

1	Introduction to Digital Product Management	1
	Sascha Hoffmann	
1.1	Product Management vs. Project Management	1
1.2	Basics of Agile Product Management	5
1.3	Digital Product Development According to Scrum	12
1.4	Digital Product Development with Kanban	22
1.5	Other Agile Methods in Digital Product Management	26
	References	27
2	User-Centered Product Visions	31
	Inken Petersen	
2.1	What is a Product Vision?	31
2.2	Why a Product Vision is Needed	33
2.3	How to Recognize a Good Product Vision	34
2.4	Tools for Creating a Good Product Vision	35
2.4.1	The Vision Statement	35
2.4.2	The Product Vision Board	35
2.4.3	The Product Vision Template	36
2.4.4	The Visiontype	37
2.5	The Vision Workshop	38
2.5.1	The Right Preparation	38
2.5.2	The Workshop	39
2.5.3	After the Workshop	40
2.6	How to Recognize that the Product Vision is Working	41
2.7	A Brief Outlook at the End	42
	References	42

3	Product Strategy—The Foundation of Product Management	45
	Christian Becker	
3.1	Introduction	45
3.2	What is Product Strategy?	46
3.3	The Importance of Product Strategy	47
3.4	The Elements of Product Strategy	48
3.4.1	The Product Playing Field	48
3.4.2	The Starting Point	50
3.4.3	The Future Factors	51
3.4.4	The Goal	52
3.4.5	The Path	54
3.5	The Formation Process of the Product Strategy	54
3.6	The Operationalization of the Product Strategy	57
3.6.1	The Alignment Gap	57
3.6.2	The Effects Gap	58
	References	58
4	Implementing and Validating Product Strategy with Objectives and Key Results (OKR)	59
	Cansel Sörgens	
4.1	What are Objectives and Key Results about?	59
4.2	What Problems does the OKR Framework Solve?	61
4.3	How are Objectives and Key Results Defined?	62
4.3.1	Mid-term Strategic Goal	63
4.3.2	Objective	64
4.3.3	Key Results	66
4.4	The OKR Cycle	68
4.4.1	Workshop for OKR Definition	68
4.4.2	OKR Alignment Workshop	70
4.4.3	Initiative Planning	71
4.4.4	OKR Check-ins	72
4.4.5	Strategy Check-ins	73
4.4.6	OKR Reflection	73
4.4.7	Strategy Review	75
4.4.8	OKR System Reflection	75
4.5	OKR Introduction	76
4.6	OKR Architecture	79
4.6.1	Dynamic Networks Instead of Strict Cascading	79
4.6.2	Types of OKR Teams	80
4.7	Roles in the OKR Process	81
4.7.1	Executives	82
4.7.2	Team Members	82

4.7.3	Internal OKR Agents	83
4.8	Principles of OKR	83
4.8.1	Finding the right balance between Top-down and Bottom-up	83
4.8.2	Do not link OKR with Performance Management.	84
4.8.3	Do not use OKR for Everyone and Everything	84
4.9	Final Thoughts	85
	References.....	85
5	Product Roadmaps	87
	Dominik Busching and Lutz Göcke	
5.1	Classification of Product Roadmaps	87
5.2	Types of Product Roadmaps	88
5.2.1	The “Classic”: The Feature-Based Roadmap.	89
5.2.2	Thinking from the End: Goal-Oriented and Outcome- Driven Roadmaps	89
5.2.3	Packed in Boxes: Theme-Based Roadmaps.....	91
5.3	The Benefits of Product Roadmaps	91
5.4	The Risks of Product Roadmaps	94
5.4.1	Risks for Stakeholder Management.....	94
5.4.2	Risks for Product Development	95
5.5	Success Factors for Product Roadmaps.....	97
5.5.1	Problem Focus Instead of Solution Focus	97
5.5.2	Short Review and Update Cycles.....	98
5.5.3	Avoiding Pseudo-Accuracy and Artificial Deadlines.....	98
5.5.4	Not less, but better Communication.....	99
5.5.5	From Product Strategy and Vision to Roadmap.....	100
5.5.6	Prioritizing Data-driven and Coordinating with Stakeholders.....	100
5.5.7	Different Representations for Different Target Groups	101
5.6	Product Roadmaps for Hardware or IoT Products.....	101
5.6.1	Hardware versus Software Development.....	102
5.6.2	Requirements for Hardware Roadmaps	102
5.6.3	Roadmaps for IoT Products	103
5.7	Conclusion	104
	References.....	104
6	Product Discovery	107
	Philip Steen and Alexander Hipp	
6.1	Goals of Product Discovery	107
6.2	Basic principles of a Product Discovery	110
6.2.1	Outcome Orientation	110
6.2.2	User Centricity and Problem Focus	111

6.2.3	Iterative and Experimental Approach.	111
6.2.4	Interdisciplinarity.	112
6.3	Manifestations of a Product Discovery	113
6.3.1	Project-based Discovery.	113
6.3.2	Continuous Discovery	114
6.4	Frameworks for Structuring a Product Discovery	114
6.4.1	Design Sprint	115
6.4.2	Product Kata.	116
6.4.3	Opportunity Solution Tree	117
6.5	Product Discovery Toolbox	118
6.6	Practical Tips for Implementing a Product Discovery in the Company	120
6.6.1	Consequences of a Focus on Product Delivery	121
6.6.2	Potential Pitfalls in Implementing Product Discovery.	121
6.6.2.1	External Control of Product Teams.	122
6.6.2.2	Output Instead of Outcome.	122
6.6.2.3	No Regular Exchange with the User.	122
	References.	123

7 Validation of Product Ideas in the Market 125

Anna Wicher

7.1	Why Validation?.	125
7.1.1	What Will This Be About?	126
7.1.2	How Long Does Such a Validation Usually Take?.	127
7.1.3	What Kind of Team Do I Need for Validation?	128
7.2	Research—Where do We Start?.	128
7.2.1	Hypotheses—What are We Assuming So Far?	129
7.2.2	Market Analysis and Target Group Definition—What are Our Initial Assumptions Based On?.	130
7.2.3	Qualitative Research—What does the target group say?.	131
7.2.4	Quantitative Validation—How Many Are There?	132
7.2.5	MVP Definition and Resource Requirements—What Do We Need for Testing?.	133
7.2.6	Design vs. Technology—Where is the Focus in Creating an MVP?.	135
7.3	Prototyping—What are We Building Now?.	136
7.3.1	Test Plan & Feature Definition—What Do We Want to Know and What Do We Need For It?.	137
7.3.2	UX and UI—What Should the MVP Look Like?	140
7.3.3	Development—How and with Which Technology Will the MVP Be Implemented?	141
7.3.4	Team—Who is Building This?.	141

7.3.5	Time Estimate—How Long will It Take?	142
7.4	Testing—How Do We Get the Numbers?	143
7.4.1	Launch & Marketing Plan—Who will test the MVP?	143
7.4.2	Pivot—Everything New Again?	144
7.4.3	KPIs & Business Plan—Are We Making Money Now?	145
7.5	And What Happens Next?	145
	References	146
8	Product Delivery	147
	Tim Adler	
8.1	Let's Get Started	147
8.2	What You Need Before You Start.	149
8.2.1	MVP vs. MLP	149
8.2.2	Documenting Features	149
8.2.3	First, Make It “Pretty”—Preparing the Design	149
8.3	Knowing in Advance What It Will Cost.	152
8.3.1	Classic Project Management FTW.	152
8.3.2	An Idea of Team Size.	153
8.3.3	Time and Cost Estimation	153
8.3.4	What to Do If It's Too Expensive or Too Slow?	155
8.4	Setting Up the Toolbox	156
8.4.1	Even More Preparation, Seriously?	156
8.4.2	Choosing a Name.	157
8.4.3	Preparing the Backlog	157
8.4.4	Setting up a Sprint Board	159
8.5	Running a Marathon	161
8.5.1	Choosing Sprint Length	161
8.5.2	Meetings, Meetings, Meetings ... are the Sprint	161
8.5.2.1	Sprint Planning	162
8.5.2.2	Daily Standup	164
8.5.2.3	Sprint Review	166
8.5.2.4	Retrospective.	167
8.5.3	Are We Still on Schedule...?	167
8.5.4	... And If Not, How Do We Get Back “On Plan”?	168
8.6	Little Helpers in Everyday Life	168
8.6.1	Developers Call for “Refactoring!”	168
8.6.2	Customer Support Warns of “Bugs!”	169
8.7	That's It	170
9	Growth	171
	Markus Andrezak	
9.1	Everyone Wants Growth	171
9.2	How Long Does Growth Take?	174

9.2.1	Henry Ford and the Model T	175
9.2.2	The iPhone	176
9.2.3	Digital “Growth Miracles”.	176
9.3	Growth Happens in Two Phases.	178
9.4	Growth Models	181
9.4.1	The Hockey Stick	181
9.4.2	The 3-Horizon Model.	183
9.4.2.1	Horizon 1.	183
9.4.2.2	Horizon 2.	184
9.4.2.3	Horizon 3.	186
9.4.2.4	The Interplay of Horizons.	186
9.5	What Do We Need to Master to Achieve Growth?	187
	References.	188
10	Product Changes	189
	Rainer Gibbert	
10.1	Resistance to Change	189
10.2	Why Changes are Rejected	191
10.2.1	Users (Mostly) Don’t Care About Design	191
10.2.2	Users Love Routines	192
10.2.3	Users Like Familiarity	192
10.2.4	Users Tend Towards the Status Quo.	193
10.2.5	Users Prefer What They Already Own.	193
10.2.6	Users Fear Loss of Control	193
10.3	Creating Acceptance for Change	194
10.3.1	Change Not As an End in Itself	194
10.3.2	Accompanying Changes in a User-Centered Manner	194
10.3.3	Make Changes Testable for Users in Advance.	195
10.3.4	Let Users Choose	196
10.3.5	Prefer Incremental Changes.	197
10.3.6	Communicate Changes and Make Them Appealing	197
10.3.7	Patience and Perseverance	198
10.4	Conclusion	199
	References.	200
11	A/B Testing in Digital Product Management	203
	Sascha Hoffmann	
11.1	Introduction	203
11.2	Basics of Hypothesis Formation	205
11.3	Statistics in A/B Testing.	206
11.4	A/B Testing in Practice	207
	References.	208

12	Product Management Understood Holistically	211
	Patrick Roelofs	
12.1	The Tasks of the Product Manager.	211
12.1.1	Result Dimension 1: User Satisfaction with the Product.	212
12.1.2	Result Dimension 2: Commercial Success of the Product. ...	213
12.2	The Product Manager as a Proactive Relationship Manager	214
12.3	The Product Manager as an Outstanding Communicator	215
12.4	The Product Manager as a “Decision Maker”	216
12.4.1	Clearly Formulated Goals	217
12.4.2	Maximum Transparency (“Connecting the Dots”)	217
12.4.3	Necessary Escalations	218
12.5	The Product Manager as a Supplier of Answers	219
12.6	The Product Manager as a Clear-Thought-Provider	220
	References.	222
13	Product Sense	223
	Robert Schulke and Nikkel Blaase	
13.1	Introduction	223
13.2	What is Product Sense?	224
13.3	The Importance of Product Sense	225
13.4	How Product Sense Can Be Developed	226
13.4.1	Building Empathy	226
13.4.2	Strengthening Product and Domain Knowledge	228
13.4.2.1	Basic Product Knowledge	228
13.4.2.2	Specific Domain Knowledge	229
13.5	Product Sense Quick Start	229
	References.	230
14	Product Leadership.	233
	Tobias Freudenreich	
14.1	Lateral Leadership	235
14.1.1	Lateral Leadership through Communication	235
14.1.2	Lateral Leadership through Power	237
14.1.3	Lateral Leadership through Trust	238
14.1.4	The Interplay of Communication, Power, and Trust	239
14.2	Disciplinary Leadership.	240
14.2.1	Clear Structures	242
14.2.2	A Clear Goal Corridor	242
14.2.3	Competent Product Managers	245
14.2.4	Strong Product Teams	248
14.2.5	Interdisciplinary Leadership.	249
14.2.6	Final Considerations.	252
	References.	252

15 Alignment	255
Arne Kittler	
15.1 Why is Alignment Important in the Context of Modern Product Development?	255
15.1.1 Alignment Creates Trust	256
15.1.2 Alignment Helps to Avoid Waste of Resources	256
15.1.3 Alignment Helps to Make Decisions	257
15.2 Who Should a Product Manager Actively Align With?	258
15.3 In Which Contexts is Alignment Particularly Important?	258
15.4 When Should Systematic Alignment Ideally Take Place?	259
15.5 What Approaches Help in Alignment?	259
15.5.1 The Right Conversation Partners in the Right Order	259
15.5.2 Sensible Constellations and Methods for Active Alignment	260
15.6 Important Questions to Clarify in the Context of Alignment	260
15.6.1 Initial Situation from the User's Perspective	261
15.6.2 Vision from the User's Perspective	261
15.6.3 Hypotheses	261
15.6.4 Input—and Roles	262
15.6.5 Output—and Boundaries	262
15.6.6 Outcome—and Limits	263
15.7 Identify Conflicts and Bring Them to Resolution	263
15.8 Alignment in Practice: “Auftragsklärung” at XING	265
15.8.1 Origin and Development of the Mission Statement	265
15.8.2 Essential Artifacts and Common Practices	265
15.8.3 Introduction, Application and Misunderstandings	267
15.9 Limits of Sensible Alignment	267
References	268
16 Product Evangelizing and Storytelling	269
Petra Wille	
16.1 Why Storytelling is Important in Product Management	269
16.2 Why Our Brains Love Stories	271
16.3 What Stories can Achieve in a Professional Context	273
16.3.1 Elements of a Good Story	273
16.3.2 Stories are the Perfect Design Tool	274
16.4 How to Conceive and Tell Good Stories	275
16.4.1 What Does all This Have to do With Product Management?	275
16.4.2 Overcoming the Fear of the Blank Page	278

16.5	How to Anchor the Message Sustainably	279
16.6	My Conclusion.....	282
	References.....	282
17	Product Owner and Scrum Master	285
	Jan Köster and Florian Meyer	
17.1	More than a Role Model from a Framework	285
17.2	How Good Collaboration Can Succeed	286
17.2.1	Start with Why	287
17.2.2	Shared Visions	288
17.2.3	Trust	289
17.2.4	Agile Principles	290
17.2.5	When do we Stop?	290
17.2.6	Why do you do it that Way?	290
17.2.7	Be Partners	291
17.2.8	Shared Rituals	291
17.2.9	Your PDCA Cycle	292
17.2.10	Leading through Why and Transparency	293
17.2.11	Leading through Attitude	294
17.2.12	Shared Leadership	294
17.3	What's Next?	295
17.4	Learning Teams	296
	References.....	297
18	Understanding User Experience	299
	Inken Petersen	
18.1	The Importance of a Positive User Experience	299
18.2	The Iterative UX Design Process	300
18.3	The Core Disciplines in the User Experience Field	302
18.3.1	The UX Designer	302
18.3.2	The Visual Designer	303
18.3.3	The User Researcher	303
18.4	The Different Types of UX Teams	304
18.4.1	The Classic UX Team	304
18.4.2	The “UX Team of One”	304
18.4.3	The Hybrid “UX & Visual Design Team” with Separate User Research Dimension	305
18.5	The Best Organizational Form	305
18.6	The Right Amount of UX	306
18.7	The Future of UX	307
	References.....	308

19	Data Analytics	309
	Jan Martens	
19.1	Introduction	309
19.2	Roles and Organizations	310
19.3	The Pitfalls	310
19.3.1	The Feel-Good Analysis	310
19.3.2	The Justification Analysis	311
19.3.3	The Symptom Analysis	311
19.3.4	Simple Questions, Complex Answers	312
19.3.5	Overconfidence	313
19.3.6	Narcissism	313
19.3.7	Simply Wrong	314
19.3.8	“Not Significant”	315
19.3.9	Too Demanding	315
19.3.10	Lack of Distance—Sunk Costs	316
19.3.11	Too Little Data	316
19.4	Conclusion	317
20	Product Organizations	319
	Michael Schultheiß, David Gehrke and Lutz Göcke	
20.1	What is a Product Organization?	319
20.2	Five Features of Successful Product Organizations	320
20.3	Structures, Processes, Employees	321
20.3.1	Structure	321
20.3.2	Processes	326
20.3.3	Employees	328
20.4	Product Organization Archetypes	332
20.5	Change and Adaptation Processes	333
20.5.1	Transformation into a Product Organization	334
20.5.2	Transformation Within a Product Organization	334
20.6	Conclusion	335
	References	335
21	Choosing the “Right” Agile Framework for the Company	339
	Stefan Roock	
21.1	Introduction	339
21.2	The Appropriate Framework for the Agile Pilot	341
21.2.1	Scrum vs. Kanban	342
21.2.2	The Thing About Beliefs	342
21.2.3	Agile Approach in Startups vs. Corporations	343

21.3	Agile Work in Entire Product Development	344
21.3.1	Minimize Dependencies.....	344
21.3.2	Managing Dependencies	345
21.3.3	Platforms	347
21.3.4	Caution with Top-Down Standardization.....	348
	21.3.4.1 Resistance from Employees	348
	21.3.4.2 Loss of Agility.....	349
21.3.5	Keep the Tools Away from Me.....	349
21.4	Agile Work throughout the Company	349
21.4.1	Autonomy and Alignment	350
21.4.2	Adaptable Structure	351
	21.4.2.1 Market Contact Through External References ...	352
	21.4.2.2 Company Adaptation with Sociocracy 3.0	353
21.5	Summary	355
	References.....	356