# Business Analytics for Managers

# **Second Edition**

Taking Business Intelligence Beyond Reporting

Gert H. N. Laursen Jesper Thorlund

WILEY

# **Contents**

#### Foreword xi

#### Introduction xiii

What Is the Scope of Business Analytics? Information
Systems—Not Technical Solutions xvii
Purpose and Audience xix
Organization of Chapters xxiii
Why the Term Business Analytics? xxiv

## Chapter 1 The Business Analytics Model 1

Overview of the Business Analytics Model 2

Strategy Creation 4

Business Processes and Information Use 4

Types of Reporting and Analytical Processes 5

Data Warehouse 5

Data Sources: IT Operations and Development 5

Deployment of the Business Analytics Model

Case Study: How to Make an Information Strategy

for a Radio Station 6

Summary 13

# Chapter 2 Business Analytics at the Strategic Level 17 Link between Strategy and the Deployment of Business Analytics 19

Strategy and Business Analytics: Four Scenarios 20 Scenario 1: No Formal Link between Strategy

and Business Analytics 22

Scenario 2: Business Analytics Supports Strategy at a Functional Level 24

Scenario 3: Dialogue between the Strategy and the Business Analytics Functions 28

Scenario 4: Information as a Strategic Resource 30

Which Information Do We Prioritize? 32

The Product and Innovation Perspective 34

Customer Relations Perspective 38

The Operational Excellence Perspective 42

Summary 44

Specifi	Development and Deployment of Information at the Functional Level 47 dy: A Trip to the Summerhouse 50 cation of Requirements 51
Off We	cal Support 52 e Go to the Summerhouse 53 nd Lag Information 54
More a	about Lead and Lag Information 57
	ing Business Processes with the Rockart Model 59
Rock	: Establishing New Business Processes with the kart Model 61
	1: Identifying the Objectives 62
	2: Identifying an Operational Strategy 62
	3: Identifying the Critical Success Factors 64
	4: Identifying Lead and Lag Information 66
^	ng Existing Business Processes 72 : Deploying Performance Management
•	ptimize Existing Processes 73
	pt of Performance Management 74
	rocess Should We Start With? 78
	ner Relationship Management Activities 80
	nign Management 84
	ct Development 85
Web L	og Analyses 86
Pricing	3 89
	n Resource Development 91
^	rate Performance Management 93
Financ	
	ory Management 95
	7 Chain Management 95 97
Lean	gue of Ideas with Key Performance Indicators
	he Company's Different Functions 99
Summar	
	•
Chapter 4	Business Analytics at the Analytical Level 103 ormation, and Knowledge 106
	Role in the Business Analytics Model 107
	equirements the Analyst Must Meet 109
	ess Competencies 110
	it Must Be in Order (Method Competencies) 111
	cal Understanding (Data Competencies) 112
	Competencies for the Analyst 113

Analytical Methods (Information Domains) 113 How to Select the Analytical Method 114 The Three Imperatives 116 Descriptive Statistical Methods, Lists, and Reports 122 Hypothesis-Driven Methods 129 Tests with Several Input Variables 130 Data Mining with Target Variables 133 Data Mining Algorithms 139 Explorative Methods 140 Data Reduction 141 Cluster Analysis 141 Cross-Sell Models 142 Up-Sell Models 143 Business Requirements 143 Definition of the Overall Problem 144 Definition of Content 145 Summary 147
Chapter 5 Business Analytics at the Data Warehouse
Level 149 Why a Data Warehouse? 151 Architecture and Processes in a Data Warehouse 154 Selection of Certain Columns To Be Loaded 156 Staging Area and Operational Data Stores 158 Causes and Effects of Poor Data Quality 159 The Data Warehouse: Functions, Components, and Examples 162 Alternative Ways of Storing Data 170 Business Analytics Portal: Functions and Examples 171 Tips and Techniques in Data Warehousing 175 Master Data Management 175 Service-Oriented Architecture 176 How Should Data Be Accessed? 177 Access to Business Analytics Portals 178 Access to Data Mart Areas 180 Access to Data Warehouse Areas 181 Access to Source Systems 182 Summary 183
Chapter 6 The Company's Collection of Source Data 185
What Are Source Systems, and What Can They Be Used For? 187
Which Information Is Best to Use for Which Task? 192

When There Is More Than One Way to Get the Job Done	194
When the Quality of Source Data Fails 197	
Summary 198	

## Chapter 7 Structuring of a Business Analytics Competency Center 199

What Is a Business Analytics Competency Center? 201 Why Set Up a Business Analytics Competency Center? 202 Tasks and Competencies 203

Establishing an Information Wheel 203 Creating Synergies between Information Wheels 205 Educating Users 207

Prioritizing New Business Analytics Initiatives 208 Competencies 208

Centralized or Decentralized Organization 208 Strategy and Performance 210

When the Analysts Report to the IT Department 213

When Should a Business Analytics Competency Center Be Established? 215

Applying the Analytical Factory Approach 217 Summary 219

# Chapter 8 Assessment and Prioritization of Business Analytics Projects 221

Is It a Strategic Project or Not? 222

Uncovering the Value Creation of the Project 224

When Projects Run Over Several Years 230

When the Uncertainty Is Too Big 232

The Descriptive Part of the Cost/Benefit Analysis for the Business Case 233

The Cost/Benefit Analysis Used for the Business Case 235

Projects as Part of the Bigger Picture 235

Case Study on How to Make an Information

Strategy Roadmap 240 Summary 243

### Chapter 9 Business Analytics in the Future 247

#### About the Authors 255

#### Index 257