



Contents

	Foreword	xi
	Preface	xiii
Part One	Introduction to Agile Modeling	1
Chapter 1	Introduction	3
	Enter Agile Software Development	6
	Agile Modeling	8
	The SWA Online Case Study	17
	A Brief Overview of this Book	18
Chapter 2	Agile Modeling Values	19
	Communication	20
	Simplicity	21
	Feedback	22
	Courage	23
	Humility	25
	Beyond Motherhood and Apple Pie	26

Chapter 3	Core Principles	27
	Software Is Your Primary Goal	28
	Enabling the Next Effort Is Your Secondary Goal	28
	Travel Light	29
	Assume Simplicity	29
	Embrace Change	30
	Incremental Change	31
	Model with a Purpose	31
	Multiple Models	32
	Quality Work	34
	Rapid Feedback	35
	Maximize Stakeholder Investment	37
	Why Core Principles?	37
Chapter 4	Supplementary Principles	38
	Content Is More Important Than Representation	38
	Everyone Can Learn from Everyone Else	41
	Know Your Models	41
	Local Adaptation	42
	Open and Honest Communication	42
	Work with People's Instincts	42
	Benefiting from These Principles	43
Chapter 5	Core Practices	44
	Practices for Iterative and Incremental Modeling	45
	Practices for Effective Teamwork	52
	Practices That Enable Simplicity	56
	Practices for Validating Your Work	58
Chapter 6	Supplementary Practices	60
	Practices to Improve Your Productivity	61
	Practices for Agile Documentation	64
	Practices Concerning Your Motivation	68
	Really Good Ideas	71
	How to Schedule AM Practices on Your Project	72
Chapter 7	Order from Chaos: How the AM Practices Fit Together	73
	The Core Practices	73
	The Supplementary Practices	76
	How the Categories Relate to One Another	77

	Chaos and Order: Chaordic	79
	Looking Ahead	80
Part Two	Agile Modeling in Practice	81
Chapter 8	Communication	83
	How Do We Communicate?	84
	Factors That Affect Communication	85
	Communication and Agile Modeling	86
	Effective Communication	87
Chapter 9	Nurturing an Agile Culture	89
	Overcome the Misconceptions That Surround Modeling	89
	Think Small	95
	Loosen Up a Bit	96
	Rigidly Support Rights and Responsibilities	97
	Rethink Presentations to Project Stakeholders	98
Chapter 10	Using the Simplest Tools Possible?	101
	Agile Modeling with Simple Tools?	102
	The Evolution of a Model	107
	Agile Modeling with CASE Tools	111
	Use the Media	115
	The Effect of Tools on Models	116
	Using the Simplest Tools In Practice	117
Chapter 11	Agile Work Areas	118
	Agile Modeling Room	118
	Effective Work Areas	122
	Making This Work in the Real World	122
Chapter 12	Agile Modeling Teams	124
	Recruit a Few Good Developers	124
	Recognize That There Is No "I" in Agile	128
	Require that Everyone Actively Participates	130
	Model in Teams	130
	Making This Work in the Real World	132
Chapter 13	Agile Modeling Sessions	134
	Modeling Session Duration	134
	Types of Modeling Sessions	136

	Participants in Modeling Sessions	138
	The Formality of Modeling Sessions	140
	How to Make This Work in the Real World	142
Chapter 14	Agile Documentation	143
	Why Do People Document?	144
	When Does a Model Become Permanent?	147
Chapter 15	The UML and Beyond	168
	The UML Is Not Sufficient	169
	The UML Is Too Complex	171
	The UML Is Not a Methodology or Process	171
	Forget about Executable UML (for Now)	172
	Making the UML Work in Practice	173
Part Three	Agile Modeling and eXtreme Programming (XP)	175
Chapter 16	Setting the Record Straight	177
	Modeling Is a Part of XP	178
	Documentation Happens	179
	XP and the UML?	181
	And the Verdict Is?	183
Chapter 17	Agile Modeling and eXtreme Programming	184
	The Potential Fit between AM and XP	185
	Refactoring and AM	185
	Test-First Development and AM	188
	Which AM Practices Should You Adopt?	189
Chapter 18	Agile Modeling Throughout the XP Lifecycle	190
	Exploration Phase	191
	Planning Phase	192
	Iterations to Release Phase	194
	Productionizing	196
	Maintenance	197
	How Do You Make This Work?	198
Chapter 19	Modeling During the XP Exploration Phase	199
	Initial Requirements Up Front (IRUF)	199
	Metaphors, Architectures, and Spikes	203
	Setting the Foundation for Your Project	206

Chapter 20	Modeling During an XP Iteration: Searching for Items	207
	The Task	208
	Modeling the Physical Database Schema	209
	Observations	212
Chapter 21	Modeling During an XP Iteration: Totaling an Order	214
	The Task	214
	Requirements Modeling to the Rescue	215
	Help from an Outside Expert	217
	A Quick Design Session	218
	Formalizing a Contract Model	220
	What about Changes in the Future?	220
	Observations	222
	How to Make This Work in the Real World	222
Part Four	Agile Modeling and the Unified Process	223
Chapter 22	Agile Modeling and the Unified Process	225
	How Modeling Works in the Unified Process	226
	How Good Is the Fit?	227
	Choose To Be Agile	231
Chapter 23	Agile Modeling throughout the Unified Process Lifecycle	232
	The Modeling Disciplines	232
	Non-Modeling Disciplines	242
	How Do You Make This Work?	245
Chapter 24	Agile Business Modeling	246
	A Business/Essential Use Case Model	247
	A Simple Business Object Model	248
	An Agile Supplementary Business Specification	249
	A Business Vision	252
	How to Make This Work in Practice	253
Chapter 25	Agile Requirements	254
	The Context Model	255
	Use Case Model	258
	Use Case Story Board	262
	Supplementary Specification	265
	How to Make This Work in Practice	267

Chapter 26	Agile Analysis and Design	269
	Rethinking Analysis and Design Models in the UP	270
	Architectural Modeling	272
	Creating Use Case Realizations	277
	Time to Update Our Use Case?	281
	Time to Use a CASE Tool?	284
	Design Class Modeling	284
	Data Modeling	287
	Embracing Change	290
	How Does This Work in Practice?	291
Chapter 27	Agile Infrastructure Management	292
	Infrastructure Models	293
	Infrastructure Modeling	294
	Setting Modeling Standards and Guidelines	297
	Core Infrastructure Teams	299
	Scaling AM with Core Architecture Teams	301
	How to Make This Work in the Real World	302
Chapter 28	Adopting AM on an UP Project	304
	How Does This Work?	308
Part Five	Looking Ahead	309
Chapter 29	Adopting Agile Modeling or Overcoming Adversity	311
	Evaluate the Fit	312
	Keep It Simple	315
	Overcome Organizational and Cultural Challenges	316
	Consider Alternatives to Full Adoption of AM	324
	How to Make This Work in Practice	324
Chapter 30	Conclusion: Choose to Succeed	325
	Common Misconceptions Regarding Agile Modeling	325
	When Is(n't) it Agile Modeling?	326
	Agile Modeling Resources	328
	A Few Parting Thoughts . . .	329
Appendix A	Modeling Techniques	330
	Glossary of Definitions and Abbreviations	358
	References and Suggested Reading	369
	Index	375