Library and Information Science

Library and information science (LIS) is an interdisciplinary domain concerned with the creation, management, and uses of information in all its forms. Taught in colleges and universities at the undergraduate and graduate levels and a subject of research in both industry and academia, LIS brings together a variety of theoretical approaches. Its focus is on representations of information—the documentary evidence of civilization—as well as on the technologies and organizations through which information becomes accessible.

The research domain is young, beginning in the late 1960s and early 1970s, but its roots lie in the nineteenth century. [...] LIS represents the intersection of library science, information science (originally called documentation), and communications. The first, library science, has sought to solve the problems of organizing and providing access to collections of materials. The second, information science, seeks to understand the properties of information and how to manage it. Aspects of the field of communication, always a facet of the first two, became interwoven with both as library science and information science matured and increasingly intersected with one another.

The field of LIS can be characterized as “user-focused.” The concern is not just for the isolated information artifact—for example, data, reports, books, video, and museum objects. Instead, the social, technical, and cultural systems that structure recorded knowledge, making it available and useful to the people who want or need it—or even happen upon it—are considered. Historically LIS has focused on technical systems, such as cataloging and classification, as well as organization systems such as the development and management of collections and user services. Legal systems that structure information access such as licensing, intellectual property rights, and information policy are central to the domain, particularly in the current information landscape that relies heavily on digital information and Internet technologies. LIS researchers also study ways in which the use of indexes, citations, and other bibliographic information can reveal such things as the relationship between disciplines, networks of scholarship, and the value of information in decision-making. LIS encompasses research on the social and cultural contexts of information, considering implications of race, ethnicity, class, gender, and sexuality for information creation, transfer, and use. Such questions lead beyond the initial concerns of the field, demonstrating the flexibility of LIS to meet the changing role of information in society.

The LIS domain extends to the structures of the institutions that make information available and usable—such as libraries, archives, and museums, whose primary purpose is collecting, preserving, organizing, and making useful information and cultural artifacts. The field also includes systems—such as information resource management—within business and organizations. [...] Information Science is concerned with information itself and its representations—what information is; how to represent it; how to understand its functions; how it is used; and how to design systems to organize, classify, and retrieve information. [...] LIS teaching and research continues to expand into newly developing areas of information organization and use. Among those areas of expansion are discipline-specific applications of informatics—for example, medical informatics, social informatics, and community informatics—the study of design, application, and use of information technology within specific domains. Another domain-specific area of development is data curation—the management of data through the information transfer cycle including data creation, management, preservation, and use. The fields of application are new, but essentially replicate in new disciplines approaches that historically were applied to libraries, and information retrieval research is now addressing issues in digital humanities that raise new questions about ontologies and retrieval of text.

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