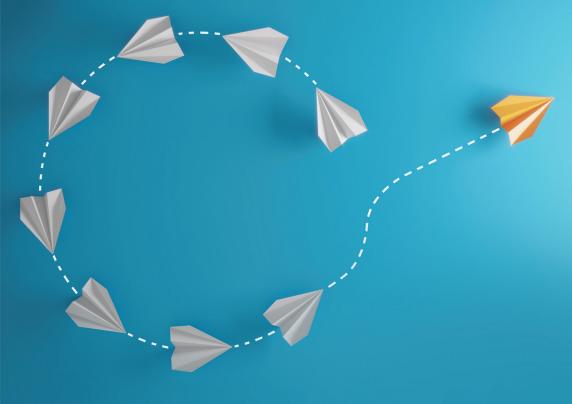
Cliff Berg, Kurt Cagle, Lisa Cooney, Philippa Fewell, Adrian Lander, Raj Nagappan, Murray Robinson



Agile 2

The Next Iteration of Agile

WILEY

Agile 2

Agile 2

The Next Iteration of Agile

Cliff Berg
Kurt Cagle
Lisa Cooney
Philippa Fewell
Adrian Lander
Raj Nagappan
Murray Robinson

WILEY

Copyright © 2021 Cliff Berg, Kurt Cagle, Lisa Cooney, Philippa Fewell, Adrian Lander, Raj Nagappan, and Murray Robinson

Published by John Wiley & Sons, Inc., Indianapolis, Indiana

Published simultaneously in Canada

ISBN: 978-1-119-79927-6

ISBN: 978-1-119-79952-8 (ebk)

ISBN: 978-1-119-79929-0 (ebk)

Manufactured in the United States of America

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at www.wiley.com/go/permissions.

Limit of Liability/Disclaimer of Warranty: The publisher and the author make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation warranties of fitness for a particular purpose. No warranty may be created or extended by sales or promotional materials. The advice and strategies contained herein may not be suitable for every situation. This work is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services. If professional assistance is required, the services of a competent professional person should be sought. Neither the publisher nor the author shall be liable for damages arising herefrom. The fact that an organization or Web site is referred to in this work as a citation and/or a potential source of further information does not mean that the author or the publisher endorses the information the organization or website may provide or recommendations it may make. Further, readers should be aware that Internet websites listed in this work may have changed or disappeared between when this work was written and when it is read.

For general information on our other products and services please contact our Customer Care Department within the United States at (877) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at booksupport.wiley.com. For more information about Wiley products, visit www.wiley.com.

Library of Congress Control Number: 2021930182

Trademarks: Wiley and the Wiley logo are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates, in the United States and other countries, and may not be used without written permission. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc. is not associated with any product or vendor mentioned in this book.

This book is dedicated to the members of the global Agile 2 team, who shared their expertise and experience and collaborated remotely throughout the COVID-19 pandemic to create Agile 2.

-Cliff

I dedicate this to those who have felt frustrated that Agile, for all its hype and promise, didn't seem to bring to you much in the way of advantage and frequently seemed an exercise in pointlessness. There is goodness in Agile methods, but Agile is a hammer, and sometimes you need a violin.

-Kurt

This book is dedicated to Agilists everywhere, those struggling in the trenches to apply its values and principles, regardless of their role or field of work, and who inspired us to try to make it better.

—Lisa

This is dedicated to fellow Agilists seeking better balance, understanding, and improvement over what's been in practice for the last 20 years.

— Philippa

My contribution here is dedicated to independent thinking and independent thinkers, who prefer to choose discovering what is really out there over acquired bias or simply following marketed experts without healthy challenge and validation and who have the courage to stand up even against popular opinion if that makes sense and do not shun putting in considerable effort to develop their (independent thinking) capabilities. In a first year of a series of global pandemic challenges, my heart is with those affected and who are fighting without complaining, never giving up, and finding ways to still help others.

—Adrian

This book is dedicated to on-the-ground workers everywhere who have worked with and struggled with Agile in the past, and who inspired us to try to make it better. And to my late beagle Bindi, whose boundless love and loyalty taught me the true meaning of servant leadership.

—Raj

This book is dedicated to people who have become disenchanted with the dogma, commercialization, and fake Agile that has taken over the Agile community. We want to reclaim Agile and revive the community's ability to learn and adjust and tackle problems that the original manifesto authors did not imagine. We hope you will join us.

-Murray

About the Authors

liff Berg is a consultant and founder of Agile Griffin, which specializes in merging Agile and DevOps. Cliff began his career doing systems analysis for electronic systems design and then building compilers, was on the team that created the VHDL language, and wrote the first "synthesis" compiler for that language. In 1995 he cofounded and served as CTO of Digital Focus, a startup that grew to 200 people by 2000 and adopted Agile (eXtreme Programming) in full force that year. Digital Focus was sold in 2006, and since then Cliff has helped more than ten organizations adopt Agile and DevOps methods, working with leadership and teams to implement change. Cliff has experience with Agile and DevOps in a wide range of contexts, from large multiproduct digital platforms to embedded systems.

Kurt Cagle is the community editor of Data Science Central (Tech Target) and the editor in chief of the Cagle Report. He is the author of 22 books on internet technology, data modeling, and knowledge representation, and he has served as an invited expert to the W3C for more than 10 years. As a consultant, Kurt's clients have included Fortune 50 companies, and US and European government agencies. When not trying to keep a handle on what's happening in the data world, he writes novels. He can be found on LinkedIn.

Lisa Cooney currently serves as the Agile coach at Axios. She is the editor of *Evolvagility: Growing an Agile Leadership Culture from the Inside Out*, by Michael Hamman (2019). Her eclectic background includes a master's degree in education, years of being a stay-at-home mom, and substitute teaching in K-12 schools while raising children, creating art, and writing. A lifelong learner, Lisa went from Basic and Pascal college classes to creating computer-based-training at Kodak to creating her own website in HTML to virtual online learning design. She spent years designing, writing, and managing (with Agile!) the program and project management curriculum (which included systems thinking) at the Department of Homeland Security. In 2014, she designed and wrote two virtual instructor-led courses called Agile for the Federal Government and Agile for the Product Owner for the Department of Veterans Affairs.

Lisa helps organize the DC Women in Agile (WIA) meetup, is on the program committee for the Business Agility Institute's conferences in NYC, and speaks at conferences about cognitive bias and developmental feedback. She is certified as an Agile Certified Practitioner (PMI-ACP), as a ScrumMaster (CSM), and as both an Agile team facilitator (ICP-ATF) and an Agile Coach (ICP-ACC). She is working on her certification for coaching DevOps. Lisa earned her master's degree in Instructional Design from the University of Virginia and holds a bachelor's degree from Wellesley College. She can be found on LinkedIn.

Philippa Fewell has had a long-tenured, progressive consulting career leading to her current position as the Managing director of Agile Services for CC Pace Systems. Philippa has more than 35 years of experience managing and delivering complex financial, healthcare, and technology projects for both Fortune 500 companies and startups. She is an accomplished executive and hands-on manager, with demonstrated expertise in driving and supporting executive mandates to facilitate and enable business agility. Philippa has an exceptional track record of managing stakeholders at all organizational levels, with emphasis on establishing cultures of trust and building high-performance teams.

Philippa has practiced Agile methods with development teams for the last 15 years, has worked extensively with leadership on what it really means to be Agile, is a certified Agile coach, and regularly speaks on the topic of Agile benefits and practices. Philippa is highly recognized for her in-depth knowledge and practical experience in Agile, bringing hands-on, real-world techniques to the teams and the executives she works with. Philippa earned a BS in computer science with a concentration in business from Rensselaer Polytechnic Institute. She can be found on LinkedIn.

Adrian Lander has since 1995 had leadership and senior advisory roles for more than 30 well-known (Fortune 500 and FTSE 100) international client organizations, across most industries and governments. These include more than 20 Agile (and DevOps) transformations, plus other business transformations, often involving innovation and the latest technology.

Adrian began as a self-taught software developer at a young age, and before studying and researching artificial intelligence and natural language processing at several universities, he was already doing software sales and project management services for clients.

He worked for a decade as a top-level management consultant for a global consultancy, where he specialized in rescuing large, traditional programs, some beyond \$100 million USD, by changing delivery to an Agile approach. In 2007, he moved to Asia to pioneer Agile in various countries, including division- and organization-wide transformations in locales including Singapore and Hong Kong, where as the lead coach, he won business awards with his teams. The past decade he has been increasingly involved in turning "bad Agile" into better Agile that has had significant measurable business benefits.

In addition to 25+ years of Agile experience, he has extensive experience in applying his expertise in the domains of professional coaching of executives, leadership and (other) teams, organizational change management, product management, and program management.

Over the years, he has obtained more than 20 professional certifications, diplomas, and degrees across domains relevant to Agile. For Adrian, however, only outcomes matter, and he believes more in the value of his skills and experience gained through deep, broad, and challenging practice. He is a founder of Agnostic Agile, a movement supported by 2,500+ Agile practitioners, focusing on openness, inclusion, and ethics in the practice of Agile. He can be found on LinkedIn.

Raj Nagappan is the founder and CEO of Catum—a software startup in the product management area. Prior to founding Catum, Raj worked as a lead engineer and manager for Nuix, which made innovative evidence discovery software for the legal industry and police. He helped it grow from a small startup to more than 500 employees with customers in more than 70 countries. Before that, he was a senior engineer in diverse organizations from startups to software vendors to investment and retail banks.

Raj holds a PhD in computer science from the Australian National University and a First Class Honours in science (majoring in computer science) from the University of Sydney. He is a Professional Scrum Master and Professional Scrum Product Owner, both from Scrum.org.

Throughout his more than 20 years of experience, Raj has sought to achieve collaboration between product/design/engineering and sales and marketing to gain a deeper understanding of customer needs and thus to craft a better "whole of product" experience. Being an engineer himself and working directly with other engineers, designers, product managers, and business stakeholders, Raj has grown frustrated with

the frequent shortcomings of conventional Agile implementations and the failure of the industry to address these concerns. From 2018 he started writing about these problems and suggesting possible ways to overcome them. This naturally led to his involvement in Agile 2. He can be found on LinkedIn.

Murray Robinson works with organizations to design digital initiatives and organizations capable of realizing them. He has 30 years' experience in IT starting as a software developer, including 20 in product and project management, 16 with Agile, and 4 in UX. He has delivered large digital programs of more than \$20 million with distributed teams of up to 100 people for large corporations. He is an experienced Agile coach, trainer, and practitioner with experience leading a successful Agile transformation that turned around a struggling digital agency. As an adaptive leader, he is known for getting things done and bringing enthusiasm, insight, and humor to every engagement.

Murray has an MBA from Melbourne Business School and has certifications of Professional Scrum Master from Scrum.Org, Leading SAFE 4.5 from Scaled Agile and Business Agility, and Agile Fundamentals and Agile Product Owner certifications from ICAgile. He is an ICAgile Authorized Instructor who teaches Agile, product ownership, coaching, and design thinking. He speaks about Agile and design thinking at industry events and writes about Agile on LinkedIn and his blog at agileinsights.wordpress.com. He can be found on LinkedIn.

Acknowledgments

e would like to thank the rest of the Agile 2 team—those who contributed to Agile 2's development but who are not authors of this book. They are Huet Landry, Lakshmi Chirravuri, MC Moore, Navneet Nair, Parul Choudhary, Priya Mayilsamy, Vigneshwaran Kennady, and Vincent Harris.

We would like to thank those who reviewed the draft Agile 2 content early, prior to its release, including David Anderson, Alidad Hamidi, Maarten Dalmjin, and Shane Hastie.

We would like to thank Navneet Nair for his insights in Chapter 7, "It's All About the Product."

We would like to thank Lakshmi Chirravuri for her contributions regarding PeopleOps in Chapter 14, "Agile 2 in Service Domains."

We would like to thank some individuals who provided early insights and feedback about Agile 2 ideas, including Chris Mills, Ebony Nicole Brown, Neil Green, and Thomas Fuller.

We thank the original group of Agilists who, throughout the 1990s and early 2000s, shared their wisdom and experience so generously and openly with the world.

We thank the DevOps community, including early authors such as Jez Humble and Gene Kim, for connecting the dots about continuous delivery and DevOps and explaining it to the world.

Finally, we would like to thank all those among the software and product development communities who have demonstrated original thinking in trying to improve the ecosystem and who have helped clients and colleagues to consider their actual situation instead of following a standard template. It was those who inspired true understanding of what is needed to be agile and identified gaps in current practices that need to be remedied. This includes those who were courageous enough to speak or write about dysfunctions within the community, ultimately contributing to the ideas that are behind Agile 2.

Contents

	About the Authors vii
	Acknowledgments xi
	Foreword xv
	Preface xix
1	How Did We Get Here?1
2	Specific Problems
3	Leadership: The Core Issue49
4	Ingredients That Are Needed69
5	Kinds of Leadership Needed121
6	What Effective Collaboration Looks Like157
7	It's All About the Product181
8	Product Design and Agile 2191
9	Moving Fast Requires Real-Time Risk Management205
10	A Transformation Is a Journey245
11	DevOps and Agile 2
12	Agile 2 at Scale299
13	System Engineering and Agile 2335
14	Agile 2 in Service Domains
15	Conclusion
	Index391

Foreword

ou can recognize a great book by its ability to make obvious what is wrong with existing worldviews and to add new insights or nuances to change or improve this worldview. I believe *Agile 2* meets these criteria easily. It is an easy read not only for those new to the subject of agility, but also for die-hard professionals who are looking for something "beyond" the basic Agile concepts that are at times dogmatic and often being misused in practice.

In this era of digital disruption and an ever-growing world full of volatility, uncertainty, complexity, and ambiguity, it becomes increasingly important for organizations to become more agile. The Agile Manifesto, originally intended in 2001 to disrupt traditional, not-too-effective software development practices, has inspired many organizations over the past decades to change their ways of working, affecting both work cultures and structures. Its popularity was boosted by a growing workforce consisting of millennials and Generation-Z professionals who demand more autonomy, ownership, and the opportunity to make meaningful impact. Over the past decade, the "Agile movement" has gained increasing momentum and also moved beyond the realm of IT.

A side effect of its success and growth was that all kinds of Agile frameworks, doctrines, and certifications popped up to standardize and monetize the discipline. The original Agile values and principles, being high-level on purpose, gave ample room for various interpretations of the core paradigms. During my career I have worked with many different Agile coaches and consultants, and I was always surprised by how much discussion and fanatic debates arose among them with regard to how to live certain Agile values or implement specific practices. This tribalism led to confusion among non-Agilists, and this hampers Agile transformations significantly. I thus see a clear need for a comprehensive Agile idea set that is both pragmatic and nuanced by nature. Enter *Agile 2*.

I was happy to find out quickly that the authors do not claim to have written yet another Agile doctrine or "Bible." Instead, they have written a pragmatic companion guide that will be useful for managers and specialists alike. It is packed with hands-on tactics and practices

xvi Foreword

that can help leaders and specialists in organizations to grow to a next level of agility, while preventing cargo-cult behavior or *avant le lettre* implementations that often do more harm than good.

One of my key drivers for cofounding the DevOps Agile Skills Association (DASA) in 2016 was building a comprehensive view on how to create high-performance IT organizations. The popularity of DASA stems largely from the six DevOps and Agile principles that advocate continuous improvement, customer centricity, autonomous multidisciplinary teams, and product thinking. Following these principles often results in a digital and organizational transformation that typically goes far beyond choosing a standard Agile framework or adding some basic Agile rituals to the mix. To transform successfully to high-performance, organizations need a more mature take on and guidance on what it means to really "be Agile" at scale. Providing this guidance is one of this book's core differentiating features.

Over the past decade I learned firsthand as a consultant, trainer, and senior leader the importance of building the right type of leadership in the organization and creating a culture of continuous learning, experimentation, and innovation. What I like about *Agile 2* is that both the importance of leadership and learning are advocated strongly. It provides many tangible ideas to reimagine an organization's leadership culture. I wish that I had this book on my nightstand five years ago. It would have helped me greatly in understanding why certain things happened—or did not happen—during the organizational transformations I was leading.

I like the fact that the authors do not intend to reinvent the wheel, but are keen on building on what is already working. Some of the key Agile values and principles are powerful to this day, but application in practice often needs some additional clarity and lots of examples. The authors nicely provide nuance to how to interpret Agile principles and values while referring to many interesting, and more recent, bodies of work. The authors hit the nail with addressing key topics that are haunting many organizations, leaders, and teams, such as how to collaborate, communicate, value both experts and generalists, and commit team capacity. They rightfully argue that how to adopt certain principles or how to interpret certain values depends on your organization's needs and its current level of maturity. Using this book as your Agile guide,

you can aim and navigate your transformation in a more tailor-made way, resulting in more business value. I expect this book to be found on many nightstands in the coming years.

Dr. Rik Farenhorst

Senior IT Exec | Trainer | Coach | Speaker |
Writer on Creating High-Performance Digital Organizations | Cofounder of DevOps Agile Skills Association (DASA)
Utrecht, The Netherlands
December 2020

Preface

few people who have become aware of Agile 2 have dismissed it as "more of that Agile stuff," not realizing that Agile 2 is a departure from the original Agile in attitude, approach, and substance. One of those individuals—a chemical engineer—said that he had discussed Agile at length with an Agile advocate, but still concluded that Agile is not for him. Another—an experienced systems engineer who has testified before Congress regarding aircraft and spacecraft systems reliability—also believes that Agile methods do not provide a robust process for trustworthy systems.

We view ourselves as Agilists, and yet we find widespread doubt about the efficacy and usefulness of Agile in many quarters. One of these is among engineers. These people are not ignorant. They know their job extremely well, yet Agile, as described to them, or as they have experienced it, has not resonated or has not answered critical questions.

The Agile movement also uprooted the product design community to some degree (which we will document in this book), although this is an area in which the Agile community has realized the issue and some are trying to rectify it.

Agile authors largely ignored the role of data: something that is so immensely important, that it is akin to speaking about mountains but missing a vast canyon immediately beside you.

The Agile community also sidestepped the issue of leadership — something that the DevOps community has tried to address. Leadership is so important for any endeavor, that to omit it is, frankly, quite equivocal.

Agile has not resonated among the growing DevOps community. Even though DevOps ideas were developed by people who strongly identified as Agilists, the Agile community at large has remained mostly ignorant of DevOps, which had the effect that DevOps became its own movement. As a result, most Agile coaches today know little about DevOps, and we find that DevOps practitioners often view Agile as superfluous.

You might think that mainstream programmers accept Agile, since they are the ones who use it most directly, but in actuality, there is a lot of doubt about Agile within programming communities in general. That is the biggest irony of all: that Agile, which was created for programmers, has in effect been taken away from them, and no longer serves them.

Agile is mostly accepted within Agile communities—comprised of Agile coaches, and managers who have been persuaded of the benefits of Agile. Programmers tend to have mixed feelings about Agile. (We will support that assertion in this book.)

Was Agile described poorly? Is Agile missing things? Did it get some things wrong? Does Agile truly not apply to the needs of the work of any of these people? Since Agile ideas can be applied to most things (in our opinion), we believe that the last explanation is not likely to be the true one.

What we have observed ourselves is that too often, Agilists explain and advocate Agile ideas and methods before asking enough questions. Some of us have seen Agile coaches fired for coming into a setting and insisting on particular practices before actually understanding how the work in that setting is done—a hypocrisy given that Agile coaches so often explain that Agile transformation is a learning journey.

To understand how to apply Agile ideas, one must first understand that domain, how the work is currently done, and why it is done that way. No Agile practice is universal. One size does not fit all, so prescribing before understanding is potentially destructive.

Indeed, the "dogma" of the Agile community helped to launch it, but it has also been its chief failing. Early proponents of Agile insisted that the Agile movement needed to be disruptive—a "call to arms"—and so dogma was called for; but dogmatic insistence also alienates and causes dysfunction when it is not the best advice for the situation.

Agile 2 is not dogmatic. It is not designed to stir up emotion. It is not a call to arms or an attempt to disrupt what we have. As such, it does not try to be disruptive. It does not replace Agile or replace DevOps or replace anything. Agile 2 pivots Agile in some important ways and attempts to fine-tune it. Agile 2 also adds many extremely crucial ideas that have been ignored by much of the Agile community, even though successful Agile practitioners often use those very ideas, and other communities of thought embrace those ideas.

Agile 2 reinforces some DevOps ideas, and some Lean ideas, but Agile 2 does not attempt to duplicate or replace those, and so those sets of ideas are still important in their own right. Agile 2 does not attempt to subsume any existing community of thought. Agile 2 also does not claim to cover all aspects of these topics. Agile 2 claims to only be a set of useful ideas for how to achieve agility in human endeavors and encourages people to include other ideas and fields of thought as well.

Agile 2 is more verbose than the Agile Manifesto. The reason is that we feel that one of the weaknesses of the manifesto was that it over-simplified complex issues. A simple value maxim cannot describe important trade-offs, and one or two principles cannot address nuanced issues such as what good leadership looks like and which styles of leadership apply best in a given situation. So Agile 2 gives these important topics the space they deserve, from an agility perspective.

One important way that Agile 2 departs from the Agile Manifesto is that Agile 2 provides the foundation of thought from which it was derived. Rather than make bold statements without substantiating them, Agile 2 provides the "problems" and "insights" that arose in discussions about Agile, in the course of the Agile 2 team's retrospective about the state of Agile. It was these problems and insights that led to the Agile 2 principles.

An Agile 2 principle is not intended to be an absolute. This is because there can be no absolutes when it comes to human behavior. An Agile 2 principle is a proposed rule of thumb: true most of the time, but perhaps not in some circumstances. That is why the underlying assumptions and thoughts—the problems and insights—are important for understanding the intention of each principle, meaning what problem it is trying to solve and how.

Someone posted a comment online about Agile 2, saying that if the original Agile Manifesto authors were not involved in the Agile 2 effort, he would not look at it. We believe that all great ideas build upon what has come before, and that even "original" ideas have deep roots. The term *Agile* had been used prior to the creation of the Agile Manifesto, and "agile" methods had been used and circulated for years prior to that. Not only do many Agile methods date back decades, but core ideas in Agile 2 such as Socratic leadership date back millennia.

There is also the matter of dysfunction within the Agile community, which we will discuss at length in the book. The dogma that is found in some quarters is one form of dysfunction; another is the separation of the community into tribes, for the various frameworks. We will explain why this has been a problem and how it has "frozen" Agile thinking and stifled its evolution.

xxii Preface

Many of the thought leaders in the Agile community have a lot invested in current paradigms and practices, and so change is not in their best interest. For these reasons, we felt that we could not rely on the community to fix these problems. The problems come *from* the community—not from the whole community, but from some of the most established and entrenched parts of it.

Why bother then? Why deal with this? It's because Agile is *extremely important*. DevOps cannot replace Agile. While Agile has become mostly about the human side of building things, DevOps has become mostly a collection of technical practices. That is the reality on the ground. But there is more to building things than the technical side: one needs both the human side *and* the technical side.

We therefore realized that addressing Agile's gaps is really important, and that to do it, we needed a diverse team with a wide range of skills, composed of people who are not deeply invested in current paradigms or frameworks. We needed original thinkers. Those criteria led to the Agile 2 team of 15 members, which you can find on the Agile 2 website.

Agile 2 is an attempt to make a solid course correction to Agile, but in an open, additive, inclusive, and nondogmatic or emotional way. We welcome ideas that can supplement Agile 2 and feedback on its principles, in the spirit of inclusiveness and advancing everyone's understanding of these complex issues.

Agile 2 broadens Agile's focus beyond software. The reality is that Agile ideas have been applied for many things besides software, and so the Agile 2 team felt that it made no sense to define Agile 2 only for software.

The reader will notice that many Agile 2 principles are stated in the margin, but not all of them. This book is not a textbook about Agile 2 that covers every aspect of its principles. The purpose of this book is to introduce Agile 2, explain why we need it, and give an overview. You can find more information about Agile 2 on the website: https://agile2.net, which is published under a Creative Commons Attribution license, "CC BY 4.0."

This book attempts to make the many topics of Agile 2 concrete. We give guidance on how to apply the principles and provide examples. However, we refrain from providing specific steps or templates to follow: we do not want to repeat the mistake of current Agile frameworks in that regard.

Except for our examples, we do not define practices to implement. Practices are important, but that is for another book and for others to propose. This book lays out a conceptual foundation, while using concrete situations as examples, but not for prescription.

A note about the use of the words "agile" and "Agile": This book uses the word "Agile" when referring to the ideas embraced by the "Agile community," which is comprised of Agile coaches and others who view the agilemanifesto.org document as a guiding source of insight; or in the context of so-called "Agile frameworks" which claim to define practices that are consistent with the philosophies of the Agile community. We use the word "agile" when we intend to convey the generic quality of agility. Agile with a capital "A" and agile with a small "a" are two different words.

The name "Agile 2" is not intended to be a version number, as in "2.0," "2.1," etc. Rather, it is the name of a reborn Agile. We feel that the principles of agility are timeless, so we do not expect an Agile 3, and so on. Rather, we see Agile 2 as an attempt to reimagine Agile—not from scratch, but by taking Agile ideas and pivoting. We hope that Agile 2 hits closer to the mark!

How Did We Get Here?

t a developer conference in 2015, Dave Thomas, one of the authors of the Agile Manifesto, gave a talk titled "Agile Is Dead." In a 2018 blog post, Ron Jeffries, another Agile Manifesto author, wrote, "Developers should abandon Agile." In a 2019 article in *Forbes* titled "The End of Agile," tech author Kurt Cagle wrote, "[Agile] had become a religion." A post about the article in the programmer forum Slashdot received more than 200 comments from software developers, asserting things like "Agile does not always scale well" and "The definitions of 'agile' allow for cargo cult implementations."

Agile has been a subject of ridicule since its beginning. In the early days, there were many people who did not understand Agile and spoke from ignorance; what has changed is that today the criticism often comes from people who *do* understand Agile methods and have decided that those methods are problematic.

Is Agile actually dead? The statistics say no,⁵ yet something is clearly wrong. Agile—which was sold as the solution for software development's ills—has severe problems. What are those problems, how did they happen, and what can be done about them? And is Agile worth saving?

Most of the discussion in this chapter will be about software. That is because Agile began in the software domain. In later chapters, we will broaden the discussion to product development in general, and to other kinds of human endeavor, since many Agile ideas apply to essentially any group effort.

A Culture of Extremes

In 1999 a new book called *Extreme Programming Explained* by Kent Beck sent shock waves through the IT industry. Agile ideas had been circulating and in use prior to this, but Beck's book somehow pierced corporate IT consciousness. It arguably launched the Agile movement, even though the movement was not called "Agile" yet.

The movement's core thesis was that methodical, phase-based projects were too slow and too ineffective for building software—challenging the approach then used by most large organizations and pretty much every government agency.

The book did not launch Extreme Programming, aka XP, which was first defined in 1996,6 but it was the book that popularized it. Talk about XP could be heard in the halls of every IT shop. It was controversial, but its values strongly resonated: Small teams, working code (rather than documents) as the only real proof of progress, frequent discussions between the customer and the programmers. Out with big, up-front requirements documents that were always incomplete, inconsistent, and incomprehensible; out with big, up-front designs that were usually wrong. Recurring and incremental customer approval instead of contracts that locked everyone in to unvalidated assumptions.

Many of the methods of XP were not new, but they had been outlier methods, and XP put them under a single umbrella. The book strongly asserted that these methods work and are a superior alternative to traditional methods.

It is not that there were no other proposals for how to reshape software development. So-called lightweight methods had been around for a while. Extreme Programming was new in that it threw a grenade into much current thinking by being so radically different and proposing methods that were so *extreme*—methods such as pair programming (which had been described as early as 1953)⁷ and Test-Driven Development (which also had some history prior to XP), which turned many assumptions about programming on their head.

Thus, the movement began as a rejection of the predominant existing paradigms. People knew something was wrong with software development as it was being done. Extreme Programming provided an oppositional alternative. It was not so much that people thought XP was great, but they were sure that current practices were not great. XP received a lot of attention and was a radically different approach.

Perhaps the attention was not because XP was so much better or radical, as there had been other ideas circulating such as Rapid Application Development, but perhaps XP got attention mostly because the Internet provided a new medium that made rapid awareness possible.

Then in 2001 a group of IT professionals—all men by the way, with most from the United States and a few from Europe—got together over a weekend and hammered out a set of four "values," which they believed should be the foundation of a new approach to building software. Kent Beck was among them. You can find these four values at AgileManifesto.org. It was largely a rejection of many approaches that had become commonplace, such as detailed plans, passing information by documents, and big all-at-once deliveries.

In the weeks that followed, some of them continued the discussion by email and added 12 principles, which you can also find at the same website.

They called all this the Manifesto for Agile Software Development, and it came to be known colloquially as the Agile Manifesto or just Agile. This "manifesto" took the popular culture baton from XP and other iterative approaches and launched the Agile movement for real.

Extreme Programming had set the tone for what would become the Agile movement, and the tone was to be extreme. In those days, *extreme* was popular. We had extreme rock climbing, extreme skateboarding, extreme pogo, extreme skiing, and extreme pretty much anything. Extreme was in. People were so tired of the ordinary; everything new had to be extreme. It was a new millennium for crying out loud: everything needed a reset!

And so "extreme" was a necessary aspect of anything new and interesting at that moment in time in the late 1990s—the end of the 20th century.

Since Agile was a rejection of what had become established software development methods, it was inherently a disruptive movement, and in the ethos of the time, it had to be extreme. And so it was that every Agile method that came to be proposed—these are called *practices*—were of necessity extreme. Otherwise, they were not seen to be consistent with the spirit of being entirely new and disruptive.

It was not the Agile Manifesto that set things in that direction. The Agile Manifesto was clearly about balance and moderation. It makes no absolute statements: every value is couched as a trade-off. For example,

the first value reads, "[We have come to value] individuals and interactions over processes and tools."

It does not say, "Forget process and tools—only pay attention to individuals and interactions." Instead, it says, consider both, but pay special attention to individuals and interactions.

In other words, the Agile Manifesto advocated judgment and consideration of context. In that sense, it is a sophisticated document and cannot be used well by people who do not have the experience needed to apply judgment.

But the tone had already been set by XP: extreme practices received the most attention and applause, because XP practices were all extreme. For example, XP's recommendation of pair programming, in which two people sit together and write code together, sharing a keyboard, was considered by many programmers to be extreme. Or everyone sitting side by side in a single room, with all walls removed and no privacy—that was pretty extreme, as it had been assumed that people needed privacy to focus, and the big programmer complaint of the 1990s, depicted in so many Dilbert cartoons, was that programmers were no longer being given offices and instead were being sat in cubicles that did not afford enough quiet or privacy. And now here comes XP and says, in effect, *You got it all wrong; you need to sit next to each other*. That was an extreme swing of the pendulum.

The Scrum framework, which dates in various forms to the 1980s but became reformulated in 1993 and then popularized through its certification regime during the 2000s, added more ideas that are arguably extreme. For example, Scrum views everyone on a team as an equal player—no one is acknowledged as having more standing than anyone else ("Scrum recognizes no titles for Development Team members"), regardless of their experience. That was pretty extreme, since before Agile, programmers in most (not all) organizations had professional levels, such as programmer, senior programmer, architect, etc.

During the first decade of the Agile movement it seemed that new suggested practices were in a competition to be more extreme than the others. We saw the introduction of mob programming, in which rather than two programmers working together as in pair programming, the entire team works together—literally—everyone calling out their thoughts in a single room and sharing a single keyboard. Then in 2015 the Agile team room was extended by Facebook to an extreme level when it created its 430,000-square-foot open team room.