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Christoph Fuchs • Franziska J. Golenhofen

# Mastering Disruption and Innovation in Product Management

Connecting the Dots

 Springer

Christoph Fuchs  
Corporate Development Consulting  
Siemens AG  
Munich, Germany

Franziska J. Golenhofen  
Corporate Development Consulting  
Siemens AG  
Munich, Germany

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## Foreword

The first two decades of the twenty-first century have seen an unprecedented rate of change in our lives, in our economies and in our societies around the world. We are continuously connected to each other via the Internet whose total traffic has increased exponentially from 84 Petabytes per month in 2000 to 96,000 Petabytes per month in 2016, an increase of more than three orders of magnitude. China has become a dominant market and producer at the global scale. A new middle class has risen in Asia and the Middle East, while an ageing population poses major challenges and opportunities in North America, Europe and Japan. Of the top 20 US companies in 1999 in terms of annual revenues, only six of them are still left in the top 20. We truly live in a VUCA (volatile, uncertain, complex and ambiguous) time.

Given this context how can products and services still be successfully developed and sustained? This question is particularly relevant for situations that go beyond pure software solutions and that require complex hardware and physical infrastructure to bring to life.

Refining prior notions of innovation as being either purely disruptive or purely incremental, the authors develop a deeper and more nuanced view of innovation. In particular, the distinction between disruption with or without the same “DNA” is critical in order to understand why many industry leaders have come under great pressure from new entrants in well-established markets.

This book takes a refreshing and holistic approach to this question and explains the challenges of product development in today’s world by “connecting the dots”. There are two particularly unique aspects of the book that stand out:

First, rather than promoting yet another new framework for designing products and services, the authors convincingly link a number of well-known and successful paradigms, many of which only cover a particular aspect of product development when taken in isolation. However, when connecting the dots between them, a clearer and more practical picture emerges.

These approaches include “form follows function” (System Architecture), Design Thinking, Design to Value, Modularization and Agile, amongst others. The authors weave these approaches into a profoundly relevant tapestry for those who want and need to understand how to master disruption and innovation in increasingly turbulent markets.

The second part of the book contains very practical tools and methods for implementing state-of-the-art product development in practice. This part of the book can be read seamlessly or used in an “à la carte” mode where key principles, methods and tools can be recalled as needed while engaged in a new design or redesign project. True to their philosophy of modular and agile thinking, the authors structure the book itself in a way that it is easy to combine different elements together quickly and with an appropriate level of detail.

Second, the authors, Christoph Fuchs and Franziska Golenhofen, have deep experience as functional experts in the field of product innovation and development. Through their work as in-house consultants at Siemens, they have applied these frameworks very successfully in many industries. Through simplified but highly illustrative examples from telecommunication, rail, energy, automotive and medical devices, we learn how dominant players can be severely challenged, almost overnight, in terms of market share and profitability. Rather than sitting back and waiting to be disrupted, this book tells an optimistic story of how Design Thinking and a real and deep focus on understanding customers allow both incumbents and newcomers to be successful by embracing rather than rejecting disruptive innovation.

The reader will find familiar but also many new ideas in this book such as the superposition of long-term disruptive trends with shorter innovation cycles, thereby combining classical models such as the technology S-curve with Christensen’s disruptive innovation concept. Overlapping waves of innovation at different timescales may even be used to predict when major innovations may occur in specific markets.

At the most fundamental level, this book brings order to chaos.

It sets different and highly relevant design approaches into a complementary picture, rather than presenting them as competing ways of solving the same problem. Product designers, managers, consultants, scholars and students will surely have this valuable book within reach on a daily basis.

Professor of Aeronautics and Astronautics  
and Engineering Systems  
Editor-in-Chief Systems Engineering  
Massachusetts Institute of Technology  
Cambridge, MA, USA

Olivier L. de Weck Ph. D.

# Acknowledgement

Appreciate good people. They are hard to come by.

Our deep gratitude, appreciation, recognition and thanks go to all who have helped to shape this book. The whole is truly more than the sum of its parts. This book would not be the same if it were not for the countless inspirational individuals who opened doors, discussed and shared their insights with us.

We can say that writing this book was a demanding and driven project that, also through the passion exuded by others for their respective topics, enriched us with moments where all of a sudden crazy ideas emerged and started shooting off in all directions (see Fig. 1).

Our own growth has evolved due to those who have taken the time and thought to provide critical, constructive feedback and thoughts for discussion to various iterations of this book. It is through their input that we were able to refine, clarify and improve concepts in terms of methodology, structure, content, clarity and ease of



**Fig. 1** When passionate individuals start linking topics, things can get wild

understanding. Here we would like to name and thank Torsten Betz, Christian Bub, Thomas Dehler, Florian Golenhofen, Tobias Lamm, Frank Ibach, Mona Karl, Morten Lange, Sabine Mittrach, Filomena Oliviero, Dirk Petershagen, Christian Schlütter, Alfred Schmidbauer, Georg Scholz, Ralf Spateneder, Burkhard Tolks, Marion Wittman and Peter Zimmer.

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There have been moments that made us smile and also critical open feedback that pushed us to roll up our sleeves and make this book evolve to its current form. We hope that this book and project is a reflection of the growth inducing conversations and collective intelligence we experienced from all of you.

April 2018

Munich, Germany  
April 2018

Dr. Christoph Fuchs  
Franziska J. Golenhofen



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# Contents

<b>1</b>	<b>Introduction</b> . . . . .	1
<b>Part I Imperative and Fundamental Concepts</b>		
<b>2</b>	<b>Disruptive Innovation</b> . . . . .	11
2.1	Introduction . . . . .	11
2.2	Defining Relevant Terminology . . . . .	15
2.3	Complementary Thoughts on Christensen’s Theory of Disruptive Innovation . . . . .	16
2.4	The DNA of Disruptive Change . . . . .	21
2.5	Disruptive Innovation with Different DNA . . . . .	23
2.6	Disruptive Innovation with Same DNA . . . . .	24
2.7	Theory of Disruption Waves or the Modulation of Disruption . . . . .	27
2.8	Benefit of a Unified View on Disruption . . . . .	30
2.9	Relativity of Disruption . . . . .	32
2.10	Typical Warning Signals for Disruptive Threats . . . . .	34
2.11	Summary . . . . .	36
	References . . . . .	37
<b>3</b>	<b>Form Follows Function: Systems Engineering</b> . . . . .	39
3.1	Form Follows Function . . . . .	39
3.2	Function Often Follows Form . . . . .	41
3.3	Defining Concept and Architecture . . . . .	44
3.4	Realizing the Product’s Architecture . . . . .	47
	3.4.1 Architectural Process . . . . .	48
	3.4.2 The System/Product Architect . . . . .	49
	3.4.3 Two Architecture Types: Integral or Modular . . . . .	52
3.5	Summary . . . . .	53
	References . . . . .	55

## Part II Frameworks

<b>4</b>	<b>Market Understanding</b> . . . . .	59
4.1	We Know Our Customers! ... Really? . . . . .	59
4.2	Understanding Your Market . . . . .	63
4.2.1	Market Segmentation for Multiple Business Questions . . . . .	66
4.2.2	Market Segmentation for Multiple Segmentation Criteria . . . . .	67
4.2.3	Identifying a Customers' "Job to Be Done" . . . . .	70
4.3	Differentiating Market Segmentation from Design Thinking . . . . .	73
4.4	How to Do a Market Segmentation . . . . .	75
4.5	Summary . . . . .	75
	References . . . . .	76
<b>5</b>	<b>Creating Customer Value Through Design Thinking</b> . . . . .	77
5.1	Introduction . . . . .	77
5.2	What is Design Thinking? . . . . .	78
5.2.1	Thinking Like a Designer . . . . .	79
5.3	When to Use Design Thinking? . . . . .	81
5.4	What is Comprehensive Understanding? . . . . .	83
5.4.1	Defining Understanding . . . . .	83
5.4.2	The Different Levels of Understanding . . . . .	86
5.5	Phases of Design Thinking . . . . .	88
5.5.1	Empathy for Individuals . . . . .	88
5.5.2	Empathy in the B2B Context . . . . .	93
5.5.3	Define . . . . .	96
5.5.4	Ideation . . . . .	97
5.5.5	Prototyping and Testing . . . . .	98
5.5.6	Scaling . . . . .	100
5.6	Summary . . . . .	101
	References . . . . .	102
<b>6</b>	<b>Design to Value (DTV)</b> . . . . .	103
6.1	Is Value Different from Price? . . . . .	103
6.2	Defining Value in Product Development . . . . .	105
6.3	Lifecycle Cost . . . . .	107
6.4	The Framework . . . . .	109
6.4.1	Essential Toolbox . . . . .	111
6.4.2	Measuring Value . . . . .	112
6.4.3	Design to Value Versus Value Proposition Design . . . . .	116
6.4.4	When to Apply the Framework . . . . .	117
6.5	How to Apply the Framework . . . . .	120
6.6	Summary . . . . .	121
	References . . . . .	122

<b>7</b>	<b>Modular Design and Platforms</b> . . . . .	123
7.1	Introduction . . . . .	123
7.2	What is Modularization? . . . . .	125
7.2.1	What Type of Products May be Modularized? . . . . .	125
7.3	Modularization: A Strategic Lever for Innovation . . . . .	126
7.3.1	Why and How Modular Architectures Enable Disruption . . . . .	128
7.3.2	Why Do Integral Architectures Emerge? . . . . .	129
7.3.3	When Do Products Become Commodities? . . . . .	130
7.3.4	How to Avoid the Commoditization Trap? . . . . .	131
7.4	Platforms . . . . .	132
7.4.1	Core Platform Versus Inclusive Platform . . . . .	132
7.4.2	Three Common Misunderstandings About Platform Design . . . . .	133
7.4.3	The Way to Go: Modular Platforms . . . . .	136
7.5	Terms and Definitions . . . . .	136
7.6	Implementing a Modular Platform . . . . .	139
7.6.1	Organizational Aspects . . . . .	139
7.6.2	Strategic Aspects . . . . .	142
7.7	How to Apply the Framework . . . . .	144
7.8	Summary . . . . .	145
	References . . . . .	145
<b>8</b>	<b>Agile for Mechatronics and Hardware</b> . . . . .	147
8.1	Introduction . . . . .	147
8.2	What Is Agile? . . . . .	148
8.3	Agile Project Management . . . . .	150
8.3.1	Connecting the Dots to Other Frameworks . . . . .	151
8.4	Agile Manifesto for Mechatronics and Hardware . . . . .	152
8.4.1	Differences Between Hardware and Software . . . . .	153
8.4.2	Agile Manifesto Adapted to Mechatronics and Hardware . . . . .	156
8.5	Summary . . . . .	162
	References . . . . .	162

**Part III Framework Tutorials**

<b>9</b>	<b>Framework Tutorials</b> . . . . .	165
9.1	Market Segmentation: Deep Dive . . . . .	165
9.2	Empathy: Skills and Techniques . . . . .	174
9.2.1	Perspective Taking . . . . .	174
9.2.2	Trust . . . . .	176
9.2.3	Deep Dive Empathic Listening . . . . .	177
9.2.4	Interviews and Deeper Conversations . . . . .	179
9.2.5	Observations . . . . .	180

9.3	Design to Value . . . . .	182
9.3.1	Main Steps of the Framework . . . . .	182
9.3.2	Deep Dive and Case Study . . . . .	190
9.4	Modularization . . . . .	200
9.4.1	Main Steps of the Framework . . . . .	200
9.4.2	Deep Dive and Case Study . . . . .	205
	References . . . . .	212

## Part IV Tools

<b>10</b>	<b>Power Tools . . . . .</b>	<b>215</b>
10.1	QFD: Quality Function Deployment . . . . .	215
10.1.1	What Is QFD? . . . . .	215
10.1.2	Why Use QFD? . . . . .	217
10.1.3	How to Do QFD . . . . .	218
10.1.4	Practical Tips and Success Factors . . . . .	221
10.2	DSE: Design Space Exploration, Set-Based Design . . . . .	222
10.2.1	What Is DSE? . . . . .	222
10.2.2	Why Use DSE? . . . . .	223
10.2.3	How to Do DSE . . . . .	224
10.2.4	Practical Tips and Success Factors . . . . .	227
10.3	DSM: Design Structure Matrix . . . . .	227
10.3.1	What is a DSM? . . . . .	227
10.3.2	Why Use a DSM . . . . .	228
10.3.3	How to Develop a DSM . . . . .	228
10.3.4	Practical Tips and Success Factors . . . . .	234
	References . . . . .	234
<b>11</b>	<b>Essential Tool Box . . . . .</b>	<b>237</b>
11.1	Requirement Focus . . . . .	237
11.1.1	Kano Model . . . . .	237
11.1.2	Pair-wise Comparison . . . . .	241
11.1.3	Requirements Management . . . . .	244
11.1.4	Tree Diagram . . . . .	248
11.1.5	Empathy Map . . . . .	251
11.2	Concept Focus . . . . .	253
11.2.1	Functional Modeling . . . . .	253
11.2.2	Morphological Matrix/Morphological Box . . . . .	256
11.2.3	Modular Function Deployment . . . . .	258
11.2.4	Onion Peel Model . . . . .	263
11.2.5	Design for Variety . . . . .	265
11.2.6	Customer Focus Group . . . . .	268
11.2.7	Osborne Checklist . . . . .	272
11.3	Cost Focus . . . . .	272
11.3.1	Target Costing . . . . .	272
11.3.2	Measurement Sheet . . . . .	277

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11.3.3	Lifecycle Cost model . . . . .	279
11.3.4	Complexity Cost Calculation for Product Families . . . .	283
11.3.5	Business Plan . . . . .	287
	References . . . . .	290
	<b>Authors and Contributors . . . . .</b>	<b>291</b>