Contents

Preface xi
Credits xvii

PART I IMPOSSIBLE MANAGEMENT SITUATIONS 1

Chapter One Management Issues 3
  Overview 3
  The Data Warehouse Has a Record of Failure 5
  IT Is Unresponsive 9
  Management Constantly Changes 11
  IT Is the Assassin 14
  The Pilot Must Be Perfect 16
  User Departments Don’t Want to Share Data 19
  Senior Management Doesn’t Know What the Data Warehouse Team Does 22

Chapter Two Changing Requirements and Objectives 27
  Overview 27
  The Operational System Is Changing 29
  The Source System Constantly Changes 32
  The Data Warehouse Vision Has Become Blurred 37
  The Objectives Are Misunderstood 40
  The Prototype Becomes Production 43
  Management Doesn’t Recognize the Success of the Data Warehouse Project 48

Chapter Three Justification and Budget 51
  Overview 51
  User Productivity Justification Is Not Allowed 53
  How Can the Company Identify Infrastructure Benefits? 57
  Does a Retailer Need a Data Warehouse? 59
How Can Costs Be Allocated Fairly? 62
Historical Data Must Be Justified 66
No Money Exists for a Prototype 69

Chapter Four  Organization and Staffing 75
Overview 75
To Whom Should the Data Warehouse Team Report? 78
The Organization Uses Matrix Management 81
The Project Has No Consistent Business Sponsor 85
Should a Line of Business Build Its Own Data Mart? 88
The Project Has No Dedicated Staff 93
The Project Manager Has Baggage 99
No One Wants to Work for the Company 102
The Organization Is Not Ready for a Data Warehouse 104

Chapter Five  User Issues 109
Overview 109
The Users Want It Now 112
The Business Does Not Support the Project 116
Web-Based Implementation Doesn't Impress the Users 119
Management Rejects Multidimensional Tools as Being Too Complex 121
The Users Have High Data Quality Expectations 123
The Users Don't Know What They Want 127

Chapter Six  Team Issues 131
Overview 131
A Heat-Seeking Employee Threatens the Project 134
Management Assigned Dysfunctional Team Members to the Data Warehouse Project 137
Management Requires Team Consensus 141
Prima Donnas on the Team Create Dissension 144
Team Members Aren't Honest about Progress on Assignments 147
A Consultant Offers to Come to the Rescue 150
The Consultants Are Running the Show 153
The Contractors Have Fled 157
Knowledge Transfer Is Not Happening 161
How Can Data Warehouse Managers Best Use Consultants? 165
Management Wants to Outsource the Data Warehouse Activities 171
Chapter Seven  Project Planning and Scheduling  175
  Overview  175
  Management Requires Substantiation of Estimates  177
  IT Management Sets Unrealistic Deadlines  180
  The Sponsor Changes the Scope But Doesn’t Want to Change the Schedule  184
  The Users Want the First Data Warehouse Delivery to Include Everything  188
  The Project Manager Severely Underestimates the Schedule  192

PART II  IMPOSSIBLE TECHNICAL SITUATIONS  197

Chapter Eight  Data Warehouse Standards  199
  Overview  199
  The Organization Has No Experience with Methodologies  200
  Database Administration Standards Are Inappropriate for the Data Warehouse  202
  The Employees Misuse Data Warehouse Terminology  206
  It’s All Data Mining  210
  A Multinational Company Needs to Build a Business Intelligence Environment  212

Chapter Nine  Tools and Vendors  217
  Overview  217
  What Are the Best Practices for Writing a Request for Proposals?  218
  The Users Don’t Like the Query and Reporting Tool  220
  OO Is the Answer (But What’s the Question?)  223
  IT Has Already Chosen the Tool  225
  Will the Tools Perform Well?  228
  The Vendor Has Undue Influence  231
  The Rejected Vendor Doesn’t Understand “No”  233
  TheVendor’s Acquiring Company Provides Poor Support  235

Chapter Ten  Security  239
  Overview  239
  The Data Warehouse Has No Security Plan  241
  Responsibility for Security Must Be Established  243
  Where Should a New Security Administrator Start?  245
Chapter Eleven  Data Quality  249
  Overview  249
  How Should Sampling Be Applied to Data Quality?  251
  Redundant Data Needs to Be Eliminated  256
  Management Underestimated the Amount of Dirty Data  259
  Management Doesn't Recognize the Value of Data Quality  263
  The Data Warehouse Architect Is Obsessed with Data Quality  266
  The ETL Process Partially Fails  269
  Source Data Errors Cause Massive Updates  272

Chapter Twelve  Integration  275
  Overview  275
  Multiple Source Systems Require Major Data Integration  276
  The Enterprise Model Is Delaying Progress  281
  Should a Company Decentralize?  287
  The Business Sponsor Wants Real-Time Customer Updates  289
  The Company Doesn't Want Stovepipe Systems  292
  Reports from the Data Warehouse and Operational Systems Don't Match  297
  Should the Data Warehouse Team Fix an Inadequate Operational System?  299

Chapter Thirteen  Data Warehouse Architecture  303
  Overview  303
  The Data Warehouse Architecture Is Inadequate  305
  Stovepipes Are Impeding Integration  309
  Should Backdated Transactions Change Values in the Data Warehouse?  318
  A Click-Stream Data Warehouse Will Be Huge  319
  Time-Variant Analysis Requires Special Designs  320
  Management Wants to Develop a Data Warehouse Simultaneously with a New Operational System  321
  The Data Warehouse Gets Assigned the Role of a Reporting System  325
  Meta Data Needs to Be Integrated Across Multiple Products  326
  How Can UPC Code Changes Be Reconciled?  330

Chapter Fourteen  Performance  333
  Overview  333
  The Software Does Not Perform Properly  334
The Data Warehouse Grows Faster Than the Source Data  336
Loading the Fact Table Takes Too Long  340

Appendix A  Data Warehouse Glossary  345
Appendix B  Colloquialism Glossary  369
Bibliography  383
Experts’ Bios  391
Index  397