

Business Intelligence Strategy and Big Data Analytics

A General Management Perspective

Steve Williams

AMSTERDAM • BOSTON • HEIDELBERG • LONDON
NEW YORK • OXFORD • PARIS • SAN DIEGO
SAN FRANCISCO • SINGAPORE • SYDNEY • TOKYO

Morgan Kaufmann is an imprint of Elsevier

About the Author	ix
Foreword	xi
Acknowledgments	xv
Introduction	xvii
Chapter 1 The Personal Face of Business Intelligence	1
1.1 BI Case Study Setting	1
1.2 BBF BI Opportunities	2
1.3 The BBF BI Vision and BI Opportunity Portfolio & Business Case	15
1.4 Generalizing From the BBF Case—BI Applications for Manufacturers	20
1.5 Lessons Learned for BI Strategy—BBF BI Progress	23
1.6 Questions to Consider for Your Company or Function	25
Chapter 2 Business Intelligence in the Era of Big Data and Cognitive Business	27
2.1 Getting Clear About Terminology—Business Definitions of Business Intelligence and Related Terms	28
2.2 The Hype Around BI, Big Data, Analytics, and Cognitive Business	30
2.3 A Business View of Big Data	33
2.4 A Business View of Cognitive Business	35
2.5 BI and Analytics—Is There a Difference?	37
2.6 Beyond the Hype—What BI Success Looks Like	39
2.7 Summary—Industry Views of BI Success	47
2.8 Recap of Some Key Points	49
Chapter 3 The Strategic Importance of Business Intelligence	51
3.1 A Business View of BI	52
3.2 How BI Enhances Business Processes and Business Performance	56
3.3 The Strategic Importance of BI	62

3.4	Skill Development Opportunity: The Strategic Importance of BI	66
3.5	Summary of Some Key Points	67
Chapter 4	BI Opportunity Analysis	69
4.1	BI Opportunity Analysis Provides the Economic Rationale for BI	69
4.2	Top-Down BI Opportunity Analysis	72
4.3	Using Strategy Maps to Discover BIOs	75
4.4	Using Structured Interviews to Discover BIOs	78
4.5	Factoring in Big Data and Cognitive Business Opportunities	79
4.6	Documenting BIOs	82
4.7	Skill Improvement Opportunity: Discovering BIOs and Mapping to BI Styles	83
4.8	Summary of Some Key Points	85
Chapter 5	Prioritizing BI Opportunities (BIOs)	87
5.1	BI Portfolio Planning and the BI Portfolio Map	87
5.2	Factors to Consider When Prioritizing BIOs	90
5.3	Approaches to Prioritizing BIOs	91
5.4	Skill Development Opportunity: Develop and Justify a BI Portfolio Map	95
5.5	Summary of Some Key Points	98
Chapter 6	Leveraging BI for Performance Management, Process Improvement, and Decision Support	99
6.1	BI as a Key Enabler of BPM	100
6.2	BI as a Key Enabler of Business Process Improvement	119
6.3	BI as a Key Enabler of High-Impact Business Decisions	141
6.4	Skill Development Opportunity	147
6.5	Summary of Some Key Points	149
Chapter 7	Meeting the Challenges of Enterprise BI	151
7.1	A General Management View About BI Success	152
7.2	Challenges for BI Success	161
7.3	Organizational Design for BI Success	175
7.4	Skill Development Opportunity: Assess BI Challenges, Risks, and Barriers	182
7.5	Summary of Some Key Points	183

Chapter 8 General Management Perspectives on Technical Topics	185
8.1 The Technical Landscape for BI Program Execution	185
8.2 Technical Infrastructure for BI	189
8.3 Data Infrastructure for BI	199
8.4 BI and the Cloud	205
8.5 Summary	208
Bibliography	209
Index	211