

Preface.....	11
How This Book is Organized	17
Introduction.....	23
What is AI All About?	30
Autonomous Marketing.....	31
Key Terms	33
Myths and Misconceptions	36
Chapter Summary.....	37
How Does Marketing Software Use AI?	39
Giving Your Company an Edge	41
<i>Competitive Intelligence</i>	41
<i>Predictive Pricing</i>	44
<i>Ads Strategy</i>	46
<i>E-commerce and Omni-channel</i>	48
<i>Business Anomaly Detection</i>	50
<i>Contracts and Legal Agreements</i>	51
Content Marketing	51
<i>Content Strategy</i>	52
<i>Content Creation</i>	54
<i>Content Curation</i>	57
<i>Content Repurposing</i>	58
<i>Report Generation</i>	59
<i>Public Speaking</i>	59
Lead and Customer Acquisition	60
<i>Sales Prospecting</i>	61
<i>Conversion Ratio Optimization</i>	62
<i>Attribution Modeling</i>	65
Customer Relationships	67

<i>Email Marketing</i>	67
<i>Social Media</i>	70
<i>Chatbots</i>	73
<i>Customer Service</i>	78
<i>Contact Enrichment</i>	79
Knowing Your Customer	80
<i>Customer Sentiment</i>	81
<i>Churn Prediction and Customer Retention</i>	83
<i>Predictive Lead Scoring</i>	85
Mass-Marketing and the Segment of One	87
<i>Segmentation</i>	87
<i>Predictive Content and Personalization</i>	88
<i>Recommendation Engines</i>	91
<i>Audience Management</i>	93
<i>The Customer Journey</i>	93
<i>Cognitive Systems</i>	95
<i>Chapter Summary</i>	97
Build Your Own AI	99
Use AI to Trigger Marketing Campaigns	101
Use AI in Software or Service Businesses	102
Use AI in Physical Products	104
The Structure of a Machine Learning System.....	106
Chapter Summary.....	107
Big Data	109
What is Big Data?	111
Data is the New Currency.....	113
Democratization of Supercomputing	113
Hadoop.....	114
Data Scientists	115
Chapter Summary.....	115
Predictive Analytics and Machine Learning	117
Types of Models.....	120
Types of Learning	121
Work Process	122
Bias	125
Chapter Summary.....	126

AI Algorithms.....	127
Data Science and Technical Terms	130
Regression.....	133
<i>Simple Linear Regression</i>	133
<i>Multiple Linear Regression</i>	135
<i>Logistic Regression</i>	137
Classification.....	138
<i>Decision Trees</i>	138
<i>K-Nearest Neighbor</i>	141
<i>Naïve Bayes</i>	142
<i>Neural Networks</i>	143
Clustering	146
<i>K-Means</i>	146
<i>DBSCAN</i>	148
<i>Agglomerative Hierarchical Clustering</i>	150
Chapter Summary.....	151
Putting your AI to Work.....	153
Making Predictions	155
Changing Conditions Require Retraining	156
Continuous Retraining.....	157
Hardware Accelerated and Distributed AI	157
Chapter Summary.....	160
How Will AI Affect My Business?	161
Will AI Replace My Marketing Job?.....	163
<i>How to Position Yourself</i>	166
Will AI Disrupt My Company or Industry?	167
Chapter Summary.....	170
What's Next in Marketing After AI?	171
The Internet-of-Things	173
<i>Marketing Insights from Machine-Generated Data</i>	173
<i>Machines Becoming Customers</i>	175
<i>How do You Market to a Machine?</i>	176
<i>Let Marketing Data Control Machines</i>	177
Blockchain	178
<i>A Trusted Ledger of Transactions</i>	178
<i>How Does Blockchain Apply to Marketing?</i>	179

Chapter Summary.....	180
Changes to the Society	181
Ethics.....	183
Legal Matters and Explainable AI.....	185
AI Apocalypse?	187
Chapter Summary.....	188
Final Thoughts	189
Please Review This Book	193
Appendix 1: Traditional Data-Driven Marketing	197
Key Marketing Metrics	199
<i>Sales Indictors</i>	199
<i>Churn</i>	200
<i>Customer Lifetime Value</i>	200
<i>Internet Marketing and e-commerce</i>	201
<i>Predicting Customer Choice</i>	202
Marketing Automation	203
<i>Segmenting</i>	205
<i>Behavior Tracking</i>	205
<i>Automated Workflows</i>	207
<i>Integrating Data from Other Systems</i>	208
<i>Using External Data</i>	209
Appendix 2: Vendor Interviews	211
Albert.....	213
Bookmark	214
Conversica	215
Cortex.....	215
Crayon	216
Crimson Hexagon.....	217
Crobox.....	217
Cubed.ai	218
Dynamic Yield	218
Emarsys.....	219
Ignite	219
Lexalytics	220
MarketMuse.....	220
Motiva	221

Narrative Science	221
Nudge.ai	222
Ometria	222
Outlier.ai	223
Pathmatics	223
Perfect Price	224
Scoop.it.....	224
Sentient Technologies	225
Smart Moderation.....	225
TalkWalker.....	226
Vestorly.....	226
Supercharge Your Projects	229
Feedback and Contacting the Author.....	233
Acknowledgements.....	237