

Chapter XI

Digital Libraries and Society: New Perspectives on Information Dissemination

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Abstract

Digital libraries are large, organized collections of information objects. Well-designed digital library software has the potential to enable non-specialist people to conceive, assemble, build, and disseminate new information collections. This has great social import because, by democratizing information dissemination, it provides a counterbalance to disturbing commercialization initiatives in the information and entertainment industries. This chapter reviews trends in today's information environment, introduces digital library technology and explores the use of digital libraries for disseminating humanitarian information in developing countries, a context that is both innovative and socially motivated. We demonstrate how currently available technology empowers users to build and publish information collections. Conventional public libraries are founded on the principle of open access, and extending this to digital

libraries presents a challenge to human-computer interaction—a challenge that is magnified if open access is extended to those who create library collections too.

Introduction

Digital libraries are large, organized collections of information objects. Whereas standard library automation systems provide a computerized version of the catalog—a gateway into the treasure house of information stored in the library—digital libraries incorporate the treasure itself, namely the information objects that constitute the library's collection. Whereas standard libraries are, of necessity, ponderous and substantial institutions, with large buildings and significant funding requirements, even large digital libraries can be lightweight. Whereas standard libraries, whose mandate includes preservation as well as access, are “conservative” by definition, with institutional infrastructure to match, digital libraries are nimble: they emphasize access and evolve rapidly.

The four chapters in this section provide an excellent illustration of the huge variety of interesting issues in digital library research that impacts the Asia Pacific region.

Libraries are pillars of education, and it is natural to expect that digital libraries will provide new opportunities for innovative educational practices. These will be particularly relevant to the Asia Pacific region because of the huge disparities in access to education between the different communities there. Peer-to-peer learning has always been a crucial factor in personal development, although it is frequently ignored in educational studies. Natalie Pang, from Monash University, Malaysia, in Chapter XIV describes her studies of how digital libraries can provide an innovative, perhaps revolutionary, environment for peer-to-peer learning amongst youths. She touches on many practical issues: gender differences, different learning styles, different levels of media and computer literacy, and age-related differences.

Many economies in the Asia Pacific region are agriculturally based. Modern agriculture is a knowledge-based activity that can benefit greatly from digital libraries. Mila Ramos, from the International Rice Research Institute in the Philippines, describes in Chapter XII a large-scale digital library system designed to support the growth, nurturing, harvesting, and distribution of that most Asian of staples, rice. This digital library supports an institute whose goal is to improve the well being of present and future generations of rice farmers and consumers, particularly those with low incomes. The institute's library houses the world's most comprehensive collection of technical literature on rice, and provides a

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