
► **Implementing FRBR
in Libraries**
**Key Issues and Future
Directions**

Yin Zhang
and
Athena Salaba

Neal-Schuman Publishers, Inc.
New York London

Published by Neal-Schuman Publishers, Inc.
100 William St., Suite 2004
New York, NY 10038

Copyright © 2009 Neal-Schuman Publishers, Inc.

All rights reserved. Reproduction of this book, in whole or in part, without written permission of the publisher, is prohibited.

Printed and bound in the United States of America.

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI Z39.48-1992.

Library of Congress Cataloging-in-Publication Data

Zhang, Yin, 1965-

Implementing FRBR in libraries : key issues and future directions /
Yin Zhang and Athena Salaba.

p. cm.

Includes bibliographical references and index.

ISBN 978-1-55570-661-6 (alk. paper)

1. FRBR (Conceptual model) I. Salaba, Athena. II. Title.

Z666.6.Z48 2009

025.3—dc22

2009031729


CONTENTS

List of Illustrations	vii
Preface	ix
Acknowledgments	xiii
Chapter 1. Introduction to FRBR	1
What Is FRBR?	1
Why Was FRBR Introduced?	3
What Are the Potential Benefits of Implementing FRBR?	4
What Is the Current Status of FRBR Development?	8
What Are the Most Critical and Challenging Issues Facing FRBR Development?	9
Summary	10
References	10
Chapter 2. The FRBR Model	13
The FRBR Model: Entity Groups	14
Further Development of the FRBR Model	23
The FRBR Model Family: FRAD and FRSAD	25
Interoperability with Other Models	28
Critical Issues and Challenges in the FRBR Model	28
References	30
Chapter 3. Impact of FRBR on Current Cataloging Standards and Practice	33
What Changes Will FRBR Bring?	34
International Cataloguing Principles	34

Description Standards	35
Changes in Encoding Standards	41
Are Changes in Cataloging Practice Coming Soon?	45
Critical Issues and Challenges in Cataloging Standards and Practice	50
Summary	51
References	52
Chapter 4. FRBR Application	57
Collections: Genre/Format and Disciplinary Communities	58
Settings	67
Critical Issues and Challenges in FRBR Application	70
Summary	71
References	71
Chapter 5. FRBR Implementations in Library Catalogs	75
Current FRBR Implementation Projects	76
Overview of FRBR Implementation Projects	91
Critical Issues and Challenges in FRBR Implementations	97
Summary	104
References	105
Chapter 6. FRBR Research	109
FRBR Research Overview	109
Gaps in FRBR User Research	112
Critical Issues and Challenges in FRBR Research	117
Summary	119
References	120
Chapter 7. Conclusions and Future Directions for FRBR	123
FRBR Development	123
Key FRBR Issues	126
Future Directions for FRBR	128

Concluding Remarks	131
References	132
Appendix A. Acronyms	135
Appendix B. FRBR Implementation Examples	139
Index	147
About the Authors	153



LIST OF ILLUSTRATIONS

Figure 2-1	Group 1 Entities and Their Primary Relationships	15
Figure 2-2	<i>Harry Potter</i> in FRBR Group 1 View	16
Figure 2-3	Group 1 and Group 2 Relationships	18
Figure 2-4	FRBR Subject Relationship	20
Figure 3-1	Model A: Using Authority Records for Work/Expression	47
Figure 3-2	Model B: Using Bibliographic Records for Work/Expression	48
Figure 5-1	An Example of a WorldCat.org Search Result Display	78
Figure 5-2	An Example of the UCLA Cinema Search Result Display for a Work	79
Figure 5-3	An Example of UCLA Cinema Expression and Manifestation Records	80
Figure 5-4	The OCLC FictionFinder Search Result Display by Work	81
Figure 5-5	The OCLC FictionFinder FRBR View of a Work and Its Expressions and Manifestations	82
Figure 5-6	A Record of Shakespeare's <i>Hamlet</i> with FRBR Display Hyperlink	83
Figure 5-7	The FRBR-like Display of the Record Clusters for Shakespeare's <i>Hamlet</i>	83
Figure 5-8	Shakespeare's <i>Hamlet</i> in English Books in FRBR Display	84
Table 7-1	Most Critical FRBR Issues Overall	127

Implementing FRBR in Libraries: Key Issues and Future Directions is designed to bring answers in three ways:

- ▶ to provide an overview of the current status of FRBR development,
- ▶ to identify the key FRBR issues that need to be addressed, and
- ▶ to point to future directions of FRBR development.

The book's overall organization parallels these goals. The introductory Chapter 1 provides a brief background and overview of FRBR by addressing several important questions: What is FRBR? Why was it introduced? What are the potential benefits of implementing FRBR? What is the current status of FRBR development? What are the most critical and challenging issues facing FRBR development? This chapter serves as a basis for further discussion regarding the various FRBR developmental fronts covered in the subsequent chapters.

Chapter 2 provides a detailed description of the FRBR model and its components, illustrating the entities and their relationships and giving an account of its evolving nature, including developments proposed after FRBR's publication. This chapter also offers a discussion on other IFLA models linked to FRBR, efforts to harmonize the FRBR model with other conceptual models, and model-related issues. Chapter 3 discusses how the FRBR model may influence and transform description standards as well as cataloging and metadata practices, current standard development, and necessary changes for the near future.

The next two chapters showcase examples of how FRBR has been applied and implemented, and they present and discuss related issues. Specifically, Chapter 4 provides an overview of current FRBR applications in various settings (in traditional libraries, digital libraries, consortia), and with regard to resources in various media and disciplines. Chapter 5 reviews various efforts that explore methods for implementing the FRBR model to create more effective library catalogs. The chapter covers examples and discussions of various implementation approaches and FRBR



PREFACE

There is no doubt that the information environment which libraries operate in today and will operate in for the foreseeable future is quite different from the one that existed a half century ago. Current cataloging standards, practices, and library catalogs based on the information environment from decades ago are facing great challenges in meeting users' information needs and facilitating information seeking in an increasingly electronic environment. These challenges, facing both libraries and their users, are urgent and real. Many people believe that if library-based finding systems don't evolve quickly, they will be replaced by Internet-based search engines.

The library community has actively debated the future of library catalogs as well as changes in cataloging standards and practices for decades. In an effort to address both changes in the information environment and related challenges, in 1998 the International Federation of Library Associations and Institutions (IFLA) published *Functional Requirements for Bibliographic Records* (FRBR), which presented a new conceptual model of the bibliographic universe with a strong user focus. The library community embraced FRBR and has actively explored its potential benefits for library professionals and library end users alike.

A decade after FRBR's official publication, and despite much lively discussion, creative exploration, practical development, and active research about FRBR, it is still unclear to many how this model may be effectively applied to the process of cataloging, how cataloging-related standards and practices will be changed, and how information systems may be improved to better meet user needs and support information seeking in today's ever changing information environment.

implementation projects that have involved development of FRBR-based systems, algorithms, and software for FRBR implementation.

Chapter 6 provides a brief overview of research efforts related to all FRBR developmental fronts with an additional focus on gaps in FRBR user research and other critical areas that require immediate attention. Chapter 7 presents a unified overview of FRBR, issues, and future directions of FRBR development.

Two appendixes are included to provide supporting information. Since there are a large number of acronyms related to FRBR, Appendix A offers a comprehensive list of acronyms to aid readers new to the field; Appendix B provides a collective list of FRBR implementation examples referenced in various chapters.

This book was designed to meet the needs of the following audiences:

1. Library professionals, such as catalogers, indexers, and metadata librarians who need to know the latest state of the model's application, current issues that need to be addressed, and changes in descriptive standards and practices
2. Library and other information agency administrators who need to be aware of the changes in practice and system development to better plan and manage resources
3. Reference librarians who need to know how a FRBR-based catalog will improve their ability to more effectively help end users
4. System developers and vendors who need to be aware of the implementations and tools that have been developed and tested thus far for future development
5. Researchers and practitioners who need to know the latest developments in the FRBR model, its theoretical framework, and the most important issues that need to be explored and systematically examined
6. Library and information science faculty and students who need a comprehensive account of all aspects of the FRBR model

FRBR offers libraries a new perspective and a broader view of the bibliographic universe capable of meeting the challenges facing both libraries and library users. FRBR shows great potential to help develop better systems for users, improve cataloging efforts, and better manage resources in a digital environment. Because of this potential, it is important that library professionals continue to work to better understand FRBR, keep current with its developments, and be aware of the related issues and future directions in implementing it in libraries. *Implementing FRBR in Libraries: Key Issues and Future Directions* is intended to fulfill this need.