

Contents

1 Challenges in a VUCA World	1
1.1 Globalization	4
1.2 Speed	6
1.3 Digitalization	11
1.4 Complexity	16
Cybernetics	17
First-Order and Second-Order Control	20
Dealing with Complexity	20
1.5 Strategy Execution in the Real World	21
Strategy Barrier	26
Management Barrier	27
IT Barrier	29
References	32
2 The Strategic Alignment Process	37
2.1 Business Perspective	40
Stakeholder Management	40
Performance Management	41
Conflicting Objectives	41
Cooperation Management	42
Management Control	42
2.2 IT Perspective	44
2.3 Tracking KPIs and the Need for Business Intelligence	46
2.4 Management Tools	51
Management by Objectives	52
Analytics and Machine Learning	54
Business Intelligence	60
2.5 Strategic Alignment Remote Control	63
References	66
3 Preparation for Strategy Execution	69
3.1 Strategy Formulation	69
Functions and Attributes of Strategy	75
Emergent Strategies	78

3.2	Definition of KPIs	79
	Balanced Scorecard	81
	Value Scorecard	82
	Use of KPIs for Strategy Execution	88
	Effective Use of KPIs	95
	Problems with KPIs	97
3.3	Tracking KPIs	99
	Value of Information	99
	Planning and Alignment	108
	Business Intelligence	109
	References	123
4	Strategy Execution	127
4.1	Analyze	127
	Past Analytics for Continuous Learning	129
	Current Analytics for Strategy Alignment	132
	Future Analytics for Strategy Creation	134
4.2	Decide	136
4.3	Act	143
	References	146
5	Outlook	147
5.1	Innovation Adoption	148
	Business Intelligence Maturity	152
	Business Intelligence Return on Investment	153
5.2	Limitations to Analytics	154
5.3	Performance Culture	155
5.4	What Next?	158
	References	160
6	Business Intelligence in Practice	163
6.1	Reporting with Excel	164
	Pareto Chart	165
	Boston Consulting Matrix	169
	PivotTable	172
	Slicers and PivotChart	181
6.2	Visualizations with Excel	185
	Data Bars	187
	Highlight Extreme Values	188
	Unique and Duplicate Values	189
	Rules for Subset of Cells	190
	Color Scales and Icons	190
	Formulas	193
	PivotTables	197

6.3	ETL with Excel	198
	Extract and Transform Customer Data	198
	Extract and Transform Sales Data	202
	Load the Data	205
	Analyze the Data	209
	Update of Data	213
6.4	Dashboarding with Excel	215
	PivotTable	216
	PivotChart and Slicer	220
	Design the Dashboard	226
6.5	ETL with Power BI Desktop	234
	Installation and Configuration of Power BI	235
	Extract Customer and Sales Data	237
	Save Power BI Desktop File	238
	Transform the Data	238
	Load the Data	238
	Maintain Relationships	241
	Analyze the Data	242
6.6	Data Modeling with Power BI Desktop	243
	Extract Database Tables	244
	Transform the Data	244
	Analyze the Data	253
6.7	Visualizing with Power BI Desktop	265
	Slicer	266
	Format Visuals	267
	Combination Chart	267
	Map	269
	Scatter Chart	271
	Conditional Formatting	274
	Page Layout	274
6.8	Artificial Intelligence and More	277
	References	279