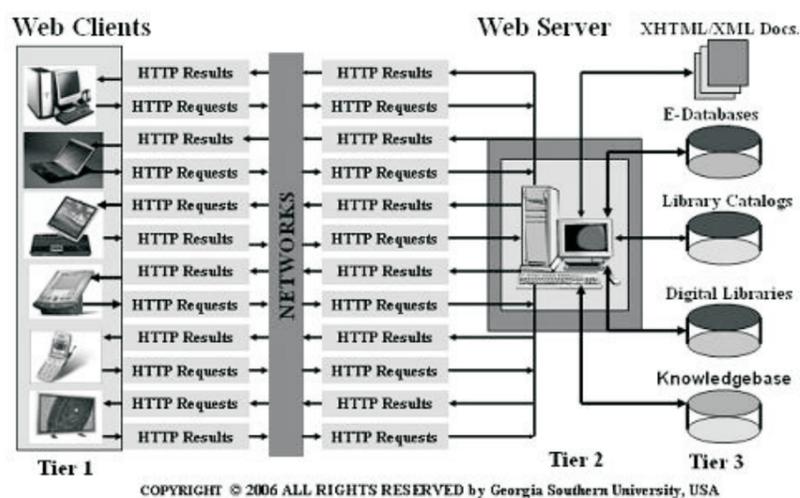


Figure 3: Web-based client / server Library Information Architecture

Digital Libraries and Information Architecture:

The volume and variety of information now digitally accessible in libraries of all kinds have led to significant growth in search engines, primarily because of the lack of structured access methods to get to the bulk of information being produced and provided in digital form. In some ways, any repository of digital information can be thought of as a library of sorts, and requires a set of organizational schemas and interfaces to provide access for users. However, even traditional libraries and information providers are seeing a massive shift by users to on-lines, often web browser accessible, repositories. Projects as large as the Internet Archive and search engines such as Yahoo, Google are the primary ways of users accessing information. In most cases, this information is loosely organized, if at all, and users are in need of structures and paths through the volumes of information they are accessing. Standards for organizing digital libraries are in place including initiatives from both the public and the private sectors, and mostly concern the overall organization of the information along traditional dimensions, such as the consideration of digital information as an object for cataloging, preserving and archiving. Information architecture in digital libraries will from beyond this traditional organization, but still benefit from the approaches to collection and management, possibly to the extent that digital librarianship may be thought of as information architecture. The growth of multimedia information also pushes digital library research and development toward practicing information architecture to provide a set of best practices methods for displaying and organizing video and audio. Additional digital library responsibilities may involve the creation of collection specific metadata as well as understanding ownership and copyright in a digital age.

The Future of Information Architecture:

Information architecture seems assured of a long future, even if the term itself ceases to gain formal agreement. A world of digital information will always need people to architect spaces for sharing, collecting, Information Architecture and organizing documents and resources. The current understanding of IA as a discipline is likely to evolve as the profession grows and formal education takes shape. Technical and theoretical advances are likely to yield new opportunities for tailoring information for personal use. The dynamic structuring of information in response to user activity is likely to offer increasing challenges for research to understand how people construct meaning and navigate through fluid information environments. Current discussions talk of a movement toward design "beyond the page," where the structures of the paper world are no longer applied to new information spaces. Under these circumstances we will likely witness the emergence of new information genres that cannot easily (or ever) be instantiated in anything other than digital form. On the practical side, IA is likely to develop a set of roles that will offer an identity to the profession that is shared by more than the rather limited number of people with that job title currently. For this to occur, it is likely that a more formal educational path will need to emerge for this profession. Information architecture is not unique in this regard. There are many parallel roles within the information design community that are constantly being named and recruited, even if formal educational qualifications for them have yet to emerge (e.g., user experience designer, interaction designer, digital librarian, etc.). The term IA appropriately covers this terrain and we should not expect rapid formalism of credential or educational path to emerge. However, the trend to date indicates that IA has made impressive progress down the path to recognizable status as a professional role and this is likely to continue in the near future.

CONCLUSION:

Information architecture has grown steadily and securely from a hot topic term to a credible application and research area within the library and information science disciplines. As research into user search behavior, navigation, content management and information structures continues, it provides IA with a growing body of findings on which to create a more formal knowledge base, through the categorization of IA as a craft discipline that extends beyond the LIS world is likely to remain.

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