Source Book on Digital Libraries

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Preface

This report has its origins in discussions Mike Lesk and I had in October 1991, in connection with an NSF-sponsored workshop. With Mike McGill we drafted a White Paper, calling for a National Electronic Science, Engineering, and Technology Library. Since then, many things have changed. Now, the term “Digital Library” is more in vogue than “Electronic Library,” though one might also call it a hypermedia archive or a data/information/knowledge base.

Regardless of the name, the intent is clear. Step one is for NSF to play a lead role in launching a concerted R&D program in the area. This is essential, so that any large scale development efforts by the Federal Government, along with state and private agencies, will be sensibly coordinated and undertaken in the most cost-effective and timely manner possible. We hope this initiative will begin in 1993, and proceed into the 21st Century. We feel that it must focus on large scale prototypes, and on setting the stage for a new, open, task-oriented, computer-assisted, type of access to information.

Step two involves partnerships, cooperative ventures, and production conversion of back-archives. ARPA, NASA, NIST, Library of Congress, NLM, NAL, and many other groups must become involved if we are to serve the broad base of users, from kindergarten to Nobel laureate researchers. It will only be successful if supported by top-quality research on information storage and retrieval, hypertext, document processing, human-computer interaction, scaling up of information systems, networking, multimedia systems, visualization, education, training, etc.

It is hoped that this Source Book will help show the potential, progress, proposals and planning efforts underway in relation to Digital Libraries --- leading to a large and effective R&D initiative Toward this aim, please send in corrections and additions so we can keep this book up-to-date..

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