Data Modeling Made Simple with PowerDesigner

Data Modeling Made Simple with PowerDesigner will provide the business or IT professional with a practical working knowledge of data modeling concepts and best practices, and how to apply these principles with PowerDesigner. You'll build many PowerDesigner data models along the way, increasing your skills first with the fundamentals and later with more advanced feature of PowerDesigner. This book combines real-world experience and best practices to help you master the following ten objectives:

This book has ten key objectives for you, the reader:
1. You will know when a data model is needed and which PowerDesigner models are the most appropriate for each situation
2. You will be able to read a data model of any size and complexity with the same confidence as reading a book
3. You will know when to apply and how to make use of all the key features of PowerDesigner
4. You will be able to build, step-by-step in PowerDesigner, a pyramid of linked data models, including a conceptual data model, a fully normalized relational data model, a physical data model, and an easily navigable dimensional model
5. You will be able to apply techniques such as indexing, transforms, and forward engineering to turn a logical data model into an efficient physical design
6. You will improve data governance and modeling consistency within your organization by leveraging features such as PowerDesigner's reference models, Glossary, domains, and model comparison and model mapping techniques
7. You will know how to utilize dependencies and traceability links to assess the impact of change
8. You will know how to integrate your PowerDesigner models with externally-managed files, including the import and export of data using Excel and Requirements documents
9. You will know where you can take advantage of the entire PowerDesigner model set, to increase the success rate of corporate-wide initiatives such as business intelligence and enterprise resource planning (ERP)
10. You will understand the key differentiators between PowerDesigner and other data modeling tools.

This book contains seven sections:
• Section I introduces data modeling, along with its purpose and variations.
• Section II explains all of the components on a data model including entities, data elements, relationships, and keys. Also included is a discussion of the importance of quality names and definitions for your objects.
• Section III explains the important role of data modeling tools, the key features required of any data modeling tool, and an introduction to the essential features of PowerDesigner.
• Section IV introduces the Data Model Pyramid, then dives into the relational and dimensional subject areas, logical, and physical data models, and describes how PowerDesigner supports these models and the connections between them.
• Section V guides you through the creation of your own Data Model Pyramid.
• Section VI focuses on additional PowerDesigner features (some of which have already been introduced) that make life easier for data modelers. Section VII discusses PowerDesigner topics beyond data modeling, including the XML physical model and the other types of model available in PowerDesigner.