About The Book

The management of the future library and the next-generation library system in the networked and digital environment is emphasised in this book. It's astonishing how library management systems have developed. The impact of the internet and Google's incredible success story significantly impacted the role of libraries. Google continued to be ahead of the libraries because to new internet technology. Even now, this problem still exists. However, given this context, libraries and companies that provide library systems made several efforts to enhance the search capabilities for libraries using the new Google-like discovery tools. The process of designing and creating the features of the following generation of systems began at the same time. Any library that wants to fulfil its duties and meet the needs of its patrons needs to have access to ICT.



Editor-In-Chief



Dr. D. D. Lal is managing and overall in-charge of the Library Services of the National Brain Research Centre (NBRC), since its inception (2000) and is also instrumental in setting up the PAN-India DBT E-Library Consortium in 2009 and carrying it forward since then as DeLCON Coordinator. He obtained Ph.D. Degree in LIS from University of Calcutta and Holds Master of Philosophy (M.Phil.), Master of Library and Information Science (MLISc.) Degree in Library and Information Science. He conceptualized the concept of "Digital Library" at

National Brain Research Centre (NBRC), Manesar and having 22+ Years of Professional Library Experience for Managing the Digital Library of NBRC, GOI. He has contributed more than 25+ research articles in different journals and conference proceedings at national and international level. He conceptualized and setup a "Library Association" for Bihar i.e. Library Association of Bihar.

Editors



Ms Yogita Talwar is presently working as Assistant Librarian at Lovely Professional University, Phagwara (Punjab). She is holding degrees of M.Com, NET and perusing Ph.D. Degree. She has more than 9 years of professional experience in the field of librarianship. She has published 25 research papers in the National and International Journals, conference proceedings and books.



Prof. Manoj Kumar Sinha holds Ph. D. in Zoology, Library and Information Science from T. M. Bhagalpur University, Bhagalpur. He is presently working as Professor in the Deptt. of LIS, Assam University, Silchar. He is also appointed as the Dean of Swami Vivekananda School of Library Sciences, since February 2018. He served as the Acting Librarian, at Rabindra (Central) Library, Assam University, Silchar from April 11, 2019 to December 30, 2020. He has published more than 300 research papers and articles in the area of Library & Information Science, Botany, Zoology and Environmental Sciences. He is currently,

President of the Library Association of Bihar (LAB) and Life Member of ILA, IASLIC, IATLIS, LPA, and Assam Library Association.



www.sankalppublication.com

Also available as an eBook Academic

INR 1050/-7-04-10P4P-EP-87P MBZI



a. Google W

Managing Next Generation in Networked and Digital

Environment

Managing Next Generation Library System in Networked and Digital Environment



Editor-in-Chief Dr. D. D. LAL

Editors Ms. Yogita Talwar Prof. Manoj Kumar Sinha

also available on







Managing Next Generation Library System in Networked and Digital Environment

Copyright © 2023 by D. D. Lal

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form by any means, electronic, mechanical, magnetic, optical, chemical, manual, photocopying, recording or otherwise, without the prior written consent of its copyright holder indicated above.

Title: Managing Next Generation Library System in Networked and Digital Environment

Chief Editor: Dr. D. D. LAL; Editors: Ms. Yogita Talwar, Prof. Manoj Kumar Sinha

ISBN: 978-93-94901-40-7 **Price:** ₹ 1050.00 Publishing Year 2023

Published by: **Sankalp Publication**

Head Office: Ring Road 2 Gaurav Path, Bilaspur,

Chhattisgarh – 495001

Phones: +91 9111395888; +91 9111396888 Email: support@sankalppublication.com Website: www.sankalppublication.com

Managing Next Generation Library System in Networked and Digital Environment



Dr. D. D. Lal Ms. Yogita Talwar Prof. Manoj Kumar Sinha



Acknowledgements

I would like to take this opportunity to thank those very special people, without whom the completion of this work would not have been possible. People, who shaped me, guided me and supported me in their own special ways.

First, I would like to extend my deepest and most sincere gratitude to Prof. Biplab Chakrabarti, Professor, University of Calcutta, for all I have learned from him and for his continuous help and support.

I would like to sincerely thank Prof. Krishanu Ray, Director, National Brain Research Centre (NBRC), Manesar, for providing necessary infrastructure and resources to accomplish my Book work and his constant supports and works of encouragement and being my incessant source of inspiration.

I am thankful to Prof. Pankaj Seth, (Senior Professor, NBRC) for always being so approachable & inspiring in his interactions. I am especially thankful for his wholehearted support of my work as well as his encouragement for all my works. I am grateful to Prof. Ellora Sen (Professor and Chairperson Library Committee, NBRC) for her continued support and encouragement.

I would like to express my whole hearted thanks and deep gratitude to Prof. Manoj Kumar Sinha (Professor, DLISc, Assam University) and Ms. Yogita Talwar (Assistant Librarian, Lovely Professional University, Phagwara, Punjab) for their valuable suggestions.

I would like to express my deep sense of gratitude to my Senior LIS Professionals, Dr. Jagdish Arora (Adviser, NBA & Ex. Director, INFLIBNET), Dr. R. K. Chadha (Ex. Additional Secretary, Lok Sabha, Parliament Library), Prof. Ramesh Gaur (Director, IGNCA), Prof. K. P.

Singh (Professor, Delhi University), Prof. Sanjay Kumar Singh (Professor, DLISc, Guwahati University), Prof. Manoj Kumar Verma (Professor, DLISc, Mizoram University), Prof. Pandey S. K. Sharma, (Retd. Librarian, UGC), Dr. Suman Mallik, (Ex. Dy. Director, CDRI, Lucknow) and Dr. R. N. Malviya (Librarian, Rishihood University, Sonipat).

I am greatly indebted, and wish to express my sincere gratitude to Mr. Mahender Kumar Singh (Information Scientist), our DeLCON Consortium staffs Mr. Neeraj Kasana (Technical Assistant), and Ms. Shalini (Technical Assistant) for their generous help and expert advice in carrying out this work. I sincerely thank all my colleagues for their timely support and encouragement that made my 'Edited Book', even at the peak of intense pressure, a joyous experience.

I extend my sincere thanks to Prof. P. K. Roy (Ex. Director, NBRC), Prof. Subrata Sinha (Ex. Director, NBRC) and Dr. T. Madhan Mohan Sir (Ex. Adviser, DBT) for their wholehearted support and encouragement for my work during their tenure.

Last but not the least, I express my heartfelt gratitude towards my parents (Father – Late Sh. Kunj Bihari Prasad, Mother - Smt. Kamla Devi), my wife (Mrs. Sunita), my daughter (Ms. Nitika), and my family members, whose unflinching love and confidence helped me to pursue this work as my passion for Library Science. I am truly indebted to all of them.

My special thanks go to the owner and staff of M/s. Sankalp Publications for bring out this beautiful edited book in record time. Thanks to those whose names I have forgotten to mention.

S/d Dr. D. D. LAL



Preface

Managing Next Generation Library System in Networked and Digital Environment

Today, people get their information online, - often filtered through for-profit platforms. If a book isn't online, it's as if it doesn't exist. Yet much of modern knowledge still exists only on the printed page, stored in libraries. Libraries haven't met this digital demand, stymied by costs, e-book restrictions, policy risks, and missing infrastructure. We now have the technology and legal framework to transform our library system. The Internet Archive, working with library partners, proposes bringing millions of books online, through purchase or digitization, starting with the books most widely held and used in libraries and classrooms.

With the emergence of new technologies, the traditional library, acting as a medium for sharing information, needs an integral refinement in its processes. This transformation will bring in efficiency and minimise human error in the processes with the help of smart gates, material location finders and smart check-out booths to automate the processes of controlling access, locating item as well as the issuing/returning of materials. However, the changeover to a smart library system might face several challenges, like, for instance, the cost of implementing numerous high-frequency RFID readers at prime locations in the library.

Another crucial challenge of this system will be the equipment's limitations to achieving a more performant system. Highly sophisticated equipment will be required which will largely affect the cost.

Libraries are facing increased expectations from users, and challenge of developing technologies including: Web 2.0, e-books, digitations and a problem of archiving digital content. Web-based technology provides users and information professionals with powerful and flexible tools for information dissemination.

Librarian offers a helping hand for users to find out the required piece of information and to use it for personal and professional purposes. Due to the advent of the Internet, the World Wide Web and the proliferation of online catalogues, the role of a librarian has been changed. Now he is more efficient and has new roles as intermediary, facilitator, end-user

trainer/educator, web organizer & designer, researcher, interface designer, knowledge manager/professional and sifter of information resources. Librarian should be knowledgeable about a variety of information sources and follow the new trends and advancements in computers, media, and publishing.

In a wider informational ecosystem throughout the world, a "smart library" is an information centre with networks of numerous libraries and their services. Smartness means that the evaluation of real resources and users is used to guide the development of new library e-tools and services.

The concept of a smart library focuses on the use of technology in libraries and is intended to be a highly collaborative learning environment in which users are encouraged to contribute ideas and information. Smart libraries enhance standard and non-traditional library services, as well as the library experience of users and students.

A number of fantastic digital projects are going on around the world. Some of the emerging technologies being leveraged by libraries can be enlisted as: digital maker labs, coding clubs, digital storytelling, virtual reality, mobile apps; open libraries, RFID technologies, robot technologies, cloud printing, web technologies etc.

Libraries are in a prime place experiment with creative spaces and take on costly duties that are limited to acting as more than just information resources. Libraries must harness the spirit of the user community, analyse their needs, and provide tailored resources to promote egovernance, information literacy, content creation, native languages, and lifelong learning for the poor, underprivileged, and marginalised. They must expand their reach outside of the traditional area and promote eculture on a large scale. There is a special guideline that consumers should be aware of the above initiatives.

This book will focus on traditional libraries, smart and modern libraries, challenges of library transformation, issues and challenges of libraries and librarians etc.

S/d Dr. D. D. LAL (Editor-I n-Chief)



List of Contributors



Sl. No.	Name of Authors	Address with Email ID		
1	Mr. Ashwini Latte	Research Scholar, Department of Library &		
		Information Science, Rani Channamma		
		University, Belagavi, India.		
		Email: gashwini364@gmail.com		
2	Dr. Deepti Khatri	Librarian, Saheed Sukhdev College of Business		
		Studies, University of Delhi, Delhi. India.		
		Email: <u>deeptikhatri2005@gmail.com</u>		
3	Mr. Hemanta Borah	Research Scholar, Assam University, Assam.		
		Email: hkb279359@gmail.com		
4	Dr. J. C. Makwana	Assistant Professor, PG Department of Library		
		& Information Science, Bhaikaka Library		
		Campus, Sardar Patel University, Vallabh		
		Vidyanagar, Anand, Gujarat. India.		
		Email: jignesh.makwana2182@gmail.com		
5	Dr. Krishnamurthy M.	Associate Professor, DRTC, Indian Statistical		
		Institute, Bengaluru. India.		
		Email: mkrishnamurthy1304@gmail.com		
6	Mr. Mahesh V M	Project Linked-Personnel, DRTC, Indian		
		Statistical Institute, Bengaluru. India.		
		Email: maheshmanjunathvp@gmail.com		
7	Dr. Mahendra Kumar	Assistant Librarian & Head, LRC-		
	Sahu	Management Development Institute,		
		Murshidabad. W.B.		
		Email: <u>sahumahendrak9@gmail.com</u>		
		= = =		
		Gyan Roshani College of Education, Khokhra,		
		Janjgir, Chhattisgarh, India.		
		Email: <u>oprathore81@gmail.com</u>		
9	Mr. Rajat Das	Research Scholar, Assam University, Assam.		
		Email: rajatdas568@gmail.com		
10	Ms. Rani Shaista	Dy. Librarian, National University of		
	Kanwal	Sciences & Technology (NUST), Islamabad,		
		Pakistan. Email: <u>librarianrani@gmail.com</u>		

11	Mc Sanghita Do	Pagagnah Sahalan (M. Phil IIS) Donortmont	
11	Ms. Sanghita De	Research Scholar (M.Phil. LIS), Department	
		of Library & Information Science, University	
		of Calcutta. Kolkata, West Bengal.	
		Email: sanghitade8@gmail.com	
12	Ms. Shashi Kumari	Research Scholar (BLIS), Department of	
		Library and Information Science, Maulana	
		Mazharul Haque Arabic Persian University,	
		Mithapur, Patna District, Bihar. India.	
		Email: shashikumari2406@gmail.com	
13	Dr. Tridib	Librarian, St. Paul's Cathedral Mission	
	Chattopadhyay	College, Raja Rammohan Roy Sarani, (Amherst	
		Street), Kolkata. West Bengal.	
		Email: tridibchattopadhyay@gmail.com	
14	Mr. Upender Kumar	Research Scholar (JRF), Mahatma Gandhi	
		Central University, Department of Library &	
		Information Science, Mahatma Buddha	
		Parishar, East Champaran, Bihar. India.	
		Email: <u>upendergupta2406@gmail.com</u>	



Contents



Sr.	Title	Page
•	Acknowledgements	V
•	Preface	vii
•	List of Contributors	ix
1	A Bibliometric Analysis of the Journal Titled 'Disaster and Development'	13
	Tridib Chattopadhyay	
2	Role of Libraries in Indian Higher Education System with special Reference to University of Delhi	28
	Deepti Khatri	
3	Resource sharing through Networking Library - An Epitome of DELNET to Transforming Library Service	45
	Mahendra Kumar Sahu	
4	Changing Roles of Librarians required Skills and Competency in the Digital Era	63
	Ashwini Latte	
5	Importance of ICT Based Library Services in the Age of Modern Era with Special Reference to Assam	78
	Hemanta Borah, Rajat Das	

0	the Library and Information Science - A Study	93
	J. C. Makwana	
7	Library System for Transforming Educational Trends in a special context to the Adoption of Information & Communication Technology (ICT) Literacy	114
	Upender Kumar; Shashi Kumari	
8	Analytical Study of the Impact of open Access Study Materials on Higher Education in a Digital Library Environment	129
	Omprakash Rathore	
9	An Approach to Content Delivery Network (CDN) System for Resource Sharing through Library Website: A Study	139
	Krishnamurthy M, Mahesh V M	
10	Internet Resources and Services for Library Users	147
	J. C. Makwana	
11	Turnover Intention of Government Sector Employees in the Capital of Pakistan	164
	Rani Shaista Kanwal	
12	Roadmap to Integrate Research Data Management in Resource Sharing Activities for Information Management Institutes	179
	Sanghita De	