

Designing Quality Databases ...

"the best book on information modeling ..."

—Terry Moriarty, *Database Programming & Design*

"This book is one of the best-written technical books that I have come across. . . . It should be part of every computer person's library."

—Robert L. Katz, *IBM Systems Journal*

"valuable insights for both beginners and database professionals. I think it will quickly become a leading book in the database field."

—Maurice Frank, *CASE Trends*

"Going beyond a mere definition of the IDEF1X standard, Bruce takes the reader on a journey through the world of data modeling and data architecture using IDEF1X to explore the impact that modeling decisions have on the business."

—Jo Meader, *Data Resource Management Journal*

"a comprehensive and coherent description of the pragmatic issues of database design. . . . I would heartily recommend this book to managers and aspiring-to-be managers in information processing organizations."

—Elliot Chikofsky, Progress Software Corp.

"Even if you don't actually use IDEF1X today, if you ever have to build a data model or design a database, then you should get a copy of *Designing Quality Databases with IDEF1X Information Models*. . . . This is not a dry theoretical book about language and syntax, it is a practical one about how to tackle real information modeling issues." —Chris Loosley, *Database Review*

"lots of extremely useful advice. . . . a solid, practical approach for modeling data and designing relational databases." —Karen Watterson, *Data Based Advisor*

About the Author



Thomas A. Bruce, a former senior systems engineer and VP with Bank of America, is a principal of T.A.B.S.E.T., a consulting and training firm based in Berkeley, California. For more than twenty years, he has been involved with all aspects of information systems development.

Partial Contents

PART ONE

- 1 DATABASE INTRODUCTION
- 2 CONTEXT FOR INFORMATION MODELING
- 3 INFORMATION MODELING BASICS

PART TWO

- 4 IDEF1X OVERVIEW
- 5 NAMES AND DEFINITIONS
- 6 ENTITIES, ATTRIBUTES, AND RELATIONSHIPS
- 7 GENERALIZATION
- 8 EDGE OF THE LANGUAGE
- 9 NORMALIZATION AND BUSINESS RULES
- 10 REVERSE ENGINEERING
- 11 FUTURE DIRECTIONS
- 12 OBJECTS AND DMT/2

PART THREE

- 13 MARKET BUSINESS MODEL
- 14 MARKET KEY BASED MODEL
- 15 MARKET DATABASE

APPENDICES

- APPENDIX A:
ZACHMAN'S FRAMEWORK
- APPENDIX B:
DATA ADMINISTRATION
- APPENDIX C:
INFORMATION MODELING SESSIONS
- APPENDIX D:
IRD RULE SUMMARY
- APPENDIX E:
COMMERCIAL PRODUCT SUPPORT FOR IDEF1X
- APPENDIX F:
CASE STUDY SUPPLEMENTARY MATERIALS
- APPENDIX G:
IBM'S REPOSITORY MODELING LANGUAGE

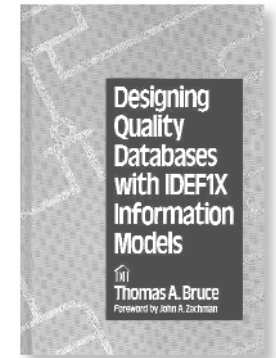
GLOSSARY

INDEX

Designing Quality Databases

with IDEF1X Information Models

by Thomas A. Bruce
foreword by John A. Zachman



ISBN: 978-0-932633-18-7
©1992 584 pages hardcover
\$63.95 (includes \$6 UPS in US)

The Quintessential Book on Information Modeling and Database Design

This comprehensive text shows how to use IDEF1X information models to specify business information requirements, policies, and rules, and describes how to use these specifications to design and build high-quality database applications.

Using IDEF1X, a language for describing information structures, Thomas A. Bruce provides a clear and practical text that teaches the reader to think about complex data and business rules without being concerned about the particular characteristics of the database management system that will be used for implementation. The text addresses both those who want to know the *why* and those who want to know the *how* of data-driven design.

Intended for use by managers, systems professionals, and students,

the text is divided into three parts: **Part One** presents the general concepts behind databases, information management, and information modeling in the context of Zachman's Framework for Information Systems Architecture. **Part Two** fully describes the symbols and semantics of IDEF1X, and speculates about the future of information modeling as well as the evolution of the IDEF1X language to support object-oriented and rule-based systems development. **Part Three** provides an extensive case study of a California produce market, employing the concepts introduced in the book.

Chapter-end exercises and references, eight appendices, a glossary, an index, and more than 300 figures and tables complete the text.

Read more about this book at
www.dorsethouse.com/books/dqd.html