



*The Addison Wesley Signature Series*

A MIKE COHN  
Mike Cohn  
SIGNATURE BOOK

# UNLOCKING AGILITY

AN INSIDER'S GUIDE TO  
AGILE ENTERPRISE TRANSFORMATION

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JORGEN HESSELBERG

*Foreword by*  
**BJARTE BOGSNES,**  
Chairman, Beyond Budgeting Roundtable  
**RICH SHERIDAN,**  
CEO, Menlo Innovations



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## Praise for *Unlocking Agility*

“Agile has become a buzzword that has no meaning. That’s because most organizations just append the word agile to what they are currently doing, shorten their ‘pressure cycle,’ and then expect miracles. To get serious benefits from Agile, your organization must change. And if you are serious about changing to a more agile way of working, you’ll want Jorgen’s help ‘Unlocking Agility.’”

—**James Grenning**, Agile Manifesto Signatory and Author of *Test-Driven Development for Embedded C*

“What a joy to read this book! From lean experimentation to agile collaboration, from business modeling to organization design, from anecdotes and stories to scaling models and transformational roadmaps, Jorgen craftily weaves it all together in this compelling book. If you were wondering where to start your agile transformation, you can start right here.”

—**Jurgen Appelo**, author of *Management 3.0* and *Managing for Happiness*

“A lot has been written about agility in enterprises. What makes this book special and extremely valuable is that it serves as an excellent and practical entry point for those who are getting started, as well as a compendium, reference, and idea-booster for those who have come far in their journey toward agility and want to take the next step.

“In each well-structured chapter, you feel that Jorgen is a very experienced practitioner, who not only knows what he is talking about, but who is also skilled in making practical use of that knowledge.

“You get a great overview of relevant models, their use, tons of great references for further self-study, and a strategic and hands-on approach to creating and driving a transformation toward agility.”

—**Hendrik Esser**, Vice President, Enterprise Transformation Program, Ericsson

“...we need more people looking at the big picture rather than promoting a particular practice, and this book is a valuable contribution to that work.”

—**Dave Snowden**, author of *Cynefin*, and CEO, Cognitive Edge

“Jorgen does a brilliant job of offering helpful (and tested) concepts, tools, methodologies, and frameworks—while at the same time presenting the ‘levers,’ first principles, and the Why. Skillfully curated by a thoughtful coach/agile change agent—with the knocks and stories to prove it—and you have something very special. The questions and answers at the end of each chapter (and references, sources) are just the icing on the cake.

“When recommending books on agile, I have a tough time suggesting the same book for agile nerds *and* the interested-but-not-immersed. *Unlocking Agility* fits the bill, however. The book is pragmatic and accessible (in his words, he offers a ‘blueprint’), while encouraging an agile approach to enterprise agility itself. I found the closing chapters on Agile Working Groups, change strategy/roadmaps, and organizational improvement backlogs to be particularly valuable. I no doubt will be referring to them frequently.

“In short, I would not hesitate to recommend it to fellow partners-in-change (with the passion, but not the background).”

—**John Cutler**, Product Development Coach, Writer

“So much Agile goodness jam-packed into one book! Starting with the origins of modern management, and ending with a vision for organizations of the future, Jorgen has pulled together every conceivable pattern, framework, and model, while also incorporating important topics like age, gender, and diversity. He brings his own Agility journey to life, cleverly narrating stories and lessons he’s learned along the way. Complete with Q&A and Further Reading suggestions, this book is a perfect reference guide to anyone leading an organization through transformative change, on their journey to Business Agility.”

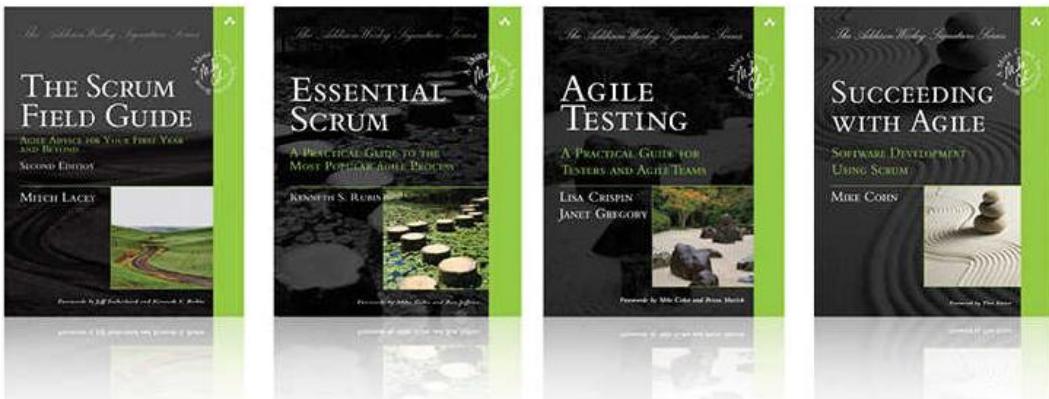
—**Jason Kline**, Agile Practice Lead, SolutionsIQ | Accenture

“Jorgen has written a gem of a book. In his conversational, easy-to-read style, he tackles complex subjects from agile organization design, to agile teams, to agile workspaces. If you are looking for a thoughtful discussion on what it takes to transform your organization into an agile one, this book should be required reading.”

—**Noopur Davis**, SVP, Chief Product and Information Security Officer, Comcast



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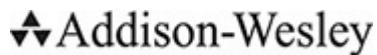


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# **Unlocking Agility**

## **An Insider's Guide to Agile Enterprise Transformation**

Jorgen Hesselberg



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1 18

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*This book is dedicated to the four most important people in my life: my soulmate and wife Melanie; my mom Gry; and my two sons, Logan and Ethan.*

# **Contents at a Glance**

**Forewords by Bjarte Bogsnes and Rich Sheridan**

**Preface**

**Acknowledgments**

**About the Author**

**Part I: The Case for Agility**

**Chapter 1: The Agile Imperative**

**Chapter 2: Enterprise Agility**

**Part II: Five Dimensions of Agility**

**Chapter 3: Technology**

**Chapter 4: Organizational Design**

**Chapter 5: People**

**Chapter 6: Leadership**

**Chapter 7: Culture**

**Part III: Unlocking Agility**

**Chapter 8: Building Your Organization's Agile Working Group**

**Chapter 9: An Operating Model for Business Agility**

**Chapter 10: Unlocking Agility: A Strategic Roadmap**

## **Index**

# Contents

**Forewords by Bjarte Bogsnes and Rich Sheridan**

**Preface**

**Acknowledgments**

**About the Author**

## **Part I: The Case for Agility**

### **Chapter 1: The Agile Imperative**

Athens Beats Microsoft

Origins of Modern Management

Scientific Management: Building More Efficient Machines

The Rise of the Knowledge Worker: Unlocking the Creative Potential

Software Eats the World: Embracing Uncertainty and Becoming Agile

VUCA and Cynefin: Orienting Businesses in a Brave New World

The Cynefin Framework

Leadership in a Complex World

Business Agility: Accelerating Organizational Learning

Summary

Q&A

Further Resources

Footnotes

## **Chapter 2: Enterprise Agility**

Defining Enterprise Agility

Designing Business Agility: Balancing Three Critical Levers

Building the Right Thing (Value)

Building the Thing Right (Quality)

Building at the Right Speed (Optimizing for Flow)

Unlocking Agility in the Enterprise

Performance Multipliers: Five Critical Dimensions of Agility

Summary

Q&A

Further Resources

Footnotes

## **Part II: Five Dimensions of Agility**

### **Chapter 3: Technology**

Building the Right Thing: Creating Products Customers Love

Business Model Canvas: An Interactive Tool for Instant Alignment

Lean Startup: A Method for Validating That You're Building a Product Worth Building

Cost of Delay: Understanding the Impact of Time to Life Cycle Profits

Building the Thing Right

Scrum: Building Value Incrementally and Iteratively

Kanban: Taming Chaotic Environments Through Visualization

Building at the Right Speed: Optimizing for Flow

XP

Value Stream Mapping

Summary

Q&A

[Further Resources](#)

[Footnotes](#)

## **Chapter 4: Organizational Design**

[Physical Workplace Design](#)

[Designing for Great Teams](#)

[The Science Behind High-Performing Teams](#)

[Case Study: More Effective Collaboration Spaces at NAVTEQ](#)

[Organizational Structure](#)

[Functional Structure](#)

[Divisional Structure](#)

[Matrix Structure](#)

[Emergent Organizational Structures: Sociocracy and Holacracy](#)

[An Agile Organizational Structure?](#)

[Heuristics of Agile Organizational Designs](#)

[Summary](#)

[Q&A](#)

[Further Resources](#)

[Footnotes](#)

## **Chapter 5: People**

[Never Underestimate the Importance of People](#)

[Characteristics of People in Agile Organizations](#)

[Fostering a Growth Mind-Set](#)

[Developing an Enterprise Growth Mind-Set](#)

[Embracing Diversity](#)

[Strategies for Building an Environment Supportive of Agile People](#)

[Implications for HR in an Agile Organization](#)

[Partner with Teams to Improve Recruiting](#)

Design Meaningful Compensation, Rewards, and Recognition Plans

Create More Relevant Roles and Define a More Flexible Career Path

Empower People by Moving Authority Closer to the Team

HR: From Controlling Function to Unlocking Enterprise Agility

Summary

Q&A

Further Resources

Footnotes

## Chapter 6: Leadership

Impact of Leadership

Level 5 Leadership

Level 5 Leadership = Agile Leadership?

Teal Leadership

Red: Lead Through Force

Amber: Lead Through Fiat

Orange: Lead Through Efficiency

Green: Lead Through Responsibility

The Organization: An Organic Ecosystem of Interrelated Parts

Teal: The Organization as a Living Entity

The Teal Organization: A Blueprint for the Organization of the Future?

Beyond Budgeting: An Agile Management Model

Origins of Beyond Budgeting

Beyond Budgeting: Less Top-Down Control, More Trust and Empowerment

The Death of the Traditional CEO?

[Three Essential Themes of Agile Leadership](#)

[Summary](#)

[Q&A](#)

[Further Resources](#)

[Footnotes](#)

## **Chapter 7: Culture**

[The Profound Impact of Culture](#)

[How We Experience Culture](#)

[The Schneider Culture Model](#)

    Collaboration—"We Succeed by Working Together"

    Control—"We Succeed by Getting and Keeping Control"

    Competence—"We Succeed by Being the Best"

    Cultivation—"We Succeed by Growing People Who Fulfill  
        Our Vision"

[Culture's Impact to Sustaining Change](#)

[Changing Organizational Culture](#)

[Characteristics of Business Agility Metrics](#)

    Actionable

    Accessible

    Auditable

    Additional Heuristics

[Examples of Meaningful Business Agility Metrics](#)

    Metrics That Help Support Building the Right Thing

    Metrics That Help Support Building the Thing Right

    Metrics That Help Support Building at the Right Speed  
        (Flow)

[Performance System Changes → Behavior Changes → Culture  
        Changes](#)

[Summary](#)

[Q&A](#)

[Further Resources](#)

[Footnotes](#)

## **Part III: Unlocking Agility**

### **Chapter 8: Building Your Organization's Agile Working Group**

The AWG: Mission and Purpose

Characteristics of the AWG

Complementary

Dedicated

Knowledgeable

Credible

Humble

Champion

Role of External Consultants

Organizational Structure and the AWG

Whole System View

Temporary Lifespan

Dual-Boot Operating System

Recruiting for the AWG

Resistance from Managers

Hesitation from Potential Candidates

The AWG: What's in It for You?

Summary

Q&A

Further Resources

Footnotes

### **Chapter 9: An Operating Model for Business Agility**

Unlocking Agility: Embrace Change, Execute with Purpose

Exploration: An Engine for Embracing Change

1. Establish Partnerships with External Innovation Hubs
2. Take Ownership Interest in Potential Disruptors
3. Acquire Disruptive Competitors—and Let Their Culture and People Flourish
4. Create an Internal Culture of Disruptive Innovation

## Exploitation: Executing Proven Strategies with Purpose

Lost in Translation: How Product Strategy Turns from Vision to Hallucination

Executing with Purpose Through Progressive Refinement

Executing with Purpose Through Fast Organizational Feedback Loops

## Creating a Balance: Embracing Change and Executing with Purpose in the Right Proportions

### On Scaling Frameworks

Scaled Agile Framework (SAFe)

Large-Scale Scrum (LeSS)

Disciplined Agile Framework

Benefits of Scaling Frameworks

Drawbacks of Leveraging Scaling Frameworks

Summary

Q&A

Further Resources

Footnotes

## Chapter 10: Unlocking Agility: A Strategic Roadmap

### Unlocking Enterprise Agility: A High-Level Strategic Roadmap

Partnered Transition (Wave 1)

Self-Guided (Wave 2)

Innate (Wave 3)

### What Agility Looks Like in Action: Applying the Five Dimensions of Organizational Agility

Technology  
Organizational Design  
People  
Leadership  
Culture

## Identifying and Driving Change Through an Organizational Improvement Backlog

Unlocking Agility in an Agile Manner

Step 1: Define and Communicate a Clear Purpose for the Transformation

Step 2: Identify Key Impediments Preventing Us from Reaching the Goal

Step 3: Build and Execute the Transformation Backlog

Step 4: Maintain Momentum: Continuously Monitor Progress, Communicate Results, Seek Feedback, and Celebrate Failures

Top 10 Items Leading to Transformation Failure

Seven Signs You're on Your Way to Unlocking Agility

## The Road Ahead: Now What?

Summary

Q&A

Further Resources

Footnotes

## Index

# Foreword by Bjarte Bogsnes

Almost 20 years ago, a group of wise people got together and formulated the Agile Manifesto. This started a movement that revolutionized the way software is developed. But it did not stop there. The agile mindset is now finding its way into the C-suite, and it is starting to radically change the way organizations are led and managed. Business agility is on everybody's lips, for very good reasons.

There are many other movements and communities challenging traditional management. They all tend to operate with different frameworks and languages, and unfortunately are not always the best of friends. A hilarious scene from the movie *Life of Brian* keeps coming back to me, where the difference between People's Front of Judea, Judea's People Front, and the Judean Popular People's Front is a very serious issue.

But if we look behind the façade, these movements have a lot in common. They all challenge the traditional mindset of rigidity, bureaucracy, command-and-control, and micromanagement. They all believe that in today's business and people realities, organizations must be more adaptive and human, and more focused on creating value for customers. They understand that exploring management innovation can bring just as much competitive advantage as technology and product innovation.

I belong to one of these movements—Beyond Budgeting. We started out a few years before Agile, and in a very different place, but with striking similarities in our dreams and our philosophies. The more all our communities join forces, the stronger we will be and the faster we can make it happen.

And it will happen. I don't care what it will be called, but I know there will come a time when we will all smile about what is currently mainstream leadership and management, just as we today smile about the days before the Internet. It is not that long ago.

This book is an important contribution toward making this happen. I have known Jorgen for many years. I have always been impressed with his passion, his curiosity, and his knowledge on these important issues. It comes as no surprise that he was asked to lead transformation from the inside of several organizations. This gives Jorgen credibility and experience which few other authors on these topics have, enabling him to move seamlessly between theory and practice. In this highly readable book, Jorgen draws on his rich background as he identifies and describes a range of concepts, connects the dots, and explains how they can play a role in an agile transformation. This is an indispensable read for anyone interested in leadership, management, and organizational transformation. There is a better way!

**Bjarte Bogsnes**

Senior Advisor Performance Framework, Equinor  
Chairman, Beyond Budgeting Roundtable

# Foreword by Rich Sheridan

On September 27, 2011 at 10:30 pm Eastern time, [Borders.com](#), the online bookstore for Borders, ceased operation; and, with the shutdown of the servers, a beloved Ann Arbor, Michigan institution, Borders Books, came to its ultimate demise. Many around the world loved Borders, but likely no one on the planet loved Borders as much as the citizens of Ann Arbor, where the bookstore began in a tiny little storefront on State Street just a block from the campus of the University of Michigan.

There are many theories as to what exactly went wrong at Borders, and you'll likely get different stories from those who worked there versus those who watched the inexorable march to obscurity from the outside. What is abundantly clear is that the world within which Borders launched in 1971, and the rapid store-by-store expansion that occurred after the acquisition by K-Mart in 1992, was affected by technological progress and the ability to embrace it and adapt.

The easiest answer is that Borders was put out of business by a website launched in 1994 by Jeff Bezos. The harder question to answer is: Why couldn't Borders adapt to this change in the ensuing 17 years? It is worth noting the obvious: the technological advancement that put Borders out of business did not even exist in 1971.

In this question about Borders lies a deeper question for you, the reader of this book. What advancement, not even yet created, lies in wait to threaten the existence of the business you are employed in or leading? And can you do anything to head off your own version of obsolescence?

## ***Shining a light on the path***

I met Jorgen Hesselberg during his days at NAVTEQ in Chicago. His firm had come to mine to do what thousands each year do: Take a tour of our downtown Ann Arbor software design and development firm, Menlo Innovations. Jorgen was already well-armed for his pursuit of agility when he arrived at Menlo, yet he wanted to inspire those around him to propel a vision of agility for his employer. And it worked. What I would later see at NAVTEQ, when I visited, was an organization on the move and energized by deep change. Jorgen is that kind of leader and organizational thinker.

In *Unlocking Agility*, Jorgen takes us on a delightful tour of the history of the software industry to explore the emotions and logic behind the Agile movement. What those of us inside the industry knew was that we needed agility more than anyone. We were causing the disruption in other industries, yet we ourselves were regularly being disrupted (by our own industry!). And we were moving too slowly and causing too many problems to survive. We needed to adapt. And adapt we did.

## ***Fear-based leadership is the opposite of what we need***

On a fateful day early in 2007, the IT leadership team at Borders came and spent a day with me, exploring the agility that we had developed in our company. They had just announced the end of their marketing relationship with Amazon and were intent on building their own online bookstore. My wife, Carol, asked me how the day went with Borders.

“They’re doomed.” I said emphatically. “They will be out of business in five years.”

She was surprised and dubious. At the time they had more than 1,000 stores and almost 20,000 employees and revenues well in excess of \$1B. She asked me why I was so certain?

“They are so afraid, they don’t know what to do next. They will never be able to compete with that level of fear at work in their organization.”

I was too optimistic. From the day of that class to the day they shut down was 4 years and 9 months. They could not break free and unlock the agility they so desperately needed. As Jorgen points out in the chapters that follow, this kind of disruption is accelerating. Agility is no longer a toy, nor a luxury;

it is, at its core, a system for organizational survival. Unlock it, and you have a fighting chance. Your pursuit will involve change. Big change. It won't happen overnight, and it will touch everything: people, process, leadership, and technology. It will involve a culture shift.

To successfully navigate this important climb requires a Sherpa, and Jorgen is one of the best.

In this book he zooms up to high altitude and looks down at the big forces at work that will inform your journey. He brings in the voices of the experts and pioneers who cut the first trails. He makes it personal, based on his direct experience at NAVTEQ, Intel and other places he has applied his wisdom. He makes it practical—not with a standard recipe for agility, but rather with some guidance for things to try and experiments to run.

Jorgen is a good friend of mine on a similar journey. I have chosen the word *joy* when I describe my own personal journey to agility. I believe joy is at the heart of any significant pursuit and can be framed by three simple questions:

1. Who do you serve?
2. What would delight look like for them?
3. And can we sustainably achieve this delight while being proud of the work an energized team of people created?

I believe these questions are the key to understanding why you or your company is actually interested in unlocking agility. I know many people who worked at Borders, and they loved working there. There were so many others, like me, who loved browsing, drinking Seattle's Best Coffee, and indulging our book reading habits in those delightful stores.

Perhaps your organization already provides this level of delight, and you want to sustain it for years to come. Perhaps you don't, but you know you have the team and the energy to change. Perhaps you simply dream of achieving a grand vision for making your own kind of dent in the universe. If you do, you will need to unlock agility in order to thrive in a rapidly changing world. This is the book for you!

Go grab a cup of coffee and start reading! And then proceed to unlock the agility that will get you to your version of joy!

**Rich Sheridan**

CEO, co-founder, Chief Storyteller, Menlo Innovations  
Ann Arbor, Michigan (Currently occupying the space that was the  
first world HQ for Borders Books)

Author of *Joy, Inc. – How We Built a Workplace People Love and  
Chief Joy  
Officer – How Great Leaders Elevate Human Energy and Eliminate  
Fear*

# Preface

The immutable laws of business have changed. What we were taught in business school and offsite executive seminars is no longer effective—if it ever was. It turns out so-called best practices, detailed customer analysis reports, and expert opinions are nice inputs, but they are insufficient to win in today’s business environment. Instead, we’re finding that the traditional barriers to entry are breaking down, forcing enterprises to deal with the threat of constant disruption, ever-changing customer demands, and a breakneck speed of technical evolution. How can enterprises thrive in this environment while continuing to refine their existing processes and leverage their competitive advantage?

The answer is that they can’t and they shouldn’t. To grow and survive in today’s business environment, enterprises need to transform *how* they work so they can learn faster, adapt quicker, and “embrace change, execute with purpose.” Rather than taking clues from scientific management and rest on lessons learned from the industrial revolution, today’s enterprises need to learn from thinking introduced through knowledge management, complexity theory, and agile software development. These movements understood that they did not have all the answers up front and that creating a habit of changing your habit is critical in complex environments characterizing today’s world.

But what does this look like? How can an organization that has successfully operated in a given way for decades learn to fundamentally change how it works and become more agile? For today’s change leaders, the available guidance is woefully sparse and mainly falls in two categories: extremely high level or quite prescriptive. On the one hand, an organization can follow values and principles, but translating this into a concrete strategy differs greatly from organization to organization. In other words, although well-intentioned, the values and principles by themselves are rarely sufficient for people looking to make real change. On the other hand, a

number of frameworks and scaling approaches are available by thought leaders and consulting firms alike. Although they are concrete and in many cases spell out roles, processes, and cadences, they often end up being so constraining that they limit the very goal they are there to implement: business agility.

This is why I wrote this book. The purpose of *Unlocking Agility* is to give you that meaningful guidance—that sweet spot between being too high level and too constraining—so that you can get just enough help along the way to successfully transform your own organization. I can give you this guidance because I believe practice informs theory—not the other way around. I have done this work several times myself (at scale), and I have seen what works and what doesn’t. I have experienced the patterns that will bring you closer to an agile way of working, and I’ve observed the harmful behaviors that can stop transformation efforts in their tracks. I have learned from my successes and from my many failures—and from those of my trusted colleagues in the agile community.

More importantly, I have seen that agility indeed is possible and that agile enterprise transformation is much more than hype—it is very real, and it can provide tremendous benefits to businesses and the people working there. When you hear the buzz of teams collaborating, when people share a common purpose, and when invisible energy permeates the very walls of the company, you can literally sense business agility in action—and it’s a beautiful experience I want everyone to have.

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## Goals and Methods

The goal of the book is to provide you with what you need to align your organization's operational strategy with its business strategy. This means you'll understand why agile ways of working can benefit a business in certain contexts, but also recognize where optimizing for agility may not be appropriate. You'll have a good understanding of the five dimensions of agility and how they need to be considered (as a whole) so you can create a lasting and meaningful change to the organization. You'll be able to recognize successful patterns of adoption and outline an operating model and strategy toward enterprise agility. But this book is not a how-to guide; it's not a step-by-step guide to agility. That would not only be impossible; it would be irresponsible—transforming an organization is a complex endeavor that cannot be neatly planned up front.

As an analogy, this book is meant to prepare you to become a chef, not a cook. A cook is able to follow instructions from a recipe and repeat a process that has already been done many times before. This works well when the outcome is known and the process (cooking, in this case) is simple. Chefs, however, can follow procedures and processes in an expert manner (and often do so, when appropriate), but they also understand the fundamental reasoning behind the instructions and can adjust the process to create their own recipes when the context changes. Chefs ultimately write their own cookbooks.

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## Who Should Read This Book?

The target audience for this book is change leaders—people who recognize that the way companies are currently operating is not sustainable in today's business environment and want to improve the way organizations create products, deliver services, and produce value for their customers. More specifically, this book is meant for executives, program managers, and change agents who will define a transformation strategy and remove impediments to agility across the organization.

Leaders from areas outside of IT will find this book particularly interesting. HR, Marketing, and Finance are areas of the business that have

not traditionally had a large role in agile transformation efforts; this book makes the case that they are an essential part of it.

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## How This Book Is Organized

This book has been organized in three main parts, each focusing on a different aspect of the transformation journey; the why, the what, and the how.

**Part I, “The Case for Agility,”** focuses on the underlying reasons why an agile way of working is more appropriate in today’s business environment. It also covers agile in a historical context and introduces VUCA, the Cynefin framework and implications of optimizing for flow of value over resources.

**Part II, “Five Dimensions of Agility,”** covers each of the dimensions in detail and intends to help the reader understand the implications of how Technology, Organizational Design, People, Leadership, and Culture interact to shape a holistic approach to enterprise agility.

**Part III, “Unlocking Agility,”** focuses on how we can take the learnings from the previous chapters and translate this material into a concrete transformation strategy. We’ll cover the Agile Working Group (AWG), define an agile operating model, and provide examples of an organizational impediments backlog as part of a strategic transformation roadmap.

Each chapter contains a number of curated resources that I’ve found relevant to the topics discussed in the chapter. In addition, I’ve included a Q&A section with questions that I often get in my work as a consultant and change leader; I believe some of these will be both entertaining and informative.

**Chapters 1 through 10** cover the following topics:

- **Chapter 1, “The Agile Imperative”:** Provides the reader with the underpinnings of a business case for agility; why working in an agile manner is more important today than ever. We’ll cover the historical context for the creation of the Agile Manifesto and its implications beyond the world of software development.
- **Chapter 2, “Enterprise Agility”:** Provides a definition and clarifies that business agility entails balancing building the right thing, building it

right, and building it at the right speed, optimizing for flow and its implications.

- **Chapter 3, “Technology”:** Covers tools, techniques, and methods that are important considerations as part of a transformation strategy. While not intended to be exhaustive nor comprehensive, we’ll cover a number of tools and methods, clarifying the context where they are most useful.
- **Chapter 4, “Organizational Design”:** Covers not only the physical workspace design considerations for working in a more agile manner, but also the organizational structures. We’ll cover traditional structures, as well as more emergent ones, and discuss benefits and drawbacks of each.
- **Chapter 5, “People”:** Discusses the skills, knowledge, and abilities required of people working in agile environments and their implications. We’ll also cover the impact to HR and its role as an enabler of enterprise agility.
- **Chapter 6, “Leadership”:** Focuses on the critical implications of leadership in an agile environment. We’ll cover Level 5 and Teal leadership and describe Beyond Budgeting, a leadership and management model optimized for business agility.
- **Chapter 7, “Culture”:** The last and most important of the five dimensions of agility, this chapter covers the profound impact of culture to a successful transformation. We’ll cover a few essential cultural models and provide a way to change behavior—and in effect, culture—through metrics.
- **Chapter 8, “Building Your Organization’s Agile Working Group”:** Explores what it takes to establish the AWG, the engine of agile enterprise transformation. We’ll cover the characteristics of the AWG, where it belongs on the org chart, and how career paths of the people of the AWG may look in the longer term.
- **Chapter 9, “An Operating Model for Business Agility”:** Explains what we mean by “embracing change, executing with purpose.” It’s not enough to adapt to changing market conditions; successful companies also need to meet commitments to customers, partners, and collaborators.

- **Chapter 10, “Unlocking Agility: A Strategic Roadmap”:** This final chapter describes how to create an organizational impediments backlog, evolve through the strategic roadmap, and discover how the five dimensions of agility affect the strategy from a holistic perspective. We’ll describe key behaviors to avoid and identify seven signs that indicate we’re on the right path to a more agile enterprise.

## Note

Register your copy of *Unlocking Agility* on the InformIT site for convenient access to updates and/or corrections as they become available. To start the registration process, go to [informit.com/register](http://informit.com/register) and log in or create an account. Enter the product ISBN 9780134542843 and click Submit. Look on the Registered Products tab for an Access Bonus Content link next to this product, and follow that link to access any available bonus materials. If you would like to be notified of exclusive offers on new editions and updates, please check the box to receive email from us.

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—*Jorgen Hesselberg*

# About the Author

**Jorgen Hesselberg** is cofounder of Comparative Agility, a leading agile assessment and continuous improvement platform. A proven thought leader of numerous successful enterprise transformation efforts since 2009, Jorgen provides strategic guidance, executive counsel, and coaching to some of the world's most respected companies both as an internal change agent and an external consultant. He has trained thousands of people on agile and Scrum, disruptive innovation, and enterprise transformation strategy.

Passionate about making the world a better place to work, Jorgen is the former director and an active member of Supporting Agile Adoption, an Agile Alliance program dedicated to supporting those who apply agile principles and practices for agile transformation. Jorgen is a frequent speaker at international industry conferences.

He earned his bachelor degree in journalism at the University of Missouri, his MBA at Iowa State University, and an MS in information technology at Northwestern University. He completed postgraduate coursework in finance and disruptive innovation at Harvard Business School.

Jorgen lives with his wife and two sons in Nittedal, just north of Oslo, Norway.

## PART I

# The Case for Agility

[Part I](#) focuses on the underlying reasons why an agile way of working is more appropriate in today's business environment. It also covers agile in a historical context and introduces VUCA, the Cynefin framework, and implications of optimizing for flow of value over resources.

[Chapter 1 The Agile Imperative](#)

[Chapter 2 Enterprise Agility](#)

# Chapter 1

## The Agile Imperative

*Agile is rapidly becoming the dominant way to develop software products today.* This iterative and incremental way of working that focuses on continuous learning and early delivery of business value is increasingly taking over from the plan-driven, deterministic thinking of the past.

But why are more and more corporations—from traditional utility companies to innovative technology concerns—looking to expand agility beyond mere product development and into the very DNA of the organization itself? Why is it that yesterday’s top-down, traditional ways of working seem insufficient in today’s business climate?

This chapter examines why executives today view business agility as one of their top priorities.<sup>1</sup> I’ll start by looking at the origins of modern management thinking; recognizing where, and why, it had its place; and explaining how today’s business environment can be best expressed through Volatility, Uncertainty, Complexity, and Ambiguity (VUCA). I’ll then discuss how organizations can benefit from disorder and how business systems can be optimized to embrace—rather than avoid—the inherent variability of today’s business environment.

Finally, I’ll cover the development of the *Manifesto for Agile Software Development*, sometimes referred to as the “Agile Manifesto,” a document created in 2001 by 17 technical thought leaders to address challenges specifically related to software development. I’ll share how the Manifesto came to exist, why it worked for software, and how its values and principles align with the needs of larger organizations as they grapple with the complexity, speed, and volatility characterized by today’s business environments.

By the end of this chapter, you’ll be able to understand how and why business agility has become such a critical part of modern companies’ strategic

imperatives. You'll also recognize the environments in which Agile excels—and where it may not. Reading this chapter will prepare you for a deeper dive into enterprise agility, laying the foundation for the rest of this book.

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## Athens Beats Microsoft

Geoffrey West, a distinguished professor of theoretical physics and biology at the prestigious Santa Fe Institute, studied nonlinear systems such as galaxies, brain functions, and the solar system. Two systems he found particularly interesting were cities and organizations. Although they are both manmade constructs that share a number of characteristics, they differ in one important aspect, which made him ask: **why is it that cities tend to live forever, while companies die out comparatively quickly?** After all, the basic elements of each are quite similar. Both cities and companies are nonlinear systems bound by common constraints and governed by a known leader. Both, ultimately, aim to accomplish the same objective: to maximize the value for their stakeholders, whether they are city dwellers or corporate shareholders.<sup>2</sup>

Yet, even the world's oldest corporation, Japan's Kongo Gumi, which is confirmed to be more than 1,400 years old, is a mere infant compared to a city like Egypt's Luxor, for example which is more than 5,200 years old.

Compared to companies, cities seem nearly indestructible: they may be exposed to severe economic turmoil, natural disasters, and even nuclear wars, yet they bounce back and even thrive.

## World's Oldest Companies and Cities

*The World's 10 Oldest Companies Still in Operation<sup>3</sup>*

Estimated Year Founded	Name	Industry
578 AD	Kongo Gumi	Construction
705 AD	Nishiyama Onsen Keiunkan	Hotel
803 AD	St. Peter's Stiftskeller	Restaurant
900 AD	Sean's Bar	Pub
1000 AD	Château de Goulaine	Winery
1040 AD	Pontifícia Fonderia Marinelli	Foundry
1488 AD	Rathbornes	Candlemaker
1526 AD	Beretta	Firearms
1613 AD	The Shirley Plantation	Agriculture
1645 AD	Post och Inrikes Tidningar	Newspaper

*The World's 10 Oldest Continually Inhabited Cities<sup>4</sup>*

Estimated Year Founded	Name
Between 8000–10,000 BC	Damascus
7000–9000 BC	Jericho
6000–7000 BC	Aleppo
4000–5000 BC	Athens
4000–5000 BC	Luoyang
4000–5000 BC	Plovdiv

4000–5000 BC	Byblos
3000–4000 BC	Sidon
3000–4000 BC	Rayy
2000–3000 BC	Jerusalem

\* Sources differ on the exact age of these cities

Dr. West's observation was apt: companies are increasingly fragile. The average age of a company on the Fortune 500 is dropping fast: from 60 years old in 1958 to 18 years today. And that number is decreasing. Companies don't just die younger; they are also more likely to disappear faster. As noted in a 2015 Boston Consulting Group study, almost one-tenth of all public companies fail each year, a fourfold increase since 1965.<sup>5</sup>

Cities continue to prosper: In 2006, more than 50% of the world's population was urbanized; in 2050, more than 75% of the world's population is projected to live in urban areas. In fact, every week from now until 2050, a million people are being added to our cities.<sup>6</sup>

How can it be that two seemingly analogous entities can have such vast differences in their rate of growth and success?

West argues that a key difference has to do with the way a city is governed, or rather, how it manages itself. Although it is true that both cities and companies have leaders (mayors and CEOs, respectively) and followers (citizens and employees), the way they approach their goals differs greatly. Companies are typically managed through a top-down, controlled structure where leaders mandate what is to be done and the general manner in which it should be done. Cities, by contrast, are governed through a loose sphere of influence, in which leaders rarely control (yet greatly influence) citizens' behaviors through policies, incentives, and boundary constraints.

And the differences in outcomes are staggering: As cities grow, their productivity grows in a *superlinear* fashion. That is, as more people are added to the equation, cities become more productive, more innovative, and more valuable. The city becomes stronger and more resilient as it grows in size. Berlin, for instance, found its population growth to be double what it expected, and its economic development has continued to beat German economic growth consistently since 2006.

In contrast, companies see their productivity decline precipitously as they grow in size. The productivity curve of companies is in fact *sublinear*, where productivity *decreases* per employee in areas such as innovation (measured in patents per employee), profitability (measured by revenue per employee), and productivity (measured in output per employee). The data is stunning: with few exceptions, in every meaningful metric across companies over time, the same phenomenon repeats itself: companies become weaker, less productive, and less competitive as they get bigger.

Why is this? Size increases complexity and makes it harder to execute faster. A company with 5,000+ employees, for example, might find it difficult to change course or reset priorities quickly. Yet, cities are showing us that it is indeed possible to increase levels of productivity (at an increasing rate) while growing in size. What is it about cities that makes them virtually indestructible and *more* productive as they grow? And why is it that companies can't seem to replicate this characteristic, instead losing their edge and becoming anemic?

We'll get back to Dr. West's findings and the possible implications to today's organizations later in this chapter, but first we'll take a closer look at why most companies are managed using a top-down, plan-driven methodology and examine the origins of traditional management thinking. Management as a discipline is a relatively new school of thought, tracing its roots back no more than some 100 years.

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## Origins of Modern Management

Corporations did not spring into existence with a single, optimal management style in place. Management and the marketplace have been evolving since the first Industrial Revolution, but the theories and practices for organizing work and growing profits are still relatively new. Much of how management is taught in schools today still reflects thinking from the earlier part of the twentieth century. To better understand why today's organizations are turning to a more agile way of working, we need first to look at the history of modern management thinking—where it began, and why its theoretical roots in manufacturing and factory work are ill-suited for so many of today's organizations.

In the following, we'll look at Scientific Management, the rise of the knowledge worker, and how software developers learned to embrace uncertainty and strive to become more agile. We'll look at the origins and creation of the Agile Manifesto, discuss VUCA, and introduce Cynefin—a

leader's framework for decision making in a world of rapidly changing business contexts.

## Scientific Management: Building More Efficient Machines

Management as an academic discipline is in its infancy compared to other areas of study. Philosophy traces its roots back to old Greece; mathematics and physics do likewise. Even relatively modern academic disciplines like psychology and sociology are quite ancient, compared to management. The first MBA program in the world, at Harvard Business School, was founded in 1908, some 270 years after the college itself was established in 1636.<sup>7</sup>

In the early days, the discipline of management was rather limited and initially covered basic functions such as accounting, governance, and general administration. That is, until Fredrick Winslow Taylor helped usher in the efficiency movement and expand the way business was viewed by applying engineering thinking on the shop floor. Through his seminal 1911 book, *Principles of Scientific Management*, Taylor showed how quantifying how to measure productivity, progress, and control of resources helped decrease per-unit costs and increase operational efficiencies.<sup>8</sup>

One of the central arguments underlying Taylor's writings is that an organization is essentially akin to a machine. A machine is made up of a number of interrelated, yet known parts. To ensure the machine can run as efficiently as possible, your job as a manager is to get as much out of your resources as possible—to optimize throughout so you can maximize output, lower per-unit costs, and ultimately maximize profits. For instance, Taylor would argue that through careful study of work processes, one could identify a “best” way to perform a task. Then, by breaking down exactly the motions necessary to perform this task according to the “best” way, one could create a precise process by which an employee could repeat this task exactly according to definition, hence optimizing for efficiency. By identifying and enumerating the hundreds and thousands of these processes inherent in the organization, employees (or “resources”, as he called them) would follow careful instructions and not deviate from the plan. The less deviation, the better—Independent thought and employee creativity were discouraged, as this could risk changing the way work was done from the “optimal” path and decrease resource efficiency.

Taylor's insights may seem quaint by today's standards, but consider the time in which his writings were published. In 1911, the Second Industrial Revolution

was having a cascading effect on the western world. Organizational productivity increased to heights never seen before, and immense wealth was amassed by factory owners. Yet, the negative effects were substantial: automation put tradespeople out of work, creating massive unemployment, and wages decreased significantly. The pace of business was set by machines, and people were merely viewed as a way to support machines in doing the work faster. Viewing the organization as a machine in which resources needed to be optimized made sense; it was considered an informed way to run a business.

You might wonder why I'm bringing up thinking that originates a century ago in a book about enterprise agility. The reason is simple: the ghost of Frederick Taylor and his traditional ways of viewing management permeate business education to this day. The systems put in place in most large organizations trace their roots directly back to Taylor's theories of scientific management. Do any of these sound familiar to you?

- Individual performance optimization schemes based on utilization
- Project plans and commitments based on estimates set by managers who are not actually doing the work
- Fixed annual budgets with rigid control mechanisms

These are just a few remnants of Taylor's thinking—observations and theories based on the business world of 1911.

To be fair, for a long time, the ideas introduced by Scientific Management served a purpose. During the Second Industrial Revolution, efficiency—the ability to squeeze as much as possible out of every possible resource—was paramount. In fact, efficiency was the only real competitive concern in this time period. Organizations were relatively isolated from competition due to lack of availability to capital, access to information, and an infrastructure that made it almost impossible to compete in a timely manner. Companies that were able to establish themselves quickly and exert a dominant position from the start had a huge competitive advantage that was hard to overcome.

In this business climate, growing companies had more time to adjust their strategies if they found they were headed in the wrong direction. If needed, they could effectively squash the competition before it became a real threat. Through the early 1900s to the 1950s, the key to success was clearly resource optimization: identifying a plan of action based on careful analysis, and then executing according to plan.

## The Rise of the Knowledge Worker: Unlocking the Creative Potential

As the western world evolved from an industrial-based economy toward a more knowledge-based economy characterized by increased product differentiation starting in the 1950s and 1960s (sometimes dubbed the “Third Industrial Revolution” or the “Digital Revolution”), it became clear that our current systems were not designed to properly support this way of working. While Henry Ford in the 1920s famously declared that “any customer can have a car painted any color that he wants so long as it is black,” economic success was now increasingly based on intangible assets such as knowledge, skills, and innovative potential as the key resources for competitive advantage.<sup>9</sup>

An increasing number of highly educated employees found themselves working for companies that created an environment of control around work that simply could not be controlled. Sure, you can measure exactly how long it takes to screw on a wing nut, and you can measure the degree of variance compared to predefined specifications to gauge quality, but how does that type of quantitative thinking translate to evaluating the complex and cognitive work of a medical doctor or investment analyst? In the case of a journalist, how do you measure productivity when someone is writing a story for publication? Is counting the number of words on a page an appropriate proxy for customer value?

A number of thinkers recognized these developments and highlighted the fundamental changes necessary to adjust to a new economy and a fundamentally different way of working. No longer were routine tasks, transaction processing, or simple order-taking sufficient. Workers were increasingly required to analyze data to establish relationships, identify trends, and understand cause and effect.

The Austrian educator Peter Drucker examined through his work as a management consultant how companies were run and made the realization that to succeed in a market dominated by information and knowledge, companies must look beyond the metrics of efficiency and expediency and instead focus on ways to unlock the potential of people inside the organization. He noted that employees often have more knowledge than their managers and that the primary purpose of management is to prepare people to perform and give them the freedom to do so.

In 1959, Drucker released his book *The Landmarks of Tomorrow*, where he coined the term “Knowledge Worker,” encapsulating the idea that the work of employees today is done with their heads rather than their hands, and that

management thinking needs to evolve to support this reality by creating an environment of growth, development, and learning.<sup>10</sup>

Building on Drucker's "Knowledge Worker" concept, in 1990, Peter Senge, an MIT-trained professor and cofounder of the Society for Organizational Learning, released his book *The Fifth Discipline*, a work that introduced the concept of a "learning organization." According to Senge, a Learning Organization is an organization that "facilitates the learning of its members and continuously transforms itself." Senge explained that companies need to transform to support a more interconnected way of thinking. To make the most of its workers' potential, a company should act more like a community supporting a shared commitment. (Remember what we know about cities?)

## **Software Eats the World: Embracing Uncertainty and Becoming Agile**

Drucker and Senge's theories regarding community and learning organizations were incredibly influential when introduced, but nowhere did they resonate more than with a new group of knowledge workers who were emerging fast in the late 1980s and 1990s—software developers. Although software development as a profession was in its relative infancy, the rise of the personal computer (PC) and the emergence of the Internet created a great demand for software developers and a growing number of products started having software included as a natural part of their design, from large mainframe computers to pocket calculators and coffee machines. Jobs in software development began to proliferate, meaning a new type of worker (and work) was arising, requiring a new set of rules.

Software developers shared a lot of the characteristics of the early knowledge workers—the architects, lawyers, and the academics—but creating software put an increased emphasis on teamwork, continuous learning, and effective communication. As a discipline, software development is both art and science. At its core, it's about solving complex problems by creating algorithms that can leverage the computing power of machines.

This insight that a better understanding of the problem emerges through experimentation and collaboration between team members applies beyond the realm of software development and to the world of product development in general. In 1986, Hirotaka Takeuchi and Ikujiro Nonaka published "The New New Product Development Game" in the *Harvard Business Review* and made an analogy describing a new way of working with a rugby metaphor, in which team

members are constantly sharing information and passing the knowledge “ball” around the team.

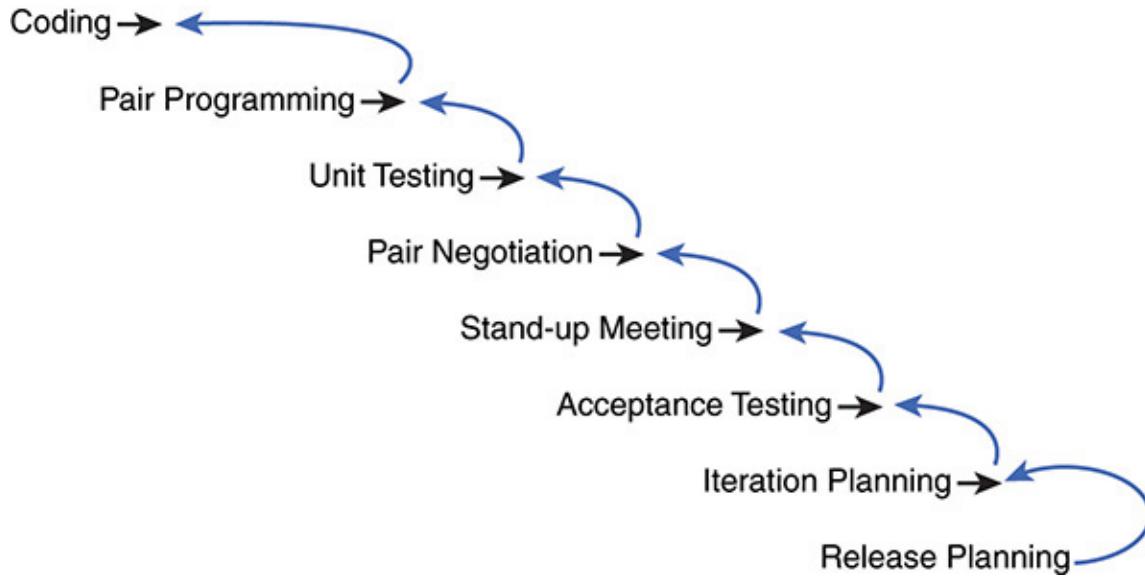
The comparison is apt; similar to a sports team, a software development team is a group of people with complementary skills, aligned around a common objective.

The article recognized that to create solutions that customers find compelling, facilitating learning so we can validate our assumptions of customer needs has to be a paramount part of the product development process. Takeuchi and Nonaka warned that the current way of working, in which all our assumptions about the customer are established up-front, was not sustainable:

“Multinationals must achieve speed and flexibility in developing products; to do so requires the use of a dynamic process involving much reliance on trial and error and learning by doing. What we need today is constant innovation in a world of constant change.”<sup>11</sup>

This insight appealed to Jeff Sutherland, a former Navy Top Gun who was involved in IT systems development at the Easel Corporation. Together with colleagues at Easel, he started defining a more flexible way of developing software that took into account learning by doing, intense team collaboration, and frequent feedback loops. In 1995, Sutherland, together with Ken Schwaber, a software developer and industry consultant, formalized this way of working in what they named the *Scrum* framework at the OOPSLA industry conference.<sup>12</sup> Scrum helped make Takeuchi and Nonaka’s findings concrete in a beautifully simple, yet hard to master methodology applicable to product development (more on Scrum in [Chapter 3, “Technology”](#)).

Scrum addressed the management side of product development, yet remained silent on specific technical practices in software. Kent Beck, an eminent software engineer, addressed this need head-on when he introduced eXtreme Programming (XP) in the late 1990s with his book *Extreme Programming Explained*. The central objective of XP is to reduce the cost of change; that is, the faster we speed up the feedback loop so we can make incremental and iterative changes along the way, the more likely we are to build software that does what we intend it to do. Beck urged managers to recognize that changes are a natural and desirable aspect of software development. Instead of attempting to define a stable set of requirements, changes should be planned for and anticipated as an expected part of the product development process (see [Figure 1.1](#)).<sup>13</sup>



**Figure 1.1 Practices in eXtreme Programming Create Quick Opportunities for Learning Through Multiple Layers in a Feedback Loop**

Beck's work caught the attention of Robert Martin, a successful C++ and object-oriented design consultant based in Chicago. Martin was frequently asked by his clients to come up with a process that could codify the kind of practices he was providing to his customers. Unable to make much progress designing a process himself, Beck's work intrigued Martin, and they became professional friends after meeting at a software conference in Munich. Martin could sense Beck was on to something, so he went to Portland to visit Beck and learned about test-driven development and how to pair programs. The more he learned, the more Martin was convinced that he and Beck were getting closer to identifying what clients were asking for.

In parallel with all of this, in 1991, Alistair Cockburn, a methodologist based in Utah working for IBM's fledgling consulting group, was given the objective to look deeper into what made project teams successful. Starting out with Smalltalk and C++ projects, Cockburn found that the factors that made a project team successful were not documented in literature at the time. After interviewing dozens of project teams, he distilled the key elements of successful teams into what he called the Crystal family of methods, a series of lightweight processes intended to be appropriate for a given type of project. The key message was that every project needs its own methodology; methods need to change as situations change.<sup>14</sup>

While these thought leaders were exploring ways of writing better software—more or less independently of each other—the industry itself was in a dire state of affairs. Through the 70s, 80s, and 90s, several cases emerged, causing headlines due to massive cost overruns, chronic quality problems, and embarrassing product delays. In 1994, the Standish group released a frequently cited CHAOS report, which found that the average cost overrun of software projects was as high as 189%.<sup>15</sup> Other surveys showed that although half of projects were operational, they were rarely considered successful. If that was not enough, three-quarters of all large software products delivered to the customer did not meet the customer's requirements.

It was not lost on the people doing the work (the programmers) that the way things were going was not sustainable. Throughout the 1990s, professionals across the software industry would meet periodically and share ideas. What do some of these emerging ways of thinking have in common? What are ways that we can improve the way software is written? People recognized that things needed to change, but the ideas had yet to coalesce in a meaningful way.

This was about to change. As XP started gaining ground in the community, Martin had lunch in Chicago with Martin Fowler, a fellow XP expert whom he had met at Kent Beck's XP Leadership Conference in the fall of 2000. They agreed some sort of “summit” was necessary to get like-minded people together and create a “lightweight process manifesto.” Martin and Fowler started identifying people who should be at the session, ensuring many different perspectives were represented. Martin sent out an invitation for the “light-weight process summit” over email; one of the invitees was Alistair Cockburn.

Cockburn—who himself was in the process of arranging a similar event for the same reason—enthusiastically accepted the invitation and offered to handle logistics by organizing the event close to his home base in Utah.<sup>16</sup>

And so it was that a few months later, in February 2001, Beck, Cockburn, Martin, Fowler, Schwaber, Sutherland, and 11 other experienced thought leaders came together in Snowbird, Utah, in a quest to help address what was wrong with the way software was created. How, they asked themselves, could they leverage their collective experiences to improve the way software was developed? As software developers, they were fiercely proud of their craft. Yet, they felt dissatisfied by the state of software engineering in general and how software development (as a profession) was negatively perceived. They wanted to produce software that their customers would be delighted by, and they wanted

to influence the organizations that created the environment where great software was built.<sup>17, 18</sup>

After a few days of debates and discussions—and a fair amount of skiing and occasional visits to the bar and hot tub—the developers wrote the *Manifesto for Agile Software Development* (also referred to as the “Agile Manifesto”), consisting of 4 values and 12 principles:<sup>19</sup>

## **The Manifesto for Agile Software Development:**

*We are uncovering better ways of developing software by doing it and helping others do it.*

*Through this work we have come to value:*

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

*That is, while there is value in the items on the right, we value the items on the left more.*

The values were followed by 12 principles, which solidified a few weeks later after the initial Snowbird session.

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Business people and developers must work together daily throughout the project.
5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
7. Working software is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity—the art of maximizing the amount of work not done—is essential.
11. The best architectures, requirements, and designs emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Kent Beck

Mike Beedle

Arie van Bennekum

Alistair Cockburn

Ward Cunningham

Martin Fowler

James Grenning

Jim Highsmith

Andrew Hunt

Ron Jeffries

Jon Kern

Brian Marick

Robert C. Martin

Steve Mellor

Ken Schwaber

Jeff Sutherland

Dave Thomas

The values and principles of the Agile Manifesto were inspired by the movements that these leaders had created and formed years prior to their meeting: Scrum, Crystal, eXtreme Programming, Dynamic Systems Development Method (DSDM), and Feature-Driven Programming. (See [Chapter 3](#) for more on some of these methodologies.) All of these underlying philosophies and methodologies had been targeted to produce better software. Yet in writing the Manifesto, these software professionals realized that they had created something deeper and more profound.

Jim Highsmith, one of the signatories, noted:

*“I believe Agile Methodologists are really about “mushy” stuff about delivering good products to customers by operating in an environment that does more than talk about “people as our most important asset” but actually “acts” as if people were the most important, and lose the word “asset.”*<sup>20</sup>

James Grenning, another signatory of the Manifesto, agrees. *“The Manifesto was written in a time when Process was clearly valued more than People. Since the signatories were people who were writing code every day, we could see the harm that this thinking did to our work and to the products we created. More than anything else, the Agile Manifesto is about making the world safe for programmers.”*<sup>21</sup>

The signatories were primarily interested in finding ways to create environments for writing better software while the profession found itself in a crisis. It is not without reason they named their agreement the Manifesto for Agile Software Development.<sup>22</sup>

At the same time, entire markets, industries, and economies were being disrupted, fueled by the ubiquity of software, increased mobility, and broadband Internet access. Cloud technologies lowered the price of processing dramatically, and access to information became near-universal. This combination of access to information, easily accessible technology, and low barriers to entry disrupted the traditional business cycle.

Whereas large corporations had a distinct competitive advantage vis-a-vis smaller competitors in the past, this benefit was quickly eroding and instead became a significant disadvantage. As critical assets of competition transformed from brick and mortar to bits and bytes, smaller, more nimble organizations could quickly access the technical stack necessary to compete with their bigger competitors.

Just as software had transformed the way we processed information in the 1970s and 1980s, it was now profoundly affecting entire markets and industries—and the companies in them.

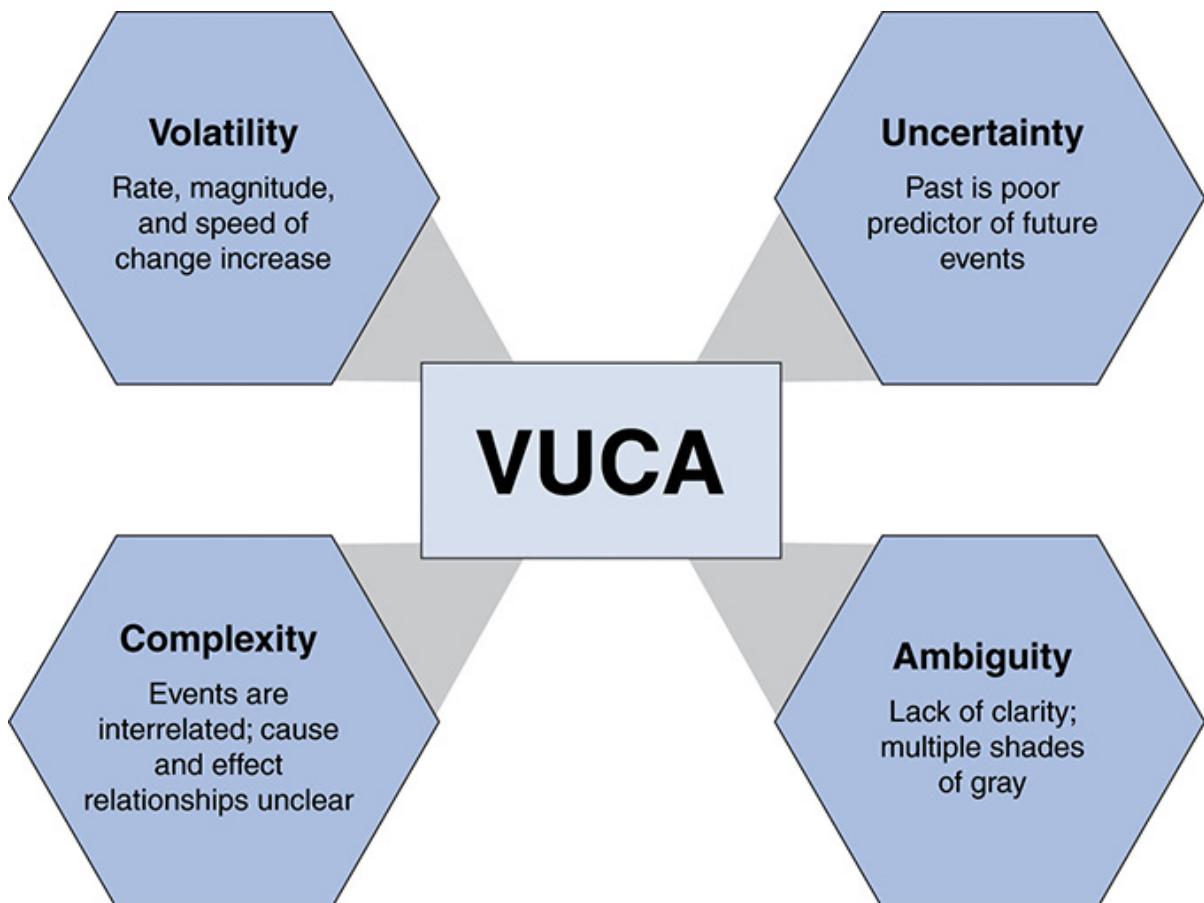
In 2011, Marc Andreessen, a prominent investor and cofounder of the Internet browser Netscape, went as far as proclaiming that “software is eating the world.” In an influential *Wall Street Journal* OpEd, Andreessen pointed out that virtually every industry—finance, real estate, advertising, healthcare, telecommunications, and more—was being profoundly transformed and that incumbents were prone to be disrupted.

*“Six decades into the computer revolution, four decades since the invention of the microprocessor, and two decades into the rise of the modern Internet, all of the technology required to transform industries through software finally works and can be widely delivered at global scale,” Andreessen exclaimed.*<sup>23</sup>

## VUCA and Cynefin: Orienting Businesses in a Brave New World

This idea—the realization that the traditional “laws of operations” had changed dramatically and that established powers were in fact at a disadvantage compared to their much faster and more adaptive competitors—was encapsulated aptly by the American War College.

Just as traditional business plans were being disrupted by the new clock speed of business, military officers noted their carefully analyzed plans were increasingly ineffective on the battlefield after the Cold War. The events of September 11, 2001 and the subsequent terrorist activities that followed had military officers describe the new environment in which they were operating by the acronym VUCA: Volatility, Uncertainty, Complexity, and Ambiguity, as illustrated in [Figure 1.2](#).



**Figure 1.2** *Volatility, Uncertainty, Complexity, Ambiguity*

VUCA can be defined as the following:

- **Volatility:** In this unstable environment, things that seem permanent no longer are. The nature, speed, and magnitude of change does not occur in a predictable pattern. Volatility is turbulence, a phenomenon that is occurring more frequently than in the past.<sup>24</sup>

- **Uncertainty:** Truths we felt to be undisputable no longer hold. There is a lack of predictability in issues and events.<sup>25</sup> These volatile times make it difficult for leaders to use past issues and events as predictors of future outcomes, making forecasting extremely difficult and decision making challenging.
- **Complexity:** Events are interrelated; cause and effect relationships are rare, and long-term effects of events are impossible to determine. There are often numerous and difficult-to-understand causes and mitigating factors (both inside and outside the organization) involved in a problem.
- **Ambiguity:** Situations are rarely clear cut; we find ourselves in the gray zone more than not. There is an “inability to accurately conceptualize threats and opportunities before they become lethal.”<sup>26</sup>

The War College used VUCA to describe the ground truth in modern military scenarios, but the term was subsequently adopted by strategic business leaders to describe the chaotic, turbulent, and rapidly changing business environment that has become the “new normal.”

What businesses used to think of as a sustainable competitive advantage no longer is; access to information, abundant cloud computing resources, and ubiquitous broadband have made it easier than ever to emulate, or even exceed, a powerful competitor’s offering at an astonishing speed. Due to the interconnectedness of globalization and international markets, unpredictable events have widespread and dramatic outcomes.

The financial crisis of 2008–2009, for example, rendered many business models obsolete, as organizations throughout the world were plunged into turbulent environments similar to those faced by the military. At the same time, rapid changes marched forward as technological developments like social media exploded, the world’s population continued to simultaneously grow and age, and global disasters disrupted lives, economies, and businesses.

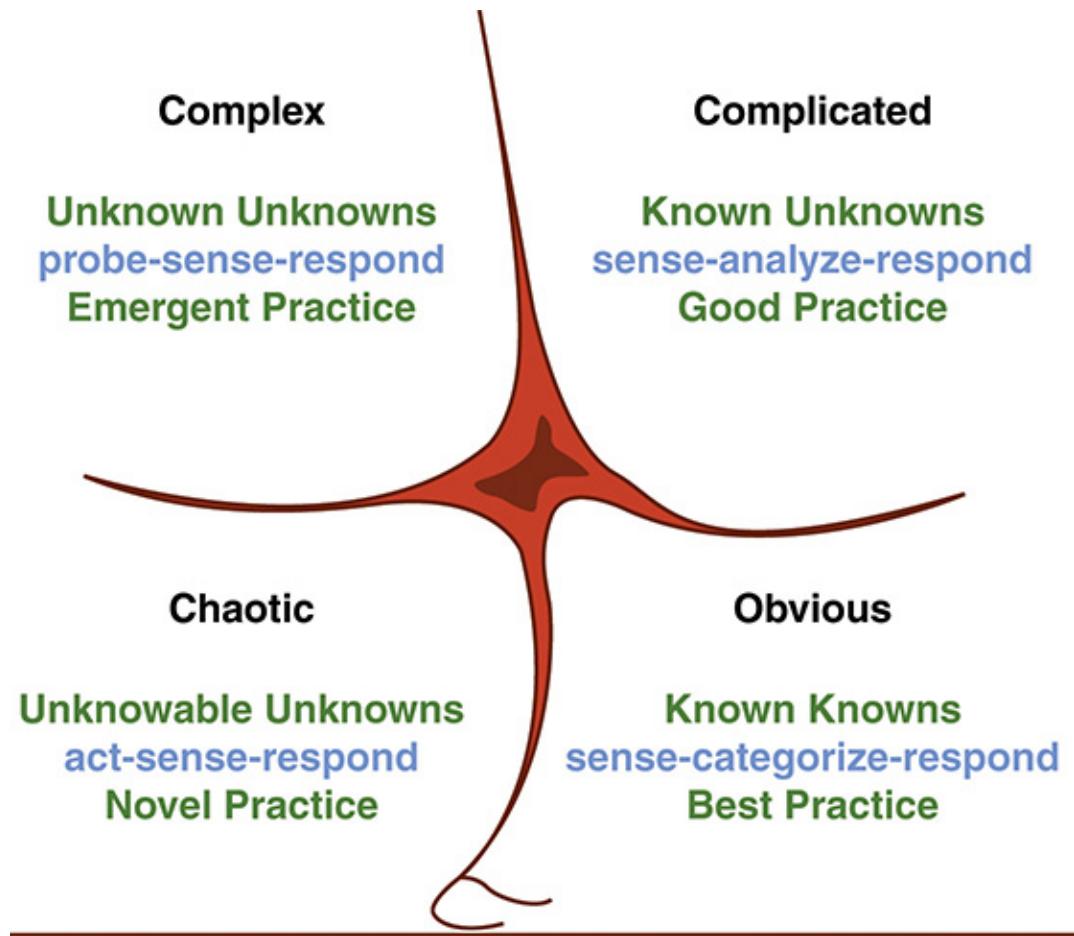
As a result, top-down, fixed strategies—however well executed—no longer predictably yield the results we expect.

From the perspective of the incumbent accustomed to doing business in a more predictable world, this type of business environment may seem chaotic. Only by adjusting and learning better, faster, and more economically than their peers can companies gain an “agile advantage.”

To start embracing a new way of operating, it is necessary to think beyond the simplifications useful in a more predictable context defined by early thinkers such as Frederick Taylor. As the world has changed to become more complex, the way we approach business strategy needs to reflect a more adaptive view of the world.

## The Cynefin Framework

David Snowden, a former frustrated employee at IBM who founded his own research network called *Cognitive Edge*, recognized the gap in current leadership models and developed the Cynefin (pronounced ku-nev-in, which is Welsh for “sense of place”) framework (see [Figure 1.3](#)), which enables “executives to see things from new viewpoints, assimilate complex concepts, and address real-world problems and opportunities.”<sup>27</sup> Cynefin represents a dynamic picture of changing business contexts; by sensing which context they’re in, leaders can “not only make better decisions but also avoid the problems that arise when their preferred management style causes them to make mistakes.”



**Figure 1.3** The Cynefin Framework Describes Business Contexts and How to Act in Ways Appropriate for Each

The following sections outline the five contexts of the framework (*disorder* doesn't appear in the image for natural reasons) and explain why understanding the characteristics of each domain can enhance decision making and unlock a more adaptive business strategy.

### ***Obvious Context***

Obvious contexts are “known knowns,” and cause-and-effect relationships are clear to everyone. In the Obvious context, the appropriate behavior is to *Sense, Categorize, and Respond*. In other words, once you recognize what type of situation you’re dealing with (Sense and Categorize), there is only one obvious approach to take. Cause and effect are easily determined, and action can be taken (Respond).

A situation that might fit the Obvious domain is reproducing a widget. The widget has been clearly defined; you know everything there is to know about how to create the widget. Now you just have to execute, and the problem is solved. Problems that find themselves in this domain are typically easily automated.

## ***Complicated Context***

In the Complicated context, we’re dealing with “known unknowns,” and the cause and effect is less clear. However, through expert knowledge, you can determine which solution is optimal from several good options. The behavior that is most appropriate in this domain is to *Sense, Analyze, and Respond*. Experts, with their deep knowledge and experience, are often well suited to tackle these problems because they may save us time and help us point to better solutions quicker.

An example of a situation in the Complicated domain is building a house. There are certainly many different ways to solve this challenge (Sense), but one method is typically better than the other depending on what goal you’re trying to achieve. For instance, if you’re aiming to build a house with specific environmental requirements, expert help from a LEED-certified architect is helpful to shift through the unknowns and create clarity (Analyze). Once an approach has been identified, you can proceed to build (Respond). Having expert knowledge (from external consultants, for instance) can be very useful in Complicated contexts because they help us wade through a variety of information, weigh the pros and cons through their skills, knowledge and abilities, and ultimately assist in making better decisions.

## ***Complex Context***

In the Complex context, the “right” answer is not clear—this is the realm of “unknown unknowns.” In fact, you don’t know the cause of the situation until *after* the fact. Therefore, instead of imposing a course of action, you need to allow the path forward to reveal itself. The most appropriate approach is therefore to *Probe, Sense, and Respond*: you test an assumption by running an experiment, find out what happened after the experiment is run, and then respond accordingly.

An example of a complex context is an organism or an ecosystem like a rainforest. Snowden explains that the rainforest “is in constant flux—a species

becomes extinct, weather patterns change, an agricultural project reroutes a water source—and the whole is far more than the sum of its parts.”<sup>28</sup>

In today’s business world characterized by knowledge work, we find ourselves in the Complex context a lot more than we probably realize. By definition, all types of creative endeavors and innovation activities fall into this domain. We simply don’t know what’s going to happen next until we run an experiment and find out. Any complex problem that has not already been solved belongs here, as well.

This is an incredibly uncomfortable thought for many of us. Given that the world is increasingly complex, how can we make precise five-year financial projections? How we can lay out detailed product roadmaps that span long periods of time?

The truth is, we cannot and should not do this with any level of confidence. Leaders who don’t recognize that a complex domain requires a more experimental mode of management may become impatient when they don’t seem to be achieving the results they were aiming for. They may also find it difficult to tolerate failure, which is an essential aspect of experimental understanding. If they try to overcontrol the organization, they will preempt the opportunity for informative patterns to emerge.

As Snowden notes: “Leaders who try to impose order in a complex context will fail, but those who set the stage, step back a bit, allow patterns to emerge, and determine which ones are desirable will succeed.”<sup>29</sup>

## ***Chaotic Context***

The Chaotic context often refers to a crisis situation that requires an immediate response. In Chaotic domains, the proper response is to *Act, Sense, and Respond*: make a decision, recognize the situation, and then make a proper move. In this case, we’re dealing with *unknowable unknowns*; there is no relationship between cause and effect.

Here is an example. There is a fire in the theatre and we need to get out (*Act*)! Are we going to spend time defining a project plan, perform analysis, or even consider a prioritized backlog of things to accomplish? Nope. We’re getting the heck out of here the moment we identify the danger (*Sense*)! Only after we’re out of harm’s way do we reflect on what just happened (*Respond*). No plan is needed.

## ***Disorder Context***

The worst domain you can be in is Disorder. You don't know which state you're in. You cannot make sense of the situation, and you're likely going to choose the wrong tools and take the wrong actions.

The best possible action you can take when you're in this domain is to simply recognize that you don't know what to do. Then you can break the situation down so that you can start categorizing appropriately.

This is one of the key points of Snowden's work: recognizing which domain you're operating in—so you know how to operate accordingly—is critical. Without recognizing the context you're in (Disorder), you're likely to end up making decisions that can be counterproductive or even harmful in the wrong context.<sup>30</sup>

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## **Leadership in a Complex World**

Current management theories, rooted in concepts from the industrial revolution, assume that the business world can be categorized mostly in the “Obvious” and “Complicated” domains, following Snowden's framework. But as I've illustrated in this chapter, the environment in which we work is fundamentally different today than it was just a few years ago. Due to the intersection of information, technology, and communication, the rate of change in business models, customer expectations, and global competition is accelerating, and the interrelatedness of events is increasingly categorized by a Complex domain, rather than a Complicated or Obvious one.

VUCA is becoming the norm, not the exception. For companies to compete in today's world, it is essential that they operate in a way that embraces this reality, rather than try to control or contain it. The fundamental problem most businesses encounter now is that they address today's complex, nonlinear problems with yesterday's linear, cause-and-effect methods and thinking.

Truly adept leaders will know not only how to identify the context they're working in at any given time, but also how to change their behavior and their decisions to match that context. They also prepare their organization to understand the different contexts and the conditions for transition between them.

A deep understanding of context, the ability to embrace complexity and paradox, and a willingness to flexibly change leadership style will be required

for leaders who want to make things happen in a time of increasing uncertainty.

**This takes us back to Professor Watts's initial observation: what is it about cities that make them so robust and virtually indestructible, compared to companies?** Dr. Watts theorized that the way cities are managed helps them embrace uncertainty in a way that allows them to benefit, rather than suffer, from unexpected events. By creating boundaries within which people can work together toward a common goal, the cities' leaders can influence—rather than control—an outcome, while allowing for creativity, collaboration, and serendipity to naturally happen.

When companies want to get more innovative, we typically hear of chief innovation officers and special initiatives in which employees are directed to submit ideas and vote for interesting concepts. People are rewarded nominal prizes if their ideas are selected, and a nice article in the company newsletter is written. This sounds nice enough; the only problem is that it does not work. Internal innovation programs are notoriously ineffective. An MIT study found that 80% of innovation is a result of coincidence and chance. You simply can't "force" innovation.

Contrast this with 1871, a co-working space established in Chicago. Faced with fierce competition from bigger cities on the west and east coasts, key players from Chicago's business community together with then-governor Pat Quinn and Mayor Rahm Emanuel realized innovation was going to be a huge need to keep jobs in Chicago. In 2012, they launched a co-working space in the Merchandise Mart building in which academics, investors, patent lawyers, students, and entrepreneurs were working together in the same space. The founders could not "force" innovation, of course, but by creating an environment where "tribes" of people sharing a common goal ran into each other regularly, they increased the "serendipity density" of something good happening.

The results are impressive. After just 18 months of operating, 1871 generated 300 jobs and \$10 million of revenue through two dozen startups.

1871 is a dynamic, organic space that continuously evolves and changes with the people who occupy the building. You could argue it is more akin to a living organism than a machine. In fact, Watts likened cities to ecosystems, rather than fixed structures. An ecosystem is poised to benefit from disorder through serendipitous encounters, rather than clearly defined, executed plans.

The city of Berlin's evolution through war, political regime change, and economic renaissance is an example of a diverse community of people who went through multiple challenges and failures, yet continued to learn, adapt, and grow

more resilient over time. Eastern Berlin was initially poorer, less educated, and far less attractive than its western sibling when the city unified again in 1989. Less than three decades later, Eastern Berlin is a hotbed of innovation, artistic expression, and creativity. Many have called Berlin the center of Europe's Silicon Valley, illustrating the level of technical innovation and richness of business models originating there. If Berlin—when faced with the many challenges caused by the war—attempted to avoid the challenges and instead attempted to silence the impulses created as a result of the eclectic clash of cultures between the East and the West, Berlin would be a very different place.

## **Business Agility: Accelerating Organizational Learning**

Applying these concepts to the world of business, Amazon has embraced this way of operating from its inception. Clashing opinions and vigorous intellectual discourse are encouraged as part of the company culture. Everyone is expected to have an opinion about a given situation and is expected to passionately defend it with data to back it up. And when a product decision is made, it is understood that failures are inevitable, however well-reasoned the decision appeared in the beginning. Employees working on the Amazon Fire Phone project, one of Amazon's more public flops, did not have to fear for their jobs; they were simply transferred to other, more viable projects as business conditions revealed that the Fire Phone would not catch people's attention.

Failure is inevitable; it's a natural part of running a business. An agile organization is therefore not designed to *prevent* failure—this is both impossible and dangerous. Instead, its objective is to identify what amplifies failure, keep these factors from creating harmful outcomes, and continuously learn from the experience. Agile organizations that practice this are highly fault-tolerant and designed to generate frequent “safe-to-fail” experiments, rather than optimized toward a flawless environment. That is, practice informs theory—not the other way around.

Software programmers were among the first to identify this when they saw the challenges associated with developing complex software under deterministic, plan-driven business expectations.

In a world where change happens at an accelerated pace and we're dealing with complex problems in an increasingly Complex domain, there is no longer such a thing as a sustainable competitive advantage. The only competitive advantage then becomes the ability and speed at which an organization can learn and adapt accordingly.<sup>31</sup>

Disruption is everywhere, and our largest companies are struggling to catch up. The business impact is evident in virtually all industries. Newspaper headlines about sinking corporate titans have become routine as large enterprises struggle to stay afloat in a world of uncertainty and constant change: IBM announced it is laying off 60,000 in 2014; Microsoft trimmed its staff by 18,000; Hewlett-Packard cut 24,000 in 2015; and Intel announced more than 12,000 cuts through 2017.

The businesses that thrive are the disruptors who adapted to the new business landscape from the beginning: Amazon is now the world's biggest retailer; Google is the most dominant marketing company in the world; Facebook has upended communications; Airbnb overtook Hilton Hotel's market share in four years; and Uber disrupted the taxi industry in less than two years. No industry is safe from disruption. Agility is everything.<sup>32</sup>

This new era is confusing, chaotic, and downright scary for anyone charged with leading companies through a world of VUCA. But as unfamiliar as this may be, there are ways to design your company so it can embrace, rather than attempt to avoid, uncertainty and constant change.

Agility is not about forgetting where we came from or ignoring the very things that made our companies successful. It's about advancing our thinking and the tools we use to adapt to today's business world, where small startups can topple industrial giants in a matter of months. Today's business world is a world of immense risk, complexity, and chaos—but also of diversity of thought, beauty, and opportunity.

In the chapters to come, we'll explore in more detail what enterprise agility entails and describe the implications to organizations as it relates to Technology, Organizational Design, People, Leadership, and Culture. We'll outline a strategic blueprint for organizational agility and detail the core engine of organizational change: the Agile Working Group (AWG).

We'll provide concrete examples of enterprise impediment backlogs and highlight the most common mistakes people make when "going agile" at the organizational level.

At the end of the book, we'll ask questions and identify statements to test whether your organization is an agile organization, helping you gauge where you are on your transformation journey.

Unlocking enterprise agility is not about installing a methodology or deploying a set of tools recommended by external consultants. Agility is only

achieved by transforming the way we work, think, and approach how we create value as a company.

Let's get started.

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## Summary

This chapter examines the origins of modern management thinking and describes some of the forces that led to the creation of the Agile Manifesto in 2001. I point out that, although the Agile Manifesto was written as a response to improving how software was written and making the profession more humane to programmers, the values and principles described here have proven to resonate beyond programming and into deeper cultural and human realms of the organization. I make a connection between the complex environment involved in the art of software development with the complex environment of business operations in the world today, accelerated by advances in technology, communication, and processing power. Finally, I describe Snowden's Cynefin model and relate it to today's competitive environment, highlighting how agile thinking is essential to sustain organizations that respond more like cities and less like traditional companies to improbable events.

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## Q&A

### **1. Do all organizations have to be agile? Is this over-hyped?**

All organizations are “born” agile at inception. As companies grow, processes are established, structures are built, and bureaucracies are defined. Much of this is good and necessary to achieve economies of scale and other efficiencies. At some point, however, the organization’s ability to respond to change and adapt tends to decline as focus gradually turns to executing on a proven business model and growing profits. Just a few years ago, this was not such a big deal because barriers of entry were relatively large and the rate of change manageable. Even if a company was not able to adapt very quickly, it could catch up over time without catastrophic consequences. In today’s VUCA world, that is no longer true—the clock speed of business is accelerating and disruption is rampant. Unlocking the

agility that once existed in an organization is therefore going to be critical to all large enterprises to sustain growth, innovation, and market share.

## **2. Does the need for agility affect all industries? Aren't there industries that will only be marginally affected by the need to adapt to change?**

Even government-sponsored companies, not typically known for their innovation and speed of change, are recognizing that simply doing business as usual is not going to be sustainable in the long run. Granted, the rate of change will vary depending on the level of competition and technological maturity inherent in each industry, but I cannot think of a single industry that is not affected. Even the utilities industry, one of the oldest, most traditional industries in business, is not immune: Equinor, a Norwegian, state-owned energy company and one of the world's largest suppliers of oil and gas, is increasingly redefining itself as a "software" company, recognizing that the way it operates today—and the products it sells—is likely to change dramatically in the future.

## **3. What if my leadership is not interested in enterprise agility?**

There's an old saying I like: "leaders change or leaders change." The implication is that if leaders want to remain in leadership positions, they need to demonstrate that they can lead their organizations through today's ever-changing business environment. If they are unwilling or unable to embrace this way of thinking, they are likely to be fired and other leaders that do will replace them.

Later in the book, I'll provide guidance on how you can contribute to supporting the effort of transforming the organization—an effort that requires alignment around all five critical dimensions of agility: Technology, Organizational Design, People, Leadership, and Culture.

## **4. Isn't the Agile Manifesto all about improving how we write software? What does this have to do with the enterprise overall?**

Although the agile movement has its roots in software because of its unique properties allowing programmers to learn quickly through cheap and rapid experimentation—breaking a "build" is not akin to breaking a bridge—all industries will be affected by change to some degree. In fact, this book is hardly about software at all—it's about how enterprises can learn faster and respond quicker while continuing to execute on a validated business model.

## 5. What are the risks of an enterprise not embracing agility?

I think we're seeing some of the risks reflected in the data referred to earlier in the chapter. The average age of a company on the Fortune 500 is dropping. Companies also fail more frequently: almost one-tenth of all public companies fail each year, a fourfold increase since 1965. If a company chooses to not embrace change, it is increasing its risk of going out of business. In other words, aiming to operate in a more agile manner is not a matter of following a hype cycle; it's a matter of survival.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- **The Agile Manifesto (<http://agilemanifesto.org/>):** The original website has barely changed since it was launched following the Snowbird session in 2001. Besides listing the 4 values and 12 principles of the Manifesto itself, the site also includes a brief history of how the Manifesto came to be (written by Jim Highsmith), (outdated) bios of the signatories, and translations of the Manifesto to dozens of languages. At one point, users could even support the Manifesto by “signing it” themselves, although this feature was closed in 2016.
- **The Agile Uprising—Manifesto Author Review Podcast (<http://podcast.agileuprising.com/manifesto-author-review/>):** To quote the site itself, Agile Uprising is a “network that focuses on the advancement of the agile mindset and global professional networking between leading agilists.” It’s free and contains lots of insightful content—a resource I highly recommend. Specifically, I recommend listening to the Agile Manifesto Author Review Podcast, which is a series providing listeners with a unique opportunity to listen to 14 out of the 17 signatories talk about the Manifesto, what they were thinking at the time, and how they have seen things evolve since 2001. It’s a treasure!
- **Cynefin: A Leader’s Framework for Decision-Making (<https://hbr.org/2007/11/a-leaders-framework-for-decision-making>):** This is the Harvard Business Review article that put Cynefin on the map and provided David Snowden with a platform to discuss how to handle

complexity in business situations. A prolific blogger, Snowden has continued to evolve Cynefin beyond the original 2007 article; you'll find more information at <http://cognitive-edge.com/>.

- **Frederick Winslow Taylor: The Principles of Scientific Management:** Taylor often gets vilified for being responsible for the top-down, uninspired, traditional management processes still prevalent today, more than a hundred years since the publication of his work. And to some degree, this is fair—large, organized bureaucracies focused purely on efficiency owe a lot to the thinking and ideas introduced by Taylor. His contributions reach beyond a focus on effectiveness and efficiency, however. For instance, he was an early advocate of mutual respect between workers and management. He argued that no method of improvement (scientific or otherwise) would be possible without a mutually beneficial result—both management and workers should gain from better work processes. Taylor's book is a fascinating read, not perhaps so much as a guide to run a business today, but as an important historical backdrop to where we are today. A paperback copy of his classic work is available in most bookstores for less than \$10. It's a worthwhile investment.

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## Footnotes

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# Chapter 2

# Enterprise Agility

In the previous chapter, we learned how software development and knowledge work differs from operations in traditional industries like construction and manufacturing. Because it deals in domains of uncertainty and faces accelerating change, software development is a way of working that is more akin to ecosystems and organisms than machines.

Early business thinkers devised theories that helped organizations optimize for resource utilization and reduce per-unit costs by following carefully devised plans. The Agile Manifesto expresses a different way of thinking that optimizes for *emergence* and the *inherent uncertainty* in the work we do. Although originally meant as a way to help improve how software is written, the thinking behind the Agile Manifesto has spread to other areas of business beyond the technical realm, influencing how organizations can operate in a world characterized by Volatility, Uncertainty, Complexity, and Ambiguity (VUCA).

This chapter builds upon [Chapter 1, “The Agile Imperative,”](#) by demystifying “enterprise agility” and offering a definition. We explain what characterizes an agile enterprise and then illustrate how an agile enterprise fundamentally differs from traditional ways of running a business.

Next, we introduce five critical dimensions that need to be addressed to evolve an organization toward a more agile way of operating. In subsequent chapters, we go through these five dimensions in detail, creating the context to help you design an enterprise strategy that unlocks enterprise agility in your organization.

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# Defining Enterprise Agility

At their core, agile organizations are enterprises that embrace uncertainty and execute with purpose. Although they continuously seek and explore new technologies and business models, they execute proven product lines with confidence, predictability, and quality. Above all, agile enterprises understand that speed is essential; the velocity at which they execute directly affects their ability to learn and adapt to change.

We know what agile enterprises look like from the outside, but how can we define enterprise agility in a way that helps organizations embrace this relatively new way of working?

Many have tried to come up with a meaningful definition of the agile enterprise. Here's my take:

*"An Agile enterprise is an organization of engaged people that is relentlessly focused on customer value; that continually improves the way it operates; and that uses empiricism to swiftly embrace change in a sustainable manner."*

Let us dig into this definition a bit before we get more specific as to what this means for the organization as a whole.

- **...an organization of engaged people”:** Agile enterprises recognize that individuals who care about the work they do and have meaningful interactions with their fellow colleagues will outperform any process, tool, or workflow any day of the week. Although tools, methods, and techniques can be extremely useful, they are merely a complement to, not a replacement for, people collaborating toward creating value.

Menlo Innovations, an innovative software development firm located in Ann Arbor, Michigan, embraces serendipitous encounters and open communications among its people. Not even the CEO has an office. Richard Sheridan explains, “Although my workplace moves around depending on the needs of the organization, I usually find myself sitting somewhere in the middle of our main development space. I found being present with those that actually do the work makes a big difference—how else can I understand what’s truly going on and be of service?”<sup>1</sup>

- **...relentlessly focused on customer value”:** People working in agile enterprises understand the “why” behind their business. They understand what their customers want and why they need it. They recognize their

customers' pain and how they can alleviate it. They also recognize how they can help their customers gain benefit, and they care passionately about delivering meaningful gains by focusing on what's important to the customer—not themselves.

Intuit, as part of its Product Development process, would often have developers "shadow" select customers while they were interacting with their product. Rather than asking customers a bunch of questions, the developers simply observed how customers were using the software in their natural context. The frustrations, a-ha moments, and pure joy expressed by customers provided a much deeper appreciation of how the software provides value to Intuit's customers than any focus group, product requirements document, or user story could ever do.<sup>2</sup>

- **...continually improves the way it operates":** For agile enterprises, constantly challenging and enhancing the way they work is simply business as usual. Every day, small, incremental improvements are made at all levels of the organization, ultimately leading to a self-perpetuating engine of improvements. Getting better is never done.

In his Agile2010 keynote address, Mike Cohn, one of the founders of both the Agile Alliance and the Scrum Alliance and a recognized thought leader in the agile community, made this point clear: "*The goal is not to become agile—the goal is to understand how to be more agile.*" Cohn's point is clear: agility is a result of a mind-set; not a process. An enterprise will never finish "becoming agile" because it will always find ways to improve its operations.

- **...uses empiricism":** As you'll remember from [Chapter 1](#), the Agile Manifesto values "working software over comprehensive documentation." The principal reason: working software is something we can observe, and it is hard to fake. It demonstrates real progress toward a goal. Documentation, PowerPoints, or other status reports, on the other hand, can be interpreted (and misinterpreted) in any number of ways. Empiricism implies that we rely on information we can see and immediately validate—not merely theories or hypotheses. Practice informs theory, not the other way around. This idea that data guides decision-making is something you'll see again later in this book. It's fine to propose an idea, but unless we've been able to validate the concept by running an experiment and checking its relative efficacy, the idea is really just a hypothesis: something to be tested,

whether or not it originates from an executive, a junior developer, or the head of a business group.

Google is famous for its data-based decision-making process. When making an argument for an idea or product enhancement, you'd better come prepared to back up your hypothesis with a healthy amount of data supporting your position; empirical evidence trumps titles or seniority. There are many examples of junior Googlers who have been able to gain support of their efforts by proving their validity through empirical evidence. “Data wins arguments” is an implicit slogan at Google’s Mountain View HQ.

- **...*swiftly embrace change***: Agile enterprises understand that they don’t know what the future holds, and they are comfortable with this reality. In fact, instead of trying to predict the unpredictable, they instead assume that there are “unknown unknowns” and that the best way to deal with these is to design an organization that can adapt to unexpected events—to recover quickly—rather than try to resist them.
- **...*in a sustainable manner***: Business agility is not a diet; it’s a lifestyle. It’s not a short-term initiative to get the company “over the hump” or through a difficult year of change; it’s a permanent way of operating. Agility is a culture and a mind-set that fuels the company on an ongoing basis, and it is a continuous journey. As such, making sure the organization finds a rate of change that is sustainable for the long term is critical.

HERE, a digital mapping company owned primarily by Mercedes-Benz, Volkswagen, and BMW, understood this. When it first started its efforts toward transforming into a more agile organization, HERE executives laid out a strategy that highlighted the fact that the company was embarking on a multiyear effort that would ultimately lead to a fundamental change in its corporate culture. “We did not know exactly what we would become, but we knew we would not look like anything we did when we started,” said Allen Rutzen, senior manager of agile program management. “That was exactly the point.”

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## Designing Business Agility: Balancing Three Critical Levers

Having a definition for agility is helpful, but to be practical, we need to provide context for how agility can be achieved and what levers need to be considered.

[Figure 2.1](#) provides a high-level view of how enterprise agility is expressed in an organizational context.



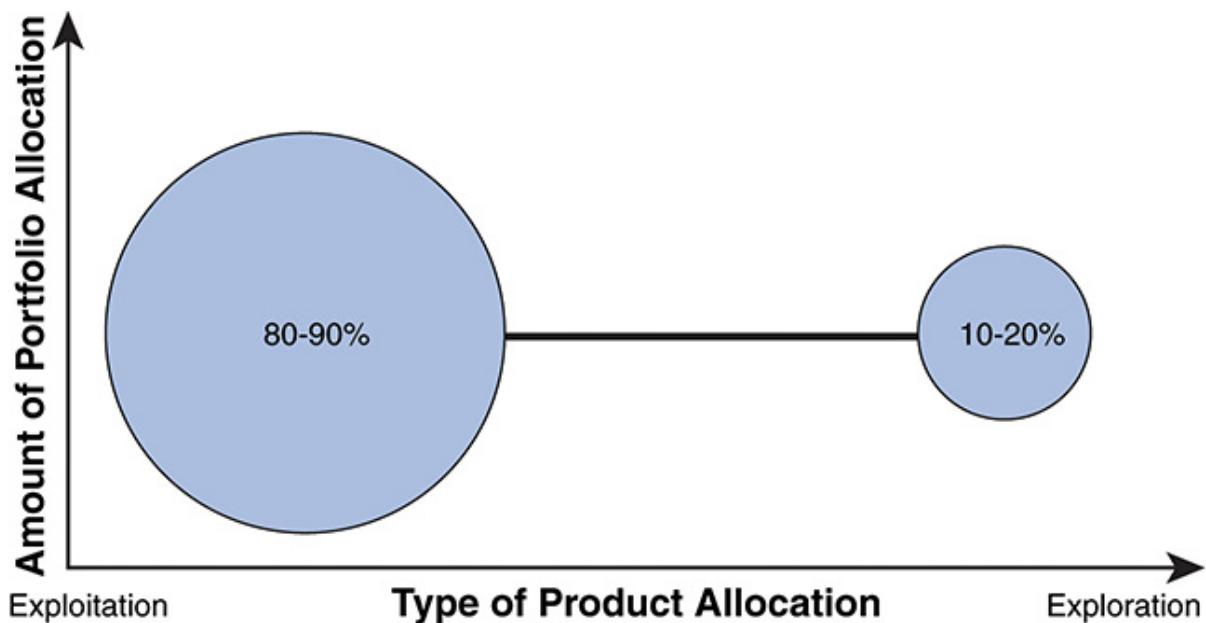
**Figure 2.1** Enterprise Agility in an Organizational Context

When designing an agile strategy, you need to achieve a balance between **value** (building the *right thing*), **quality** (building the *thing right*), and **flow** (building at the *right speed*). Let's examine the concepts behind the illustration in detail.

## Building the Right Thing (Value)

Value creation in an agile workplace has two aspects: *execution* and *exploration*. An agile enterprise needs to be building compelling products that provide value to the customer in a manner that is economically viable for the organization. That's the *execution* bit. At the same time, an agile enterprise needs to always be searching for new ways to provide value, through product or business model differentiation and innovation. This is what we mean by *exploration*.

Strategically, we need to deploy what Nassim Taleb, the author of *Black Swan* and himself a successful options trader, refers to as a “barbell strategy”: a portion of our product portfolio allocation is focused on the “known knowns” (traditional Product Management, labeled as “exploitation” in [Figure 2.2](#)), while a separate portion of our product portfolio is focused on the “unknown unknowns” (“exploration”), which necessitate continuously experimenting, validating, and searching for new product designs and business models.<sup>3</sup>



**Figure 2.2** An Agile Enterprise Portfolio Executes on Proven Business Opportunities While Actively Embracing Change and Uncertainty as Part of a Strategy Optimized for VUCA

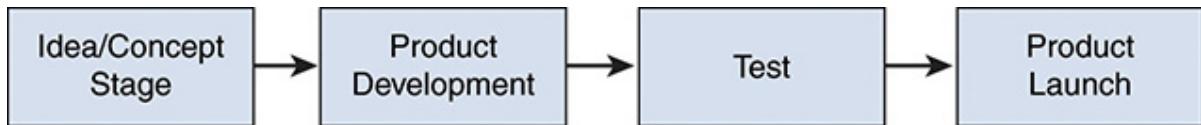
Only by designing the organization for *both* exploitation and exploration can we take advantage of the opportunities inherent in proven, mature markets while

actively searching for new disruptive technologies, products, and business models.

[Figure 2.2](#) illustrates Taleb’s “barbell strategy” in an enterprise context; a majority of a corporation’s resources are targeted toward proven, low-risk business efforts, while a significant, yet smaller part of the total portfolio is allocated to riskier, more innovative endeavors.<sup>4</sup>

## ***Exploitation: “Product Development”***

Let’s dig into exploitation first because that is what most of us are familiar with. One of the primary purposes of an organization is to match a compelling value proposition with a customer segment that’s willing to pay for a product or service. Traditionally known as Product Development, the process involves developing an idea or concept, validating that the concept appeals to the target audience through focus groups or other research, running tests to ensure the product works as desired, and then launching the product into the world. [Figure 2.3](#) illustrates how a product is launched traditionally, from “concept-to-cash,” described further in the list that follows.



**Figure 2.3 Traditional Product Launch Stages**

- 1. Idea/Concept stage:** In this stage, the opportunity is defined and the first draft of a business plan is developed. A SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is performed, high-level budgets are outlined and an expected return of investment is expressed. The idea, together with the financial modeling, is presented to upper management, which makes a go/no go decision. If the green light is given and budgets are allocated, we’re off to the races.
- 2. Product Development:** In this stage, everyone gets down to work. Each department (Engineering, Marketing, Finance, and so on) starts executing on its respective plans. The product is developed, marketing plans are detailed, and financial models clarify impacts of pricing, competition, distribution, and more.

3. **Test:** In this stage, an early version of the product is delivered to a small test audience to help identify potential bugs and gather early feedback. Marketing completes its go-to-market plans and finalizes its communications strategy. Sales completes supporting materials and starts promotional activities.
4. **Product Launch:** This is what we've been waiting for: the product is formally launched, marketing plans are executed, sales staff get ready to start selling, promotional activities are in high gear, and the board starts looking at the sales projections to see whether they meet the plans outlined the previous year, during the Idea stage.

This Product Development model is what's typically taught in business schools and is universally known as the generally accepted way to develop products today. Most established enterprises leverage some variation of this model, some doing it quite well. Yet, despite the popularity of the model, many more product launches fail during their first year than actually succeed.

According to a leading market research firm, **some 75% of new product launches fail to earn even \$7.5 million in their first year.<sup>5</sup>**

So what's missing? In his seminal work *The Four Steps to the Epiphany*, Steve Blank, a respected Silicon Valley venture capitalist, took a closer look at the Product Development model and noted some critical flaws:

1. **Customers are not considered.** In the traditional model, real customers are not considered until the test stage. Focus groups and marketing research does a poor job of predicting what actual customers will think of the product in their natural habitat—much less, any information about whether they will buy it.
2. **Focus is on the initial ship date.** The main goal in the traditional Product Development cycle is to “meet the date.” Executive bonuses, incentive plans, and other reward systems are heavily biased toward meeting the commitment initially set when the product was given approval at the senior level. All else is secondary.
3. **Emphasis is purely on execution, not learning and discovery.** The emphasis on the Product Development model is to “execute to plan.” Following what was laid out as much as a year earlier is of utmost importance; new information that might be gained along the way is viewed as noise and a distraction against executing as defined.

4. **Premature scaling.** The model encourages the business to spend significant funds to build up an organization around the product—before anyone knows that the product is indeed a success. Marketing personnel, sales staff, engineering leadership—these are all the trappings of a large, ongoing department, not for a product that has not yet proven that it is viable.
5. **High costs of product launch failure.** Because of the time required to get to market, the large organization built around the product, and the lack of learning during the process, it is expensive to fail a new product launch.

Given these limitations, if anything changed during the time the product was developed, or if any of our assumptions were incorrect about our customers, the risk of not satisfying the customer is very high and the chance of recovering from failure is very small.

The traditional Product Development model, therefore, only works if our initial assumptions are correct, if the market remains unchanged from the time we start developing the product to when we’re ready to launch it, and if we’ve accounted for the unknown risks inherent in any new endeavor.

Getting all of this right is nearly impossible and part of the reason so many new product launches fail to live up to their expectations. One example of not accounting for the unknown unknowns, despite near flawless Product Development execution, is an innovative music service you’ve probably never heard of.

### ***Case Study: Comes with Music***

In the early 2000s, before Pandora, Spotify, and Apple Music ruled the world, Nokia came up with a brilliant idea: including a free music subscription service with every new Nokia phone. The service, dubbed “Comes with Music,” was truly ahead of its time and tested favorably with focus audiences: bundled with special editions of a Nokia phone, consumers would also get a full year’s worth of music, completely free of charge.<sup>6</sup>

At first, initial sales signals were encouraging. Although the music service was lacking in certain areas and did not have contracts with a couple of major record labels, the feedback from early focus groups was generally positive, and people were snapping up the service.

Yet, gradually, something unexpected happened; even though time and effort had been spent creating extensive catalogues with music from all over the world,

the Comes with Music service was met with a tepid reception from consumers: sales numbers never took off beyond the early adopters, and people actively avoided the Comes with Music offering, in sharp contrast to the reaction from the focus groups conducted earlier.

What went wrong? Why were the world's largest markets so negative in response to a service that focus groups had embraced so readily?

The answer had to do with people's definition of "free music" and the ancillary costs of owning the service, especially in developing markets. As it happens, "Comes with Music" was indeed technically free, but not really. To please the record companies and quickly build an attractive catalogue of music, Nokia had agreed to lock each of the songs to the device with so-called DRM (Digital Rights Management) technology, ensuring that the songs could not be transferred to other devices. This meant that if people wanted to listen to their tunes through other means than their phones, they'd have to go through a series of complicated steps to circumvent copyright protection measures. All this to simply listen to songs that were ostensibly yours!

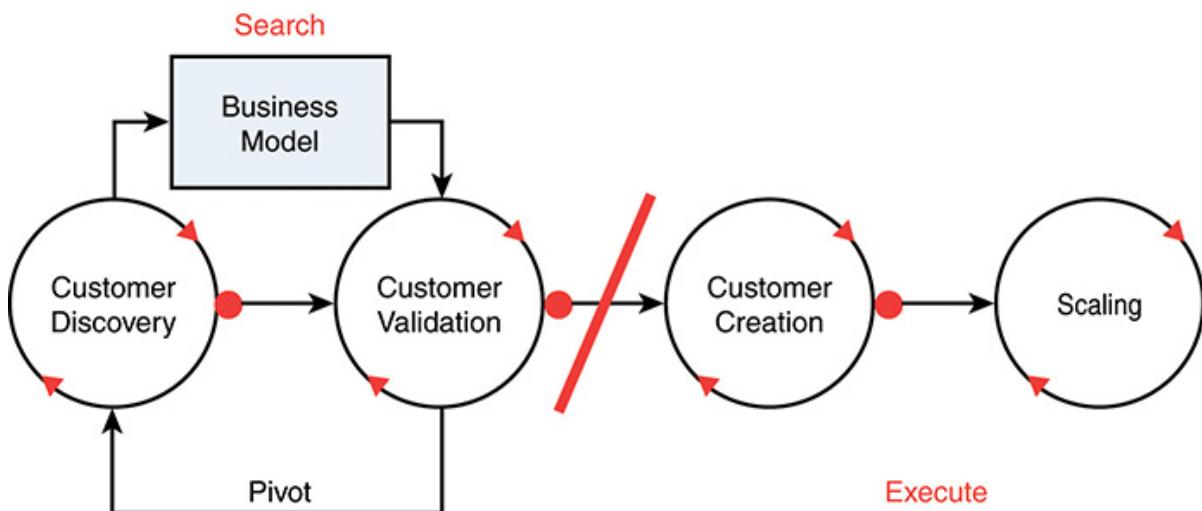
In addition, because this service required extensive downloads, having a data plan that supported an increased use of data was necessary. And because data plans in emerging markets like India were notoriously expensive, the Comes with Music service essentially required consumers to sign up for plans that cost many times the value of the phone itself. People caught onto this quickly and avoided the service like the plague. Who would want a phone that required such an expensive cost of ownership?

Comes with Music is an example of a product that hit the nail on the head in terms of value proposition and target audience. Unfortunately, Nokia ignored the underlying consumer preferences and economics behind the offering. Because the service could only be used on a single device and required extensive data plans to be used, it was essentially unattractive and out of reach for many in the world's largest markets. As a result, the Comes with Music service was shut down less than a year after it was launched.<sup>7</sup>

## **Exploration: Customer Development**

As demonstrated in the preceding case study, “Execution” is incredibly hard to get right given the enormous degree of uncertainty involved in a product launch. Exploration, practiced in tandem with exploitation, is essential. Gaining information about the customer early has taken on an increased importance. Rather than focusing on the product itself, shift the focus to the customers and find out what they want *before* investing large amounts of money to build a product.

Blank calls this process “Customer Development,” summarized by four critical steps illustrated in [Figure 2.4](#) and described in the list that follows.<sup>8</sup>



**Figure 2.4** Steve Blank’s Customer Development Model Focuses on First Identifying a Compelling Need for a Potential Customer; Then Validating That the Product or Service We’re Building Satisfies This Need Before Investing in Scaling Activities

1. **Customer Discovery:** Listen to your potential customer and find out what her problem is. What is her pain? What can your product or service do to help alleviate the pain and even delight the customer?
2. **Customer Validation:** Verify your assumption. Does your proposed solution solve the problem the potential customer identified? Is there a need for the solution in the first place? These questions are answered through several iterations in which you learn more about the customer problem and the intensity to which the problem needs solving. As you discover that your

assumptions are wrong (which they most often are), you'll "pivot" and change your direction to ensure you meet the needs of the customers.

Once you've validated that there is a customer problem and that your solution is compelling, you have achieved a so-called "Problem-Solution" fit. Now you know that there is a need to build the product, and you can proceed to the next two steps, which resemble the traditional Product Development model.

3. **Customer Creation:** Depending on the market (existing, new, resegmented), what is the opportunity for this solution? More traditional Product Development activities such as product positioning, marketing, and targeted product launch will now take place.
4. **Scaling:** Given that we've identified the customer, confirmed that our solution is indeed solving a problem worth solving and that there is a market supporting the product or service, let's build the solution. This is what's called "Product-Market Fit." At this point, we're ready to scale, knowing that we have validated several essential assumptions.

The main idea of the Customer Development model is that we recognize that we're awfully naive when it comes to our customers. Knowing this, an integral part of the process is a series of iterations, in which valuable learning is gained along the way.

The Customer Development model (exploration) is not meant as a substitute for the Product Development model (exploitation), but rather as a complement. To execute with purpose while embracing uncertainty, agile companies need to deploy a dual operating structure, in which both exploration and exploitation are considered part of their strategy.

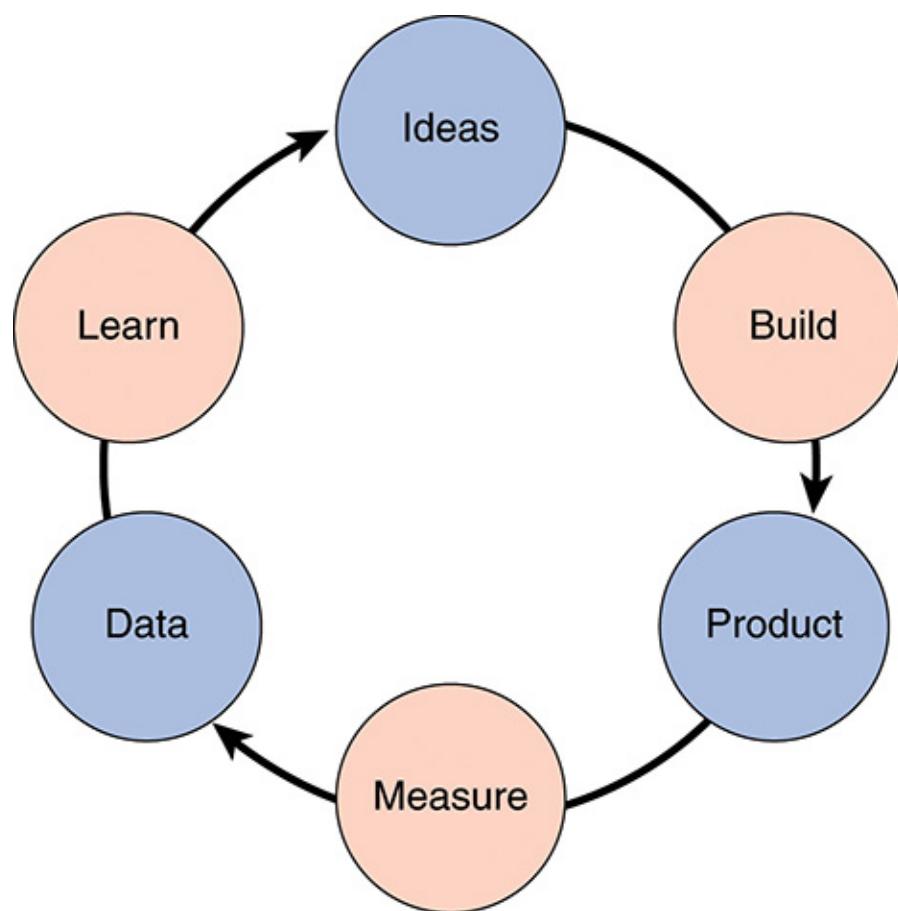
### *Putting It into Action: Lean Startup*

Lean Startup is a methodology introduced in 2008 by Eric Ries, one of Steve Blank's students at Stanford. It was inspired by three sources: Blank's work, the scientific method, and Lean's focus on optimizing for customer value.<sup>9</sup>

Lean Startup turns the traditional Product Development model on its head: instead of defining a product upfront based on traditional market research and focus groups and then assuming that the general public will find it compelling once it's launched into the real world, Lean Startup introduces a model that incorporates "validated learning" across the Product Development cycle.

What this means: instead of assuming that we know what we're building and who we're building it for, let's create a hypothesis to test our assumption through the release of a Minimum Viable Product (MVP); validate whether or not our assumptions are correct; and then evolve our product based on empirical data, rather than extensive (and hypothetical) business plans. In other words, empiricism rules—and validated data drives theory.<sup>10</sup>

Ries summarized this model as the “Build-Measure-Learn” cycle, where a number of hypotheses are made throughout the Product Development cycle and continual learning helps adapt the design of the product based on customer feedback, as illustrated in [Figure 2.5](#).



**Figure 2.5** The Build-Measure-Learn Cycle Encourages Validated Learning Through Rapid Experimentation So You Can Quickly Identify What Customers Want in Environments with High Degrees of Uncertainty

Although Blank and Ries approached this problem from a perspective of a startup (hence the title of Ries's book), the concept also applies to larger enterprises. Companies such as Nordstrom and GE are running active Lean Startup divisions as part of their Product Development efforts. Lean Startup helps to ensure the companies continuously innovate, explore, and validate new ideas in addition to executing on their proven models.

Intuit is an early adopter of this way of working, as well. Founder Scott Cook views this model as a natural way of doing business in a VUCA world. He warns that past success can be a poor predictor of future performance. "Success is a powerful thing, it tends to make companies stupid, and they become less and less innovative."<sup>11</sup>

Cook and CEO Brad Smith have built a deliberate culture at Intuit, in which failure is more than just an acceptable option; it's a natural way of working. Experimentation is encouraged and easy. There is no need for permission, everything you need to run an experiment is readily accessible, and leaders are encouraged to keep an open mind and let results (rather than preconceived notions) speak for themselves. In fact, the relative success of a given experiment may often be irrelevant; what's important is what the organization learns as a result and that it encourages a culture of continuous innovation and experimentation.

## **Building the Thing Right (Quality)**

"Building the thing right" is deceptively simple: if we build in quality at the source, we can ensure that the foundation of the product is solid, which enables us to execute with purpose. We recognize the crippling effects of *technical debt*, and we approach product design with an emergent mind-set.

## ***Managing Technical Debt***

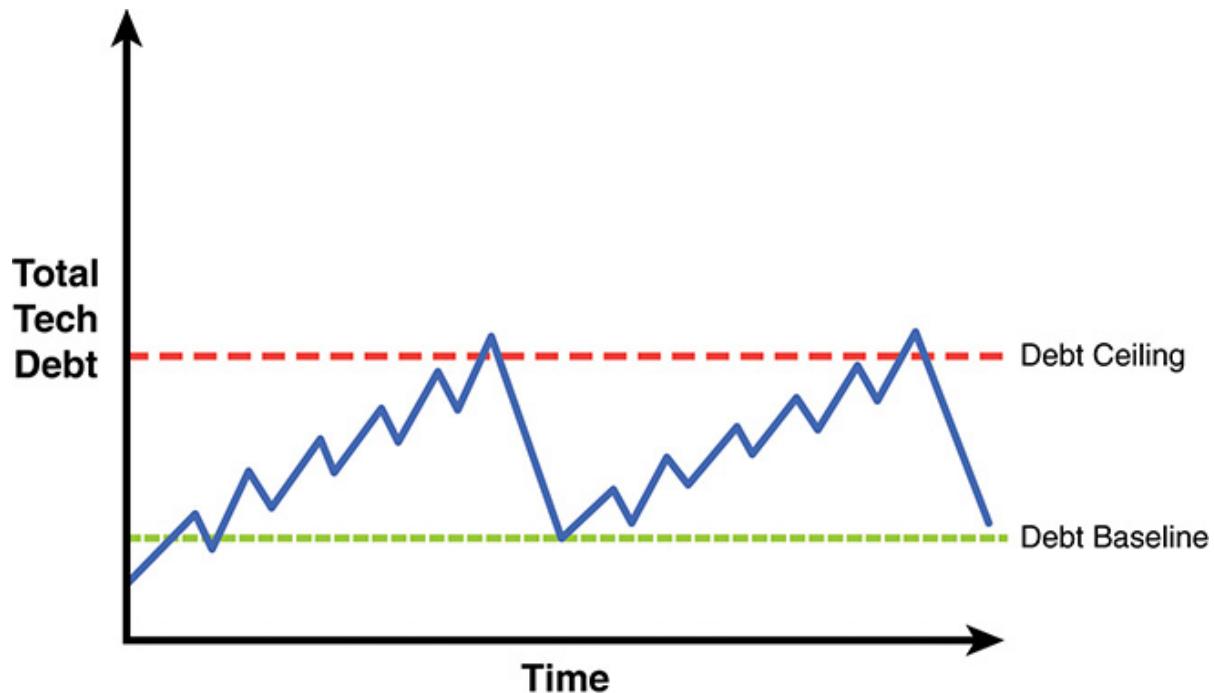
What is technical debt? Coined by Agile Manifesto co-author Ward Cunningham, the term refers to the price we pay when we take product design shortcuts.

Henrik Kniberg, an agile thought leader with an impressive knack for simplifying complex concepts, perhaps explained it best: technical debt is the result of decisions you make that slow you down in the long run. That is, by making technical decisions that are not well thought out, we'll incur a debt that will need to be repaid later, and with interest. The interest is represented through delays, rework, and future development required to make up for the shortcuts taken earlier.

On his blog, C2.com, Cunningham takes the debt metaphor further and explains that teams either have to keep paying this interest—thus slowing them down—or pay down the “principal” by refactoring (rewriting) the code and designing it the way it should have been from the start. In the long run, keeping the principal low by taking an intentional approach to code design will ensure you can handle occasional debt (periodic shortcuts) while keeping your design under control.<sup>12</sup>

Technical debt is an instrument to be used. Just like financial debt can be a useful tool as part of a financial portfolio, we can take on technical debt to test an important concept or validate an idea. The important part is being able to pay down the debt when appropriate so that future development is not being slowed down by “technical sins” of the past. Kniberg recommends setting a “debt ceiling” so that you can take on debt when it makes sense but make a conscious effort to pay it down as it reaches an agreed-upon red line in the sand.

[Figure 2.6](#) illustrates this idea. A team may consciously take on technical debt to validate a concept or get feedback from a customer but makes an effort to pay down the debt periodically so it does not get out of hand.



**Figure 2.6 Keeping Technical Debt Under Control by Being Conscious About How Much We Take On—and When to Pay It Off<sup>13</sup>**

## ***Intentional Product Development***

*Quality at the source* means building products in an intentional, deliberate manner that embraces emergence and the “art” of software development.

James Grenning, one of the signatories of the Agile Manifesto and a seasoned programmer, considers Product Development to be both an art and a science. “Fundamentally, software programming is about problem solving,” Grenning states. “Getting a program to run successfully and understanding the problem statement that is expressed in each line of code—and how it is solved—is part of the science of software development. Doing this in a beautiful way, so that it’s not just functional but also appealing, easy to understand and maintainable so others can build on it is part of the art.”<sup>14</sup>

The value of building products with this level of intention has benefits beyond the satisfaction of a job well done, however. By taking quality seriously, a number of organizational advantages emerge:

- **Velocity:** Writing software in a manner that prevents bugs and architectural cul-de-sacs helps teams produce more value in less time. This does not mean they’ll write more lines of code (which is not related to value), but

that they'll write software without excessive rework, bug fixing, and ambiguity later on.

- **More predictability:** When teams take technical debt seriously and ensure they keep it under control, the level of variability in their code is reduced and risk minimized. This means the level of stability with which they develop software increases.
- **Confidence:** Few things are more empowering for a team than when they can confidently deploy to production without fear. They know the build will run successfully because they approached their code with a level of intention that pays off in the long run. And by making small changes in an iterative manner, recovering from failure is not a significant event.
- **Adaptability:** When code is written in a way that avoids architectural shortcuts, the team is positioned where it can more easily embrace changes without having to rewrite large portion of the code. Decoupled code that follows proven design principles increases the level of robustness in the code and allows for more frequent changes.

Being intentional about quality has the added benefit of strengthening the entire system. When I visited a Toyota lift truck plant in Indiana a few years ago, I asked one of the employees about the plant's approach to defect reduction. The engineer smiled at me and let me know Toyota was thinking of renaming "defects" to "treasures."

I remember being confused. Why would Toyota relabel its defects? This sounded remarkably like some of the less-than-successful companies I've worked with before that labeled defects as "features" to help everyone look better on status reports. The engineer picked up on my puzzled look and quickly explained:

*"We're considering renaming defects to treasures because they are providing us with immense value. When we find a defect, it is a gift—it is revealing information about the system that will help us improve it. There are things we did not know until the defect told us about it. We then go to the root of the defect, understand the cause for why it appeared in the first place, and we fix the problem to ensure it never happens again. The system is now stronger, more resilient and healthier as a result of this defect telling us this valuable information—it is indeed a treasure."*<sup>15</sup>

"Building it right" certainly helps focus on quality and in turn improves the entire system, but it also has significant short-term benefits to the bottom line. According to the American Society for Quality, many companies have "quality-

related costs as high as 15 to 20 percent of sales revenue, some going as high as 40 percent of total operations. A general rule of thumb is that costs of poor quality in a thriving company will be about 10 to 15 percent of operations.”<sup>16</sup>

“Building it right” is a critical component of enterprise agility and very much a part of the signatories’ core intentions when they wrote the Agile Manifesto. The reality is this: without a focus on quality and technical practices supporting it, you’ll never be as agile as you’d like to be.

## **Building at the Right Speed (Optimizing for Flow)**

One of the key questions companies need to grapple with is balancing the degree to which organizations are being optimized for *resources* or optimized for *flow*.

### ***Resource Efficiency: Utilizing Resources and Exploiting Cost Efficiencies***

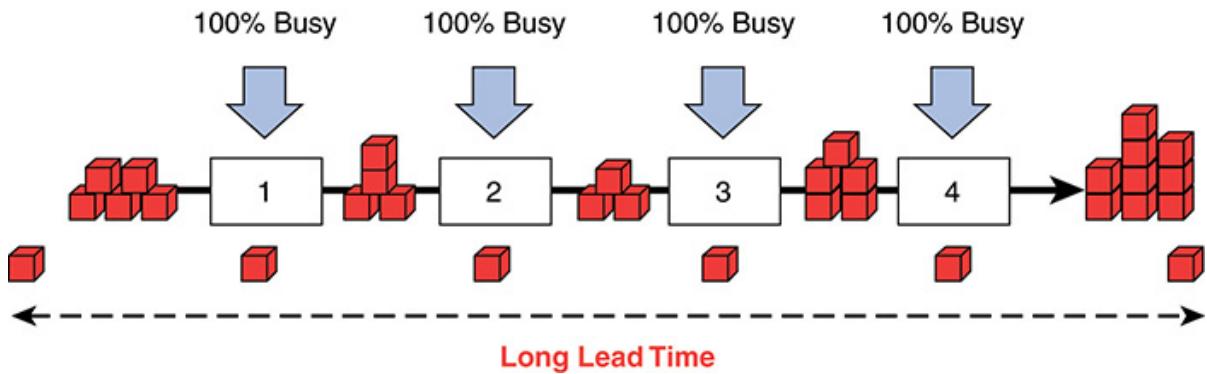
Optimizing for resources means that we do everything we can to ensure the most expensive part of our budget—people and resources—is kept busy at a high rate of utilization. This makes a lot of sense in environments where we have low rates of variability because it allows us to make the most out of our expensive resources, with the result of a smaller per-unit cost. For example, if I bought a \$1,000 machine that creates coffee cups, it makes sense to have this machine be as busy as possible so I can justify the cost of the machine. If the machine is utilized less than 10% of the time and makes 5 cups a day, this would be a poor use of its potential—it would be idle most of the time, and it would be hard for me to sell the cups at a profit, given the cost of the machine. (Each cup would essentially cost  $\$1,000/5 = \$200$  to produce, assuming I only used the machine for a day.) However, if the machine was utilized 100% of the time and made 2,000 cups, I would be able to sell the cups at a much smaller price point and still make a profit ( $\$1,000/2,000 = \$.50$  per cup, under the same assumptions).

Optimizing for resources can be advantageous in low-variability environment like these. After all, coffee cups are typically not terribly innovative, and their manufacturing process can be easily repeated. However, optimizing for resources tends to have a side effect: if we ensure the machine is always busy, we need to have a certain amount of work waiting for it so that it’s ready to take on the next task when it’s done with its current job.

Say there are four parts to the process of manufacturing the cup: rolling the mud/shaping, attaching the handle, cleaning/glazing, and then completing the

decal. To ensure I get the most of all the money I've invested in each of these stations, I'll ensure the machinery is 100% busy by having some inventory waiting to be worked on before each station. This naturally means that some of that inventory (the work waiting to be "worked on") will stay in the queue for a while, but I'm OK with this because it ensures my most expensive items in my budget are always busy, and I'm exploiting this resource for all its worth.

As illustrated in [Figure 2.7](#), the stations are fully utilized, decreasing the per-unit cost of the coffee cup. However, some excess inventory is necessary to ensure each station is fully utilized, leading to a longer production Lead Time for the cup.



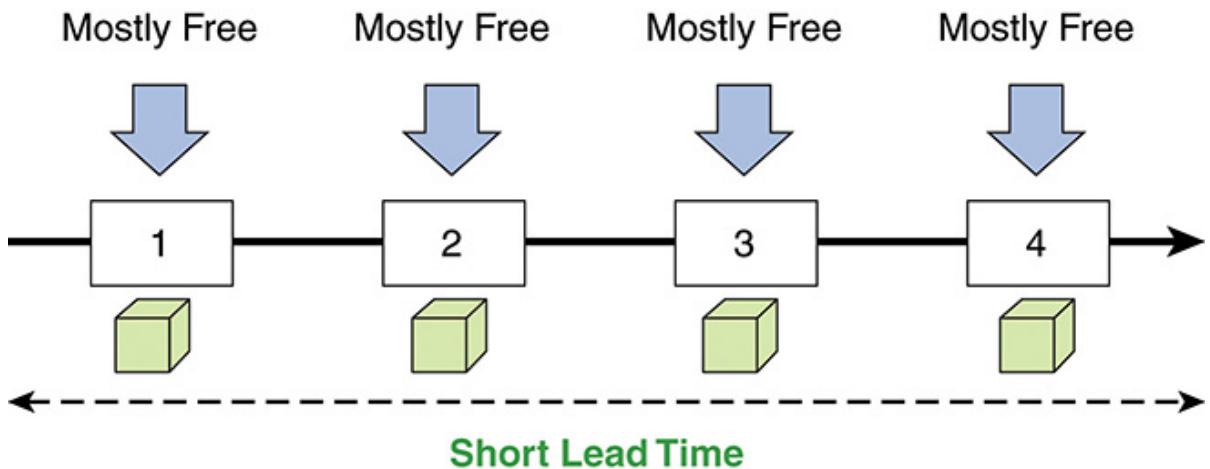
**Figure 2.7 Optimizing for Resources: Each Station Is Fully Occupied, Leading to Smaller Per-Unit Costs but Longer Lead Times and Excess Inventory**

## ***Flow Efficiency: Shortening Lead Times and Adapting Quickly to Change***

Optimizing for flow takes a different view. In this scenario, we optimize for the work itself and design systems so that we’re minimizing the wait times between adding value to the work. In other words, the resources come to the work (pull), not the other way around. For example, if we design a process for work at a fire station, we’re going to do everything we can to ensure we minimize the time it takes from a fire alarm being received until the fire is put out. This means that we want to keep our critical resources such as fire engines and firefighters ready to respond at all times. Our primary concern in this case is not to keep the fire engines “busy” by having them drive around the neighborhood at all times. On the contrary, we want to ensure they can put out a fire as soon as possible by responding right away. The side effect of this approach is that although Lead Times are short (they respond quickly), resources are more idle, so cost efficiencies are less impressive.

For example, let’s say there are four basic stations involved in responding to a fire: receiving the fire alarm, gathering the crew and equipment, traveling to the location of the fire, and fighting the fire. To ensure we can respond as quickly as possible to a potential fire—which can happen at any time and is unpredictable—we need to ensure each of these stations has excess capacity at all times; the stations need to be idle. If a fire occurs and the crew is busy saving cats from trees, valuable time is spent, leading to the potential loss of life. As such, cost efficiencies and resource utilization aren’t as much of a concern; value creation is directly tied to how quickly we can respond to the fire.

[Figure 2.8](#) illustrates how this system might look. Each station is mostly idle, ready to take on work at any time. Cost efficiencies are not the primary concern in this scenario because they greatly reduce the time it takes to respond to a fire.



**Figure 2.8 Optimizing for Flow: Each Station Is Mostly Idle; Ready to Take on Work at Any Time and Reducing the Time It Takes to Produce Value. Cost Efficiency Is Not a Primary Concern**

The difference in focus between resource-optimized and flow-optimized systems may seem trivial, but it has dramatic implications for the way we work and the ultimate outcome for the customer. In resource-optimized systems in environments of VUCA, delays are common, quality is often compromised due to frequent handoffs, and adapting to change quickly is made cumbersome by complex lines of communication. In systems optimized for flow of value, time-to-market is shortened, quality is higher due to fast feedback loops, and adapting to change is easier because people are more focused on less work at once—and hence can adjust more quickly.

### ***Resource Efficiency and Flow Efficiency: Finding a Balance***

This sounds like a no-brainer: why can't all businesses simply optimize for flow? The reason is that to run a business profitably, resource optimization also needs to be part of the equation. The examples provided previously—the coffee cup and the fire station—are extreme cases made to illustrate the difference in thinking between the two approaches; reality is more nuanced. Sure, you don't want your resources and people to be busy all the time, but you certainly don't want them to be idle and waiting for work most of the time either. In other words, to be successful, a business has to be able to balance both flow and resource efficiency.

Accomplishing this balance is the main topic of Niklas Modig and Per Åhlström's excellent book *This Is Lean*. They argue that finding the ideal

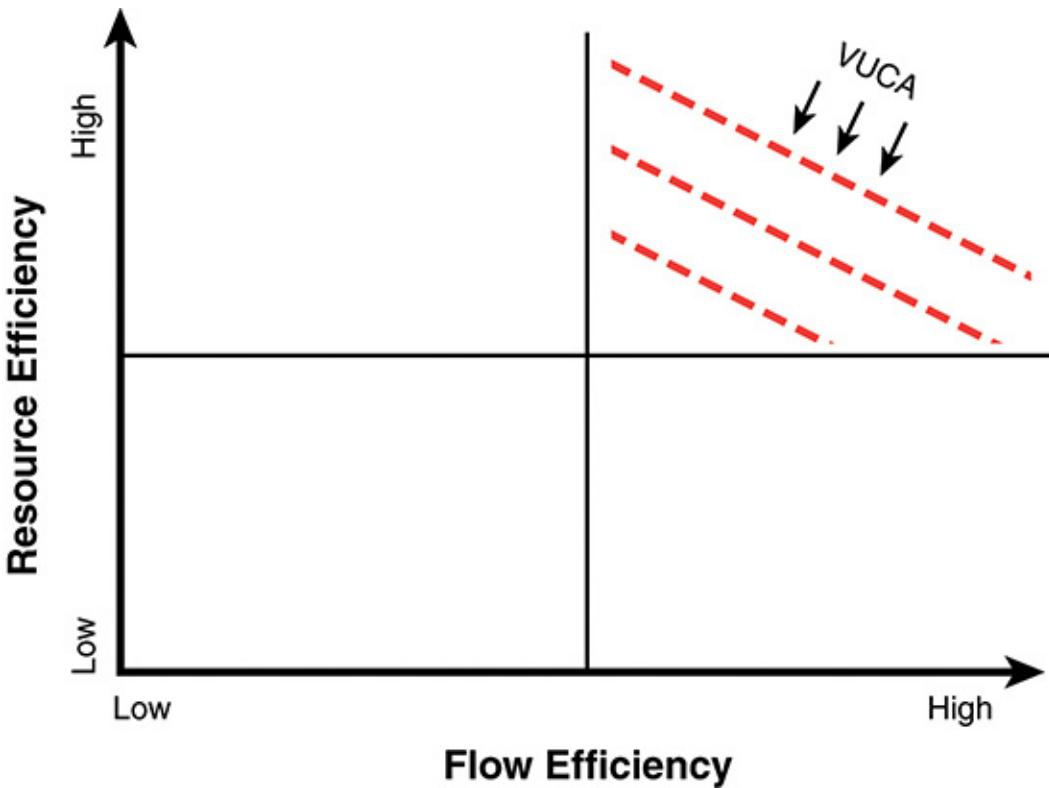
balance between resource and flow efficiency is context specific and differs from company to company. The key is that the operational strategy (whether to focus on resource optimization or flow optimization) needs to be aligned with business strategy.

For example, if you operate a low-cost airline that competes solely on dirt-cheap ticket prices, optimizing for resources over flow makes sense. It is likely that customer service will not be overly responsive and wait times may be long, but if customers are OK with this level of service—knowing that they will get the cheapest fares around—this is a sound business strategy. I’m sure you can think of other businesses that have made a strategic decision to *not* focus on customer service or awesome quality because they make up for it in unbeatable prices, convenience, or other factors. (Who eats fast food for the quality of the food?)

On the other hand, if you’re running a luxury hotel where premium customer service is a key differentiator, optimizing for flow makes more sense. In this case, the business is better served not by reducing per-unit costs, but by providing extremely responsive and attentive personal service. This, of course, enables the hotel to charge a premium for the uncompromising service, which again helps it stay profitable and separate itself from the competition.

Understanding your Cost of Delay (CoD; more about this in [Chapter 3](#)), which helps define the value of time to lifecycle profits of your product, will help you align your operational strategy with your business strategy. Although in environments with more VUCA, optimizing for flow over resources is advantageous, the balance between the two approaches is always context specific; there is no one “right” answer.

[Figure 2.9](#) illustrates the trade-off between resource efficiency and flow efficiency. At the bottom-left corner of the graph, both resource and flow efficiency are low—the worst of both worlds. Products are late to market and inefficiently produced. In the upper-left corner, there’s high resource efficiency and low flow efficiency; Value is produced efficiently but is late to market. In contrast, in the lower-right corner, there’s high flow efficiency and low resource efficiency; Value is delivered quickly, but cost efficiencies are not a priority. The ideal state—the upper-right corner—is where resource and flow efficiency strike a balance. A company’s business strategy and the degree of variability—VUCA—inherent in the business determine the degree to which the two types of efficiencies can be balanced.<sup>17</sup>



**Figure 2.9 Balancing Resource and Flow Efficiency.** The Business Strategy of a Given Organization and the Amount of Variability (VUCA) Inherent in the Context of the Business Determines the Balancing Point Between the Two Forms of Efficiency

Modig and Åhlström do a great job of clarifying this trade-off in *This Is Lean*. The point they are making is that simply stating that everything “agile is good and all good is agile”—is not terribly useful. In fact, sometimes working in a more lean and agile manner might not be in the best interest of your business. For instance, businesses that fall in the Obvious and even some in the Complicated domains as defined by Snowden (see Chapter 1) are examples of operations that will benefit more from optimizing for resources over flow. There is less inherent variability in these types of businesses, so the cost savings gained from per-unit costs outweigh the drawbacks of being less responsive to change. Take the coffee cup manufacturing example described earlier, for instance. In a business like this—with low variability and highly repeatable processes—we’re probably better off optimizing for resources over flow efficiency.

But what has changed dramatically over the past several decades—as software has become ingrained into everything we do and the clock speed of business has accelerated—is that an outsized part of our economy is now

increasingly based on work conducted in the “Complex” and partly “Complicated” parts of the Cynefin framework. This means that the characteristics of VUCA and increased variability are unavoidable parts of doing business today—and something we need to embrace rather than try to avoid.

Because optimizing for flow enables organizations to adapt to change, reduce delays in response time, and learn faster, organizations operating in business environments characterized by high degrees of uncertainty (such as companies building software, driving innovation, and creating knowledge work) will benefit from optimizing for flow first and considering resource optimization later.

This is in contrast to more traditional industries where variability can be controlled to a greater degree; hence, optimizing for resources makes sense as an operational strategy. Today, the knowledge economy is an expanding part of U.S. private economic output; manufacturing and more traditional industries are increasingly losing ground. As companies experience the accelerated pace of change, increased levels of VUCA, and ever-increasing customer expectations, adopting an agile mind-set that enhances learning, speed to market, and customer responsiveness is not just a matter of preference, but a matter of survival.

To complete our discussion of flow, however, it’s important to understand a few concepts from the world of Lean: the impact of too much Work in Progress (WIP) and its impact on value creation at the enterprise level.

### ***Little’s Law, Kingman’s Formula, and Their Implications in a World of VUCA***

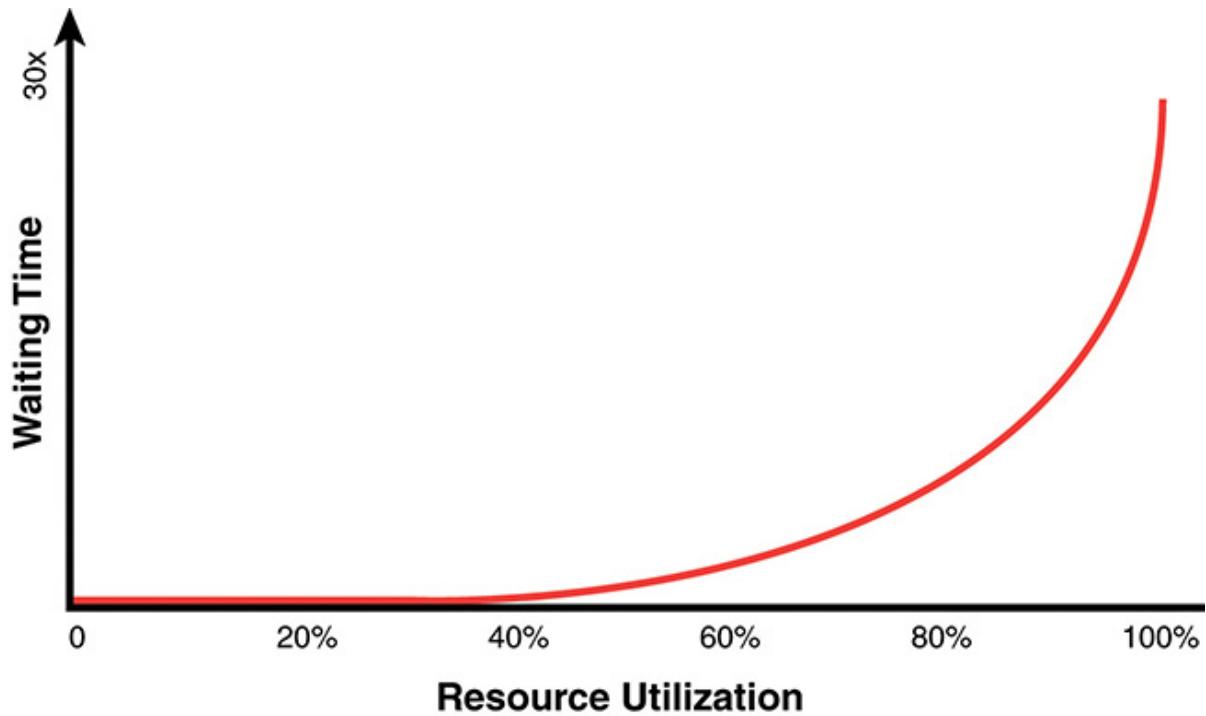
As we saw previously, balancing resource and flow optimization is at the heart of “building at the right Speed.” But what is the concrete impact of not getting the balance right? What are the implications to value creation and its resulting financial impact? To better understand this, it is helpful to familiarize ourselves with a relatively simple formula called Little’s Law.<sup>18</sup>

## **Time-to-Value (Lead Time) = Work in Progress (WIP) \* Cycle Time**

John Little, a professor of operations at MIT, showed that in a stable system, the time it takes for a customer to receive value is a function of the number of items being worked on at once (WIP) and the time it takes to complete work on any given item (Cycle Time). Although this theorem was defined in the 1950s and has stood the test of time, there is an implication of this law that is particularly interesting in today's world. A fellow mathematician, John Kingman, showed that in situations with high degrees of variability, a small amount of increased resource utilization creates a disproportionately large increase in wait times.

There's probably no better example of this phenomenon than when your computer locks up from processor over-utilization. When your computer is at 70–80% utilization, you may notice it gets a bit sluggish, but things are moving along pretty well. If you open a few more applications, however, and the CPU utilization goes above 90–95%, you quickly notice that waiting times increase dramatically. This is Kingman's formula in effect. Things grind to a halt, and your only recourse is to wait it out or start closing applications so you can reduce the utilization rates again.

As [Figure 2.10](#) illustrates, waiting times more than double as utilization moves from 80–90% and double again as it moves from 90–95%.<sup>19</sup>



**Figure 2.10** Kingman's Formula Shows That as Resource Utilization Rates Increase, Waiting Times Increase Even More

Taking what we know from Little's Law regarding WIP and Cycle Time (and its impact on Lead Time) with what we learned from Kingman's formula regarding variability and utilization rates (and their impact on waiting times), what does this mean? Simply put, it means that in environments with high degrees of variability (or VUCA), optimizing for resources has a disproportionately negative impact on the time it takes to create value for your customer. Optimizing for flow—in environments with high degrees of variability—is therefore an advantageous operational strategy where speed to market and adaptability are important competitive factors.

The implications of this finding are that, to unlock organizational agility and optimize for organizational flow of value, we need to do the following:

- **Reduce Organizational Work in Progress (WIP):** Working on too many things at once increases utilization rates, which has detrimental effects to the overall processing time, as Kingman shows us.
- **Increase Processing Speed:** Another way to accelerate value creation is to increase the rate at which we work and decrease Cycle Time. This can

be expensive to do, but it has long-term positive effects. Examples include automation, effective tooling, process improvements, and more.

- **Increase Resources (Capacity):** This is rarely a realistic option for most organizations, but adding resources is one way to increase the overall speed of value delivery. Ideally, adding technical resources such as increased server capability or faster build systems can be helpful in this context. Adding people, however, is not as straightforward because the relative benefit of adding a person to a team is greatly reduced as the team size increases—to the point where the effect may even be negative.
- **Reduce Variability:** In knowledge work, reducing variability is a double-edged sword. On one hand, you need variability to foster innovation and creative thinking. At the same time, boundless variation can become distracting and leads to delays, failure demand, and quality issues.

The previous sections were dedicated to providing a deeper understanding of what it means to create a product or service that is compelling to both current and future customers (build the right thing) but also is sustainable and has a high level of quality (building the thing right).

This section explored what it means to build at the right speed—recognizing that this does not mean simply “building faster,” but aligning your operational strategy with your business strategy. In other words, it is balancing the opposing perspectives of resource optimization with flow optimization and understanding the trade-offs inherent in each. We concluded the section with an overview of some key concepts from operations theory (Little’s Law and Kingman’s formula), which helps guide our operational strategy in environments with large amounts of VUCA.

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## Unlocking Agility in the Enterprise

Considering the various facets that need to be considered to build an enterprise that embraces rather than fears VUCA can be daunting at first. Most large organizations today have been built on the foundation of resource utilization, and as a result, the systems put in place to execute their operating strategies are often in direct conflict with their stated business strategies. We now know how ludicrous it sounds when companies are asking knowledge workers to “keep busy” 100% of the time (resource optimization) while espousing a business strategy of responsiveness and innovation, which requires idle time associated with flow optimization.

There was a time when some of this inherent conflict could be hidden in the shadows of spreadsheets and lack of transparency. But not anymore. Because of the dramatic shift in the way our economy is transforming, being able to adapt to change is no longer a “nice to have.” It is now a matter of survival. As we saw in [Chapter 1](#), an increasing number of large enterprises are seeing firsthand that it is no longer sufficient to “do the wrong things righter.”

Just as other human constructs like cities have shown us over centuries, large organizations need to be able to learn and adapt much quicker than what might have been acceptable just a few decades ago. The velocity at which we learn is fundamental to how we continuously improve the way we work. The sooner we’re able to drive improvements, the sooner we’re able to execute experiments. The faster we’re able to validate our learning, the more we’ll be able to see risks sooner, capitalizing on opportunities and mitigating risks.

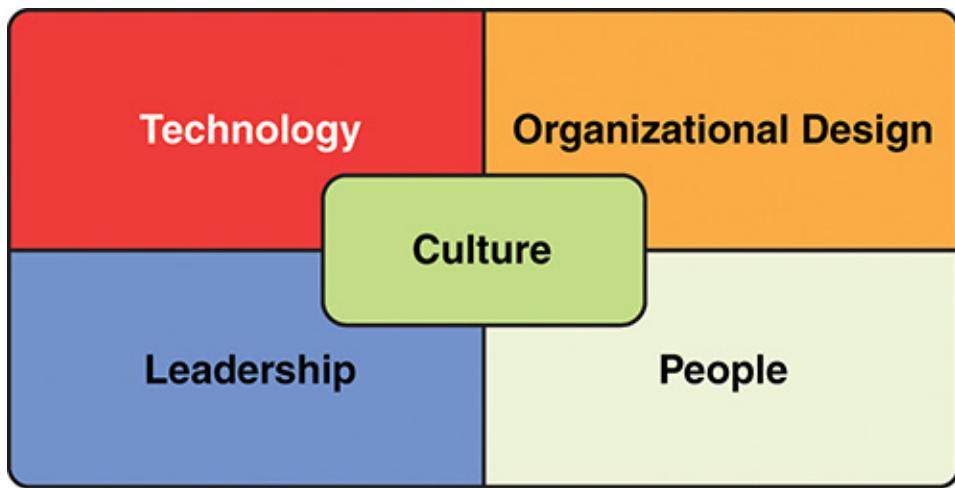
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## Performance Multipliers: Five Critical Dimensions of Agility

Now that we have an understanding of what enterprise agility is and what it entails, let’s bring these concepts into a framework we can use to take action and start building.

The Five Critical Dimensions of Agility capture the main subject areas that we’ll be covering in detail over the next several chapters. Understanding what’s involved in each of these dimensions will help us devise an actionable strategy and drive a continuous improvement roadmap toward unlocking enterprise agility.

First, let's briefly describe the five dimensions, as illustrated in [Figure 2.11](#).



**Figure 2.11** *The Five Critical Dimensions: a Holistic View Supporting Enterprise Agility*

- **Technology:** In the broadest sense, Technology refers to “the entities, both material and immaterial, created by the application of mental and physical effort to achieve some value.” In our context, we’re referring to technology as the *methods, tools, and techniques that help us increase flow and agility in the organization*. [Chapter 3, “Technology,”](#) covers these in some detail.
- **Organizational Design:** With Organizational Design, we’re referring both to the way we physically design our company and to the manner we structure our organization in a managerial sense. Both are critical to unlocking agility; the workspaces where we collaborate, communicate, and create have a direct effect on how we work. The management structure also plays a large role in determining how we work together, manage dependencies, and ultimately deliver value. [Chapter 4, “Organizational Design,”](#) covers this topic.
- **People:** Although more work is being automated and completed by machines than ever before, no meaningful work can be done in a modern organization without engaged, passionate, and talented people. The skills, knowledge, and abilities required of people in agile organizations are markedly different from what we expect in more traditional organizations. The way we’re recruited and ultimately hired for our work affects the type of people we bring into the organization. The way we reward and

recognize people in our organization helps drive behaviors we want to dampen or amplify. And the way we treat employees—including what we do when we recognize that they are not working out—helps define who we are as a company in the long term. [Chapter 5, “People,”](#) covers this topic in more detail.

- **Leadership:** As illustrated in [Chapter 1](#), agile organizations are entities that quickly adapt to changing market conditions. The agile enterprise recognizes that it makes more sense to leverage the power of thousands of brains rather than one supreme CEO being. Think less General Patton, more Nelson Mandela. Less command-and-control, more servant leadership. Leadership in agile organizations may be different from how we traditionally view leadership, but it is far from chaos. Agile leadership is characterized by a clear sense of purpose, a willingness to embrace and learn from failure, and an ability to create meaningful boundaries within which we operate as an organization. Much more on agile leadership is found in [Chapter 6, “Leadership.”](#)
- **Culture:** The author and management consultant Peter Drucker famously stated that “Culture eats strategy for breakfast.” Regardless of the tools you use, the leadership you instill, or the strategy you employ, if the culture is one that does not embrace change, is not willing to learn, or is not open to new ways of working, any attempt to fundamentally change the organization is going to be futile. Yet culture is not something that just happens: a company’s culture is a reflection of the values, organizational language, and behaviors inherent in the organization. A company’s culture continuously evolves and changes over time. [Chapter 7, “Culture,”](#) is about how you can be intentional about culture to help foster organizational agility.

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## Summary

This chapter started with a definition of enterprise agility and identified the key components of what it means to work in an agile manner. We discussed the importance of understanding customer value and how to build products that satisfy customers in a sustainable manner. We showed how to continuously look for ways to remove obstacles that get in the way of this goal by always seeking small, incremental measures to improve the way we work.

We discussed the delicate balance that must be struck between optimizing our organization for resources vs. optimizing for flow and how we're better off optimizing for flow in environments characterized by high levels of variability—which is where most of our economy is headed today.

We then completed the chapter by introducing Five Dimensions of Agility to help us make enterprise agility concrete and to set the foundation for a strategic roadmap toward an agile enterprise transformation. In the next several chapters, we'll explore these dimensions in greater detail so you're armed to take the next steps toward transforming your organization.

I hope I have not overwhelmed you with the number of concepts introduced in this chapter. I realize it's a lot to take in. The key point is this: the way we work today is based on a way of operating that no longer is applicable in today's economy.

The bad news is that changing decades-old thinking is never a trivial effort, and we'll be met with resistance to change every step of the way as we embark on our work. The good news is that this is not a management fad or a cool new concept—it is a fundamental change in how business is operating, and those who do not make the adjustments will simply not be around much longer.

As W. Deming said: “It is not necessary to change; survival is not mandatory.” By reading this book, you’re aiming to be one of the survivors. Let’s do some good together.

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## Q&A

### 1. How will becoming more agile help us know we're building the right thing (creating value)—and when we're failing to do it?

As we highlight in the definition of an agile enterprise earlier in the chapter, the essence of unlocking agility entails learning through empiricism to “swiftly embrace change.” This means that agile organizations continually test their assumptions through rapid experiments and validated data. Are we still delivering value to our customers? Are we solving a compelling need? How can we increase customer gains? These are questions agile companies have engrained as part of their organizational DNA.

Consider this: A company may be under the impression that it is building the “right thing” by looking at a steadily improving sales curve and revenue numbers, but what if customers are simply buying the company’s product due to lack of options or contractual obligations? A product is ripe for disruption in cases like this; without adapting to customer needs (rather than relying on lagging indicators like sales), a company can quickly be caught flat-footed when a more customer-focused product comes along.

A classic example of this challenge is Blockbuster. The movie rental retailer relied heavily on late fees for its impressive revenue growth at the peak of its success. The fact that customers hated these fees was treated as an after-thought; the fees helped fuel Blockbuster’s success on Wall Street. When Netflix entered the market, introducing its no-late-fee rental offering through mail orders, Blockbuster was slow to respond, giving upstart Netflix an entry into Blockbuster’s market that it never relinquished.

**2. My company has been developing products the traditional way for a long time. Focus group testing is our comfort zone. How do I shift our company’s mind-set to embrace exploration and risk-taking, in addition to execution on a traditional launch plan?**

We’ll cover this topic in more depth in [Chapter 9, “An Operating Model for Business Agility,”](#) but here’s a core idea: unlocking agility means leaders can answer the following question: *“Do you want to be right—or do you want to be successful?”* Very often, you cannot be both.

Traditional organizations reward and promote their people for “being right”—for following a well-defined plan and executing accordingly. More agile organizations recognize that, increasingly, “being successful” means that one may have to admit (often) that one’s initial assumptions were in fact wrong. To be clear: there is nothing wrong with focus group testing, market research, or other more traditional methods of identifying customer needs. But we need to treat these methods as ways to create assumptions, which are essentially educated guesses. The sooner we can validate that these guesses are true or false, the sooner we can build a product that is based on validated learning, which helps increase the probability of building something customers love.

**3. Building the thing right (focusing on quality) sounds like common sense. Why aren’t more companies practicing intentional product and code design?**

Taking quality seriously and giving the **way** we build products an equally important role to **what** we’re building may sound intuitive, but in my experience, quality often takes a back seat to a committed date or urgent client request. There are many root causes for this, but here are the key challenges I often observe:

- **Lip service paid to quality; weak executive support:** You will never hear an executive say quality is *not* important, but the true test is the decision made when faced with a clear-cut business scenario: delay a scheduled delivery, or move ahead with a flawed product launch. Many organizations push a flawed product only to provide many fixes shortly thereafter. (Remember the so-called “service packs” shortly available after the initial product launch of Windows Vista, for instance?) Clearly, in this case it was more important to meet the committed date expected by the market than get it right the first time and delay launch until the product was ready. In cases like this, leadership is sending a clear message of flaccid support for quality: meeting the date is paramount; quality is something to be handled afterward.
- **Not treating quality as a strategic differentiator instead of an optional “feature”:** Quality does not come for free; it requires an investment in a proper infrastructure, employee training and development, and recognition that doing too many things at once—although organizationally seductive—is harmful and detrimental to quality. The implication is that, despite market pressure and company demands, organizations that view quality strategically empower their people to say “not yet” instead of simply “yes” when responding to requests from product managers and customers.

Quality—like organizational agility—is not achieved through tools, frameworks, or external consultants. Rather, it is the result of a deliberate, strategic commitment to continuous improvement and learning throughout the organization.

- **Lack of psychological safety and a culture of quality:** Psychological safety, a concept we’ll cover in more detail in [Chapter 8](#), entails creating an environment where people feel empowered to speak up and do not fear negative repercussions for reporting “bad news.”

An environment characterized by psychological safety is a prerequisite for instilling a culture of quality, where everyone—regardless of formal role or position—views quality as his responsibility. A great manifestation of this type of culture can be found at Toyota, where the “Andon cord” allows a team member to pull a cord to immediately stop the production line if there is a quality concern. Everyone then comes together to identify and fix the root cause of the issue right away.

Contrast this with GM in the early 2000s, when stopping production was akin to career suicide. Everyone had a mandate to ensure the plant met daily production numbers; any deviation from these targets was a cause for deep concern. The impact to business outcomes was predictable: GM’s quality problems continued to increase throughout the 2000s, and eventually the company went bankrupt in the aftermath of the bank crisis in June 2009.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- **Taleb, Nassim. *The Black Swan: The Impact of the Highly Improbable*. Random House. 2007:** *The Black Swan* is one of those books that came at just the right time. Taleb noted serious problems with the way risk was assessed in the financial markets and stated that highly improbable events (black swans) were not as unlikely as we may think. Less than a year later, the financial crisis of 2008 hit, and Taleb was declared a genius. This modern classic is highly recommended: *The Black Swan* helps the reader view “experts” and authority figures with a skeptical eye, pointing out that the world is more complex than what we’d like to think; unknown unknowns are everywhere.
- **Modig, N. & Åhlström, P. (2012) *This Is Lean: Resolving the Efficiency Paradox*, Rheologica publ.:** *This Is Lean* is my favorite book on Lean of all time, and I’ve read a few. It’s easy to read, makes complex material simple to understand, and gives you exactly what you need to help view Lean from a practical point of view. The vast majority of my understanding

of flow efficiency is from this book; it has had a large impact on how I view the alignment between strategy and operations.

- **Visit Menlo Innovations in Ann Arbor, Michigan** (<http://menloinnovations.com/>): This is not a book, a blog, or a podcast, but it's a resource nonetheless. My friend Rich Sheridan, whom you'll see referred to on multiple occasions throughout this book, arranges tours of his software "factory" Menlo Innovations in Ann Arbor, Michigan. I've done the tour a few times and always learn something new. Rich tells stories, displays visuals, and even lets you sit in on some of the internal company events. It's an educational—and entertaining—way to see an agile company in action!
- **The Crisp Blog** (<https://blog.crisp.se/>): I've been a big fan of Henrik Kniberg's work for many years, but the entire crew at Crisp is a great resource on a variety of topics related to agile and Lean ways of working. The blog is updated frequently and often features interviews, free resources, and other goodies. Highly recommended.
- **Blank, Steve.** <https://steveblank.com/> **blog:** Steve Blank, whom you'll see me refer to in other parts of this book, is a true innovator and pioneer. Not only is he an entrepreneur in his own right (he started and exited several companies), he is also a Silicon Valley professor, thought leader, and originator of much of the methodologies and thinking associated with running innovative startups today. His blog is updated frequently and is always brimming with interesting material; don't even think about building "the right thing" without first exploring Steve's blog!

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## Footnotes

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## **PART II**

# **Five Dimensions of Agility**

**Part II** covers each of the dimensions in detail and intends to help the reader understand the implications of how Technology, Organizational Design, People, Leadership, and Culture interact to shape a holistic approach to enterprise agility.

[Chapter 3 Technology](#)

[Chapter 4 Organizational Design](#)

[Chapter 5 People](#)

[Chapter 6 Leadership](#)

[Chapter 7 Culture](#)

# **Chapter 3**

## **Technology**

[Chapters 1](#) and [2](#) covered why enterprise agility is not only an important competitive advantage, but also a matter of corporate survival in a world characterized by VUCA. We learned about enterprise agility’s origins in challenges made apparent by thinkers in the computer science community, and we broke down the Agile Manifesto: 4 values and 12 principles that illustrate how to embrace uncertainty and continuously adapt to an ever-changing environment. We then explored enterprise agility in more detail and offered a working definition. We covered the essential elements of an enterprise agility strategy, and we highlighted five key dimensions that we need to consider as we aim to transform the enterprise.

In this chapter, we cover the first of the five dimensions: Technology. In the context of this book, we refer to Technology as the “tools, techniques, and methods that assist in unlocking agility.” Note that this is not intended to be an exhaustive overview; that is beyond the scope of this book. Rather, the purpose of this chapter is to provide you with a synopsis of the most relevant tools you need as you start or continue on your transformation journey. (For a more comprehensive and continuously updated overview of tools, methods, and techniques, please access the free book companion resource at [www.unlockingagility.com](http://www.unlockingagility.com).)

By the end of this chapter, you’ll be familiar with the most popular tools, methods, and techniques typically required in an agile enterprise transformation. You’ll be ready to acquire the resources you need to enhance your understanding and start making your strategy real. Subsequent chapters complete the picture by covering Organizational Design, People, Leadership, and Culture before describing the engine driving the transformation: the Agile Working Group (AWG).

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# Building the Right Thing: Creating Products Customers Love

Chapter 2, “Enterprise Agility,” identified that part of becoming an agile enterprise involves continuously evaluating whether you’re building the right thing. Is your product solving a customer problem in a manner that is sustainable and profitable? Executing on a well-defined strategy may feel comfortable and may even be extremely profitable for a while; however, if your organization is not continually exploring and validating that it’s meeting these criteria, disruption is inevitable.

I’ve found the three technologies/approaches covered in the sections that follow to be helpful in identifying whether the organization is indeed building the right thing.

- Business Model Canvas
- Lean Startup
- Cost of Delay

## Business Model Canvas: An Interactive Tool for Instant Alignment

According to Alex Osterwalder, one of the co-authors of the Business Model Canvas (BMC), the Canvas is a tool that helps you “describe, design, challenge, invent, and pivot your business model.”<sup>1</sup> That’s quite an ambitious description for a simple, oversized poster, you say? Well, its simplicity is core to its effectiveness and why it does such a great job in creating alignment across a diverse set of people.

In essence, the Canvas is a communication tool. It’s useful in helping people in your organization gain a common understanding of what they are working on and why they are working on it. Used properly, it helps you continuously challenge the underlying assumptions behind your organization’s business model.

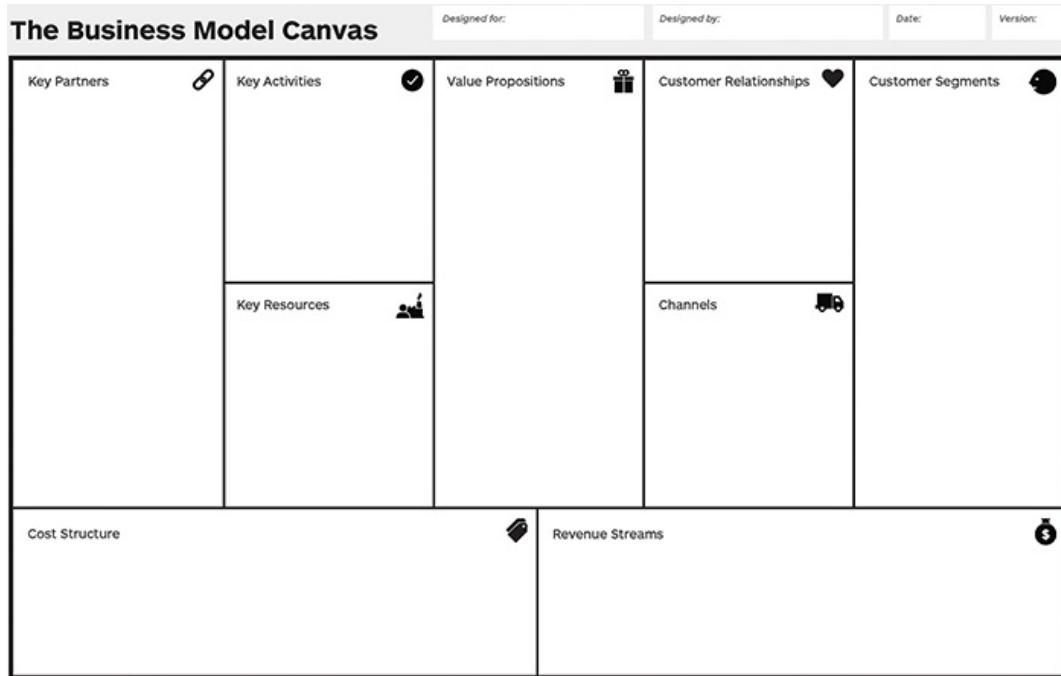
### ***How It Works***

The Business Model Canvas is made up of nine basic building blocks required in any business model, regardless of industry:

- **Key Partners:** External alliances you form to strengthen your model
- **Key Activities:** Core functions essential to execution and operations
- **Key Resources:** Critical physical, intellectual, financial, or human resources
- **Value Propositions:** Differentiating characteristics; what makes you unique
- **Customer Relationships:** Interactions with customers that create bonds and incentives to stay

- **Customer Segments:** Various subgroups within customer base with distinct needs and requirements
- **Channels:** Ways to reach customers, whether online or offline
- **Cost Structure:** Fixed and variable costs required to execute model
- **Revenue Streams:** Recurring and transactional revenue streams; combine with cost to understand financial sustainability

As illustrated in [Figure 3.1](#), the right side enumerates the elements related to value delivery. The left side identifies items required to realize the value. Taken together, the Business Model Canvas forms a comprehensive picture of the business model underlying the organization's operations.<sup>2</sup>



**Figure 3.1** The Business Model Canvas (This work is licensed under the Creative Commons Attribution-Share Alike 3.0 Unported License. Designed by Strategyzer AG. Alex Osterwalder; Yves Pigneur & al. 2010. [www.strategyzer.com](http://www.strategyzer.com))

I use the Business Model Canvas in my workshops as an interactive group activity. Participants fill in the Canvas using simple Post-it notes, describing the business model in real time in an interactive manner. The discussions that result are often robust and passionate, full of eye-opening contradictions and revelations: “Our key customer segment is small business? I was convinced enterprise customers were more profitable!”

## ***What Problem Does It Solve?***

It solves misalignment and misunderstandings. The BMC helps create near-instant alignment of everyone in the room. Through interactions, discussions, and sometimes disagreements, participants gain a deeper understanding of the relevant business model, helping to define the “why” and the “what.”

In addition, the BMC shows that competing by delivering a compelling product alone is no longer sufficient. Rather, the business model underlying product delivery also needs to be competitive to create a sustainable and profitable business.

Take Groupon, for instance. The company was a pioneer in the daily deals e-commerce industry and is the dominant player in this space today. But its dominance is not a result of a superior product or a smarter design. Right now hundreds of template clones are available for purchase; you could build a Groupon competitor in less than 15 minutes! Still, you’re unlikely to grab any significant market share from the market leader. That’s not because your product will be inferior—after all, the clone is virtually identical to the real thing. The reason you won’t be successful is because of so-called “network effects”—the idea that with a platform involving buyers and sellers, you need to reach critical mass of both constituents to have a compelling product.

Groupon recognized this and spent an inordinate amount of money buying up competitors as they started to grow. They understood that they were not buying the products themselves; they were buying the *users* of the competing platforms. By building a huge set of both sellers and buyers, Groupon was able to establish a business model that made it difficult for a competitor to disrupt its business by simply competing on product alone.

The BMC helps highlight this fact quickly and effectively and delivers an important question: how can we build compelling products and fortify our business model to make it harder for competitors to disrupt our business?

## ***What You Need to Make It Useful***

The Canvas is only as good as the people participating in the discussion. By having representatives from diverse parts of the organization involved, a more complete picture of the business model emerges, helping to create a clearer vision and link strategy to execution.

Also, although an electronic version of the Canvas is available, I highly recommended conducting BMC sessions in person. The interactivity, rich discussions, and increased understanding that come from face-to-face communication are part of the value provided by this tool.

You also need a strong facilitator to make the most out of a BMC session. This facilitator is typically an experienced agile coach or a member of the Agile Working Group—a third party that can help drive an effective discussion with the whole organization in mind.

## ***Practical Application***

The BMC is a communication tool that helps you quickly align around the bigger picture and is an excellent complement to your Enterprise Portfolio or Product Backlog. (See the section on Scrum later in this chapter.) Although it is not necessary to use this tool on a daily basis—it describes the high-level business model, which does not change day to day—it is extremely useful as part of regular product planning activities, say, every three to six months. The BMC helps remind us of where the organization is headed; it also helps to validate that our assumptions are still valid. In [Chapter 9, “An Operating Model for Business Agility,”](#) which describes Enterprise Portfolio planning, we illustrate how the canvas is an integral part of driving alignment across the enterprise.

Today, the BMC is used by more than five million professionals worldwide. As a result of the effectiveness of the BMC in getting people aligned quickly around a common narrative, other variations of the canvas have been developed over the years. Roman Pichler’s *Product Canvas*, which aligns people around a short-term product deliverable, Ash Maurya’s *Lean Canvas*, which is often used to launch new ventures and startups, and Jason Little’s *Change Canvas*, which can be used to more effectively track organizational change efforts, are examples of how iterations of this technique can be used for a number of applications.

## **Lean Startup: A Method for Validating That You’re Building a Product Worth Building**

Eric Ries coined the term “Lean Startup” in his book with the same name in 2011.<sup>3</sup> (See [Chapter 2](#) for more on Ries and his mentor, Steve Blank.) After completing his studies at Stanford, Ries cut his teeth as an entrepreneur, as a software engineer for a young company, and then later as a founder of a social media company without much initial success. After taking a hard look at why things did not work out the way the well-researched business plans indicated, he started writing about his experiences in a blog called “Start-Up Lessons Learned.” One of the key insights he found was that there was not enough rigor in the way products were being built. What was missing: key elements of the Toyota Production System (TPS) and the scientific method. The result was *Lean Startup*, which became a *New York Times* best-selling book.

## ***How It Works***

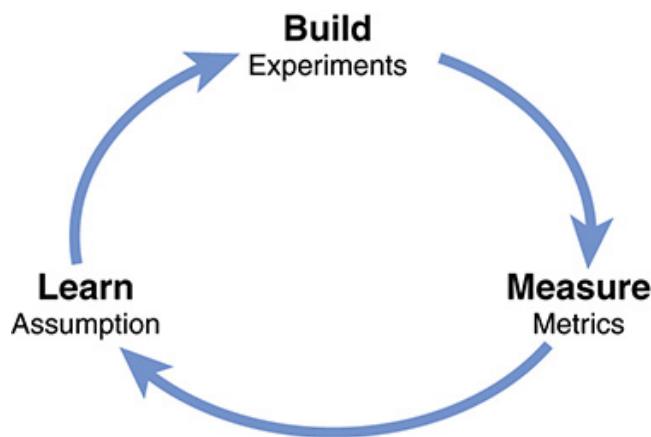
Lean Startup is a methodology focused on embedding validated learning to make sure teams are working on problems worth solving. Ries found that executing on a defined backlog of work items was a solvable problem, but he wondered whether teams were focusing on the right problems. In other words, should the service, solution, or product be built in the first place?

Through a Build-Measure-Learn cycle of information gathering, Lean Startup aims to test and validate whether the work we’re planning to do is indeed worth doing.

The process involves building a Minimum Viable Product (MVP) using as few resources as possible. Meanwhile, the development team expeditiously tests if the assumptions they hold about the value proposition of the offering resonate with the target customer segment. Are customers willing to pay what we require to be profitable? Do we have the skills, knowledge, and abilities inherent in the team to build the product? Is our technical platform appropriate for building the product?

Through actionable measurements, teams can quickly gauge whether they are on the right track (persevere), whether they need to change direction (pivot), or whether they should simply abandon the effort altogether. With this learning, the team can make reasoned decisions and repeat the cycle as it increases its confidence regarding whether the product is desirable to the customer and feasible to build.

The process is circular and continual, as illustrated in [Figure 3.2](#).



**Figure 3.2** The Build-Measure-Learn Cycle

### ***What Problems Does It Solve?***

Lean Startup invites us to fail fast. Lean Startup is an effective methodology that tests assumptions before committing numbers of resources toward building something customers may not want. By failing fast and learning that your product may not be as important to your customers as you thought, you can divert your resources to other, more viable products—saving time and resources by focusing on what has a greater chance of success.<sup>4</sup>

### ***What You Need to Make It Useful***

Lean Startup increases your likelihood of “building the right thing.” To make it useful, however, your organization needs to be comfortable with smaller teams and different performance metrics than what you’d typically associate with traditional product development teams.

For instance, while “year-over-year revenue growth” may be a legitimate performance metric for a mature product line, this would not be a relevant metric for a team engaged with innovation and validating whether or not the product would resonate with a target segment. A metric that would be more appropriate in this case may be new customer sign-ups, customer churn, and customer usage.

Also, organizations need to make it “safe to fail” for their team members so that when they attempt new product ideas and inevitably fail to get traction, their jobs are not on the line. In fact, you *want* them to fail many times while validating their ideas. To succeed, you need to take 100 shots on goal, recognizing that only a few may in fact hit the back of the net. This ratio is analogous to the relative success of startups in general; according to the Startup Genome Report, a study supported by researchers from Stanford, 9 out of 10 new companies fail.<sup>5</sup>

More than any other factor, it’s important to have executive support so these teams can withstand the pressure from the organization overall when the “gravitational pull” of traditional thinking becomes more intense.

## ***Practical Application***

The Lean Startup belongs at the very start of an agile product development life cycle, before making significant funding decisions or standing up an organization ready to execute on a real product. Because the culture, risk profile, and way of working are fundamentally different from teams that are working on more mature products, we recommend creating a separate Lean Startup innovation division inside the organization.

Ideas and concepts that are validated through work happening in this Lean Startup vertical can then “graduate” into more formal product development processes, with the additional resources that these processes entail. For an example, look to GE, one of the pioneers of this way of working. GE’s digital transformation is separate and distinct from the rest of the organization, but it gets the visibility and support it needs from upper levels of management.

The effort is a comprehensive, multiyear initiative whose impact will take time to show up on the balance sheet, but there are signs the new way of thinking is bearing fruit. For example, the traditional process of creating prototypes and manual blueprints for the company’s jet engines took as much as eight weeks to complete in the past—now the process is completely digitized and sent to the engineering teams immediately, saving both development time and money.<sup>6</sup>

## **Cost of Delay: Understanding the Impact of Time to Life Cycle Profits**

In 1748, Benjamin Franklin wrote an essay called “Advice to a Young Tradesman.” In this note, he famously observed that “time is money”—time is a finite, valuable resource that needs to be protected as such. The implication is that successful trades-men need to focus on getting things done swiftly and be careful to only spend precious time on things that are worth doing.<sup>7</sup>

This focus on speed of execution and prioritization of work is something today’s businesses are well served to heed as well. Cost of Delay (CoD) is a way to express the relationship between time and money and is an incredibly powerful way to prioritize work across the organization. CoD was introduced by Don Reinertsen, a Harvard-trained McKinsey consultant who was looking for an effective way to quantitatively reflect the effect of delays on life cycle profits over time.<sup>8</sup>

CoD has proven to be powerful in helping companies prioritize their work more effectively, align their understanding across multiple functions, and ultimately drive conversations that are grounded in economics, not politics or internal power trips. Using CoD as a tool to drive product development decisions is an important element in an agile organization.

### ***How It Works***

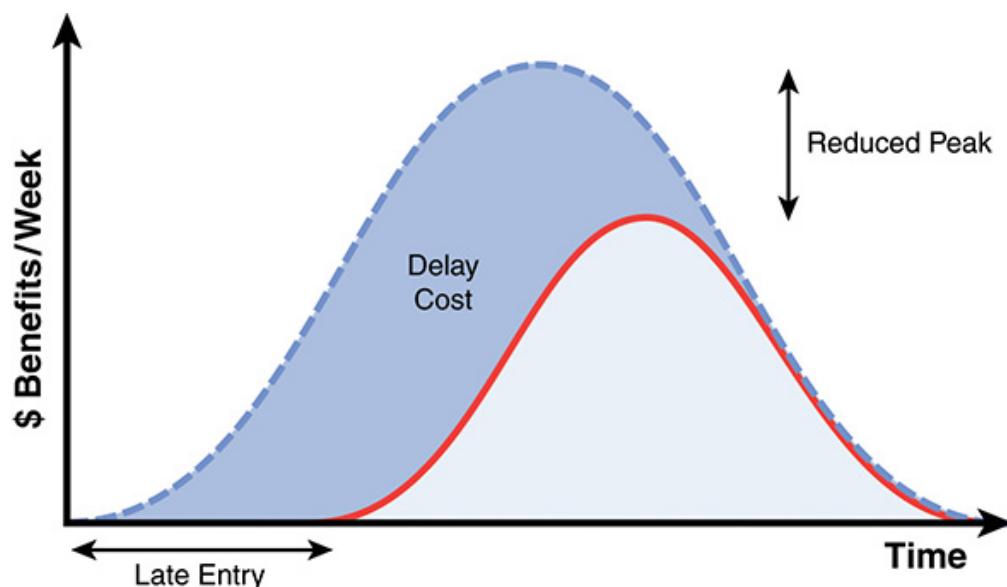
Joshua Arnold, a consultant focusing on optimizing enterprise-wide decision making, does an excellent job in outlining how CoD can be calculated:<sup>9, 10</sup>

#### **1. Recognize the benefit of the type of work being considered. Does the work:**

- a. Increase revenue?** Will it increase sales through acquiring new customers or creating new markets through disruptive innovations? An example of work in this category would be new product development.
- b. Protect revenue?** Will it retain existing revenue by incrementally improving existing products or by remaining competitive in existing markets? An example of work in this category would be adding features to an existing product.
- c. Reduce costs?** Will it improve existing processes to increase margins or become more efficient? An example of this category would be automation, process waste reduction, and other improvements to the way work is done.
- d. Avoid costs?** Will it make improvements to prevent costs in the future? This category would include security improvements to decrease the chance of attacks and content management systems to reduce legal liabilities.

#### **2. Identify the urgency profile of the work being considered. Is the work’s life cycle:**

**a. Short life cycle; peak value affected by delay?** In this case, value is tied closely to time. In other words, once the product is out in the market, it decreases in value quickly as competition reacts with similar products, diluting the value of the initial product. For instance, if you’re releasing a product that can be replicated and where the competitive advantage is closely tied to a first-mover advantage, the CoD curve is steeper. [Figure 3.3](#) illustrates a short life cycle, with the peak affected by delay.



**Figure 3.3** Short Life Cycle; Peak Affected by Delay

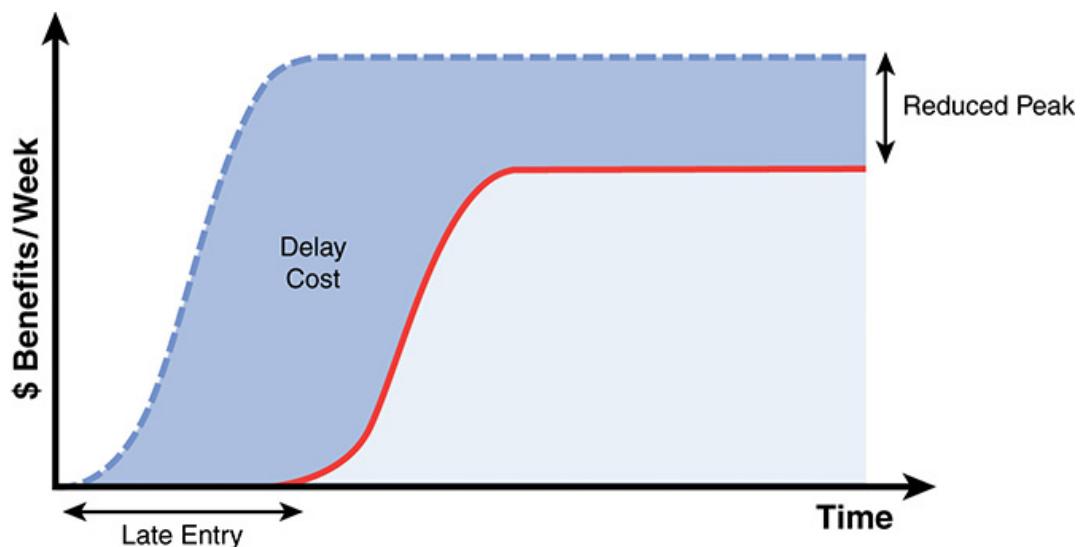
For instance, when Apple released its first version of the iPhone, it lacked a number of standard features vis-a-vis the competition. The original iPhone did not have 3G support (only 2G), could only be synced via a physical cable (no wireless support), and required users to be locked in with a single carrier (Cingular). Steve Jobs reasoned that, given iPhone’s revolutionary interface, users would be willing to look beyond the deficiencies—and the CoD required to fix these features would not be worth the competitive advantage of being viewed as the first must-have personal computing device.

Jobs was right. When the iPhone was released in June 2007, there was nothing like it. Google decided it had to rebuild Android to come close, Blackberry was keyboard-dependent, and Microsoft’s offering at the time was not competitive. This left Apple with virtually no competition in the marketplace until the following year, allowing it to grow market share unopposed and essentially “own” the smartphone segment.

**b. Long life cycle; peak value affected by delay?** In this scenario, the product’s relative value is not significantly affected by delay, perhaps because you have an

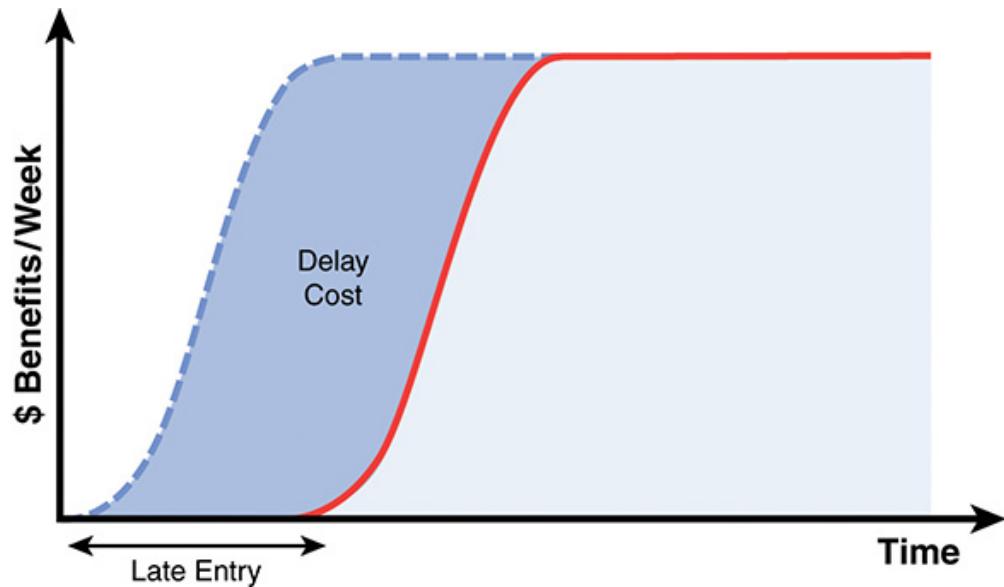
unfair competitive advantage or other network effect. Even if the competition responds with an alternative offering, this competition does not significantly affect the value of your product over time.

A classic example of this is Facebook. Even if a competitor entered Face-book's space now, it would not noticeably reduce the value of the social media platform in the short term due to its incredible network effects. Make no mistake, Snapchat is a legitimate competitor, but Facebook's already massive user base (and the relative difficulty of moving to another platform) reduces the urgency of the CoD profile. [Figure 3.4](#) illustrates a long life cycle with the peak value affected by delay.



[Figure 3.4 Long Life Cycle; Peak Less Affected by Delay](#)

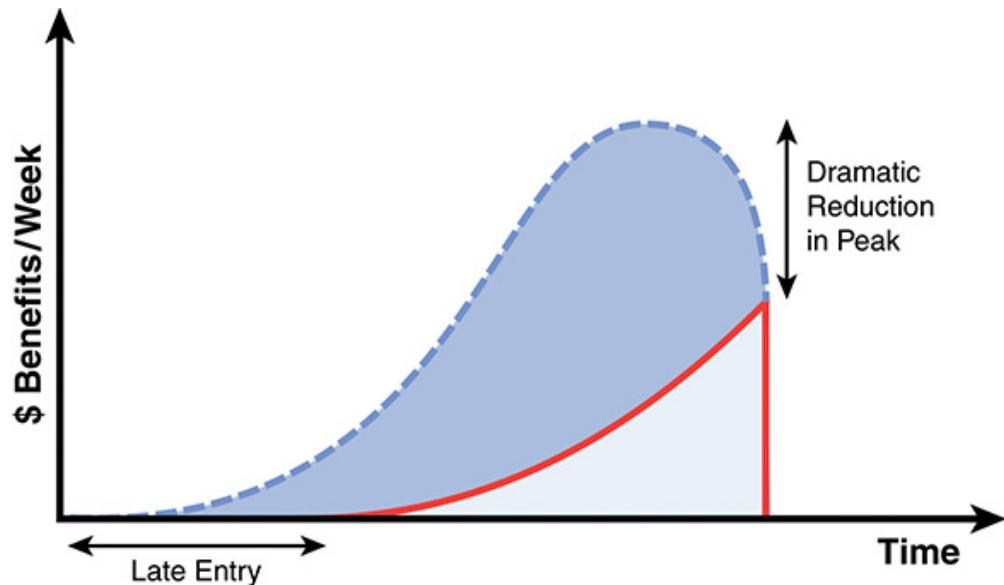
- c. **Long life cycle, peak value unaffected by delay?** In this case, the value of the work is largely unaffected by the delay of introduction. That is, even though the value is delivered later than intended, it still provides the desired value and continues to do so for the foreseeable future. This is typically the case for process improvements. Even though an improvement is not implemented when it's first intended, the value is still realized without erosion. [Figure 3.5](#) illustrates a long life cycle, peak value unaffected by delay.



**Figure 3.5 Long Life Cycle; Peak Not Affected**

- d. **Impact of an external deadline?** In this urgency profile, an external deadline significantly affects the value of the product. This is often the case with products that are affected by seasonality, for instance.

If you're a producer of Halloween products, the CoD for delivering after October 31st is dramatic. According to the National Confectioner's Association, almost 10% of candy makers' annual revenue takes place during this particular holiday, making it even more important than Christmas, the biggest holiday season overall. The same goes for costumes, cards, and decorations. Halloween has a bigger impact to these industries (and hence a larger CoD) than it does for producers in virtually any other industry. [Figure 3.6](#) illustrates a short life cycle with a sharp drop-off based on a deadline.



**Figure 3.6 Short Life Cycle; Sharp Drop-Off Based on Deadline**

### 3. Estimate Peak Benefits

Estimating the maximum benefits of proposed work items (yet to be released) is more art than science. What's important in this context is accuracy, not precision.

For instance, I can make an accurate estimate that it would take me between 8 and 12 hours to fly from Oslo to Chicago. This is not terribly precise; however, spending the time to come up with an analysis that would let me know it would take precisely 9 hours and 25 minutes to make the trek does not materially improve my analysis. Hence, being “roughly right” is more valuable in this context than being precise.

Also, by making the estimations and the assumptions underlying them visible, we can help create clarity and gradual improvement over time. For instance, in the previous example, by being explicit regarding how we came up with the estimates for the overseas trip, we can invite additional questions and perhaps even improve on our estimates. Perhaps we can shave off a few hours in total and make the estimate even more accurate by only considering direct flights. The importance here is not necessarily that the estimate itself is extremely precise. The real value is in the conversations, interactions, and common understanding among the stakeholders regarding what benefits the product or feature may provide—and how we calculate it.

### 4. Calculate Cost of Delay

Finally, by combining the value of the work with the urgency of the proposed work item, you can calculate a CoD estimate. Involving someone from the Finance department can be useful during this step because that person will be able to more quickly articulate the expected financial impacts.

Example: You’re considering automating an existing process to save \$200,000 per year (a Cost Reduction). This, in turn, will improve invoice collections by \$400,000 per year (a Revenue Improvement). To calculate CoD, first combine these two benefit categories:  $\$200,000 + \$400,000 = \$600,000$  improvement per year. Next, divide this annual improvement by a time interval—in this case, by the number of weeks in a year (52). Delaying this project therefore has a CoD of about \$12,000 per week ( $\$600,000/52 = \$11,538$ ).

## ***What Problems Does It Solve?***

CoD has one obvious benefit in that it helps us prioritize work based on equal units of measure. By creating an economics-based value ranking for our work, we can remove emotional considerations and compare apples to apples. This helps us make better trade-off decisions. For example, is it more important to deliver this big platform upgrade over an important customer request? Without an economic framework, these are not easy decisions to make. Very often such conversations become emotional and devolve into politics and shouting matches.

Perhaps the most important benefit of CoD is its capability to change the focus of the organization so that everyone—from the CEO to the developer building the product—has a common view of the economic impact created by the product being built. When a developer understands that the feature she is working on will lead to a direct economic impact of \$12,000 a week for the company, it helps make the work very real and helps align everyone around a common goal.

## ***What You Need to Make It Useful***

CoD can be viewed as overwhelming and foreign to many. But once stakeholders realize that it’s less important to be precise in our calculations than to aim for accuracy, a layer of resistance goes away. We want to be “roughly right, over precisely wrong.”

As in the preceding flight example, the fundamental **value** of the information is the same whether we have a range-based estimate or a precise calculation. I can plan my trip accordingly, set expectations with family members, consider hand luggage adjustments, and so on. The effort required to get the precise estimate, however, is much greater than the effort it took to make a rough estimate. The same logic applies when calculating CoD; the value of the information is to understand the financial impact of one set of efforts over another. Having a rough, yet accurate estimate provides the same value in terms of prioritization of the work, yet it takes a fraction of the time to attain.

One crucial element of making sure CoD is useful is to ensure that a cross-section of the company’s functions are involved in making the calculation. The main value of calculating CoD is not the calculation itself, but the conversations and cross-functional alignment that come out of the exercise. Working together to identify the numbers going into these calculations helps to get everyone on the same page. As you can imagine, the Finance

department plays a crucial role in this activity, so make sure they are involved from the beginning.

### ***Practical Application***

CoD is most effective when it becomes a natural part of the company’s product development prioritization process. In [Chapter 9](#), I’ll provide an end-to-end example of how to create an agile product development portfolio strategy; CoD is included as part of the **product strategy definition** and is one of the tools combined for use with the Business Model Canvas, as described earlier.

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## **Building the Thing Right**

Identifying what to build is a critical part of being an agile organization, but none of this matters if you’re not able to execute well. With building the “thing right,” we’re referring to building quality products that customers will love.

In the sections that follow, you’ll find what I would consider the most important agile methodologies available to enable your teams to both execute with purpose and delight customers:

- Scrum
- Kanban

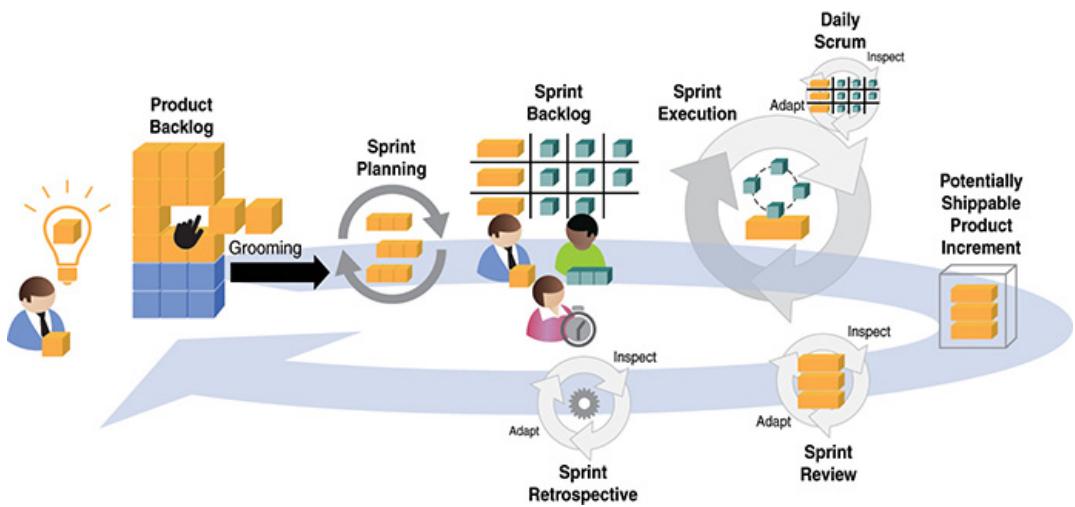
### **Scrum: Building Value Incrementally and Iteratively**

Scrum, which we referred to in [Chapter 1](#), is by far the most popular agile framework in use today. In fact, according to Version One’s State of Agile survey, nearly 60% of teams deploying agile methodologies report using Scrum.<sup>11</sup>

Part of what makes Scrum so popular is that it is elegantly simple. But don’t let the simplicity fool you—simple does not equal easy. As Ken Schwaber and Jeff Sutherland, the creators of Scrum, note: “Scrum is simple to understand, difficult to master.”<sup>12</sup> Part of what makes Scrum so challenging is that it is extremely effective at making flaws in your system visible. In other words, because there’s always room for improvement, you’ll never truly “master” Scrum—you’ll simply do it better than you did yesterday. This continuous improvement mind-set is at the core of enterprise agility and is part of the reason Scrum is such a widely used tool in agile business environments.

At its essence, Scrum helps make the values of the Agile Manifesto concrete through a framework consisting of four ceremonies, three roles, and a few simple artifacts.

[Figure 3.7](#) provides an overview of the Scrum framework.



**Figure 3.7 An Overview of the Scrum Framework**<sup>13</sup>

## How It Works

One of Scrum's strengths is that it embraces validated learning through frequent feedback loops. That is, throughout the methodology, you have multiple opportunities to learn and adapt the direction of your product based on how customers (or a customer representative) respond when they get to examine a “potentially shippable increment”—a vertical slice—of value.

For instance, if a customer is looking to build an order entry system, a team may build a lightweight, yet working increment of the system that allows the customer to simply log in and enter a small subset of information. It's certainly not ready for production—lots of functionality is missing—but it allows the customer (or the team member representing the customer) to create a Minimum Viable Product (MVP) and get an idea of where the product is headed, provide early feedback to the team, and suggest improvements along the way.

This customer representative is called the “Product Owner,” or PO, in Scrum. The PO is responsible for the product’s vision and expresses the product through a number of prioritized Product Backlog Items (PBIs), typically called User Stories. These Stories are progressively refined over time, so the Product Backlog is dynamic and can change as more information is available.

The Iteration, or Sprint, is fixed. The PO, in collaboration with the team, selects a subset of Stories from the Product Backlog. This subset is to be completed in the Sprint, which is typically no longer than two weeks (although Scrum officially sets the limit at 30 days).

Although the Product Owner prioritizes the Stories, the team members estimate the effort required to do the work. The team then lets the PO know whether the scope of work is realistic. In other words, the people doing the work are the ones responsible for making estimates. This involvement helps create ownership and realistic commitments.

The team itself is a multidisciplinary, cross-functional group that encompasses all skills necessary to execute on the Backlog: developers, testers, User Experience (UX) designers, architects, business analysts—whichever skills, knowledge, and abilities are required to create value. The catch is that the team is not to be larger than 7 +/- 2 people to keep collaboration and communication efficient. This size recommendation is based on the fact that lines of communication (and associated inefficiencies) increase dramatically as the team size increases. For instance, the lines of communication of a 6-person team is 15; the lines of communication of a 10-person team is 45, which is a threefold increase in complexity.

In addition to the PO and team, the third role in Scrum is the ScrumMaster. The ScrumMaster is the team “coach” who helps remove impediments to getting work done. The ScrumMaster stewards the process and helps the team members continuously improve the way they work.

Each day, the team meets for a 15-minute coordination session called a “Scrum” or “daily stand-up.” (It’s called a stand-up because people typically stand during the brief meeting to keep things moving along and keep the session focused.) In this session, team members help each other understand what they are doing to execute on the team’s goals for the Sprint and whether anything is standing in the way of accomplishing what they committed to for the Sprint.

The questions asked are:

1. What did you do yesterday to help advance the goals of the Sprint?
2. What are you planning to do today to help advance the goals of the Sprint?
3. What is standing in your way of advancing the goals of the Sprint?

If impediments are uncovered, the ScrumMaster springs into action following the meeting and ensures work can continue with minimal disruption.

At the end of the Sprint, the team demonstrates the great work it has done in a “Sprint Review.” This allows the Product Owner to formally sign off on what the team accomplished. It’s also an opportunity to share updates with the rest of the organization and other stakeholders. Working software is demonstrated in this session. It’s important to note that this is not a mere presentation; it’s about demonstrating working software to show progress toward the product goal. Sprint Reviews also lead to additional insights and learning.

The final ceremony in Scrum is called the “Retrospective.” Whereas the Sprint Review focuses on the Product, the Retrospective focuses on the team members and how they work together. In the Retrospective, team members reflect on how they worked together and explore ways to do even better the next time. Although there are continuous improvement elements throughout Scrum, the Retrospective in Scrum is crucial because it focuses solely on how the team members work together and what they can do to improve how they create value as a team—not the product itself.

## ***What Problems Does It Solve?***

Focus on highly visible priorities. One of the reasons Scrum is the most popular Agile framework by far is because it helps make the 4 values and 12 principles of the Agile Manifesto concrete. In fact, because the Manifesto and Scrum are often tied to one another, many erroneously equate Scrum with Agile; however, this would be a fallacy. Agile is a mind-set and a set of values and principles that guide how to work in a more agile manner; Scrum is one manifestation of an agile way of working.

Where Scrum is most effective is in helping teams execute on a defined set of prioritized work items. Due to its short iterations, frequent feedback loops, and high degree of customer representation, Scrum has enabled companies to learn more about the customers' needs and produce value faster. Thus, it has quickly grown to become the dominant way of building software today.

## ***What You Need to Make It Useful***

For Scrum to be effective, however, several criteria need to be fulfilled. Paraphrasing Mike Cottmeyer, CEO of Leading Agile and a top organizational change consultant, being successful requires three essential things:

1. A complete team, able to deliver value as defined by the Product Backlog
2. Fully tested and integrated software available at the end of each iteration
3. A well-defined, groomed Backlog maintained by an engaged Product Owner

My experience is that Scrum is often introduced in traditional companies without accounting for these three elements. Initially, organizations tend to simply translate existing team structures and roles and put new labels on them to reflect a Scrum team. For instance, the Project Manager becomes the ScrumMaster or the Product Requirements Document (PRD) becomes the Product Backlog.

This is a common mistake that will effectively kill the benefits of Scrum. The PRD is a static document that, once committed and signed off on, will not evolve without change orders and approvals. The Product Backlog, in contrast, is a dynamic set of priorities that is represented in various levels of detail. By simply translating the PRD into a set of user stories, you've effectively restated the same static document, not accounting for any learning in the form of customer feedback along the way. Instead, a lightweight PRD—perhaps represented as a Canvas—can be an excellent starting point to set the stage and create a common understanding among the team members, whereas the Product Backlog itself continues to evolve as more learning is acquired.

Scrum is therefore not simply a different framework with different labels; it represents a dramatically different way of working, compared to plan-driven, predictive methodologies.

Hence, for Scrum to be effective, you have to **change the way you work**. This is part of the power of Scrum: it highlights and makes visible the many flaws you have in your

current processes so you can reflect on them in the Retrospective and make appropriate changes to address them. Remember how Toyota viewed defects as “treasures”—information presented to us as a way to improve our system? This is exactly the same thinking.

To get the most out of Scrum in your organization, I recommend leveraging some external coaching help, at least as the methodology is introduced. Because it represents such a fundamentally different way of working from traditional project management techniques, having some external assistance will be critical unless you’ve already invested in this expertise inside your organization. (See [Chapter 8, “Building Your Organization’s Agile Working Group.”](#))

## ***Practical Application***

Scrum was initially built for software product development, but you can apply it in any business setting that deals with the Obvious, Complicated, and to some degree the Complex domain. Its sweet spot is probably the “Complicated” domain, because having an understanding of the “what” is essential to a Product Backlog and to executing according to commitments.

Scrum can be used in many contexts outside of software, however. My family uses Scrum to plan our week together. Each Sunday, my wife, our two kids, and I define our “Backlog” for the week and plan how we’re going to get our work accomplished together. Once we’ve discussed the Backlog and estimated the relative effort required to get it done, we place the work on a highly visible Scrum board visible in our living room so we can always be aware of current status and quickly help each other if any of us gets stuck with something. Although we don’t have a formal ScrumMaster or Product Owner (my wife is probably the closest we have to the PO role), we self-organize around this agreed-upon Backlog and help each other get it done. It definitely beats the honey-do list!

## **Kanban: Taming Chaotic Environments Through Visualization**

Kanban, translated from the Japanese, means “visual signal” or “card.” Originally a visual technique in which an instruction card was sent along the production line to help visualize flow of work and enable “just-in-time” inventory management in manufacturing, Kanban was later adopted for knowledge work in the mid-2000s by a group of thought leaders including David Anderson and Jim Benson, both authors and management consultants.<sup>[14](#)</sup>

At its core, Kanban is about visualizing the work being done, limiting the amount of work done simultaneously, and continuously improving the processes and amplifying positive outcomes.

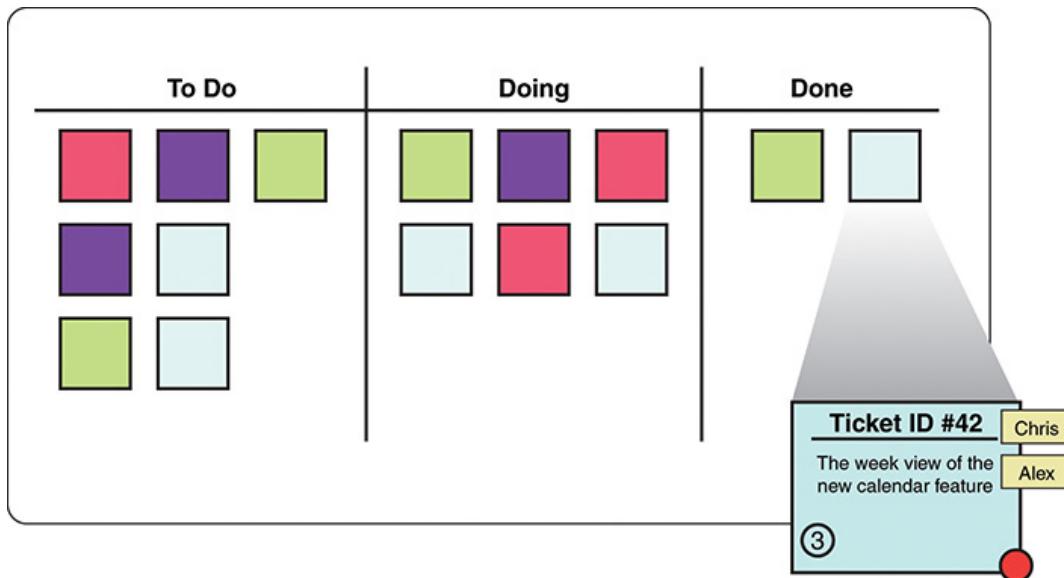
Although Scrum uses timeboxes to help constrain the system and create an implicit “rhythm” of work, Kanban removes the timeboxes and instead focuses on managing the flow of work itself through Work in Progress (WIP) limits. That is, by ensuring teams do not work on more than they can handle at once, we can reduce bottlenecks, increase speed, and improve the overall quality of the work.

Scrum is the more popular technique used in environments with more traditional software product development, but Kanban tends to be more popular in environments with less predictability and more interruptions, such as what is typically found in software maintenance or support work.

## ***How It Works***

Kanban enables teams to quickly see how work flows within their processes. It also allows teams to communicate their status and to provide a deeper understanding of the context of the work being done. As one of the leading Kanban consultancies states, “Kanban takes information that typically would be communicated via words and turns it into brain candy.”<sup>15</sup>

A Kanban board is a simple, visual that’s easily grasped within seconds, as illustrated in [Figure 3.8](#).



**Figure 3.8 Example of a Kanban Board**<sup>16</sup>

Using the board, teams enumerate the work they are doing, track the progress they are making and continuously aim to improve the manner in which work gets done.

## ***What You Need to Make It Useful***

At the heart of Kanban are four principles:

1. **Visualize work.** Rather than introducing a new way of working (such as Scrum), Kanban recommends starting by visualizing the way you work right now. Having an understanding of your current state is in itself a critical component of improvement.

Being able to visualize the processes, blockers, components, and dependencies involved with creating value deepens the team's understanding of what needs to improve.

2. **Limit Work in Progress (WIP).** We discussed some of the benefits of not doing too much at once in [Chapter 2](#). Kanban recognizes this explicitly by encouraging teams to reduce the amount of unfinished work in progress. This helps increase the speed at which work is completed. It also reduces variance and helps increase quality by reducing task switching.
3. **Focus on Flow.** By setting WIP limits to manage the flow of work, teams are encouraged to continuously monitor, analyze, and improve the manner in which they work.
4. **Continuously Improve.** Once teams start changing the way they work, the resulting cultural shift spreads into the organization at large and becomes the basis for an enterprise that is focused on three goals: flow of value, managing WIP, and reducing the time to market.

Kanban can be an excellent way to introduce agile ways of working without rocking the boat by deploying new process, roles, and ceremonies. By following the Kanban principles, teams gradually gain a greater understanding of how they work and continuously improve as they track progress along the way. However, a potential drawback of this approach is that it does not require any changes to be made. If the teams do not track progress and actually manage their WIP over time, Kanban can be reduced to simply visualizing the way work is being done—and left at that. There is benefit in this from a communication and understanding perspective, but without actively managing WIP, the benefits of Kanban can be compromised.

## *Practical Application*

Kanban is most useful when it is difficult to predict incoming work, such as support organizations that deal with a seemingly random number of support tickets arriving at various rates.

When I was coaching one of the support teams at McAfee, we quickly recognized that managing work with Scrum was not going to be very meaningful. We tried to plan our work through regular Sprint Planning every Monday, but after a few hours higher-priority tickets began arriving, and we had to replan all over again. Once we saw this become a pattern, we decided to stop trying to plan our work in two-week increments and instead make prioritization decisions on the go and focus on not working on more than we could handle at any one point in time.

Customers loved it: by collecting data on average cycle time per feature, we could predict with a fair amount of accuracy when support tickets would be completed, depending on their priority. A high-priority bug is coming in? No problem, knowing we

have three high priority bugs ahead of you and that we'll spend about 3-5 days getting them done, we can confidently say you can expect a resolution sometime next week.

Kanban, without time boxes or regular iterations, is well suited for work in Snowden's "Complex" and "Chaotic" domains, where there is a fair amount of uncertainty and volatility in the nature of the work.

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## Building at the Right Speed: Optimizing for Flow

Identifying what your customers want and executing on the unique value proposition is critical. But to remain competitive and continuously improve the way you work, it's equally important to develop products in a way that removes waste in the process and reduces the time it takes to get from "Concept to Cash," as Mary Poppendieck, a long-time Lean thought leader, puts it.<sup>17</sup> In my experience working with both startups and Fortune 50 companies, the following sections describe some tools, techniques, and methodologies I've found effective in removing waste and delivering value in a sustainable manner.

- XP (eXtreme Programming)
- Value Stream Mapping

### XP

eXtreme Programming, or XP for short, is a set of engineering practices and disciplines that help teams enable fast feedback loops. XP also keeps technical debt under control by implementing quality at the source, promoting emergent design, and driving technical sophistication. XP typically refers to practices such as *Test Driven Development (TDD)*, *Continuous Integration*, *Pair Programming*, *Collective Ownership*, and *Refactoring*.

### How It Works

At its core, XP is about building in quality at the source and enabling fast software delivery through frequent inspect-and-adapt cycles. In the list that follows, I provide a brief overview of the key practices associated with XP. Because it is beyond the scope of this book to go in depth on these practices, I highly recommend you take a look at the "Further Reading" section at the end of this chapter so you can go beyond the cursory overview provided here.

1. **Test Driven Development (TDD).** TDD is a software development process that repeats a short development cycle: First, write an initial test to define a desired system change or new function. When the test runs (and fails), the developer writes the minimum amount of code necessary to pass the test, before refactoring the code to ensure good code "hygiene." This process ensures code test coverage and risk reduction. The process typically looks like this:

- a. Add a test.
- b. Run all tests and see if the new one fails.
- c. Write some code.
- d. Run tests.
- f. Refactor code.
- g. Repeat.

This approach may appear foreign to developers who are used to “black-box testing,” in which tests are added *after* the code is written (and by different people).

“Traditional” developers may need time to get accustomed to the idea of writing tests first. The benefits are substantial, however, because this process promotes emergent design, improves quality through faster feedback loops, and simplifies the code base so that it is easier to maintain.

**2. Continuous Integration (CI) and Continuous Deployment (CD).** CI is a development practice that requires developers to integrate code into a shared repository several times a day. Each check-in is then verified by an automated build, allowing teams to detect problems early. By integrating regularly, you can detect errors quickly and locate them more easily.

Although CI does not in itself fix bugs, it greatly speeds up their discovery through rapid feedback loops and is an essential part of building sustainable, testable code.

Continuous Deployment (CD) takes this concept a step further. It entails releasing the tested build to production. This enables early feedback in terms of identifying issues with the code, but it also enables learning about users’ needs earlier.

Combined, CI and CD help lower the “cost of releasing” dramatically. In the process, teams adapt to market changes much quicker. This concept later evolved to include people collaborating throughout the entire software life-cycle, from design through the development process to production support, creating a complete end-to-end delivery pipeline. This is essentially what we today call DevOps.<sup>18</sup> (More resources on DevOps are available at the end of this chapter.)

**3. Pair Programming.** Pair programming refers to the practice of creating software by having developers pair together around the same computer. Pair programming requires two roles: a driver who writes the code and a navigator who reviews the code as it’s written. Roles change frequently to help retain fresh minds. **Mob Programming**, popularized by Woody Zuill, extends this concept even further and involves an entire team working on “the same thing, at the same time, in the same space, and at the same computer.”<sup>19, 20</sup>

By taking on different roles and working together in such an intimate manner, the navigator can focus on more strategic, long-term concerns of the code while the driver focuses on the immediate task at hand. The idea is that two (many) heads think

better than one and that, combined, immediate concerns and a long-term view (emergent design) are considered and addressed at the same time.

Pair programming is another practice that some developers find controversial. Many developers are fiercely independent and introverted, which can make the thought of working with someone at such a deep level very challenging. Over time, however, my experience as an organizational coach has been that developers tend to enjoy the practice once they have had a chance to try it out for a while. It turns out that none of us is an expert at everything; having someone help along the way is a great way to write better software.

In fact, some companies, like Menlo Innovations, Inc., a successful software company based in Ann Arbor, Michigan, have made pairing a natural part of how they work. And at Menlo, this collaborative approach extends beyond programming: Project Managers, Managers, and other employees routinely pair on work to help ensure quality and to provide on-the-job training and a level of consistency across the organization. Rich Sheridan, CEO of Menlo, is blunt in his embrace of pairing: “It simply works better. Two brains think better than one!”

**4. Whole Team Ownership.** This concept refers to the idea that the outcome is owned by the entire team (and sometimes even other teams). Anyone can make changes virtually anywhere. Rather than having a particular person be responsible for her code, the team shares responsibility for maintaining all the code and owning its quality together.

This is another practice that can seem foreign to more traditional developers, who may be used to clear delineations between who owns the code. After all, developing software can be an extremely personal endeavor; many developers feel, “How can others possibly appreciate and understand my code?”

This is, of course, antithetical to the very sentiment of Whole Team Ownership. Instead of optimizing for a single individual, this practice optimizes for the team so that everyone on the team is expected and encouraged to make changes to any line of code they want. This can be incredibly liberating in that code maintenance is viewed as a community responsibility, but it can also be difficult, especially for people with a healthy amount of ego. In fact, this is true for most agile practices; the individual is rarely the focus in these matters—the team is.

**5. Refactoring.** Code refactoring is the process of rewriting existing code without changing the behavior of what the code aims to accomplish. As such, it targets the quality attributes of the code and helps make the code more readable, so it looks cleaner and is easier to maintain. If done consistently, refactored code tends to be less complex and allows for greater extensibility, offering emergent design.

In more advanced cases, refactoring may even resolve hidden design flaws or other vulnerabilities that would otherwise have gone unnoticed. If done incorrectly, refactoring might in fact change the behavior of the code or introduce new bugs. It is

therefore a practice that goes hand-in-hand with the other practices we discussed above. Refactoring is a continuous focus for the team, not a one-time event.

Joshua Kerievsky, an XP veteran and author of *Refactoring to Patterns*, explains that by making refactoring a natural part of development, the initial friction is an investment in code for the future:

*“By continuously improving the design of code, we make it easier and easier to work with. This is in sharp contrast to what typically happens: little refactoring and a great deal of attention paid to expediently adding new features. If you get into the hygienic habit of refactoring continuously, you’ll find that it is easier to extend and maintain code.”*<sup>21</sup>

## ***What You Need to Make It Useful***

Although XP is not technically part of Scrum or Kanban (or any of its variations), it is becoming clear throughout the software industry that without paying attention to robust engineering principles when developing code, any benefit you may gain from developing smaller, more incremental slices of code is going to gradually erode as the crippling effects of technical debt slow progress down to a halt. In fact, I have never seen teams enjoy sustained performance gains without also considering the engineering principles used when developing product.

XP complements the other product development methodologies perfectly by shortening the feedback loop, confirming assumptions, and ensuring quality issues are found faster. By combining methods aimed at managing the work (such as Scrum) with methods aimed at improving the way the work is done (such as XP), the result is a force multiplier in learning, speed, and quality.

## ***Practical Application***

XP is increasingly becoming a de-facto standard in how software is developed, but it can be challenging to implement XP in procedural languages or in environments where developers are not familiar with principles of object-oriented design (SOLID).

Also, without a strong knowledge of patterns and refactoring to patterns, some of these practices can give coders a false sense of confidence in the design. The most effective way to apply XP to existing environments is to combine hands-on training with an extended period of coaching and pairing.

## **Value Stream Mapping**

Before starting any major project or effort, it pays to understand exactly what's involved in getting the work done. Value Stream Mapping (VSM) is a visualization technique derived from Lean thinking that helps us document, analyze, and ultimately improve the flow of value (information or materials) required to produce a product or service for a customer. In my experience as an organizational coach, I've found it to be an incredibly useful tool for observing the steps necessary to create value in an organization—and for identifying ways that we can improve the way we work toward optimizing for flow of value over resource optimization.

### ***How It Works***

There are a number of ways a VSM can be created. Some organizations learn best from complex exercises—a large group of people visualizing their work with icons representing a myriad of activities. Others benefit from simple, intuitive workshops that enhance understanding and creating a shared language.<sup>22, 23</sup>

I prefer the latter. Ultimately, the VSM in itself does not solve the organization's problem, but it helps visualize where the problems are and in effect extends an invitation to address them. By keeping the VSM activity simple and intuitive, I've found that more information is conveyed more rapidly and collaboration between groups happens more organically. Also, people tend to remember a simple VSM better than they do a highly complex representation.

Here's how I typically conduct a VSM workshop. I proceed through a series of eight steps:

**Step 1. Understand Flow Optimization.** I start off by explaining to the participants what optimizing for flow entails. This is an important step, as we often tend to think of our work from the perspective of our functional areas, not as it pertains to how value is created.

To make this concept concrete, I typically use a real-world example, such as the process a patient goes through when at the doctor's office. We map out the process together, noting how much time is spent in-between the steps. For instance, after we see the doctor, we may get a referral to a specialist. This is another step that might take a few weeks before we actually see this professional. From the perspective of the doctor, she is very busy and fully optimized—she's seeing as many patients as she can squeeze into her day. But from the perspective of the patient, this is a slow process—we now have to wait weeks before getting closer to a resolution. The value in this case is the diagnosis, and what we want to find out is how we can reduce the time it takes to get to a diagnosis as quickly as possible.

**Step 2. Identify the solution.** Next, I work with participants to identify the essentials of what we’re mapping out as it relates to the specific project we’re about to start. Where is the need coming from? Where does value get realized by the customer? Who is the customer?

**Step 3. Draw current state flow.** We then draw the current state flow as a group. We identify all the areas of the work that add value and those that do not. If this is an existing process, we identify the average time it takes for a given unit to be manipulated or processed (value added time) and the “dead time” in between (wait time). At this point, people invariably are surprised that the wait time—when nothing is happening in terms of adding value to the product or service—is often 6–8 times longer than the time we spend actually adding value to the unit. Talk about waste!

Depending on the maturity of the organization, I may stop the exercise here. Creating awareness so that we understand the degree to which we’re systematically destroying value creation through our organizational structures can in itself be sufficient. But if much of this is already known, we go a few steps further.

**Step 4. Draw the future state.** As a group with representatives from the entire value stream, we redraw the map so that we reduce waste in the process and optimize for value. This can take several hours, but it’s invariably an extremely insightful exercise that helps identify where we go next.

**Step 5. Create an action plan (3–6 months).** Once we’ve agreed as a team to make meaningful changes to the way we work, we identify a high-level “improvement backlog” with concrete recommendations and corresponding prioritizations. This plan projects 3–6 months into the future.

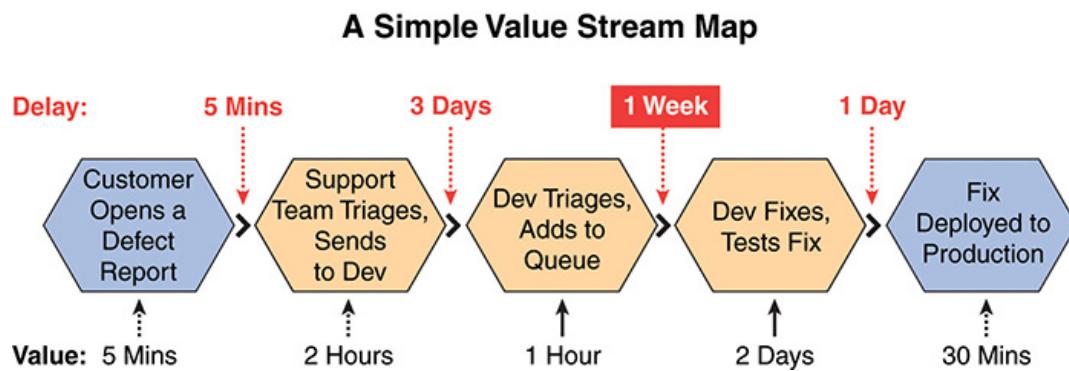
**Step 6. Appoint a VSM Product Owner.** I typically recommend identifying a Product Owner who “owns” the changes and ensures we make continuous progress toward our goals. In some cases, if the organization has an Agile Working Group (AWG) established, these objectives may align with their Backlog. (More about the AWG in [Chapter 8](#), “Building Your Organizations’ Agile Working Group.”)

**Step 7. Communicate goals to the organization.** Meaningful change thrives when it receives attention and organizational engagement. At this stage, I recommend that the objectives and resulting outcomes of the VSM workshop be communicated to the broader organization so that everyone understands what’s about to happen next.

**Step 8. Repeat periodically.** Making sure everyone in a program understands what it takes to create value, from need identification to need realization, is a critical part of unlocking organizational agility. It is too easy to ignore what happens

beyond a given team's sphere of influence. So that we visualize the idea that our goal is to optimize for the whole, not for our respective teams, I recommend running VSM workshops on a regular basis (every 3–6 months, depending on the size of the program).

Figure 3.9<sup>24</sup> is a simple VSM describing the steps necessary to deploy a fix to production, from the moment a customer opens a defect until the fix is implemented. Notice the value-added steps (lighter boxes), but also the wait times in between. As is typical, the wait times (when nothing happens) are much longer than the time required to get work done (value-added time.).



**Figure 3.9 Simple Value Stream Map (Credit: [https://www.ibm.com/cloud/garage/content/think/practice\\_value\\_stream\\_mapping/](https://www.ibm.com/cloud/garage/content/think/practice_value_stream_mapping/))**

## What You Need to Make It Useful

It's most important to have the right people in the room when mapping out the value stream. In an interactive workshop, we don't necessarily want high-level managers or leaders involved; we want the people actually doing the work to help make the map come to life. Like most activities that require an intense level of communication and interaction, creating a VSM is not something I'd attempt doing virtually; an effective VSM workshop requires face-to-face interaction.<sup>25</sup>

## Practical Application

One of the primary goals of a VSM is to create alignment between everyone involved in building a product or service. Participants need to understand how everyone contributes to creating value. This exercise in itself is valuable, but perhaps even more useful when doing an activity like this is how the *impediments* to value creation quickly become apparent.

I recommend conducting a VSM session as part of defining the “what”: for instance, immediately following a *Business Model Canvas* workshop. Then we can quickly identify the “how” as well. As the teams start executing on the strategy, I like to review the VSM

on a regular basis and do a workshop every six months or so to ensure we account for potential changes that may have occurred in the value stream.

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## Summary

As pointed out earlier in this chapter, the tools, techniques, and methodologies described here are by no means meant to be an exhaustive list of what you'll need to unlock agility in the enterprise. They are, however, what I have found to be the most useful and effective in terms of accelerating organizational agility.

You'll recall from [Chapter 2](#) that we defined organizational agility as the ability to build the right thing, build the thing right, and build at the right speed—by optimizing for organizational flow:

- **To build the right thing:** Using Lean Startup and the Business Model Canvas combined with Cost of Delay and other ways of modeling economic sensitivities has proven to be incredibly effective in defining whether we're building the “right thing.” It helps drive a highly visible approach to continuously validating whether critical assumptions made regarding our value proposition (and business model in general) are indeed correct. When using an economic framework to drive decisions, prioritizations are based on business benefits rather than fancy titles or political influence.
- **To build the thing right:** Leveraging Scrum or Kanban (or a combination of the two, like “ScrumBan”), combined with technical practices outlined in XP, is a proven way to building the “thing right.” Building in quality at the source and embracing emergent design ensures you don’t code yourself into a corner and can keep technical debt at bay. Over time, this level of technical discipline and adherence to a common organizational heartbeat reduces variance and increases agility, predictability, and confidence.
- **To build at the right speed:** Enabling fast feedback loops and conducting activities such as Value Stream Mapping is incredibly effective at highlighting exactly what is necessary to create end-to-end value and identify where we might have gaps or bottlenecks. When we understand the economics of our work, we can more easily make meaningful trade-offs so that we breathe more oxygen into the value streams that create the most economic value for our organization. At the same time, we can allocate fewer resources where the economics do not make as much sense. In short: we optimize for the organization as a whole rather than optimizing locally or by functional area.

Understanding what technology is available to us is an important part of unlocking agility in the enterprise, but without carefully considering the organizational design by which the company operates, the tools and techniques by themselves are ineffective. The

next chapter covers organizational design in some detail and helps you create the conditions from which agility can thrive.

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## Q&A

### **1. Why do I need to invest in technology to become more agile?**

*Technology* in the context of this chapter is meant to represent “tools, techniques, or methods assisting in unlocking agility.” Becoming more agile is not “free”—it does require a change in how you’re currently operating. And investing in Technology to help you on your way can be an effective use of resources. The examples I provided in this chapter are merely a few ways to help in this effort, but there are many more that can be equally effective. (I provide an updated list on [www.unlockingagility.com/](http://www.unlockingagility.com/).)

The key point, however, is that the existing Technology portfolio employed in your organization most likely needs an upgrade to operate in a VUCA world. This is not necessarily because the existing tools are “bad” or ineffective; it’s because they are optimized for a plan-driven, less volatile business environment. As we’ll learn later in this book, unlocking agility means being able to balance both these concepts—“embrace change, execute with purpose.” We also need to refresh the tools we use to adapt to the context of our business environment.

### **2. Isn’t it enough that we make a good, profitable product that satisfies a customer need? Why is a company’s business model as important as the product or service we’re delivering?**

As we learned in the introductory chapter, the notion of a traditional competitive advantage no longer applies. The barriers of entry are now so low that any person with a bright idea can take on the most powerful companies in the world without significant resources and become a potential disruptor. And change is happening faster than ever; companies with seemingly untouchable market positions find themselves scrambling for survival in a matter of a few years—the stories of Kodak, Blockbuster, and Nokia are all too familiar.

Competing with a business model is an entirely different thing, however. If a company is able to create a compelling business model around its product or service, its chances of survival are much greater. Facebook is probably the most obvious example here. The product itself may be compelling, but the competitive barrier it has created by having all your friends connected through their product—as well as a myriad of partner apps, sites, and additional services—makes it difficult to simply “quit” Facebook and move to a competitor. A Facebook clone without your friends is worthless—it’s your friends and connections that create the content and make the product interesting to you.

By thinking more deeply of the business model supporting a product and service, an organization can create competitive advantages that—although perhaps sustainable—will at least create additional obstacles for potential competitors.

### **3. Should every company have a “lean startup” division—or is this just for companies that create new products frequently?**

The underlying *thinking* behind Lean Startup—the idea that running short, inexpensive experiments is an effective way to validate assumptions in Complex domains—is an important concept that applies beyond simply product development. As an example, later in this book, you’ll learn about a company that ran a series of experiments, Lean Startup-style, to better understand how to build better work environments for its people. It’s not exactly Product Development, but it’s important as a technique to help facilitate rapid, validated learning.

Whether a separate division is necessary from a product development perspective is a different question. In [Chapter 9](#), we cover this topic in some detail. Building an internal “innovation hub” may be one way to encourage disruptive Product Development and change, but other approaches may be even more effective, however.

### **4. How important is it that all employees (not just Finance and executives) discuss and understand Cost of Delay?**

I find CoD useful because it is a concept that everyone can understand and can relate to. By articulating that a CoD is a certain amount per week, for instance, employees throughout the organization (regardless of position) can more easily make economically sensible decisions without having to ask management for permission. As such, having an understanding of CoD can help bring decisions closer to where the work is done, reduce overhead and lead time, and ultimately contribute to more agility in the organization. For example, if an engineer understands that the CoD for the project she is working on is \$900,000 per week and she is faced with a decision of whether to upgrade a build server that will help speed up development by several days per month (incurring a cost of \$20,000), it’s easier to make a decision based on economic sensibilities rather than gut feel. Upgrading the server right away is a reasonable decision to make, given the situation.

Whether or not the CoD figure is exact is not important; whether it is accurate is. In other words, if the CoD was \$900 per week instead of \$900,000, the engineer would most likely make a different decision.

### **5. How do I know which agile tool, technique, or framework will work best to unlock agility in my organization?**

It’s important to note that tools, techniques, and methods won’t unlock enterprise agility by themselves—but they can be important aids in doing so. As we’ve learned in the previous chapters, context matters; the tools that may be appropriate for one given situation may be counterproductive or even harmful in another.

This is why there is no such thing as “one tool/framework/method to rule them all”—rather, unlocking agility requires being able to recognize the context within which the organization operates, identify a few potential tools that may work, and seek to learn quickly to adapt and adjust along the way.

I realize this may sound like an unsatisfactory answer—sort of like the classic consultant response “it depends” when asked a concrete question. But my experience is that the business environment we operate in today is far too complex to distill agility down to a given tool, technique, or method. This is why this book is about empowering the reader to gain a deeper, more comprehensive understanding of agility so she can make better, more informed decisions—and learn quicker—as she continues her quest for unlocking agility.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- Osterwalder, A., & Pigneur, Y. *Business Model Generation: A Handbook for Visionaries, Game changers and challengers*. John Wiley & Sons. 2010.

This is an extremely easy to read—and beautifully designed—book that goes through the Business Model Canvas in detail and helps you get productive through lots of practical examples. Required reading.

- Business Model Canvas Overview (video)—<https://www.youtube.com/watch?v=QoAOzMTLP5s>

This animated video—capped at about 2 minutes—does a great job of explaining the BMC for people who are just getting introduced to the concept; it’s a nice place to start.

- Ries, Eric. *The Lean Startup. How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. 2011.

Ries’s book became an instant best-seller and helped bring a slice of entrepreneurial thinking into the boardroom. Easy-to read, with compelling examples and unique heuristics, *The Lean Startup* has become a modern business literature classic.

- Blank, Steven. “Why the Lean Startup Changes Everything,” *Harvard Business Review*. May 2013.

Blank’s HBS article is a great primer in understanding thinking behind the Lean Startup and how it applies to larger organizations. A must read.

- Reinertsen, Donald, G. *The Principles of Product Development Flow: Second Generation Lean Product Development*. Celeritas. 2009.

Reinertsen is the father of Cost of Delay and his book, *Principles of Product Development Flow*, is one of those you'll read many times over and keep finding new insights. It may look relatively thin and innocuous, but inside is a dense source of learning. Highly recommended.

- Arnold, Joshua. *Black Swan Farming*—Website (<http://blackswanfarming.com/cost-of-delay/>)

Arnold has done a better job than anyone I know in the agile community to help make CoD widely accessible and practical. Although Arnold offers a wide range of services, he is probably most well-known for his work on CoD and his website is full of helpful (and free) resources to help you get started quickly.

- Rubin, Kenneth S. *Essential Scrum*. Addison-Wesley. 2013.

Rubin has written what I consider *the* definitive source on Scrum. In this book, Rubin manages to be both broad and deep in his coverage of Scrum, making this book an absolute required read.

- Schwaber, Ken and Sutherland, Jeff. "Scrum Guides."  
<https://www.scrumguides.org/scrum-guide.html>

The creators of Scrum released periodic "upgrades" to Scrum based on their experience and user feedback from time to time. The "Scrumguides" website is the source of these guides; I recommend checking this out to see how the framework has evolved.

- Anderson, David J. *Kanban: Successful Evolutionary Change for Your Technology Business*. Blue Hole Press. 2010.

This is an easy-to-understand, accessible resource for everyone interested in getting a practical introduction to Kanban and Lean thinking. Packed with examples and illustrations; highly recommended.

- Poppdieck, Mary and Poppdieck, Tom. *Lean Software Development: An Agile Toolkit*. Addison-Wesley. 2003.

The Poppdiecks have been thought leaders in the lean software space for decades; it's incredible that this book—written in 2003—feel just as fresh now as it did when I read it ten years ago. I suspect this will be just as relevant in 2033; evergreen!

- Beck, Kent. *Test-Driven Development by Example*. Addison-Wesley. 2002.

Beck's *Test-Driven Development by Example* is meant as guide for those who want to understand what TDD is and how it can be used in various contexts. Known as the "bible of TDD, it's an invaluable resource.

- Humble, Jez and Farley, David. *Continuous Delivery: Reliable Software Releases through Build, Test, and Deployment Automation*. Addison-Wesley. 2010.

Humble and Farley's classic was one of the key drivers of the DevOps movement and the book is an excellent resource for understanding how to build fast-feedback environments. The authors recognize that releasing value faster is not simply a matter of leveraging better tools; they also cover the underlying principles and values required to unleash agility, as well.

- *Mob Programming: A Whole Team Approach* (<https://leanpub.com/mobprogramming>). Zuill, Woody and Meadows, Kevin.

This is a great way to get started—and more advanced—with mob programming. Written by some of the thought leaders of the movement, this is a book that covers pretty much everything you'd want to know about mob programming: from initial setup and workplace concerns to common pitfalls and lessons learned. Note: At press time, this book was still a work in progress, but it's available at LeanPub at a reasonable rate.

- Rother, M. and Shook, J. *Learning to See*, v1.2, The Lean Enterprise Institute, Cambridge, MA June 1999.

For understanding the value and applicability of Value Stream Mapping, there are few better resources out there. This is a handbook; as such, it's not very detailed, but it's perfect for those who want to get started and need a step-by-step guide. It's an excellent place to start.

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## Footnotes

- [1] Osterwalder, A., & Pigneur, Y. *Business Model Generation: A Handbook for Visionaries, Game Changers and Challengers*. John Wiley & Sons. 2010.
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# Chapter 4

# Organizational Design

The tools, techniques, and methods described in the previous chapter can be incredibly powerful to help unlock organizational agility. Yet, their relative effectiveness will be greatly affected by the context within which they are used. One of the influences of that context is Organizational Design. Without an Organizational Design that supports an end-to-end view of value creation, the technology deployed will have limited effect.

In this chapter and throughout this book, I refer to Organizational Design from two perspectives:

- **The Physical Design of the Workplace:** Here, I'm referring to the physical (and sometimes virtual) workspace within which people collaborate, communicate, and work together.
- **The Organizational Structure of the Organization:** Here, I'm referring to the way in which the organization coordinates its people, resources, and assets in an effort to create value in a sustainable manner.

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## Physical Workplace Design

Research has shown that the way our workplaces are designed has an outsized impact on our productivity, our ability to collaborate, and our engagement in the workplace. We'll explore this in more detail later. In this section, I outline why the workplace is so important for knowledge work. I also highlight some of the key elements of an effective workspace and provide a case study of how my team completely transformed the workplace at NAVTEQ from a traditional “cubicle farm” to a highly collaborative, energetic place to work. My hope is that this will inspire you to rethink the way you view your own place of work and look for ways to optimize it for human collaboration and communication—not for square footage, as is often the case.

## Designing for Great Teams

The least common denominator in an agile enterprise is the team. Although each individual contributes to developing a great product, it is ultimately the team that is necessary and responsible for creating compelling user experiences. Given the importance of teams as an organizational unit, recognizing exactly what makes a team highly productive has been an important area of business research. For those of us who have been fortunate enough to have worked on a high-performing team, it's sometimes difficult to pinpoint precisely what made that team so productive.

Early in my career, I was fortunate to work as a software engineer on a team that created custom financial forecasting solutions for Hewitt Associates (later acquired by AON), an HR management consulting firm. We were a relatively small team of five people, and we were fiercely proud of the product we created. When our internal customers requested new features, we rarely took more than two weeks to develop, test, and deploy them in production. (This was as close to Continuous Deployment [CD] as we got in the early 2000s.)

Better yet, our internal customers enjoyed using the product. Almost every month, we'd get a note from an end user who'd express how he loved working on RevCast because it was so friendly and different from all the other impersonal systems he had to spend most of their time on every day. Remember, this was an internal forecasting system, not a consumer app; having users reach out to us like this was not common with these types of systems. But the users loved our product—and started talking about it. In fact, RevCast was so successful that when senior management wanted to move RevCast's functionality to a more established Enterprise Resource Planning ERP system (PeopleSoft), there was a near revolt among the financial analysts who refused to give up the flexibility, intuitiveness, and responsiveness of this home-grown application. RevCast prevailed and became the system of record for more than \$1.8 billion worth of business for several years in the early 2000s.

I've asked myself many times afterward why the team was so successful. Was it because of the personalities of the people on the team? Did our skills, knowledge, and abilities complement each other particularly well? Was it perhaps an extremely charismatic leader who made it all happen? Or was it simply luck?

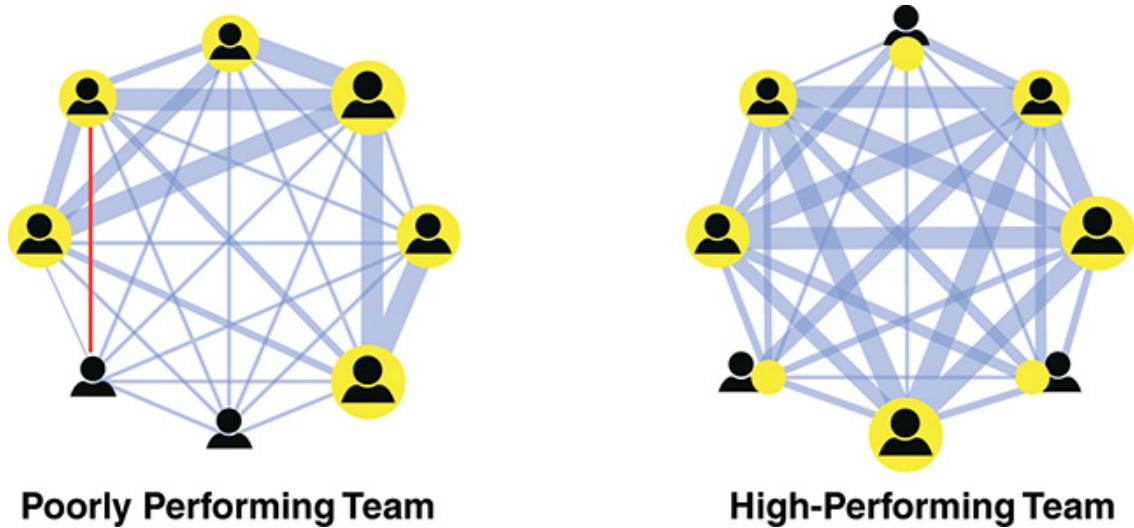
## The Science Behind High-Performing Teams

Alex Pentland, a director at MIT's Human Dynamics Laboratory, set out to find out exactly what made teams great through careful observation of more than 2,500 teams in a variety of industries. By using a set of sensors collecting more than 100 data points a minute and observing teams work together for up to six months at a time, he could correlate the way the teams worked with their respective outcomes. He found that what made teams successful was not so much the composition of the teams themselves or the content of what the teams were discussing, but *how* they were communicating with each other:

*“...we've found patterns of communication to be the most important predictor of a team's success. Not only that, but they are as significant as all the other factors—individual intelligence, personality, skill, and the substance of discussions—combined”* (Pentland, 2012).<sup>1</sup>

Specifically, Pentland was able to identify three elements of communication that directly affected the degree to which teams were successful:

- **Energy:** The number and nature of exchanges between team members matters. More exchanges are generally better as long as they are relevant to the task at hand. Face-to-face exchanges are most effective; texting and email were found to be among the least effective forms of communication.
- **Engagement:** The degree to which communication exchanges are distributed among the team members is important (see [Figure 4.1](#)). More evenly distributed exchanges are found to be more effective than “clustering,” where representatives of one role only communicate with others having the same role, for instance.



**Figure 4.1** *Visualization of Communication Patterns on High-Performing Teams vs. Poorly Performing Teams According to Pentland's Research*

- **Exploration:** The degree to which people are engaging with members outside of their core group is critical. Consistently, higher performing teams are engaged more frequently with members outside their own unit—and demonstrate higher levels of creativity and innovation.

Although I could not put my finger on it at the time, the communication patterns identified by Pentland were exactly what I experienced as a team member of RevCast early in my career. Looking back, I remember that people remarked about an audible “buzz” when entering our workspace—we were working together on problems, exchanging ideas, and engaging in active problem solving. We never considered each other’s individual roles as significant—we were merely team members with different things to contribute. And perhaps because of the energy displayed by the team, we constantly had the opportunity to interact with people outside of our own group. These people helped us gain a more comprehensive perspective of the solutions we were building and allowed us to gain empathy with our stakeholders and end users.

Given the insights in Pentland’s study and the obvious benefits that high-performing teams unleash, how can we create a workspace that increases the opportunity for team energy, engagement, and exploration?

## **Case Study: More Effective Collaboration Spaces at NAVTEQ**

When I was leading the agile transformation at NAVTEQ in Chicago, we found that one of the key impediments to effective collaboration between and across teams was lack of an effective work space. Traditional “cubicle land” was simply not cutting it: teams reported that it was difficult to meet with each other on an ad-hoc basis. Pairing was next to impossible and constantly struggling to find available meeting rooms made face-to-face collaboration a challenge.

To alleviate these impediments, executive management supported our proposal to completely redesign our existing workplace. In the next section, I outline how we approached the problem, describe some of the lessons we learned, and provide examples of how the workspace evolved to better serve the needs of our teams.

### ***The Working Agreement: Approach the Workplace from an Agile Perspective***

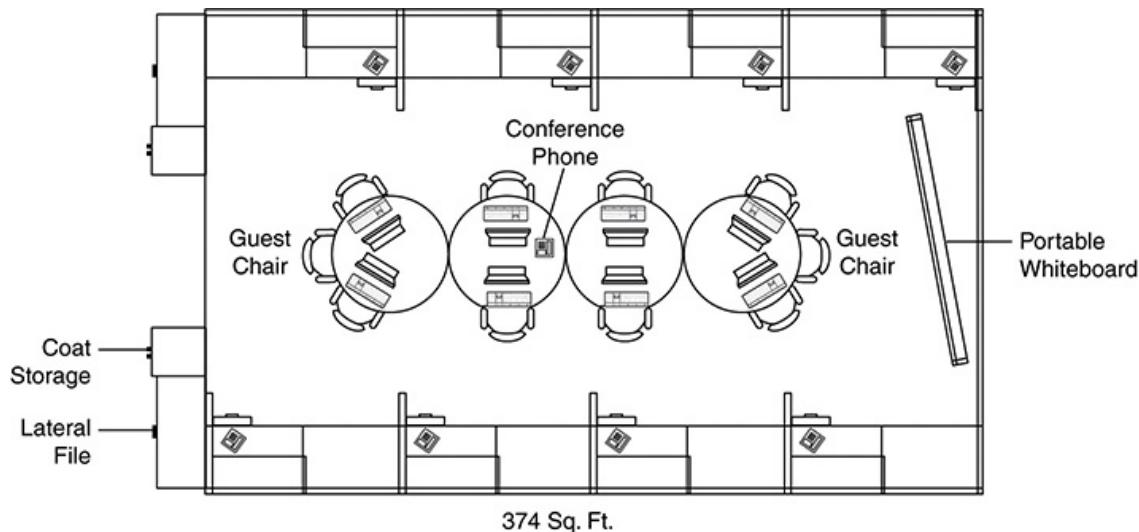
As part of the agile enterprise transformation at NAVTEQ, I was leading the Agile Working Group (AWG), a team tasked with removing impediments to organizational agility. (More on the AWG in [Chapter 8, “Building Your Organization’s Agile Working Group.”](#)) We understood that we needed to dramatically change the office landscape, which was currently set up as traditional cubicles. Each person had his own little semi-private space, but this isolation was completely anathema to collaboration. We also understood that we did not know all the answers and that we needed to approach this project with an agile mind-set: we would learn along the way and modify our thinking as we uncovered more information.

We decided to collaborate with a workspace architecture firm. During the process, the architects consulted with us as external resources and provided expertise, ideas, and counsel as we built our agile workplace.

### ***Phase 1: Design Agile Pod Prototypes***

The AWG started our efforts by examining the current workspaces and gaining a deeper understanding of the problems the teams were encountering through in-depth interviews with team members, anonymous surveys, and observations from coaching. The themes that kept coming up were “lack of collaboration” and “communication challenges.” Team members needed to work more closely together so they could make quick decisions based on high-bandwidth communication. The existing cubicle design made it difficult to work together effectively without having to schedule separate meeting rooms; however, this added a lot of unnecessary overhead and waste.

In cooperation with the architecture firm, we created a first set of prototype “Agile pods” designed to help address the problems of collaboration and communication. [Figure 4.2](#) provides an early example of the design. The first set of prototypes was based on a variation of this general scheme.



**Figure 4.2** “Agile” Pod Design; Everything Inside the Space Is Moveable, Including Chairs, Tables, Whiteboards, and Video Screens

The design was created with a focus on flexibility, spontaneous collaboration, and the capability to bring in members from other teams on a moment’s notice.

We asked for volunteer teams and set up four separate “experiments” on two different floors. Two of the teams were in 8-person pods, the other two were in 7-person pods. Because our company tried to keep the teams small as a general rule, this setup seemed reasonable: we felt confident we had optimized the work spaces for the factors that teams felt were important.

## ***Phase 2: Run the Experiment—and Reveal Uncommon Learning***

The four volunteer teams agreed to participate in the experiment under the following conditions:

- The experiment would last no more than three months.
- If the team members did not like the collaboration space, we committed to moving them back to their old work environment at the end of the experiment.

We decided that a time-boxed effort was indeed best. That provided employees with the option to go back to the current setup at the end, eliminating the risks involved with trying the new environment. In retrospect, creating this “safe-to-fail” condition was a major reason we were able to get volunteers to sign up for our experiment.

As the teams moved into their new “homes,” we made a special effort to celebrate their involvement publicly, half-jokingly comparing their efforts to the Apollo space mission some decades earlier. I say “half-joking” because we recognized it was no small feat to dramatically change employees’ workspaces in this manner—especially when they could have continued working without any change at all.

Over the next three months, we interacted with the teams in a number of ways, collecting data to better understand the degree to which the agile pods were helping to increase team members’ levels of collaboration, improve their communication patterns, and find new ways of working together. We collected the data by combining a number of sources: observation, surveys, periodic open space events, individual interviews, and objective data. (We even considered placing a time-lapsed video camera in the pod to observe communication patterns in the teams over time, but this was quickly rejected by the teams as if they were “in a zoo.” Point taken.)

The data we collected came back remarkably consistent among the four teams. Unfortunately, it was initially very painful. To our surprise, most participants *absolutely hated* working in the new pods. They said they were noisy. There was virtually no privacy to make occasional personal calls. One volunteer was pretty clear in her assessment: “This is a hellish working environment; please change whatever you’re doing and rethink the whole agile collaboration concept.” The judgment was pretty clear: if the pods are going to look like this, they would rather quit their jobs than work in this environment!

However, there was some good news: teams *were* collaborating better. Communications were more effective within and across teams. We noticed there were a few times each week when we could observe the teams really gelling together—a few people from different teams got together for regular Xbox game nights at the office, and ad-hoc table tennis tournaments started popping up. We recognized we were onto something—but we knew we had to change some of the design decisions we made in the prototypes. We needed to amplify all the positive developments we saw related to increased collaboration and cross-team communications and dampen the issues related to noise concerns and lack of privacy.

### ***Phase 3: Back to the Drawing Board—Optimizing for the Right Thing***

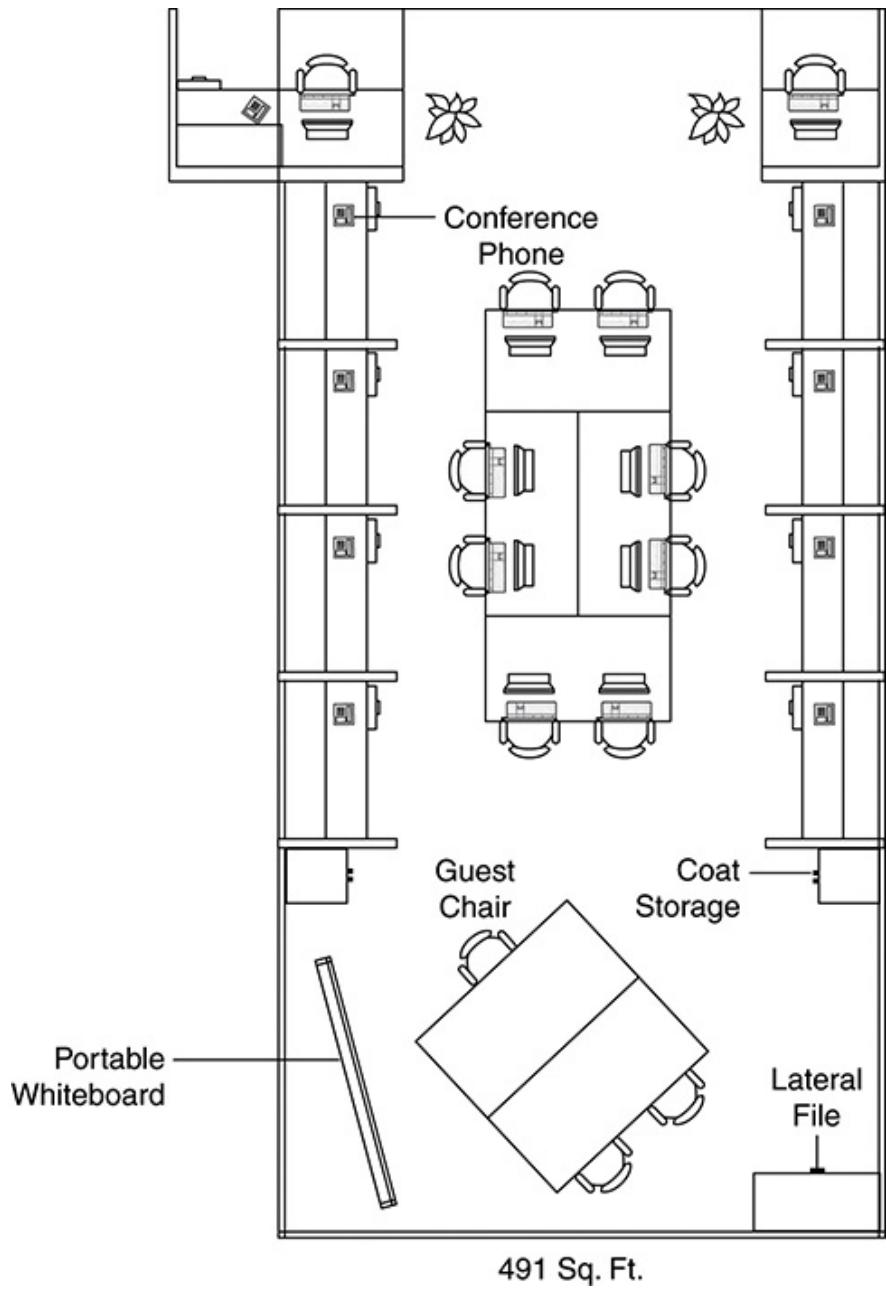
Running these experiments was incredibly valuable. Without them, we would only have a theoretical idea of what worked and what didn't. Afterward, we had a vivid understanding of what we needed to change so that we could create a work environment for our people that not only enhanced communication and collaboration, but also respected their individual needs for privacy and focus.

In the end, the changes we needed to make to the pods from the original design were relatively small, but with one significant design difference: size. Our prototype pods reduced the amount of square footage used per employee. Team feedback showed us that to be effective, the pods needed to be bigger, and we needed to provide additional supporting rooms to complement them.

This insight changed the math of the physical workspace design effort: no longer could we argue that we could improve team performance *and* save on real estate costs. We now had to draw a line in the sand: if we couldn't have both, which was more important: team performance or square footage?

Upper management was clear that their commitment to the agile transformation was unwavering, and they approved the additional cost incurred by increasing the size of the pods and improving additional areas of privacy for team members.

The new PODs were bigger and provided additional space for “guests.” They also were accompanied by additional privacy spaces that team members could use any time they needed to get out of the “bubble,” focus on something for themselves, or have a private conversation (see [Figure 4.3](#)).



**Figure 4.3 Revised “Agile” Pod Design; The Increased Size Provided More Space for Team-Specific Items, Occasional Guests, and Activities Like Pairing**

After making these changes and receiving positive feedback from the volunteer teams, we decided to roll out the redesigned PODs across all the teams in our R&D division, ultimately ensuring all of NAVTEQ’s development teams were working in a more collaborative workspace.

## ***What We Learned***

Through this experience, we learned a few valuable lessons. Although the research was unequivocal that high-bandwidth communication does improve with a more collaborative workspace, we found that a few practical considerations needed to be considered when designing an agile workplace:

- **Provide Effective Focus Space:** Knowledge workers frequently collaborate and work together, but when deep focus is necessary, they need to be left alone so they can work in peace. This means that a workplace needs to accommodate both a satisfactory noise level and an appropriate amount of privacy. As much as great products are created by teams, individuals also need space to concentrate their efforts when working heads-down on deep problems.

We approached this need by raising the walls of the agile pods to about 6 feet so that the teams could focus without noise interruptions from other teams. We found that “noise” coming from people working on the same project was not disruptive; conversations regarding work that had nothing to do with the current work was.

In addition, we installed a number of “privacy booths” outside the agile pods. These could be used by anyone at any time, without scheduling. This made it possible to have spur-of-the-moment private conversations with a spouse, for example, or a space to focus on deep problem solving for a few hours.

- **Create Opportunities for Collaboration Without Sacrificing Focus:** Pentland’s research shows us that successful teams collaborate with members outside their own core units, but the places where collaboration happens can vary. Designing to include more public spaces can create meaningful collaboration opportunities.

Steve Jobs famously made sure the bathrooms at Pixar’s offices were set up in such a way as to increase opportunities for “serendipitous personal encounters.” He believed that having people from different and diverse teams meet each other under unplanned circumstances helped spur innovation, inspiration, and creativity.<sup>2</sup>

- **Support Effectiveness Through Flexible Options:** Although we recognize that face-to-face conversations are superior methods of communication, knowledge workers value workplace flexibility above all else. Given the distributed nature of workers today, it is important to build flexibility into the design of the workplace. This means that the office space itself needs to be malleable and open to virtual communication technologies.

For instance, Intel has built co-working spaces throughout its campuses worldwide so that people can just as easily work in semipublic spaces bustling with colleagues as they can in private, two-person task rooms. Having options allows for flexibility. People can enjoy the buzz of a creative space when needed and take advantage of solitude when deep concentration is more appropriate. The key element of this workplace design strategy is choice: employees get to choose which environment they want to work in based on their personal work needs and the specific nature of the work itself. One size does not fit all.

This flexibility extends to another option: not working in the office at all. Working remotely is becoming increasingly more important, especially in tech. Remote work is a key enabler to gaining access to the very best talent, regardless of where they reside in the world. In light of this, some companies are choosing to go completely virtual, with people working from all corners of the world and coming together in virtual meeting rooms on a regular basis.

### Note

Jurgen Appelo, a top innovation thinker, notes that the mental alignment between team members is just as important—if not more so—than the physical location of the team. When people share a common purpose and align around a well-defined cause, the physical workspace of the team members becomes less important for achieving positive work outcomes.

Although I'll argue nothing beats face-to-face communication, the reality of today's distributed organizations is that this is not always practical. I've found virtual teams to be quite effective—as long as the technical infrastructure enables seamless information exchanges and you allow for periodic face-to-face interactions on a regular cadence.

True, your travel budget is likely to be affected when having a highly distributed team; creating a high-performing virtual team isn't free. I've found that coming together on a regular cadence—ideally, every 3–4 months—is essential to creating the type of mental alignment Appelo refers to in the preceding sidebar. (For more ideas on how to support virtual workplaces, check out the companion website: [www.unlockingagility.com/](http://www.unlockingagility.com/).)

## *The Human Impact of Effective Workspaces*

The co-location effort at NAVTEQ was a significant success. In less than six months after the teams had moved into their new workspaces, defects in production were down by more than 60%. The time it took to complete critical issues improved 2.5 times, and teams were delivering with more predictability and confidence.

Perhaps most important of all was the fact that our employee engagement scores increased. Although there were a few adjustments made along the way (additional footrests, mini-fridges, Xboxes for sporadic team building, and so on), the general consensus among our employees was that this was a huge improvement and that working together was easier and more—dare I say it?—fun.

For me, the most meaningful proof of our success was reflected in an exchange I had with one of our top engineers, Kevin. A few months after the office redesign, he took me aside, smiling, to share some exciting personal news: he had received an offer from Google.

I wasn't sure how to feel. I was happy for Kevin; Google was a great opportunity. But I was also profoundly sad that we would be losing one of our best engineers, someone I cared about a great deal. I managed to respond with something that must have resembled a combination of a frown and a smile.

"I turned them down," Kevin said. He looked at me and smiled even wider. It took me a few seconds to realize what he'd just told me: he'd turned down Google to stay with us. "I realized I don't want to leave this place. I love my team, we're working on really amazing stuff, and I want to be part of this journey we're on!"

In that moment, it became clear to me what an impact organizing the workspace had made to our people. By designing a workspace that took into account what our people were telling us and recognizing the patterns inherent in effective communication and collaboration, we had made NAVTEQ a better place to work. This was not about moving a few tables around and adding some plastic flowers to improve office optics. This was real. It was substantial. And it was meaningful. Did creating this agile working space cause higher performance and a better working environment? I can't prove that there was a causal relationship—and it's likely that there were many other factors contributing to improving work at NAVTEQ. But was it one factor contributing to having one of our top engineers choose to stay with us and being part of our journey? Of that, I have no doubt.

I gave Kevin a warm hug, unable to speak a single word.

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## Organizational Structure

Organizational Design goes beyond physical workspaces. How a company manages its people, assets, and resources also has a significant impact on how a company creates value. As we illustrated in [Chapter 2](#), whether an organization optimizes for resources or flow (whether consciously or not) will have wide-ranging effects throughout the company.

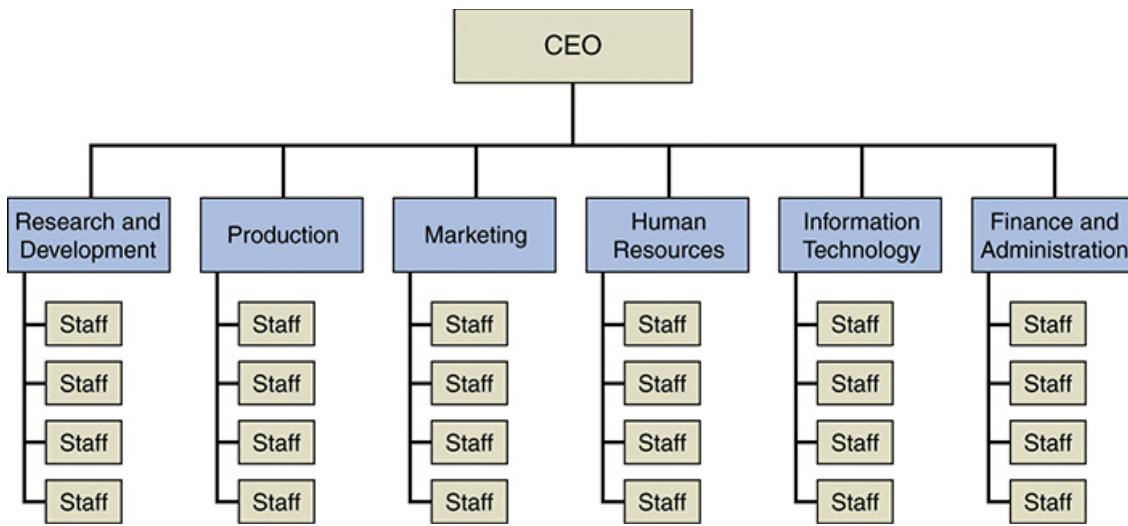
That's not to say that there is any one "right" way to structure a company. Depending on the business context in which the company operates, one given structure may be more advantageous than another. As we've learned, knowledge work requires different structures than what we may need in environments where we're looking to decrease variance, lower per-unit costs, and utilize resources to the fullest. Some specific organizational patterns are more appropriate than others when it comes to embracing uncertainty, executing with purpose, and creating an environment characterized by robust employee communication and collaboration.

In this section, we'll first describe some of the most common organizational structures companies deploy and point out some of the benefits and challenges associated with each of them. We'll then highlight a few nascent structures that have gained traction over the past few years.

We'll conclude the chapter by presenting an example of an agile Organizational Design that is currently gaining a great deal of momentum, and for good reason: it's currently working for HERE, Spotify, and ING.

### Functional Structure

The functional structure is the most common organizational structure in use today, and it has its roots in the management theories we discussed in [Chapter 2](#). As the name implies, a functional organizational structure is optimized for each function within the company; for example, below the top tiers of administration you might have a Production department, a Marketing department, an IT department, and so on, as pictured in [Figure 4.4](#).



**Figure 4.4 Example of a Functional Organizational Structure**

Each function in this type of organization is run by a *functional leader* who is responsible for managing her respective staff and ensuring her function runs optimally. Given that the focus of each function is to specialize in a given area of expertise, the people within each function tend to share similar skills, knowledge and abilities.

Because of this structure, there is a rather large difference between the various functions in the organization: having people change roles from marketing to information technology happens rarely, for example, because each function has its own culture. In extreme cases, it may even be viewed as an organization inside an organization.

## ***Benefits***

Functional structures optimize for resources and reduce per-unit costs. They increase efficiencies and facilitate a high degree of control.

Also, staff within each functional area has a clear career path. As employees gain experience in their field, they advance from junior to more senior roles within their specialty. This means the level of knowledge within the particular function is typically quite deep: the more senior employees can have 30+ years of experience.

## **Drawbacks**

Although the functional structure facilitates deep areas of knowledge within the company, it also creates distinct silos and makes collaboration between specialty areas difficult. Having this clear delineation and separation has a tendency to slow down decision making and makes adapting to changing market conditions challenging.

People working in companies with functional structures also typically struggle to see the “big picture” of how an organization creates value for its customers. Because their work rarely involves people outside of their functions, employees tend to be limited to a customer view dominated by a functional perspective. For instance, if you happen to work in the Quality department and focus purely on this perspective, you may only notice the number of defects and “bugs” reported by customers, while the more substantial issues preventing higher uptake may be related to poor user design or responsiveness.

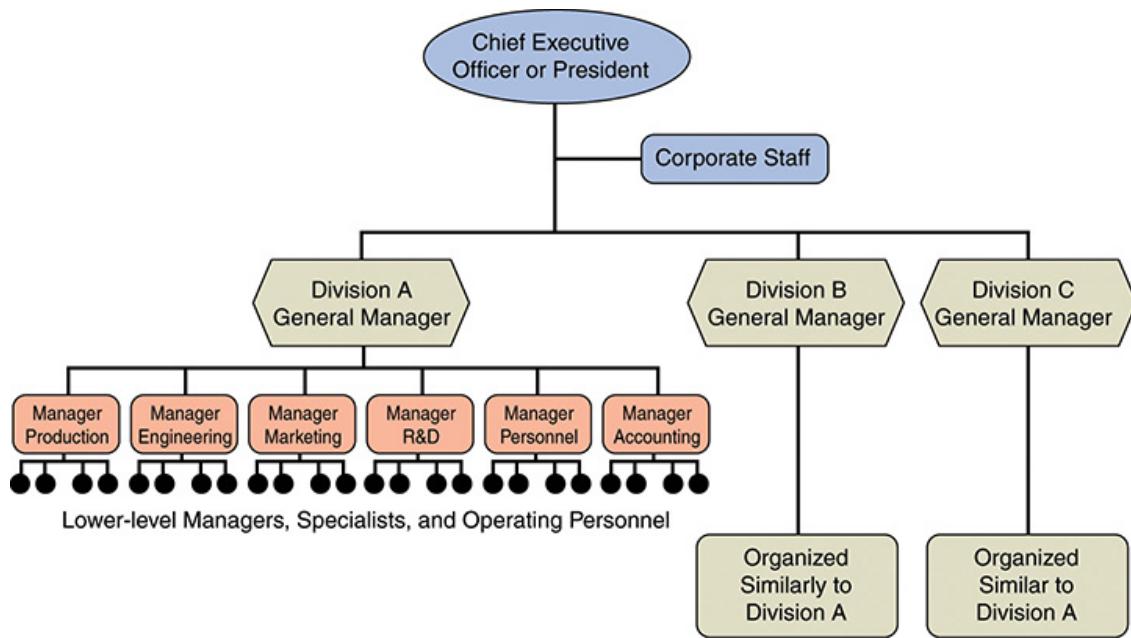
## ***The Takeaway***

A functional organizational structure, while popular, is becoming increasingly undesirable in an environment characterized by Volatility, Uncertainty, Complexity, and Ambiguity (VUCA). Due to the inherent limits of this structure as it relates to adaptability, speed of execution, and customer focus, companies that benefit from this structure are those that operate in stable, highly predictable environments.

Government institutions, manufacturing organizations, and religious institutions are examples of organizations that may leverage this structure with some success, although these areas are no longer as stable as before.

## **Divisional Structure**

A divisional structure is used more often in larger companies that span a wide geographic area or support multiple lines of business and products under a common corporate umbrella, as illustrated in [Figure 4.5](#). In a divisional organizational structure, each division operates semi-autonomously to produce a service or product. Each is headed by its own executive responsible for running the division as a separate business. For example, a bank leveraging an organizational structure may have separate divisions for retail, wealth management, investment banking, and so on.<sup>3</sup>



**Figure 4.5 Example of a Divisional Organizational Structure**

## Benefits

The head of the division, typically a VP or general manager, is responsible for hiring, overall budgeting, and sales/marketing for the respective division. Having a clear line of ownership is advantageous because all resources necessary to produce value for this particular product or service are focused on a common goal.

Contrary to a functional organization, where there is constant competition for access to central resources, the divisional structure have its own functions and therefore supports a more product-centric way of running a business.

In my experience, companies with a divisional structure typically move faster than functional organizations. They can change strategic direction more rapidly and with a higher degree of customer focus.

## Drawbacks

Divisional structures can be powerful, but they have their distinct disadvantages. Communication between the divisions often suffers as each unit is run more or less as its own organization within the company.

This structure can also be expensive because there is duplication of functions inside each division. For example, just as the Retail division will have a marketing function, so will the Investment Banking division. This duplication of effort can add a lot of overhead.

Perhaps more crucially, the divisional structure tends to create unhealthy competition and negative politics between the various divisions. Because each division competes for the same resources from the corporate level, there is little incentive to collaborate between the divisional heads, and this tends to drive a short-term, narrow view of the business as a whole.

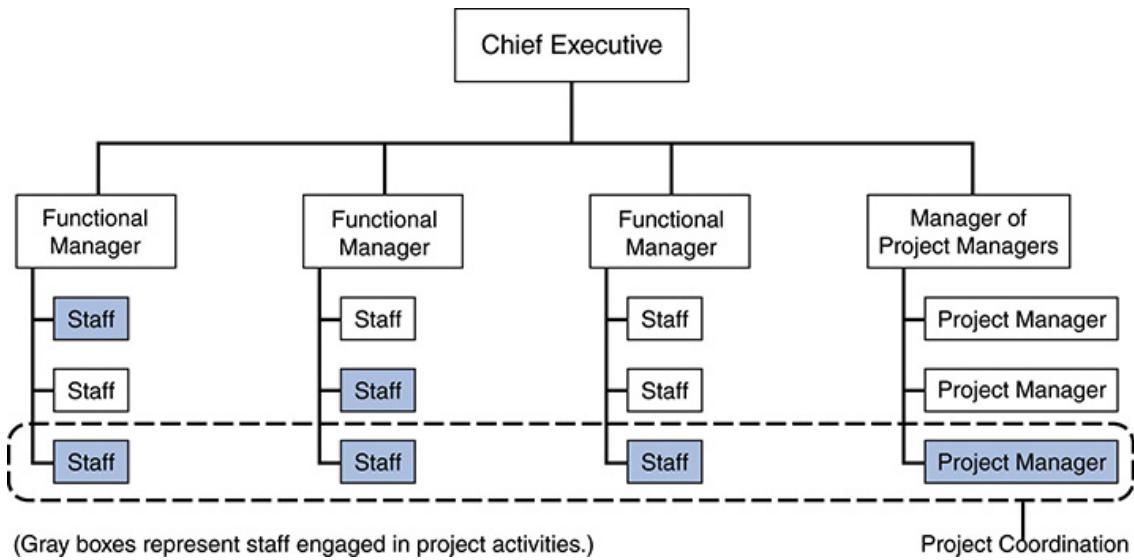
### ***The Takeaway***

For larger companies with operations in multiple locations across the world, a divisional structure may make sense. Having a division in Asia run semi-autonomously from a sister division in Europe can serve the company well because the needs of the customer base in each geography may be different and require custom ways of operating.

Although more suited to deal with today's complex business environment than the functional structure, one potential drawback of this way of organizing is that without strong leadership and alignment at the top, the semiautonomous nature of this structure can lead to divisional factions and misalignment on a global level. For instance, a customer's experience of one brand in the U.S. might be very different with the same brand in Europe, if the same brand is operating independently. This can create negative brand perception and customer confusion.

## **Matrix Structure**

A matrix structure can be viewed as a combination of the functional and divisional structures. Whereas the functional structure optimizes for a given function and a divisional structure optimizes for a particular product, geography, or line of service, a matrix structure aims to marshal a company's resources and assets toward a common goal, as illustrated in [Figure 4.6](#).



**Figure 4.6 Example of a Matrix Organizational Structure**

## Benefits

One of the key benefits of a matrix organization is that it drives an increased level of collaboration and communication across the organization. People are not tied to a given function or a product line; instead, people work across boundaries to accomplish the same goal, regardless of where they may reside in the org chart.

Also, because employees are working in an environment where managers are not defining the way things are done, there tends to be a relatively high level of autonomy and employee engagement in matrix structures. Consulting firms are often set up using a matrix structure where employees may have a formal “people manager” who is separate and distinct from the “client engagement manager” who may direct their day-to-day work activities.

## Drawbacks

The main drawback of the matrix organizational structure is that employees are supervised by multiple managers at once. Because employees are managed by both a “people manager” (who may be responsible for their career path and growth) and a “product manager” (who defines the goals they are working on), employees in matrix structures often report feeling conflicted and confused regarding which priorities to follow. “Do I work on improving a certain process, or do I spend my efforts working on a product deliverable?” Both are important—the former concerns improving how we work while the latter addresses customer needs—but one of these needs to be prioritized higher than the other. Both can’t be equally important.

Having a single manager would help in terms of gaining clarity. With two managers—each coming from different perspectives—you may be faced with delivering two work items, both being number one on the priority list.

Also, because employees are typically working on multiple goals at once (each with its own set of managers and other stakeholders), the matrix structure brings with it significant complexity and overhead, requiring excessive coordination and dependency management. I worked in a matrix organization earlier in my career and experienced some of the challenges firsthand. For instance, my “people manager,” who was ultimately responsible for defining my financial rewards and career recognition, would sometimes disagree with my “product manager,” whose goals I was assigned to help achieve. As an employee, these situations could be uncomfortable; do I follow my people manager, who wants me to help redesign our existing workflow so we can be more effective in the future, or do I follow my product manager, who wants me to focus more on immediate feature deliverables? When management was well aligned, this type of structure worked well. When it was not, it tended to create conflicts and office politics.

### ***The Takeaway***

The matrix structure may at first appear as if it combines the best of the functional and divisional structures. However, when used in larger organizations, many of its inherent benefits disappear amidst complexity and coordination between conflicting managers and goals.

For smaller organizations (< 150 people), this structure may work quite well, but as the organization moves beyond a few hundred people, the matrix structure tends to be less effective—both for executing in an efficient manner and adapting quickly to changing business environments.

## **Emergent Organizational Structures: Sociocracy and Holacracy**

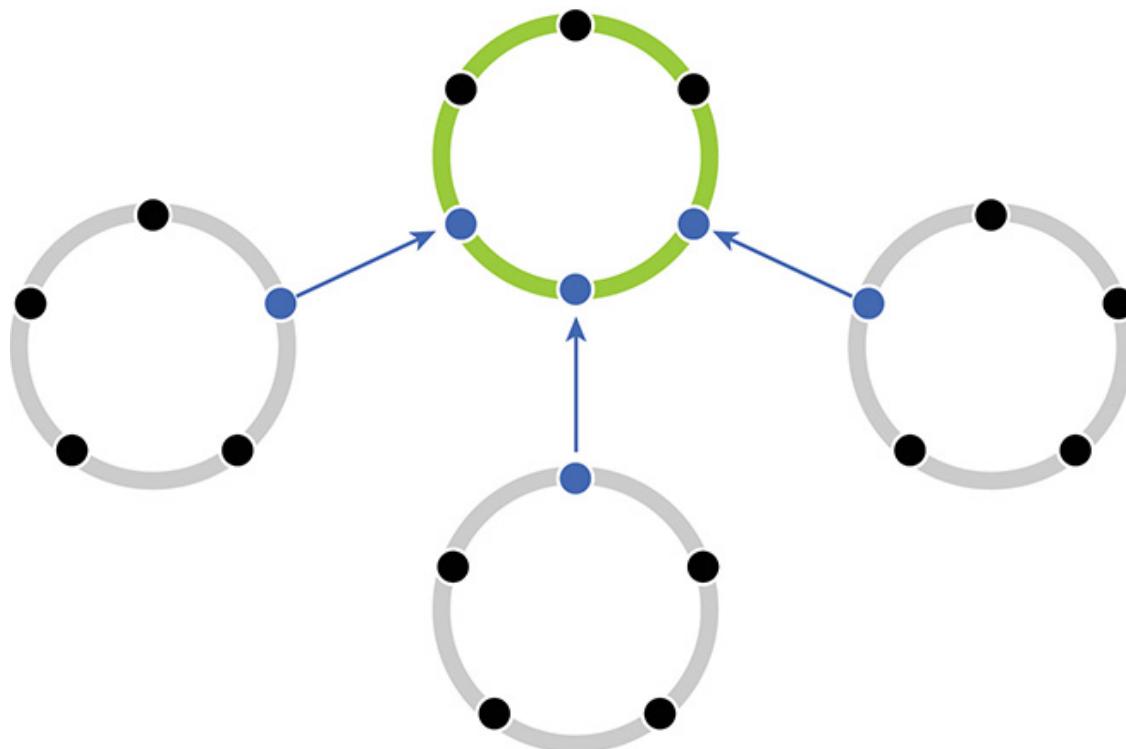
The organizational structures discussed in the preceding sections are well established and have been in place in some form or another since the concept of the modern corporation was introduced in the 19th century. The business environment has changed dramatically since then, however, and some organizational structures have emerged that aim to better support a more human-centric, adaptable organization. Two of the most popular emergent structures are Sociocracy and Holacracy. In the following section, we’ll describe these structures and highlight some of their differences. We’ll also highlight some of the challenges associated with each.

## *Sociocracy*

The term *Sociocracy* comes from the Latin and Greek words *socius* (companion) and *kratein* (to govern). Sociocracy aims to put people first and considers all employees to be equals. In contrast to the more traditional organizational structures we discussed earlier where there is a single decider at the top, decision-making in Sociocracy is based on consensus—the notion that a group of individuals can get behind a decision together without objections.

Gerard Endenburg, an electrical engineer, is credited with defining the modern version of Sociocracy we know today. Combining ideas from the Quakers' consensus principles with his understanding of engineering and systems thinking, Endenburg defined an “operating system” of decision making and collaboration through a set of hierarchical circles—each corresponding to a department of an organization.

In this structure, policy decisions require consent of all members of the circle. Regular decision making is made by the operations leader within the policies established in circle meetings. If other circles are affected by a decision, then a circle of representatives from each affected circle is empowered to make the decision. By linking circles and making decisions by consent, efficiencies are preserved while maintaining equality for the circles and the people in them (see [Figure 4.7](#)).<sup>4</sup>



**Figure 4.7 An Example of a Sociocracy Organizational Structure.** Representatives from Various Circles are Empowered to Influence Decisions that Affect Them. Decisions are Made by Consensus.

## ***Holacracy***

Although influenced by Sociocracy, Holacracy is a more recent innovation and is based on Brian Robertsen's organizational experiments at Ternary Software, where he wanted to explore more democratic forms of governance. Robertsen first defined Holacracy as a concept in 2007 and later codified it with definitions of practices and principles in his 2010 manifesto, "Holacracy Constitution."<sup>5</sup>

A central idea in Holacracy is the focus on roles. A role is not a job description in the traditional sense; it is a definition of the purpose, span of control, and accountabilities involved in getting work done. This means a person in an organization can take on multiple roles; he is not solely dedicated to one purpose, as in a Sociocracy.

Holacracy also leverages the circle-based decision model, but it is more self-organizing and less self-directed than in Sociocracy. In Holacracy, decision making is more hierarchical; circles are connected by two roles known as "lead link" and "rep link," which are accountable for alignment with the broader organization's mission and strategy. If there is a potential conflict between circles, the "lead link" gathers input and feeds this into existing roles so forward momentum can be made. The roles are empowered to do everything possible (within legal and ethical limits) to achieve the goals defined for them. Advocates of Holacracy therefore claim a bias toward action and autonomy—more so than with Sociocracy. A person whose role is "Community Liaison" is empowered to make decisions within her area of responsibility without conferring with others in her circle, for instance. Sociocracy would encourage a more consensus-based approach.<sup>6</sup>

## ***Benefits***

One of the key benefits of Sociocracy is that everyone in the organization feels included, and their voices are represented in decision making. This structure also helps create trust among the employees and a strong sense of working toward a common purpose.

It is perhaps not a coincidence that Sociocracy has been adopted quite successfully in nonprofit, religious, and cohousing communities—organizations that thrive on empathy and common understanding among constituents.

Holacracy shares many of the same benefits and places a high degree of emphasis on personal accountability and actions. Compared to Sociocracy, in Holacracy, there is increased focus on defined roles and their ability to make decisions, and there is less focus on group consent. Yet, by emphasizing self-organization, an organization leveraging Holacracy should be more adaptable to change and more apt for a world where environments are fluctuating widely.

## **Drawbacks**

With its focus on equality and transparency, Sociocracy will appear quite radical to businesses accustomed to operating with top-down decision making and need-to-know information-sharing policies. The corporate culture required to make Sociocracy work can also be alien to multinational companies accustomed to driving strategic direction from headquarters rather than having decision making happen organically within a group of employees viewed as equals. Most implementations of Sociocracy known today are of small-to-medium organizations; larger enterprises have yet to adapt this model.

Holacracy has had a few high-profile adaptations, notably Zappos and Medium; however, both implementations have been challenging, to say the least. Medium ended up abandoning Holacracy after a few years because of challenges related to cumbersome coordination for larger product development efforts. In addition, the rigorous and detailed nature by which the roles and policies were defined ended up hindering personal ownership and initiative.

Zappos' Holacracy efforts are still ongoing, but the company has generated some high-profile negative attention as a double-digit percentage of people left the company when CEO Tony Hsieh posed an ultimatum asking employees to commit to Holacracy or leave. It is too early to tell whether or not Zappos' Holacracy effort can be called a success or a failure, but it is clear that it has been an extremely challenging transition.<sup>7</sup>

## **The Takeaway**

Sociocracy and Holacracy are genuine innovations in Organizational Design. Although it's difficult to implement, there are examples of smaller organizations that have been able to adapt this way of operating with success. The Morning Star Company, a maker of tomato products, has been leveraging Holacracy for some time, as has Valve, a developer of software gaming platforms. These are relatively small companies, however.

For larger corporations, these governance structures still appear too immature and risky to constitute a pragmatic alternative to one of the traditional Organizational Designs discussed earlier. Although there is a lot to like—self-organization, consensus-building, transparency—the cohesive cultural environment, leadership maturity, and communication structures necessary to make these designs work in large enterprises may not be there yet.<sup>8</sup>

## An Agile Organizational Structure?

After exploring these organizational structures at a high level, where does this leave us? The formal structures we discussed earlier are rooted in traditional, plan-driven ways of running a business; they optimize for resource control and compliance rather than speed and agility. And the modern structures we looked at optimize for self-organization and personal fulfillment but do not confidently address customer needs and a changing business environment.

What, then, is an Organizational Design that supports business agility?

The short answer is that there is no one “correct” Organizational Design. Rather, an agile Organizational Design is dynamic, flexible, and ultimately optimizes for customer value (present and future) rather than resources or leadership control. In the next section, I outline the Organizational Design I was involved in creating at HERE and cover the highlights of an organizational setup at ING (greatly inspired by Spotify), a Dutch financial institution that has been making some innovative organizational changes.

### ***Optimizing for Value: Organizational Design at HERE and ING***

When HERE (formerly NAVTEQ) started its agile transformation in 2009, the initial focus was on implementing Scrum (and in some cases Kanban) to boost teams’ ability to deliver software faster, with higher quality, and with more transparency. Over the course of several months, the Agile Working Group (AWG) and the coaching staff trained teams, empowered Scrum Masters, and gave Product Owners the authority to own their respective Backlogs to prioritize work. By all measures, the initial efforts were a significant success: quality improved significantly, teams delivered value faster, and management had more visibility into what was delivered over time.

But everything was not all roses. Part of the reason the teams were doing so well was that they were doing quite poorly before due to a bogged-down, highly bureaucratic process that had been imposed on the teams a few years earlier. The relative improvement was significant, but still not enough to be competitive with more nimble competitors entering the marketplace.

Perhaps most troubling: The teams were starting to operate more as silos, making it difficult not only to integrate code as teams prepared to go to production, but also to appear to the customer as a cohesive end-to-end product. For instance, one team would be working on a radically different way to process map data throughout the vast database of Points Of Interest (POI), yet the teams responsible for collecting POIs in the first place had no way to migrate their information to the new process engine—the data structures, the type of data involved, and the overall process were

not aligned. The teams were operating as individual units, not as part of a cohesive effort aligned around a common goal.

The coaching team recognized that the root cause of the problem wasn't so much that Product Owners and ScrumMasters weren't coordinating enough—they had daily Scrum-of-Scrums and Communities of Practice in an effort to do just that—but that the teams needed a more appropriate Organizational Design. Rather than having teams operate under the existing organizational structure, working for a given divisional lead, the coaching team tried organizing the teams under a common goal instead. For instance, for Next Generation Map Building (NGMB), teams involved in these efforts—regardless of where they may initially belong on the org chart—came together to solve that problem.

The new structure was entirely aligned around value creation; people organized around a common mission that was led by a Chief Product Owner, typically a senior director or a VP. Teams formed more or less organically to help deliver on this goal—and upper management decided the relative size of the program based on the priority of the effort. Mission-critical efforts received more oxygen than initiatives that were not deemed as strategic.

The results were dramatic: teams became more aligned around shared goals, miscommunications and misunderstandings decreased, and customers received a more cohesive product experience. The change was probably more challenging for middle management than anyone else. Reporting relationships was no longer the primary source of power and influence; rather, the ability to deliver customer value became the most important factor managers were held accountable to.

## ***Agility at ING***

Another similar example took place in the Netherlands. The Dutch banking group ING was doing great financially, but leadership understood that the business environment around them was changing fast.

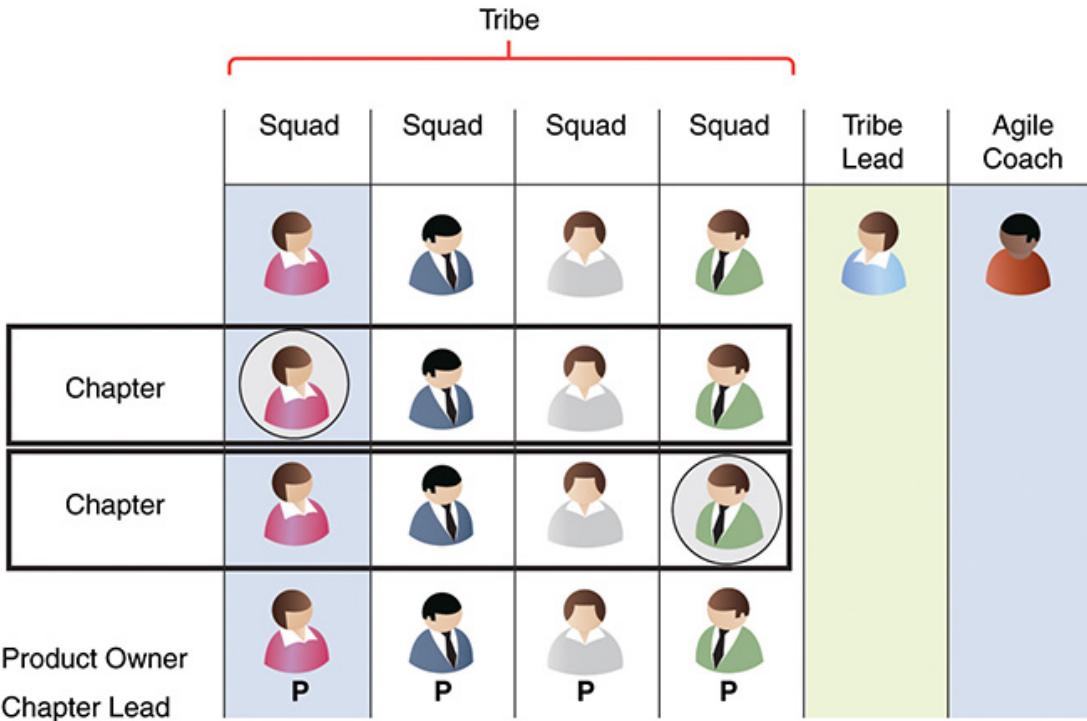
*“Customer behavior...was rapidly changing in response to new digital distribution channels, and customer expectations were being shaped by digital leaders in other industries, not just banking,”*

Bart Schlatmann, CIO of ING states in McKinsey Quarterly.<sup>9</sup>

Leadership realized that ING was no longer competing against other banks—it was being compared to the performance of other, more nimble technology companies. To learn more, ING executives decided to visit tech companies like Google and Spotify to better understand what made these companies so adaptive and responsive to customer expectations. One of their epiphanies was the way the companies organized around value. Schlatmann continues:

*“The key has been adhering to the “end-to-end principle” and working in multidisciplinary teams, or squads, that comprise a mix of marketing specialists, product and commercial specialists, user-experience designers, data analysts, and IT engineers—all focused on solving the client’s needs and united by a common definition of success.”*

ING was particularly inspired by Spotify, the Swedish streaming service that described its own organizational model in 2012 in a paper by agile consultant Henrik Kniberg and Spotify internal coach Anders Ivarsson.<sup>10</sup> After visiting Spotify and admiring its organizational structure in action, ING decided to organize itself through a number of Tribes (to use Spotify’s terminology), each responsible for an overarching business objective. Each Tribe consists of several Squads—small groups of people (no more than nine) dedicated to working on a given end-to-end solution. Each Tribe is led by a senior executive who is responsible for strategic direction and financials. Each Squad’s direction is then owned by a Product Owner. To facilitate cross-team collaboration and alignment on technical capabilities, each Squad has a Chapter Lead who meets with other members of the chapter on a regular basis to keep everything in synch (see [Figure 4.8](#)). The Chapter Lead is also the people manager for the persons in the Chapter. A Chapter Lead should have people in her chapter spread across various squads; this prevents the conflicts sometimes seen in matrix organizations. The PO is responsible for what happens (prioritization) and the Chapter Lead is responsible for a standard way of work for the experts within her particular expertise area (the Chapter).



**Figure 4.8** ING's Tribe Organization; Inspired by Spotify

There are quite a few similarities between this and the model described earlier with HERE. Both models share characteristics we noted earlier, with formal and informal structures. For example, this model shares elements of self-organization with both Holacracy and Sociocracy. Embedded in these models are elements of hierarchy as well: although the “how” is left up to the teams (with informal controls provided by the Chapters), the “what” in the form of business objectives is clearly defined from executive levels.

These structures are aiming to strike a careful balance between flexibility and reliability. By allowing people to have more autonomy within clearly defined boundaries of responsibility, Spotify, HERE, and ING are able to respond faster to market changes while delivering on customer commitments predictably. Although none of these companies claims to have achieved a “perfect Organizational Design”—they are always evolving and improving—these structures have proven to be more effective ways of managing work in environments characterized by rapid change. One indication that this way of working is bearing fruit: while the initial efforts at ING described above were limited to the organization in The Netherlands, senior leadership was so impressed by the results that the entire company is moving in this direction, implementing a similar structure in offices across the company worldwide.<sup>11</sup>

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## Heuristics of Agile Organizational Designs

Organizational Designs have shown they are more adaptive than traditional approaches of organizing work. They support faster delivery and keep people engaged so they perform at higher levels and create better products.

To gain value from what we've observed in these structures, it is instructive to look at the core heuristics they demonstrate rather than the particular details of each model:

- **An end-to-end perspective with the customer in mind:** Agile Organizational Designs optimize for flow. Internal handoffs and the distance between teams who develop product and the customers who receive it are minimized.
- **Self-organization toward a common purpose:** Developing software is a complex endeavor, and requirements will emerge over time. As such, the people required to develop the solution will also change organically and will self-select to assume work that takes on increased organizational importance.
- **A dedication to continuous improvement and technical excellence:** Software craftsmanship and a culture of engineering excellence are common in agile organizations. Because software code needs to be accessible to a broad set of people, it is important to write code in a way that is understandable for everyone and can be tested quickly and with confidence.
- **Empowering people to make and meet commitments:** The executives in agile organizational structures are very much involved in defining the strategic direction of the company. They define the “what.” The team members define the “how” and make their own commitments about when the solutions can be delivered.

Although there is no one “right” Organizational Design that will magically inject agility into your organization, you can align your operational strategy and design so that it supports the realities of the business environment you’re in. This means that copying and pasting the models used at Spotify, ING, or HERE is not a helpful way to unlock agility in your organization—but understanding the reasons *why* these structures worked in the context of their organizations is.

If you’re operating in a business characterized by relatively high levels of stability, such as defense contracting, starting with a more traditional Organizational Design and looking for ways to inject more employee autonomy may be a rational approach to pursue. However, if you’re operating in an environment where volatility is not only common, but accelerating (as we’re seeing in most industries today), it

may be wise to look to more flexible designs first and then create boundaries and well-defined interfaces where appropriate.

Organizational Design is a critical part of unlocking agility in the enterprise. By aligning both the physical workspace as well as the organizational structure so that your people can produce value faster, respond to change quicker, and do their best work, the organization as a whole will be better suited for a VUCA world.

In [Chapter 5](#), we turn our attention to the next success factor in unlocking agility, a factor without which little work could be done at all. That factor is People.

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## Summary

This chapter covered Organizational Design. For the purposes of this book, this is defined as the physical and virtual workspace within which people collaborate and the structure by which people are organized to create value. We explored research identifying key characteristics essential for high-performing teams and detailed a case study where a company took an intentional approach to creating an agile workspace environment. Although not a recipe, we summarized a few key elements associated with effective agile workspaces.

We then listed a few of the most common organizational structures in use today and detailed benefits and drawbacks of each. We looked at a few companies' efforts to build a more agile structure: Spotify, HERE, and ING in particular. We closed the chapter with some key heuristics to help design more agile organizational structures and unlock agility in the enterprise.

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## Q&A

### 1. Why is there no one perfect agile Organizational Design?

If you were looking for a simple solution—"just do this organizational structure, and you'll be agile"—you might be disappointed by this chapter. In fact, even the Organizational Designs I detail in the chapter most likely will have changed by the time you read this. As part of the research for this book, I spent time with Anders Ivarsson, the Spotify employee who wrote the initial snapshot of the Spotify model with Henrik Kniberg back in 2012. Asked on his view of the Spotify model and how it has affected the discussion on agile at scale, he was unequivocal: "There really wasn't a 'Spotify model' in the first place—we just documented what we had at the time to illustrate how we organized our work; it

was never meant to be a static model. It sometimes concerns me that some people think this is the one way to organize if you want to be more agile.”<sup>12</sup>

Ivarsson’s point is well taken: it wouldn’t be very agile to implement a snapshot in time (what may indeed have been a good approach for that context) and expect this to simply be the answer to future challenges. One of the key themes of this book is that unlocking agility means being aware of your context and adapting accordingly. Instead of striving to find “the perfect organizational structure,” it is more important to be open to trying new models, mixing in learning from existing models, and finding a structure that works for your organization and your business strategy. In fact, that’s how Spotify’s model came about in the first place. If you take a closer look, you’ll notice elements from matrix structure, divisional structure, and even some functional structure elements sprinkled in— together with self-organization often associated with Sociocracy. What made Spotify’s model work for the company then is not what it looks like today. Since 2012, Spotify has grown tremendously. Although some of the same structures still remain (tribes, chapters, and so on), there are now additional layers, roles, and more structure added to accommodate a different context. And it’s still evolving.

So does this mean there are lessons to be learned, that simply “trying whatever you’d like” is the way to go? Well, not quite. Although there may not be a simple solution, that does not mean there is not meaningful guidance that can help you on your way toward a more agile organization. The four simple heuristics I outline at the end of this chapter are central to all agile organizational structures I’ve seen, regardless of size, industry, or type of organization.

## **2. There’s a lot of emphasis on face-to-face communication in agile organizations. What about working from home and the concept of fully virtual organizations?**

Indeed, the very first value in the Agile Manifesto spells out “individuals and interactions over processes and tools.” And the research I did for this book—as well as my own experience—indicates that, all things being equal, it *is* more effective for team collaboration and communication when people work together, in a shared physical space, than it is being virtual. The information we convey through subtle facial expressions, body posture, and even changes in the tone of our voice is not easily picked up in a virtual medium—and it matters.

Companies have caught on to this. There is a distinct trend—even among hot tech companies—to invest more in physical workspace designs to make them more attractive for employees to stay at work and interact with their colleagues. Some companies go as far as outright banning the practice of working from home

altogether. (That's not necessarily something I'd recommend as a policy, mind you.)

That being said, everything is *not* always equal. Some work benefits from solitude; interactions with others can break deep concentration and be harmful. Employees can gain peace of mind and focus when they know they are available to take care of an aging parent or sick child at a moment's notice. There are people with unique skills, knowledge, and abilities that your company may need—but who may not be looking to move to the town where your company operates. I think you see where I'm going with this.

Yes, humans tend to collaborate better when they share the same physical space. But in the face of real constraints, it is advantageous to take a more pragmatic approach to working together. Here's what I've seen to be effective:

Clarify that although there is a *preference* for face-to-face collaboration, working virtually is perfectly acceptable as long as the team can work out the constraints. This might mean that we meet outside of regular office hours at times, we upgrade the network infrastructure to increase our bandwidth, we invest in better virtual meeting software and cameras in our home office, and so on. And we still meet face to face on a regular basis, but perhaps not all the time. Employees at Paylocity, a successful payroll company based outside Chicago, routinely work from home 2–3 days each week; this balance and flexibility is part of what helps them recruit great talent in a fiercely competitive job market.

What about fully virtual organizations, where there are no offices at all? In this case, I've still found it helpful to come together as a team once every 2–3 months or so. In fact, I drink my own champagne in this regard: Comparative Agility, where I work, is a fully virtual company with offices in Oslo, Sarajevo, and Silicon Valley. We still meet face to face every quarter or so, however. We try to always change venues—one time it's Berlin, the next it's London, and then Oslo, and so forth—but getting together for a few days every quarter has proven to be very helpful for us when we discuss larger features, articulate and shape our strategy, or simply want to have fun together as a team.

What works for your organization may be different; there is no easy answer here. The point is to recognize the constraints involved in embracing certain approaches while dampening the negative consequences and amplifying the good. And if something is not working—change it. Again. Until it works. Then keep improving.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- Kniberg, Henrik and Ivarsson, Anders. “Scaling Agile at Spotify with Tribes, Squads, Chapters and Guilds.” 2012.  
<https://blog.crisp.se/2012/11/14/henrikkniberg/scaling-agile-at-spotify>

An easy and enjoyable read—and quite important. Kniberg and Ivarsson captured a snapshot of how Spotify approached an agile organizational structure in 2012, and many took it as gospel. There are lots of great lessons to be learned here; however, the underlying principles for why they did what they did, and how they approached employee autonomy and company alignment, for instance, are excellent. This resource is well worth your time!
- Eckstein, Jutta and Buck, John. *Bossanova: Company-Wide Agility with Beyond Budgeting, Open Space & Sociocracy*. 2018. <https://leanpub.com/bossanova>

Eckstein and Buck are giants in their respective fields of agile thinking and Sociocracy. When they had a chance to come together and discuss the challenges facing organizations today, they found that many of the same themes resonated with them. As a result, they decided to join forces and share their collective knowledge in their book *Bossanova*. It’s an informative read bound to give you insights you can use in your own transformation efforts.
- Pentland, Alex “Sandy.” “The New Science of Building Great Teams.” April 2012. *Harvard Business Review*. <https://hbr.org/2012/04/the-new-science-of-building-great-teams>

This is the *Harvard Business Review* article summarizing the findings I refer to in the text above. Pentland was able to use sensors and empirical data to look at communication patterns and how people collaborate in teams. It’s a fascinating study that is fairly unique, at least in terms of knowledge work.
- <https://www.gensler.com/research-insight/workplace-surveys>

I don’t intend to promote companies or brands in this book, but Gensler is a workplace architectural firm I have a lot of respect for that offers its own findings to the public. Their annual workplace surveys are as informative as they are beautifully designed; they’re worth your time if you want to know more about trends in workspace design.

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## Footnotes

- [1] Pentland, Alex “Sandy.” “The New Science of Building Great Teams.” April 2012. *Harvard Business Review*. <https://hbr.org/2012/04/the-new-science-of-building-great-teams>
- [2] Eadicicco, Lisa. Here’s Why Office Layout Was So Important to Steve Jobs. <http://www.businessinsider.com/steve-jobs-office-apple-pixar-2014-10?r=US&IR=T&IR=T>
- [3] Joseph, Chris. “Advantages & Disadvantages of Divisional Organizational Structure” September 2017. bizfluent. <https://bizfluent.com/info-7809542-advantages-disadvantages-divisional-organizational-structure.html>
- [4] Buck, John; Villines, Sharon. *Sociocracy: A Deeper Democracy*. Sociocracy.info Press. 2007.
- [5] Robertson, Brian. “History of Holacracy.” <https://blog.holacracy.org/history-of-holacracy-c7a8489f8eca>
- [6] Hoglund, Jan. “Holacracy vs. Sociocracy.” <http://janhoglund.eu/holacracy-vs-sociocracy/>
- [7] <http://fortune.com/zappos-tony-hsieh-holacracy/>
- [8] Eckstein, Jutta and Buck, John. “Company-Wide Agility with Beyond Budgeting, Open Space & Sociocracy.” 2018. <https://leanpub.com/bossanova>
- [9] *McKinsey Quarterly*. “ING’s Agile Transformation.” 2017. <https://www.mckinsey.com/industries/financial-services/our-insights/ings-agile-transformation>
- [10] Kniberg, Henrik and Ivarsson, Anders. “Scaling Agile at Spotify with Tribes, Squads, Chapters and Guilds.” 2012. <https://blog.crisp.se/2012/11/14/henrikkniberg/scaling-agile-at-spotify>
- [11] Abelen, Eric (ING). Conversations and email thread. December 2017; January 2018.
- [12] Ivarsson, Anders (Spotify). Conversations and email thread. December 2017; January 2018.

# Chapter 5

## People

Karl appeared extremely confident. And why wouldn't he be? Over the past 20 years, he'd built a career in which he had consistently delivered above and beyond what was expected of him. He knew getting ahead was not a popularity contest; although he could appear rough around the edges, he always got the work done, and that's what mattered. His efforts had paid off —he was a Director of Engineering for close to 100 engineers working on an important strategic initiative at HERE.

I have to admit, I was a bit intimidated when I had my first 1:1 meeting with Karl to discuss the implications of transforming the company into a more agile organization. He had a reputation for running his engineering division with an iron fist, and I was uncertain as to whether he would be open to making the types of changes the rest of the organization was committing to doing.

Our conversation started out well enough. He met me with a firm handshake, pointed at a chair positioned right across from his desk, and asked me to get to the point right away. I had done these types of pitches a few times before. I went straight into an overview of why executive leadership had decided to transform HERE to a more agile organization. I talked about how it would help us deliver value faster, adapt to changing market conditions, and increase the level of quality in our product portfolio. I had just started covering optimizing the organization for flow of value over resource utilization when Karl raised his right hand slightly, signaling me to stop.

“Jorgen, let me interrupt you for a moment there. I hear what you’re saying, and I understand all of this very well. But let me tell you what’s going to happen. You’re going to continue this agile transformation business with the other verticals and leave me alone. I don’t need any change; things are just fine. My division is among the highest performing in the entire company. Do you think leadership really wants to mess with that? I built my career by performing above and beyond everyone else, and that’s why I’m here right now. That VP position which will be available when Jeff retires next year is going to be mine, and nobody can stop me. Because as long as I deliver on time, within scope, and under budget—as I always do—nobody’s going to touch me.”

At this point, it became clear that spending a lot more time with Karl was a waste. I let him know I’d be there for him if he needed any help. He said he’d be happy to have his people get some Scrum training. He had read up on the methodology, he said, and he liked the transparency it provided.

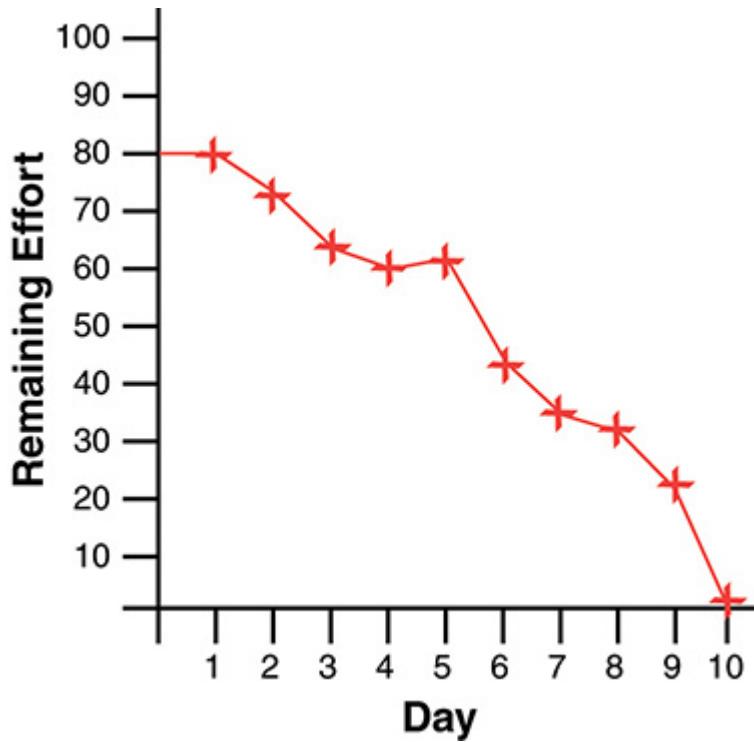
Fast-forward several months. Karl’s group seemed to be doing great on the surface. We had provided him with basic Scrum training, but beyond that he did not need assistance related to upgrading the infrastructure of his technical stack, modifying the organizational design, enhancing technical practices, or looking into changing any of the traditional metrics we used to gauge performance. He had stated unequivocally in our earlier meetings that his managers did not need additional management training; his way of articulating value, he said, was clear to everyone, and the culture of his division was one of “high performance.” From the outside looking in, everything looked good: dates were apparently on track, and projects were humming along. Yet, a few months in, the Agile Working Group (AWG) was starting to see some indications that things were perhaps not quite as idyllic as the picture Karl was painting.

One Tuesday morning, a few months after Karl’s team had started working with Scrum, Heather, a ScrumMaster for two of Karl’s teams, asked if she could talk to me in confidence. I assured her I would not share anything she told me unless she agreed for me to do so. What she shared with me will stick with me forever: Karl loved Scrum because of its transparency—in that teams would provide an honest account on how they were progressing toward meeting the goals of the sprint each day. However, he wasn’t holding up his half of the bargain as a manager. He was using Scrum in a way that was contrary to its intent and spirit, and this behavior forced his team to work around him rather than be fully honest with him. Here’s how:

Scrum advocates for openness and transparency to help teams collaborate more effectively, not as a means for management oversight. The main idea is that with this transparency comes the trust that if things do not go quite as smoothly as we expect, the team will swarm together to help each other get back on track. Berating an individual for sharing a struggle with an impediment is not allowed. Being open and honest about one's progress in front of your fellow team members can be a humbling experience; it requires that you feel safe enough—supported by your team enough—to be vulnerable. In return, this vulnerability is liberating because you don't have to pad your estimates, perfume the truth, or otherwise pretend to make things look better than they are. Openness and courage are core values of Scrum for this very reason.

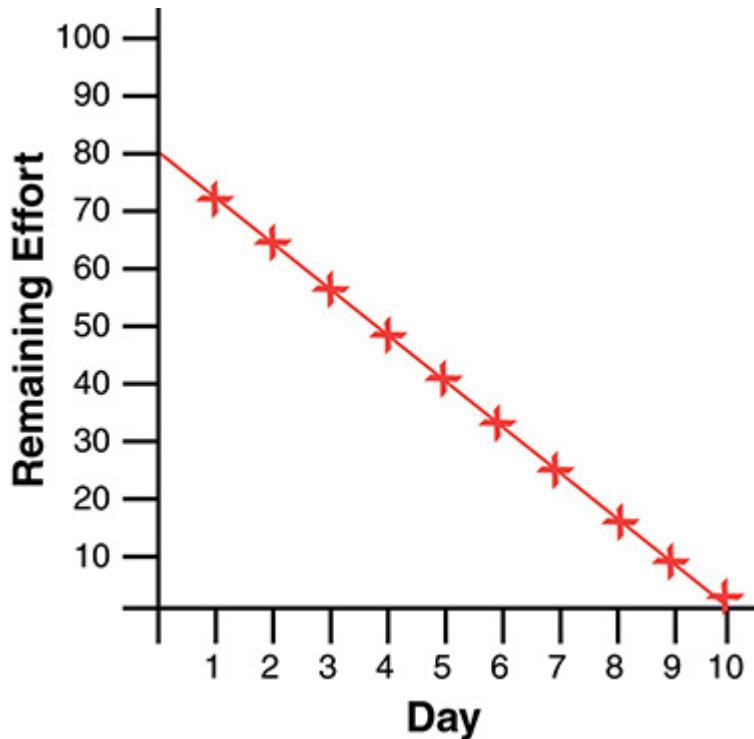
Unfortunately, Heather shared, it turned out this part of the Scrum training had been lost on Karl. Over the past several months, he made an effort to attend each team's daily stand-up, criticize the members, and question their competence unless the burndown chart—a visual indicator of progress throughout the Sprint—was showing a 45-degree straight line representing smooth progress.

The constant berating made team members so afraid that over time, they created two sets of charts. The first was an honest representation of how the team was doing. The burndown chart would be a bit jagged and haphazard at times. It was an honest reflection of the risk and complexity of the work being done, as illustrated in [Figure 5.1](#).



**Figure 5.1** A Typical Burndown Chart; Some Surprises Come Along on Day 3, Resulting in a Few Days of Less Than Expected Progress

As illustrated in [Figure 5.2](#), the second version, dubbed “K-Agile” by the team, was a smooth, 45-degree line of progress that ensured Karl would not berate them and make them feel worthless.



**Figure 5.2** “K-Agile” Burndown Chart Showing a Linear Burndown of Work Performed Through the Sprint; Although It’s a Nice Ideal, Knowledge Work Is Rarely Done Following a Perfect Linear Path Like This

In other words, the teams had come up with a way to appease their leader by showing him the data he wanted to see out of fear of the consequences that would happen if they were honest.

I was horrified to hear what Heather had just told me. “Can you help us?” she asked. I requested her permission to share what she had told me, and I escalated the situation to HR. Karl was given a formal warning. When he had not changed his behavior three months later, he was asked to resign. Karl left the company shortly thereafter and never became a VP at HERE. His fellow Directors took notice. The message was clear: although business performance is always going to be an important part of how we measure success, the *way* we achieve that success matters more. I consider this moment one of the key inflection points that caused HERE to unlock sustainable enterprise agility at scale.

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## Never Underestimate the Importance of People

Karl's story demonstrates that not everyone will be willing or comfortable with changing the way they work. Although I am not aware of any scientific studies to back this up, my experience working through several enterprise transformations is that 10–15% of a company's employees that are going through a change of this magnitude will have a hard time adjusting—or will refuse to change altogether. This should not be surprising: after all, if everyone is OK with the changes you're making, it's probably an indication you're not making meaningful changes in the first place. Dean Leffingwell, author of *Scaled Agile Framework (SAFe)*<sup>1</sup>, once told me bluntly, “If nobody wants to quit when you're going through a significant transformation, you're clearly not doing it right!”<sup>2</sup>

But what to do with people who are struggling or refusing to change? My experience is that you really only have two options. First, do everything you can to ensure there is a supportive environment for those who are having trouble adapting. This typically means providing coaching, mentoring, and additional resources to get through the hump. HERE, when going through the transformation, offered confidential 1:1 executive coaching sessions for people challenged with their new work environment and established ongoing peer-to-peer support groups for people who sincerely wanted to (but were having trouble) understand their new role in an agile environment.

Transforming to an agile organization is a significant shift, and we should not downplay the impact it will have on people. The organization overall, and leadership in particular, has a responsibility to help create a supportive environment through the transformation.

If this fails, your second option is to help them move on. Some people will simply refuse to change, as with Karl in the preceding example. In this case, my strong recommendation is to sincerely aid them in leaving the organization and finding another job. If you're building a culture of transparency, openness, psychological safety, and cross-functional collaboration—and it's clear this is not aligned with how a person wants to work—both the company and the employee will be better off taking their services elsewhere. There's simply no room to “fake” this type of work: the type of close collaboration, communication, and engagement required to

optimize for flow of value across the organization is vastly different from the traditional, more siloed, and individualized ways of working.

How do you know if you're one of these people who can't adjust? If you long for the days when you could sit in a closed office by yourself without ever interacting with people, you're probably better off in a nonagile organization; the disconnect is simply too vast. Amazon, for instance, recognized that its way of working might not be for everyone and purposefully created an incentive for people to leave. That program continues today. Called the "Pay to Quit" program, each employee is offered a sum of money every year (currently up to \$5,000) to quit the company if they no longer find it desirable to work there. Bezos explained the rationale behind the program in a letter to shareholders in 2014. "In the long-run, an employee staying somewhere they don't want to be isn't healthy for the employee or the company."<sup>3</sup>

In the preceding example, Karl clearly was not ready to change his ways of managing. His hard-nosed ways of leading had worked well for him over many years, and he saw no reason to change now. The company, however, recognized that his behavior and way of working were not aligned with the company's direction and decided to take disciplinary action after he refused to change or take advantage of the additional help he was given. Making a decision to let someone go is never easy, but it may very well be a necessary part of an enterprise transformation. The reality is that transforming an organization into a more agile way of working requires that the people in the organization adapt as well. If they are not able to, the organization needs to move on without them.

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## Characteristics of People in Agile Organizations

If the traditional command-and-control behaviors may no longer be appropriate, then what *are* the skills, knowledge, and abilities identified with people in agile organizations? To what degree do the people in agile organizations differ from their colleagues in traditional organizations? And how can established functional areas (such as HR) help support, develop, and grow people in an agile environment?

In the sections that follow, we discuss some of the key characteristics of people working in agile companies, cover some strategies regarding how companies can support them, and ultimately outline what it means—for both the company and its employees—to work in a more agile manner.

## Fostering a Growth Mind-Set

Earlier in the book, we defined agile enterprises as organizations that “embrace change and execute with purpose.” Embracing change means that an organization is comfortable with operating in an environment of volatility, uncertainty, complexity, and ambiguity (VUCA)—and recognizing that leadership may not have all the answers up front in terms of business models or product strategy. An agile enterprise also fosters fast feedback loops, experimentations, and the ability to adapt to validated learning along the way.

Given this concept of an always-learning, digital enterprise, I am often asked to define the characteristics typically associated with people who succeed in agile environments. My response is to first refer to Stanford professor Carol Dweck’s growth mind-set concept introduced in her 2006 book *Mindset—The New Psychology of Success*.<sup>4</sup> Let’s take a closer look at what the growth mind-set means and the implications it has for how we support people in agile organizations.

When professor Dweck was a graduate student in the 1970s studying how children handle failure, she discovered something interesting. Some children were completely devastated when things did not go the way they expected, whereas others relished—even thrived—when tasks got challenging. Over the next several decades, professor Dweck studied this dichotomy regarding how people deal with failure and came up with an insight to help explain the phenomenon. She theorized that people—not just children—handle failure in starkly different ways in large part due to their mind-sets. She defined two basic categories of mind-sets: a fixed mind-set and a growth mind-set.

The fixed mind-set holds that our capacities, skills, and ability to achieve are fixed—that we’re born with these characteristics as innate and that we either have them or we don’t. The growth mind-set, in contrast, is more focused on effort and holds that abilities can be developed over time and that great things can be achieved if we work hard enough.

The implications of these seemingly simple distinctions are quite profound. Dweck found that people with a fixed mind-set—who believe that they are intelligent and talented by birth—struggle to achieve over time because they often become frustrated and start doubting themselves when they are faced with unfamiliar challenges or particularly complex situations. It's as if they are asking themselves, "If I'm so smart and I'm struggling with this situation—does it mean I'm not that smart after all?" The result is that people with a fixed mind-set tend to be less adaptable, more risk averse, and generally less creative because they try to avoid situations they are not familiar with—at the risk of feeling dumb.

People with a growth mind-set, however, approach skills, abilities, and high performance as something one can attain through effort: by constantly trying, failing, and learning from those failures over time. In other words, a person with a growth mind-set does not believe one is limited by her natural abilities, only through her ability to learn from her experiences and efforts. This idea that someone can improve performance through effort—through the process of trying and failing over time—has many positive implications:

- People with a growth mind-set are much less afraid of making mistakes. After all, this is how they learn. As a result, people with a growth mind-set tend to take more controlled risks than people with a fixed mind-set.
- People with a growth mind-set generally tend to be more passionate, more engaged, and happier with themselves. They recognize that their performance is not predetermined by their DNA, but rather by how much effort they put in. They feel they have a degree of control over the situation.
- People with a growth mind-set are not as afraid to take on unfamiliar or uncertain tasks or challenges. They realize that, although they will have a hard time grasping the situation at first, it will get better once they have a chance to learn more over time.
- Learning is seen as a key ingredient to success among people with a growth mind-set. They recognize that it's not so much the output of what they produce that is the key to success, but the effort they put in—the process by which they learn and can improve over time.

It's important to note that growth and fixed mind-sets as defined by Dweck are not set in stone and unalterable. Rather, they are *beliefs and behaviors* that help define how we learn, think, and act when faced with a situation. As such, they can be changed with practice and effort—and this shift can be supported and encouraged at the enterprise level.

Companies are starting to recognize that promoting a growth mind-set across the organization can have positive effects on enterprise performance and help everyone adapt to a more agile way of working. Microsoft, under CEO Satya Nadella, has implemented a number of concrete initiatives specifically designed to help promote a growth mind-set among its employees and to encourage more innovation and risk-taking. The Hololens project, for instance, which helped define holographic computing, was an innovative, high-risk project that Nadella promoted to help the organization move beyond the conservative, risk-averse approach it had under former CEO Steve Ballmer. According to an article in the *Harvard Business Review*, leaders who emerged under that project advanced faster to senior-level roles at Microsoft because they demonstrated a willingness to learn and develop as leaders.<sup>5,6</sup>

## Developing an Enterprise Growth Mind-Set

What are some concrete ways that companies can help encourage and develop a growth mind-set among employees? Dweck, in an interview with the *Harvard Business Review*, highlights four strategies companies can employ right away:<sup>7</sup>

- **Send a clear message from the top:** People take cues from the language and behavior of executive leadership. By sending an unambiguous message that growing and learning is more important than being individual “rock stars,” you can help encourage people to start taking controlled risks and to focus more on efforts than results.
- **Don’t expect everyone to be fully formed at the point of employment:** Set the expectation that you’re hiring for potential and the ability to learn—and that you’re not expecting an employee to be a high-performer from Day 1. This expectation creates undue pressure on the employee and stunts her ability to learn.

- **Encourage reasonable risk-taking:** Reward people for taking safe-to-fail risks. Focus on what they learn, not on the failure itself. Getting everything right every time is not a sign of success; it's a sign of risk avoidance, and it's detrimental to creativity and innovation.
- **Praise effort—not talent:** Rewarding employees for following a strategy and for persisting to learn through hard work is more important than praising for a successful outcome. This does not mean that you praise people for simply trying. Rather, focus on what employees learned through the engagement and how they learned and adapted their work as more feedback provided more information.

## **Embracing Diversity**

Fostering a growth mind-set is an excellent way to encourage more adaptability and innovation in the organization, but it is not enough. The range and variability of ideas inherent in your organization will be constrained by the relative homogeneity of your employees. To embrace change, it is also necessary to ensure your organization consists of people from a wide variety of backgrounds. In the sections that follow, we describe some of the kinds of diversity you should consider as part of your hiring and retention strategy. We also outline some of the benefits of diversity and how hiring for “cultural fit” can be harmful.

## *Age*

Today's work environment is the first where as many as five generations of employees work side by side. At my work at Intel, for instance, it was not uncommon to see a Baby Boomer (born 1945–1964), a Generation X'er (1965–1976), a Millennial (1977–1995) and someone from Generation Z (1996 and later) collaborate on projects. Although ageism is a well-documented phenomenon, especially in the tech industry, the benefits of having perspectives from a variety of experiences can be substantial.

Although it may be true that certain characteristics of intelligence, such as abstract thinking, pattern recognition, and working memory ("fluid intelligence") may decline over time, other characteristics, such as verbal ability, cognition, and judgment ("crystallized intelligence"), actually improve. An agile organization needs people with both fluid and crystallized intelligence to adapt quickly to changing business conditions.<sup>8</sup>

## *Ethnicity*

Ethnic diversity, where an organization employs people from a variety of ethnic backgrounds, is another essential component of creating a diverse workforce. Without considering the moral issue, there is a clear financial performance component. In a 2015 study conducted by McKinsey,<sup>9</sup> the researchers found that companies that are in the top quartile for ethnic diversity are 35% more likely to have financial returns above their respective national industry medians. Moreover, the study found a linear relationship between ethnic diversity and financial performance. That is, for every 10% increase in ethnic diversity on the senior executive team, earnings before interest and taxes (EBIT) rose 0.8%.

## ***Gender***

Women, especially in the tech industry, are woefully underrepresented. And some studies indicate it's getting worse: according to a Silicon Valley Bank Startup Outlook 2017 report, more than 70% of the more than 900 startups surveyed had not a single female board member, which is an increased percentage from the year before. Furthermore, more than half of the companies had no female executive representation. Companies ignore gender diversity at their peril; the McKinsey study showed that in the United Kingdom, greater gender diversity on the senior-executive team corresponded to the highest performance uplift in their data set: for every 10% increase in gender diversity, EBIT rose by 3.5%.<sup>10</sup>

## ***Neurodiversity***

Neurodiversity is a term coined in 1999 by sociologist Judy Singer to define neurological differences such as autism, Asperger's, dyslexia, and ADHD. Although this type of diversity has not gotten a lot of attention as part of a diverse workforce, studies have shown that people with autism are more attracted to jobs in technology and science. Statistically speaking, organizations in the tech industry are likely to have people on their staff with neurological conditions without being aware of it.

Why is this important? Although there may be negative implications for people associated with having neurological conditions compared to "neurotypical" employees, the benefits of embracing people who fall outside the norm are substantial. People with Asperger's, for instance, are often highly intelligent in ways that don't register on regular IQ tests and are capable of deep concentration on tasks that take advantage of their natural gift for detecting flaws in patterns.

Peter Thiel, a Silicon Valley investor and co-founder of PayPal, claims having a mild form of Asperger's can be an advantage. In an article with *Business Insider*, Thiel explains that when people tend to gather around in the same geographical area (such as Silicon Valley), there is a distinct risk of groupthink—preventing a real diversity of ideas as imitations and conformity set in. Thiel notes that "many of the more successful entrepreneurs seem to be suffering from a mild form of Asperger's where it's like you're missing the

imitation, socialization gene.” To foster innovation and creativity, companies should therefore encourage a range of neurological diversity, as well.<sup>11</sup>

## ***Dangers of Hiring for “Cultural Fit”***

Hiring for “cultural fit” has been a key component of companies’ hiring practices for many years now. While interviewing candidates for positions at many of the companies I worked for in the past, degree of cultural fit was explicitly stated as a desirable criterion we were looking for in potential employees. However, hiring for cultural fit can quickly become a source of unconscious bias. Research has shown that interviewers are more likely to hire people more like themselves and tend to disfavor people who are different from them—even when they try not to. Cultural fit as a criterion means there is a real risk that candidates can be rejected simply because the hiring manager feels they are “different” and hence not a good match for the company. This ultimately stunts diversity efforts and creates more homogeneity.

In a *Forbes* article, author Lars Schmidt points out that companies such as Facebook and Pandora are removing the culture fit criteria altogether and instead look for characteristics of the person that can help *add* to the culture, rather than simply adhere to it. Atlassian, an Australian software company, looks for candidates who align neatly with their core values and that will help enhance their culture as a result. Audrey Blanch, Global Head of Diversity and Inclusion at Atlassian, puts it bluntly. “Focusing on ‘values fit’ ensures we hire people who share our sense of purpose and guiding principles, while actively looking for those with diverse viewpoints, backgrounds, and skill sets. We’re trying to build a healthy and balanced culture, not a cult.”<sup>12</sup>

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# Strategies for Building an Environment Supportive of Agile People

Who are agile employees? A group of people with a growth mind-set, consisting of a diverse set of skills, knowledge, and backgrounds. How can organizations create an environment where these people thrive, so organizations can reap the benefits of a more agile workforce? The following list describes a few essential strategies that companies can deploy to enable an easier alignment to a more agile way of working.

- **Flexible work arrangements:** As the demographics of our people become more varied, their needs outside of work differ as well. By creating more flexible work arrangements, companies can make the workplace more accommodating so that people can give their best selves at work without having to worry about not having time to pick up their kids at school. This flexibility may mean “flex-time” in the sense that a full-time employee can structure her workday in a way that better accommodates life outside of work. But it can also mean leveraging on-demand, Uber-like contractors who can take on goal-specific projects and move on to other organizations when their objective is accomplished.
- **Flexible workspaces:** We covered the implications of workplaces in the previous chapter, and it bears repeating: there is no one-size-fits-all when it comes to workplace design. People work in different ways depending on the context of the work and their backgrounds; workplaces need to be able to accommodate this. A person with Asperger’s, for instance, may need some space for quiet contemplation at certain times of the day, whereas others need open spaces ideal for intense collaboration and robust discussion. A workplace needs to be able to accommodate both modes of working.
- **Psychological safety:** Ann Edmondson, a Harvard Business School professor, defined psychological safety as a “shared belief that the team is safe for interpersonal risk taking.”<sup>13</sup> In an extensive study conducted at Google, researchers found psychological safety was the top shared trait among high performance teams. Forward-thinking companies like

Google recognize that people with a growth mind-set will make mistakes as part of their learning process; allowing them this type of comfort, that it's "OK" and that they won't be judged by their peers, is critical. And as we expand the range of backgrounds that people come from, we must ensure that they feel comfortable being themselves without having to conform to a set standard. We'll describe in detail how leaders can help build psychological safety in the next chapter, on Leadership.

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## Implications for HR in an Agile Organization

What does transforming an organization to a more agile way of working mean for Human Resources (HR)? HR is traditionally viewed as a risk-averse, conservative part of the organization. To what degree will this unit need to change as part of a broader transformation?

The sections that follow outline a few ways that I've observed HR organizations adapt to this new way of working to remain relevant—albeit different—from what we were used to in the past.

More than anything else, HR as a business function needs to be a strategic partner and enabler to the rest of the organization. To be fair, part of HR's mandate has always been risk reduction through legal mitigation, employment contracts, and compliance. To support a more agile way of working, however, HR needs to also adapt its ways and become more focused on delivering value to customers (the organization's employees) rather than being viewed as a risk-mitigation vehicle. In fact, HR can—and in some cases already is—becoming a source of competitive advantage: a critical component of a broader strategy toward unlocking agility in the enterprise. The sections that follow describe a few roles (and activities) where HR can make an outsized impact in the agile transformation.

## **Partner with Teams to Improve Recruiting**

Traditionally, HR has led recruiting efforts, essentially “handing off” people to the hiring manager for interviews and final hiring decisions. In an agile enterprise, this becomes a much more integrated process in which HR and the hiring department work together closely to break down silos and increase the chances of an effective hire.

My experience has been that the primary external “recruitment capability” continues to reside within HR; however, the way recruitment happens differs a bit from what we might be accustomed to. The internal recruiting efforts shift to become the primary responsibilities of internal agile managers, as they play an essential role in building and maintaining an environment of high performance and agility. HR still plays an important role, however; they partner with agile managers to identify and ensure they bring in the variety of people we believe can succeed in this environment.

What does this mean for the day-to-day work of Human Resources? One implication: the sources of recruitment are expanded beyond the traditional methods such as job boards and college campuses. Traditionally, for example, a software engineer was hired based on a set of key requirements—one being a college degree, and two being that the degree was in computer science or engineering. These requirements are now starting to change because we’ve learned that traditional predictors of performance, like education level or college major, may not be as accurate as initially thought.

Although a college degree is still considered an asset, it is a far from perfect predictor of future job performance. Also, having a technical degree is great, but it’s not a guarantee that you’ll be a good programmer or a productive team member. At HERE, we found that some of the most effective technical architects and programmers were people with a passion for technology and critical thinking—and degrees in music or philosophy. Why? We were never able to establish a clear link, but our best guess was that the critical thinking and creativity associated with majors such as philosophy and music helps express creativity at work, as well.

Also, we recognize that value is created at the team level, not at the individual level. The way people work together is critical to the relative success of the team and the future of the candidate in an organization that promotes an agile environment.

How does one go about evaluating whether a prospective employee can work well with a team? The best way is to actually try it out—to run an “experiment” where the candidate gets to work with potential team members on a problem together. Menlo Innovations, a software company based in Ann Arbor, Michigan, requires all candidates to pair with other job candidates to work on problems together for a few days. (They get paid for their time.) While the candidates pair together, employees quietly observe how the candidates work: are some dominating, wanting to “take over” and belittle the other candidates? Or are they supporting, helping others get better (if they have superior skills) so that they can succeed as a team?

Rich Sheridan, the CEO of Menlo, says one of the best predictors of future performance is to observe how candidates are able to share the keyboard. “If I see a candidate that shows impatience and unwillingness to work with their fellow partner towards a common solution, I never hire them—even if they have a PhD in Computer Science. A bad hire like this would have a negative impact on my team, so I can’t afford to hire them—even though they might be technically brilliant.”<sup>14</sup>

Even though this strategy has been extremely successful for Menlo (their turnover rate is among the lowest in the industry), this does not mean “trying before buying” is the only way to hire great people. What it does suggest, however, is that having some sort of practical, tangible example of *how* a person might operate in a team environment (beyond a traditional interview) is a good idea. Some research, for instance, suggests that pre-interview psychometric tests can be effective ways to increase the chances of getting great candidates. Provided they are administered correctly, these tests can help companies select external candidates that are more likely to be successful in their roles and ultimately generate more economic value during their employment.<sup>15</sup>

HR, as a key source of people information in the organization, also helps identify internal talent that may be a good complement for other positions throughout the company. By taking an active role in understanding the skills, knowledge, and abilities of each employee and becoming experts in matching talent with organizational need, they can help discover unknown capabilities and enable talent to flow where it’s needed in the organization. This means relying on a host of technologies and data beyond the skills and experience profiles used today—including employees’ passions, geographical

preferences, and competencies. HR plays a critical role in helping the organization find ways to recruit the best talent, whether they are internal or external candidates. Increasingly, enablers such as Artificial Intelligence (AI) and machine learning are starting to augment HR's level of effectiveness. As HR consultant Jeanne Meister notes, Capital Group is already using predictive technologies such as web-based video interviewing platforms to get more unbiased and relevant job candidates in the door.<sup>16</sup> These developments will only continue as HR continues to advance in an agile world.

## Design Meaningful Compensation, Rewards, and Recognition Plans

Traditional compensation and reward plans focus on individual achievement. To foster an increased emphasis on the whole and an end-to-end perspective, compensation plans need to move more toward team and organization-based accomplishments and less toward individual feats. Still, individual recognition remains important, although money may not be the sole component in this regard.

In designing more meaningful compensation plans, agile HR departments look for ways to support high-performing teams, rather than optimizing for the individual. We recognize that people have good days and bad days—they bring their “whole selves” to work—and we trust that on balance, everyone contributes their fair share in a unique way. Joe may be a technical ace who helps solve a lot of hurdles, but Mary may be an exceptional communicator who helps everyone get on the same page quickly and without hesitation. Is one skill more important than the other? In the end, we’re trying to optimize for the *team’s* ability to expeditiously produce products customers love—in a sustainable manner, with an appropriate level of quality.

That being said, there *are* individual differences between team members, and there are times when exceptional people need to be recognized. It’s just that we don’t want this individual excellence to be the sole criteria for performance. In other words, we need to combine both a recognition of the team as a whole with a level of individual performance management.

At one of the companies I worked earlier in my career, we did this by creating a 60/20/20 balance in terms of quarterly goals and compensation. A

salary was set at competitive market levels, so we knew people were being paid fairly. In addition, a quarterly bonus was paid out based on how well the company did in relation to its external guidance. If we met our company goals, the employee was eligible for 100% of the bonus, typically about 10% of his salary. That was the base for the bonus. Then, how much of that base the employee received depended 60% on whether the team met its goals, 20% on whether the employee's unit met its goals, and 20% on whether the employee met his individual goals. So there was a clear bias in favor of the team and the organization—yet with some leverage to make a difference personally.

In addition, teams were eligible for several awards and recognitions throughout the year. These would typically be nonmonetary in nature and would involve individuals earning special training classes, attending certain attractive conferences, or getting cool artifacts for their agile pods. Why did we do this instead of giving bonuses? Research has shown that monetary rewards are often poor motivators; providing other, more meaningful types of recognition is something HR can help define and implement. At Nokia, teams were given additional time off during the summer months if they met their goals set earlier in the year, for instance. These incentives made a real difference to the team members without necessarily requiring additional compensation.

## **Create More Relevant Roles and Define a More Flexible Career Path**

Titles, roles, and job descriptions are typically fairly static documents that rarely get updated and are subject to a rigorous review. Although this is likely well intentioned, the reality is that people in agile organizations change how they work frequently. As a result, they find that their current job descriptions are inadequate representations for what they do and provide little guidance in the way of a career path.

At Intel, one of the objectives I was never able to accomplish was to add job titles such as “Agile Coach” or “Product Owner” to the traditional HR organizational structure. The process for adding these relatively new titles was long and cumbersome. Instead, employees would take on roles that were similar in spirit, such as “Program Manager” and “Product Manager.” (I did

accomplish this in other organizations, however—see the companion website for sample portraits of agile roles.)

In an agile organization, one of HR's roles is to take an active part in creating more meaningful job titles and role descriptions. To help their organizations become agile, HR professionals need to drive a fundamental redesign of work descriptions. By doing so, HR facilitates more experimentation and less conformance to rigidly prescribed job tasks.

Some organizations are going so far as to eliminate standard titles altogether and instead encourage employees to come up with their own titles that more accurately describe their work. Google allows employees to come up with their own titles (an activity called “job crafting”) as part of a group exercise with their managers. By doing this as a collaborative activity with the support of the manager, job crafting can be helpful to ensure roles are kept up to date and stay relevant.

Jane Dutton, a University of Michigan professor and one of the originators of the job crafting concept, has seen other companies such as Logitech and VMware embrace the concept. “In the long run, if that happens as a regular part of a workplace, it can make the whole unit or organization run more effectively because people are better allocated. People are assigned in a more adaptable way where they can add the most value,” Dutton said in an interview with *Fast Company*.<sup>17</sup>

Just as jobs may need redesigning to drive agility, career paths will likely require reconfiguration. A neatly defined, linear career path is no longer useful to either employees or their employer. Agile organizations need to ensure people can easily change roles and careers based on three factors: the needs of the individual, the needs of the business, and changing market conditions. Instead of straight-line trajectories, agile professionals will expect—and be comfortable with—less clearly defined career paths—because they are always looking for more opportunities for growth. What those opportunities are—whether they involve taking on an agile manager role, expanding existing responsibilities within current scope, or moving to a new domain altogether—is up to the individual and is a natural part of their ability to develop as a professional and a person.<sup>18</sup>

## **Empower People by Moving Authority Closer to the Team**

HR has an important role in helping decision-making move closer to the team. Through policies and internal procedures, HR can influence other parts of the organization on how decisions are made regarding routine tasks such as purchase decisions, simple expense approvals, and the like.

At one company I worked for, HR—in cooperation with Finance—helped define a simple set of guidelines that sped up the approval process for a number of decisions that typically could take days or weeks to complete. For expenses up to a certain amount (\$5,000/year/employee), the individual was empowered to make decisions in terms of expenses related to items such as conferences, relevant training, and so on. If a person wanted to attend a \$2,500 Java conference, for example, she could simply notify her manager and let the team know (and plan for potential impact by giving plenty of notice). The expense was channeled through the team and the vertical (value stream) within that team. All expenses and approvals were handled by the functional manager by default, but this was a rubber stamp. As long as employees stayed within the limit, they were trusted to behave responsibly. In fact, the resources dedicated to chasing down the expenses and such far outweighed the fixed \$5,000 annual amount.

For bigger amounts, the functional manager was empowered to approve up to \$10,000. The Director-level approval was needed for amounts up to \$100,000. Once you got above \$100,000, expenses typically required VP approvals.

Pushing down decision making within boundaries helped achieve two main objectives. First, it sped things up. The vast amount of approvals were for rather small things, so by pushing decision making lower in the organization, we did not waste a lot of time on approvals and such. Simple activities like these went from taking days to minutes.

Second, pushing down decision-making authority sent a powerful signal that the organization trusted employees to do the right thing. Although the amounts were fairly modest, the organization clearly indicated that people were trusted as individuals and as employees. In my years at this company, I cannot say for sure whether people abused the system (I don't think they did), but the positive impact it had in terms of employee morale was well worth the small risk of someone making a bad decision.<sup>19</sup>

## **HR: From Controlling Function to Unlocking Enterprise Agility**

As organizations look to transform their operations into more agile and lean manners of working, they will look to HR as a strategic partner in making this happen. Just as organizations themselves will reshape the way they work to “embrace change and execute with purpose,” so must HR reinvent itself to drive agility in the organization. Those HR organizations that do not become enablers but insist on holding the line on a risk-mitigation focus will themselves risk being disrupted and be found superfluous in tomorrow’s agile enterprises.

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## **Summary**

This chapter covered the importance of People in the context of an agile enterprise transformation.

We started off with a real-life anecdote illustrating how harmful command-and-control management can be in an agile environment. We showed the way this particular organization handled the problem: to make clear that this behavior was no longer acceptable—an important message leadership needs to send when unlocking enterprise agility.

We then described the types of characteristics associated with people working in agile environments and introduced the growth mind-set concept and various forms of diversity. The different styles of thought, the commitment to learning, and the experimentation inherent in these characteristics are crucial ingredients found among people in agile organizations. We then looked at some of the ways organizations can support and grow people in an agile environment.

The chapter closed with an overview of how Human Resources is impacted by the change in how we operate as an agile company. Just as the organization overall is changing, so must HR. From a traditional risk-reduction objective to strategic enabler of talent, HR needs to change its focus in a number of ways to ensure it can remain a critical part of a company’s change efforts. We closed the chapter by suggesting a few

concrete areas where HR's role and activities will become more strategic and impactful.

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## Q&A

**1. How can I make sure I'm not a “Karl” from your story at the beginning of the chapter? How do I know my team trusts me enough to tell the truth about their performance and day-to-day challenges and needs?**

Frankly, simply by asking this question, I'm pretty sure you're not a “Karl.” Part of Karl's problem was that he was not overly concerned about the people working for him. He was instead laser-focused on the task at hand to the detriment of his team. But the broader question about transparency is well taken: how can you create an environment where people feel comfortable being vulnerable and open about challenges when they occur?

There's more about this topic in [Chapter 6, “Leadership,”](#) but the short answer is this: The first step starts with you, as a leader. If you intend to create an environment of openness and transparency, you need to take the initiative and model the behavior you want to see. Simply by being a manager, there's going to be an uneven power-balance between you and your employees. If you take the first step, by being transparent and open in your relationship with them, it is likely that you will experience the same behavior reflected in your employees over time. Demonstrate that you're open with them and share information—even when it's not all “good news.” Show them that you're willing to be vulnerable and that it's OK not to have all the answers all the time. Accept blame and share credit. If you're consistent, these actions will have an impact, and you'll gradually build a culture of transparency and trust—one where creating two sets of “books” is not going to be necessary for teams to feel safe.

**2. Isn't too much diversity of backgrounds or skills risky or even unproductive when people need to be on the same page?**

Unfortunately, diversity tends to be a politically charged item, which often contributes to clouding a rational, evidence-based discussion

around this important topic. Putting aside the moral issue for a moment, there is credible research to support the fact that companies that have a more diverse workforce tend to do better over the long run judging by relevant financial metrics and outcomes. (You can explore some of these sources in the “Further Resources” section.)

What’s perhaps more interesting in this context is to explore the impact of a diverse workforce from the point of view of organizational agility. At its essence, unlocking agility at the enterprise level means not only executing on proven business models, but also continually adapting to changing business conditions.

When executing on a proven business model, in which the business is reducing variance and the cost of producing a known product or service, a diversity-based hiring strategy is probably not going to be providing significant positive returns. After all, in this context (Snowden’s Obvious and partly Complicated domains), we’re focused mainly on executing on an already solved problem. In fact, hiring of *any* kind is unlikely to provide significant benefits in this context; you’re better off investing in ways to automate the existing process.

However, in business environments with increasing amounts of VUCA (Snowden’s Complex and Chaotic domains), having the ability to validate learning quickly through frequent experimentation will be at a premium. These experiments need to come from a place of creativity and innovation—and this is where having a diverse range of thought is especially valuable.

A central theme of this book is that an increasing part of our business environment is becoming characterized by VUCA. As such, having an internal business operating system that is equipped to embrace this new way of working is necessary to thrive. A diverse workforce is part of what makes that operating system run.

**3. If I hire for “values fit” and against cultural fit, or I hire people with nontraditional training or backgrounds, don’t I risk the ability of my teams to come together smoothly and quickly?**

Rather than hiring “against” cultural fit, I would state that being aware of one’s natural biases is important and that making an effort to look for

people that differ from the typical company persona can be helpful. A classic example of this approach is Abraham Lincoln's cabinet, where he tried to create a “team of rivals” around him. By appointing some of his most ardent opponents as part of his team, Lincoln was making an effort to avoid “groupthink” and get access to the very best minds, regardless of political affiliation or “fit.”

Make no mistake, this is not easy. Our brains have a natural tendency to seek out ideas that are similar to our own and reject those that are not; aka “confirmation bias.” Although this may be a natural part of how we act, it is a dangerous notion in a business environment with frequent disruption and change. Yes, we need alignment around a purpose and mission, but we also need people who can speak up, reject the blinders, and tell us when we’re wrong so we can see what we’re missing.

Fostering diverse, creative, and sometimes disharmonious teams that help combat an “accepted” way of thinking is not going to be smooth or quick. It takes perseverance, energy, and being able to focus on the needs of the group ahead of the individual.

Making the investment in time and mental effort to look beyond where you’re comfortable is not only worthwhile; it’s an essential component in your strategy of unlocking agility.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- Work with Google—<https://rework.withgoogle.com/>

Google famously uses data to track most aspects of how it works, and we get to benefit from these nonacademic experiments through this wonderful resource. Work with Google is a free resource that provides a lot of great insights into Google’s quest of “making work better.” Packed with useful blog entries and practical guides, this is an invaluable resource I recommend you explore as part of your focus on organizational improvement.

- Manifesto for Agile HR Development—  
<http://www.agilehrmanifesto.org/>

Written in the same general style as the original Agile Manifesto (“we value *this* over *that*”), the Manifesto for Agile HR Development is a useful resource to remind ourselves of the impact agile thinking has on the HR function. There’s also a discussion group you can join to help explore further.

- Employment and Practical Guidance  
(<https://www.autismandnurodiversitytoolkit.org/employment>).

This toolkit is a nice resource to become more familiar with the challenges associated with neurodiversity. The guide provides information regarding how to more effectively hire people with autistic conditions, how to better support them in the workplace, and how to improve the chances of a mutually beneficial employment relationship. It’s a great place to start!

- Dweck, Carol. “Developing a Growth Mindset.” (YouTube:  
<https://youtu.be/hiiEeMN7vbQ>)

An informative, 10-minute video explaining the impact on performance of schoolchildren by leveraging a growth mind-set and how to help develop it through how we raise our kids. In this video, she also explains the science behind the concept of “not yet” to help encourage learning. It’s quite applicable beyond the classroom!

- Herring, Cedric. “Does Diversity Pay?: Race, Gender, and the Business Case for Diversity.” *American Sociological Review*. 2009.

This is worth taking a closer look at if you’re interested in digging deeper into the underlying science behind the claims. The results show that racial diversity is associated with increased sales revenue, more customers, greater market share, and greater relative profits. Gender diversity is associated with increased sales revenue, more customers, and greater relative profit.

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# Chapter 6

## Leadership

Donna Potts-McKenzie was nervous—more nervous than she usually was in circumstances like these. Granted, it's natural to be a bit jumpy when you're speaking in front of a crowd of more than 200 people. But she had done that many times before, and she had managed to handle her jitters until now. After all, it was part of her job as Director of HR to explain updates to employee benefit plans, changes in compensation policy, and the like. This was what she did!

So why did it feel so different this time? Perhaps it was because she didn't know what to say. She always took pride in preparing her remarks thoroughly—she had a clear outline, she memorized the key talking points, and she knew she would end her talk with a clear call to action. But she hadn't been able to follow her routine this time. She was about to step on the stage as part of NAVTEQ's quarterly Agile Town Hall and provide HR's perspective on how roles would change in an agile world. And she did not know what to say. This was all uncharted territory!

Just a few days earlier, I met with Donna to prepare for her upcoming talk. She told me she felt unsure of what to say. She knew transforming the company to a more agile way of working would have wide-ranging effects on people's roles, on how they would be rewarded, on what their career progressions might look like. She knew that it would even affect the variety of people we would hire. All of this was still very new, and she did not know how the changes would affect NAVTEQ's employees. She simply did not have the answers. And now she was supposed to provide HR's perspective: to stand in front of a couple hundred people and essentially tell them, "I don't know."

My advice to Donna was simple but probably did not help her feel much better: “Go out and tell them just that—that you don’t know all the details yet. That you recognize there will be changes and that you and the rest of your team are working hard to figure it out, but that you will need some help and patience as you may make some mistakes along the way. Allow yourself to be vulnerable, and admit you don’t know the answers...yet.”

Donna stepped up to the podium, testing the microphone by gently tapping it with her index finger before talking. “I want you to know I’m very excited about the transformation we’re part of as a company. In fact, it feels like we’re creating a brand new company—something all of us are having a hand in. But I also have to admit there’s a part of me that’s scared about all of this: we’re making a lot of changes, and I don’t feel I’m in control as much as I’m used to. This is something I’m working on, and I ask for your patience as I go through my own professional transformation.”

Donna went on to explain how HR would be an integral part of the agile transformation at NAVTEQ, but that she could not provide any specifics yet. She was transparent about her fears. She was humble in recognizing this was new to her and that she felt uncomfortable.

People have come up to me years after Donna’s talk and told me this was the moment they recognized NAVTEQ was not simply changing labels—that the company was fully committed to transforming as a company. Although NAVTEQ was fortunate to have many capable leaders, none had ever before displayed this level of humility and vulnerability. For employees, it was completely unexpected to see their HR director embody the same mix of excitement and fear that they all felt as they were going through the change. And it created a sense of trust and alignment between leadership and employees that would prove invaluable as the company started its continuous improvement journey.

This chapter is about leadership—specifically, how agile leadership is very different from the traditional ideals you may have read in classic management tomes. We’ll explore the very real impact of leadership in initiating organizational change and making it stick, cover some recent thinking in the context of a Volatility, Uncertainty, Complexity, and Ambiguity (VUCA) world, and outline a few concrete differences between traditional leadership and what’s required to succeed today. At the end of this chapter,

you'll be able to articulate what agile leadership is and recognize the impact it will have on *your* agile transformation.

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## Impact of Leadership

One of the world's foremost management thinkers, Jim Collins, set out to identify in the late 1990s what it was that characterized truly exceptional companies. To accomplish this, he and a team of researchers examined more than 1,400 high-performing organizations and reduced the list to just 11 companies that met his yardstick for "greatness": stock returns more than three times the market for 15 years after a major transition period. He described his observations in the book *Good to Great*, which subsequently became one of the best-selling management books of all time.<sup>1</sup>

Although Collins found that several key factors played into a given company's success, when examining these 11 companies in greater detail, he found that all of them shared one single quality: what he called "Level 5" leadership. Collins found that above all the other factors, the type of leadership exhibited at the top determined whether a company would achieve great financial performance compared to its peers.<sup>2</sup>

Before looking into what Collins refers to as "Level 5" leadership, it may be helpful to provide a brief summary of the other four levels of leadership he identified:

- **Level 1: Highly Capable Individual:** Leaders in this category are highly capable and contribute to creating value through their talent, knowledge, skills, and good work habits. They are not great team members, however, and fail to leverage their potential beyond their own force of personality.
- **Level 2: Contributing Team Member:** Leaders at Level 2 contribute to higher level objectives at the team level and work well with others in team settings. They merely participate as part of a bigger group, however, and are not able to affect company performance to any greater degree than any other effective team member.

- **Level 3: Competent Manager:** Level 3 leaders are able to organize people in an effective and efficient manner toward predefined objectives. They are excellent at executing on a clear goal but fail to stimulate continuous improvement in their teams.
- **Level 4: Effective Leader:** The leaders in Collins's fourth level are able to drive performance toward a clear and compelling vision. They are also able to instill a sense of pride in their employees, increasing performance standards constantly.
- **Level 5: Executive:** Leaders in this category—the pinnacle of leadership—build sustainable greatness in their organizations by combining both a sense of humility and an unbending commitment to doing what's necessary to get the job done. They inspire continuous improvement in their people, take blame for failures, and give credit to their people when things go well. They also recognize that luck is a contributing factor to success.

Figure 6.1 illustrates the Level 5 Leadership Hierarchy.



**Figure 6.1** Level 5 Leadership Hierarchy

## Level 5 Leadership

Collins found that of all the factors he studied, the level of leadership at the helm mattered the most. Specifically, Level 5 leadership was found to be essential in transforming a company from a *good* into a *great* company. What distinguishes Level 5 from the other levels are two characteristics in particular:

- **Personal humility:** Leaders with personal humility display a compelling modesty. They don't seek the limelight or boast of their accomplishments. They are often quiet, calm, and determined and motivate through inspired standards, not charisma. Perhaps more importantly, they put the company ahead

of themselves, take blame for mistakes readily, and give credit generously.

- **Professional will:** Level 5 leaders have a strong professional will and a resolve to do whatever must be done to achieve long-term results, no matter how difficult the task. By setting high standards for themselves—and recognizing inevitable failures along the way—they inspire greatness in their people to always improve the way they work.

## Level 5 Leadership = Agile Leadership?

Collins's research is compelling, but does it work for agile leaders? Yes—in fact, it may be necessary. A case can be made that for agile leaders to succeed, they need to embrace these Level 5 characteristics. For example, Donna Potts-McKenzie, in the story that introduced this chapter, displayed these leadership qualities when she bravely let her organization know that she did not have everything figured out but that she was committed to making it work—however daunting the task may have seemed. Unlocking agility requires a major organizational transformation effort. As such, it requires changes at all levels of the company; having leaders who are able to credibly articulate that “we’re in this together” can be a powerful force multiplier of performance.

Discerning readers will have a few questions regarding Collins's research, however:

First, to what extent can we trust that Level 5 Leadership is indeed a core component of company performance? Aren't there several examples of other successful companies with leaders who are anything but “humble”? And how can we trust the results of Collins's research when some of the companies mentioned in the study (Circuit City and Fannie Mae, for instance) are now defunct?

## **Collins's 11 Companies Studied in Good to Great:**

- Abbott Laboratories
- Circuit City Stores
- Fannie Mae
- Gillette Company
- Kimberly-Clark
- Kroger
- Nucor
- Phillip Morris
- Pitney Bowes
- Walgreens
- Wells Fargo

Collins has responded to this criticism over the years by pointing out that his study was not intended to predict what would happen in the future; rather, the research showed that over the 15 years that the companies were studied, Level 5 was a determining factor in this set of data and over that time period. To be fair to Collins, both Circuit City and Fannie Mae had different leadership by the time they fell into trouble. And it is always possible to point out an outlier (such as Steve Jobs, who was anything but “humble” by most accounts) and claim this refutes Collins’s theory.

Despite its criticisms, what makes Collins’s study so compelling in this context is that when it comes to examining leadership style and its impact on company performance, few studies can match the depth, breadth, and comprehensiveness of Collins’s work.

Besides the quantitative perspective, to gather the qualitative side of the study, the 22 researchers involved in the study collected 6,000 articles about the 11 companies, conducted 87 interviews with company participants, and analyzed internal documents and public analysts’ reports. They gathered the

quantitative side through financial metrics, management turnover, and public notifications of employee layoffs and restructurings. Then they calculated the effect of the respective companies' stock performance over 15 years.

When synthesizing all this data and correlating it to key factors across the 11 companies, the characteristics summarized as Level 5 leadership stood out as a significant differentiator when comparing the leadership style of the highly successful companies with those that did not quite make it. In fact, Collins's researchers tried to avoid these conclusions at first because leadership is often considered a "soft skill" and they were expecting other, supposedly "harder" factors to play a larger role. But as the results of the study became clear, the researchers could not ignore the results of the data, and Level 5 leadership emerged as "one of the strongest, most consistent contrasts between the good-to-great and the comparison companies."<sup>3</sup>

The second criticism of Collins's study is that it is getting long in the tooth. Collins started the research in 1996 and completed the findings in 2001. In a world where change happens incredibly fast, that's ancient history, even though the data and the results may have been compelling and valid for their time.

To support Collins's theory and apply it to agile leadership in today's world, we need a more modern study that validates his findings. Do they still stand? I found the answer in Fredric Laloux's *Reinventing Organizations*, released in 2014. Laloux's book contains one of the most exciting leadership theories coming out of business management literature in the past few years.<sup>4</sup> In the following section, we'll take a closer look at his theory, Teal Leadership, including its implications and how it stacks up with Collins's earlier Level 5 discoveries.

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## Teal Leadership

Frederic Laloux, a former McKinsey associate partner, noticed in his work as a management consultant that something was missing: the management structures and theories introduced over the past century failed to capture the needs of today's businesses, resulting in lack of employee engagement, high turnover rates, and a general feeling of "emptiness," even within the upper ranks of management. Laloux's sentiments were backed up by data: according to a Gallup survey in 2016, close to 70% of employees either do not feel engaged or are actively disengaged at work, leading to loss in productivity, increased turnover costs, and quality issues.<sup>5</sup>

As Laloux searched for a way to understand these challenges and identify a better way forward for his clients, he dove into anthropological research describing organizational paradigms in human history. At the core of his theory was the idea that, from the beginning of time, humankind has tended to evolve its level of consciousness in stages. Each of these stages has in turn brought with it a model of collaboration and organization that is an expression of our current level of consciousness.

He hypothesized that the current challenges evident in today's organizations are signs that we're entering a new level of consciousness as humans and that current organizational models do not adequately address our needs. Hence, a more sophisticated level of organization and collaboration is needed to complement our new stage of development—an organization category that he named Teal.<sup>6</sup>

Before taking a closer look at Teal and its implications for leadership, let's briefly summarize the history of organizational patterns in [Table 6.1](#) and the sections that follow, as defined by Laloux.

**Table 6.1 Evolutionary Breakthroughs in Human Collaboration**

Color	Description	Guiding Metaphor	Key Breakthroughs	Current Examples
Red	<p>Constant exercise of power by chief to keep foot soldiers in line</p> <p>Highly reactive, short-term focus</p> <p>Thrives in chaotic environments</p>	<p>Wolf pack</p> <p>Division of labor</p> <p>Command authority</p>		<p>Organized crime</p> <p>Street gangs</p> <p>Tribal militias</p>
Amber	<p>Highly formal roles within hierarchical pyramid</p> <p>Top-down command-and-control</p> <p>Future is repetition of past</p>	<p>Army</p>	<p>Formal roles (stable and scalable hierarchies)</p> <p>Stable, replicable processes (long-term perspectives)</p>	<p>Catholic Church</p> <p>Military</p> <p>Most government organizations (public school systems, police departments)</p>
Orange	<p>Goal is to beat competition; achieve profit and growth</p> <p>Management by objectives (command-and-control over what, freedom over how)</p>	<p>Machine</p>	<p>Innovation</p> <p>Accountability</p> <p>Meritocracy</p>	<p>Multinational companies</p> <p>Investment banks</p> <p>Charter schools</p>
Green	<p>Focus on culture and empowerment to</p>	<p>Family</p>	<p>Empowerment</p>	<p>Businesses known for idealistic</p>

	boost employee motivation	Egalitarian management	practices (Ben & Jerry's, Southwest Airlines, Starbucks, Zappos)
	Stakeholders replace shareholders as primary purpose	Stakeholder model	
Teal	<p>Self-management replaces hierarchical pyramid</p> <p>Organizations are seen as living entities, oriented toward realizing their potential</p>	<p>Living</p> <p>Self-management Wholeness Evolutionary purpose</p>	A few pioneering organizations

## Red: Lead Through Force

Some 10,000 years ago, humanity started organizing itself in chiefdoms to help protect their resources against competing forces. Conquering armies came into existence, enabling some to acquire more resources at the expense of others' losses. Only the strong survived; *command-and-control management* was therefore at a premium, and the world was a zero-sum game.

## Amber: Lead Through Fiat

Around 4000 BC in Mesopotamia, state bureaucracies, agrarian societies, and more organized religions emerged. This development had a significant impact on how humans managed resources. Societies now looked at how to increase utility for the group, not the individual. Self-control and restraint were taught as virtues; people organized themselves into clearly delineated hierarchies where everyone knew their place and their role. The invention of these management structures allowed people, together, to create impressive feats: cathedrals, pyramids, and other well-organized group efforts are the results of an Amber way of working.

As we've seen throughout this book, elements of Amber leadership still exist in today's organizations. If you have a low level of uncertainty and resource optimization is at a premium, Amber is still an effective way to run an organization. Military organizations and some government institutions fit this category. However, because we now operate in a world increasingly characterized by VUCA, this structure quickly becomes inadequate and ineffective as a way to deal with change.

## Orange: Lead Through Efficiency

During the Renaissance, the Enlightenment, and carried forward through the first part of the Industrial Revolution, the way people viewed work changed from its agrarian roots where work was "hard" through the industrial revolution, where labor was assisted by machines and the goal of work, therefore, was to be "efficient." No longer was success defined by a higher authority—achieving profit and growth became goals in themselves. With this thinking, a few key management innovations were introduced: *innovation*, which created departments such as R&D and Marketing; *accountability*, which meant that people were responsible for achieving goals within defined boundaries; and *meritocracy*, the idea that people could rise to the top of the organization as a result of their relative skills and contributions, rather than by caste or family affiliation.

As we saw in [Chapter 4](#), "Organizational Design," many of the most popular ways of managing work today, such as the functional organizational structure, help support the ideas outlined in Laloux's Orange leadership category. This model has brought enormous prosperity to society as a whole through the past several hundred years. But it also has brought a distinct focus on short-term profits and the exploitation of resources, leading to an ultimately unsustainable way of operating. A survey of Chief Financial Officers revealed that firms often reduce spending on research and avoid profitable investments to make short-term profit targets.<sup>7</sup> In 2015, Larry Fink, the CEO of BlackRock, one of the world's largest asset holders, warned in a letter to CEOs of some of the world's largest firms that a lack of long-term perspective had the effect of "underinvesting in innovation, skilled workforces or essential capital expenditures necessary to sustain long-term growth."<sup>8</sup>

## **Green: Lead Through Responsibility**

The Green Leadership model recognizes that the exploitative manners of Orange are not sustainable in the long run. Green Leadership aims to focus on responsibility and long-term growth. Although there are several nonprofits, environmental, and social justice organizations to be found in this category, there are also several large corporations that embody Green sentiments as part of their core values. Southwest Airlines, Rally Software (later acquired by CA Technologies), and Starbucks are examples of organizations that have included a distinct focus on culture, mentoring, coaching, and teamwork over the more traditional focus areas like strategy and financial budgeting that are so often found in Orange organizations.

Some of the innovations introduced by Green organizations include concepts like *employee empowerment* and *egalitarian management*—the idea that everyone has a voice and can influence the direction of the organization in various ways.

## **The Organization: An Organic Ecosystem of Interrelated Parts**

Laloux points out that, although the four categories outlined in the preceding sections describe distinct stages of human development and corresponding ways that we manage our organizations, all of these categories are in effect to various degrees in most large organizations today. For example, you'll recall the concept of the City, which I discussed in the introductory chapter. The City is a social construct that has been able to withstand enormous challenges for thousands of years by following an organic, highly adaptive way of organizing people, resources, and assets. Within it, you can see evidence of Red (drug dealers, cartels), Amber (public schools), Orange (publicly traded companies), and Green (nonprofits) organizations.

So it is within company structures as well. Each company embodies some or all of these categories to an extent. What's truly important is the dominant paradigm because this has an outsized impact on how the company is managed. For instance, in a Fortune 500 company, it is not uncommon for the Accounting department to be organized in an Amber manner, with clear lines of authority and distinct rules of operating, while the Marketing department may be characterized by Green features that include more employee

empowerment and room for creativity. The dominant culture, however, may be more reminiscent of an Orange organization, where management by objectives and short-term profit motives are dominant.

As we'll see in [Chapter 7](#), “[Culture](#),” the way we as leaders reward certain kinds of behaviors in our people helps explain what the organization values—and what it wants to amplify further as a company. According to Laloux, the level of consciousness of the organization cannot exceed the level of consciousness of the leader.

## Teal: The Organization as a Living Entity

Laloux, much like Collins before him, started researching a number of companies to find out how they were dealing with the challenges posed by today's ever-changing business environment. He wanted to see whether there were distinct commonalities in the companies that thrived. He ultimately landed on 10 companies (initially 12, but 2 of these reverted back to old ways after senior management shifts). He dug deeper into their management practices and was able to identify a few key commonalities that helped define what he calls Teal organizations, the next evolution from Green.

Laloux noticed a few management innovations that characterized what he called Teal Leadership organizations:

- **Self-management:** Teal organizations operate with a large degree of autonomy, yet coordinate effectively across organizational boundaries. Self-management does not mean that people do whatever they want; it means that natural hierarchies emerge based on a set of interlocking structures where decision-power flows to the person who has the interest, expertise, and willingness to oversee a given situation. You'll remember this type of structure being described in the earlier chapter on Organizational Design when we covered structures like Sociocracy and Holacracy.
- **Wholeness:** Teal organizations recognize that work is about more than a paycheck; there needs to be a meaning beyond the work itself. Also, people bring their “whole selves” with them to work. This means that beyond simply bringing the

“professional you” to work, you’re also encouraged to bring your “personal you.”

Menlo Innovations, a software company based in Ann Arbor, Michigan, is a great example of a Teal company that fully believes in the idea of bringing your whole self to work. When Rich Sheridan, the company’s CEO, learned that several of his employees had trouble getting to work because daycare options were limited, he asked his employees to bring their babies to work with them. Today, several of Menlo’s employees bring their babies to work, creating an atmosphere of trust and personal connection between the employees but also with the company itself. Sheridan proudly calls the additions to the team “Menlo Babies,” although their productivity is limited to naps, feedings, and the occasional “big business.”

- **Evolutionary purpose:** Teal organizations recognize that they don’t know all the answers up front. They embrace uncertainty as part of doing work. By focusing less on set targets, incentives, and budgets and more on what emerges by enabling organizations to sense and respond, they are able to outpace their competition. This style has profound consequences for how leadership manages the business; rather than trying to predict and control what will happen in the future and marshal resources toward an uncertain goal, Teal organizations seek to sense and respond—and execute based on what the business environment reveals, rather than what a business plan dictates.

For instance, in Teal organizations, profit is viewed as a lagging indicator—it is not a goal in itself, but rather a consequence of doing the “right thing” and providing a superior customer experience that fulfills the organization’s mission. Patagonia, a multimillion dollar outdoor clothing company, has a core mission to help provide awareness of environmental issues to save the planet. That the company also makes a profit is a nice side effect. Over the years, Patagonia has made sure to vote with its dollar, as well: each year, it gives 1% of the total sales of the company to environmental groups.<sup>9</sup>

## **The Teal Organization: A Blueprint for the Organization of the Future?**

Laloux's book has received a fair amount of praise and sold millions of copies worldwide; he clearly hit a nerve with his idea of the Teal organization. However, there are a few valid criticisms of his theory that we should note.

First, of the 10 companies he examined in detail (see sidebar), none of them are bona fide Wall Street companies. Does that mean this type of thinking does not apply to public companies at all? Or does it perhaps mean that it does not scale well beyond 10,000+ employees? The few examples we've seen of companies approaching this way of working have so far been problematic (like Zappos), rather small (like The Morning Star Company), or nonprofits. Nothing is wrong with this per se, but is Teal a real answer to most modern management challenges?

### **Ten Companies Studied in Laloux's Reinventing Organizations:**

- Buurtzorg
- ESBZ
- FAVI
- Heiligenfeld
- The Morning Star Company
- Patagonia
- Resources for Human Development (RHD)
- Sounds True
- Sun Hydraulics
- Holacracy

To be fair to Laloux, his theory is rather new in management thinking and has not had a chance to be tested at scale yet. This is a valid concern for leaders looking to advance the state of their companies.

Nevertheless, simply maintaining the status quo is not a solution either. Companies do need to find ways to adapt more quickly as change continues to accelerate and employees are indicating in survey after survey that their engagement levels are low. In fact, the core ideas displayed by both Collins and Laloux—the sense that current management thinking is broken, that we’re not equipped to deal with today’s challenges—echo the very sentiments expressed by the authors of the Agile Manifesto back in 2001 (albeit in the context of software development, not leadership or management).

As we discussed earlier, the Agile Manifesto for Software Development was itself a direct response to these challenges in their industry—a way to articulate how the way we work can be improved, expressed through values and principles.

Wouldn’t it be instructive if leadership and management had a similar guide to refer to when considering how to change the way businesses operate in today’s environment? Wouldn’t it be helpful if there was something equivalent to an Agile Manifesto for leadership and management thinking?

It turns out that there is. It’s called Beyond Budgeting.

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## Beyond Budgeting: An Agile Management Model

Beyond Budgeting, despite its somewhat misleading name, is not really about budgets per se; it’s a model that supports adaptive management and empowerment of the people affected by it. The name was chosen to illustrate that current thinking needed to evolve from the traditional top-down management systems with their fixed, annual budgets and into a more emergent way of managing business operations. Let’s take a closer look at where Beyond Budgeting comes from and explore its core principles—and how these may help us support leadership in an agile environment.<sup>10</sup>

## **Origins of Beyond Budgeting**

Jeremy Hope, an author and former financial controller for several UK firms, and Robin Fraser, a writer and business consultant, were slated to speak at the Consortium of Advanced Management International (CAM-I) conference in 1997 to discuss problems with budgets and their negative impacts on business performance. Although they had never met before, Hope and Fraser quickly discovered that they shared a lot of the same views and started discussing how they could collaborate. In 1998 they decided to form the Beyond Budgeting Round Table (BBRT) with Peter Bunce, who had experience managing several research programs as a member of the CAM-I. The research conducted at the BBRT resulted in the development of the Beyond Budgeting model as a way to radically change the way organizations are led and managed.<sup>11</sup>

## **Beyond Budgeting: Less Top-Down Control, More Trust and Empowerment**

The core issue, Hope and Fraser argued, was that although organizations recognized that they needed to adapt faster, empower their people, and improve the way they create value, the traditional budget process—and the culture and processes it promotes—eradicated any possibility for change. Because traditional budgets were (and still are) usually based on traditional management thinking from the 20th century, where compliance and control were of the essence, the trust between workers, managers, partners, and customers—so essential in a knowledge economy—would inevitably break down.

Here's a simple example. Consider the sales force in a given company. Salespeople, traditionally, are given a sales quota they need to meet. When meeting these numbers becomes impossible, salespeople may leverage their relationships with customers, asking them to order goods they will ultimately return. The sales quota for the quarter may be met, but these are artificially inflated numbers because some of the products will come back as returns in the next quarter. Conversely, if the business unit looks like it's going to exceed its target, sales forces often persuade customers to have their orders delivered in the next fiscal period—even if this means delaying company cash flow. This game of acting in one's own self-interest permeates in

different forms throughout the organization. Ultimately, the budget becomes an impediment to a common sense way of doing business—a “game” that needs to be mastered, rather than an effective tool for creating business value.

In an interview discussing his motivation for developing the Beyond Budgeting model, Hope elaborates:

*“It is more how the budget system is used rather than the budget system itself that creates the problem...This process of engaging huge numbers of people in a protracted cycle of detailed planning, and then making them march to the drumbeat of the budget, seems to us not just a waste of time, but also an insult to their intelligence.”*<sup>12</sup>

Hope and Fraser became convinced that fixing this problem required a brand new perspective of leadership. So as they established the BBRT in 1998, they started their research by seeking out a number of companies that were working to alleviate the inherent problem of traditional management structures. At first, finding companies that were doing so was not an easy task; not many companies were practicing this type of innovative management in the late 1990s. However, after several years of studying companies who had made the leap, they recognized that there were two fundamental differences in the way these companies operated compared to the traditional models.

First, these companies *supported a more emergent way of managing*. That is, rather than having a fixed budget from which to make decisions, these companies would, where possible, have targets that were set relative to others, internally or externally. Second, they embraced a more *dynamic and decentralized decision model*. Instead of a traditional, top-down hierarchy of decision-making, these companies would place an emphasis of pushing decision-making authority closer to the work, so that more decisions were made by line managers and people “on the floor.” They would also introduce a more business- and event-driven rhythm in their management processes. The dynamic resource allocation implemented in many of these resembles “continuous delivery” as we know it in agile. The annual budget is too big a batch of decisions, so resources are allocated more continuously instead of once a year.

Combined, these themes—embracing change and empowering people—became the core of the Beyond Budgeting model. To make the model

practical and actionable, Hope and Fraser, together with other members of the BBRT, outlined a set of 12 principles to help provide concrete guidance on both the leadership and the process aspects of Beyond Budgeting (<https://bbrt.org/the-beyond-budgeting-principles/>), as described in **Table 6.2.**

**Table 6.2 Beyond Budgeting: The Adaptive Management Model**

Leadership Principles	Management Processes
<b>1. Purpose:</b> Engage and inspire people around bold and noble causes, <i>not around short-term financial targets</i>	<b>7. Rhythm:</b> Organize management processes dynamically around business rhythms and events, <i>not around the calendar year only</i>
<b>2. Values:</b> Govern through shared values and sound judgement, <i>not through detailed rules and regulations</i>	<b>8. Targets:</b> Set directional, ambitious, and relative goals; <i>avoid fixed and cascaded targets</i>
<b>3. Transparency:</b> Make information open for self-regulation, innovation, learning, and control; <i>don't restrict it</i>	<b>9. Plans and forecasts:</b> Make planning and forecasting lean and unbiased processes, <i>not rigid and political exercises</i>
<b>4. Organization:</b> Cultivate a strong sense of belonging, and organize around accountable teams; <i>avoid hierarchical control and bureaucracy</i>	<b>10. Resource allocation:</b> Foster a cost-conscious mind-set and make resources available as needed, <i>not through detailed annual budget allocations</i>
<b>5. Autonomy:</b> Trust people with freedom to act; <i>don't punish everyone if someone should abuse it</i>	<b>11. Performance evaluation:</b> Evaluate performance holistically and with peer feedback for learning and development, <i>not based on measurement only and not for rewards only</i>
<b>6. Customers:</b> Connect everyone's work with customer needs; <i>avoid conflicts of interest</i>	<b>12. Rewards:</b> Reward shared success against competition, <i>not against fixed performance contracts</i>

As these ideas became more known through books such as Fraser & Hope's *Beyond Budgeting*, more and more companies started sharing their stories. Companies such as Handelsbanken, Whole Foods, Volvo, and many

others reported implementing Beyond Budgeting ideas and achieving remarkable results.

One of the more successful transformations in this context has been documented by Bjarte Bogsnes, Chairman of BBRT and Senior Advisor at Equinor (formerly Statoil), a \$60 billion energy company with more than 20,000 employees. Bogsnes, in his book, *Implementing Beyond Budgeting*, describes how this enormous energy company was able to separate the three purposes of a budget—target setting, forecasting, and resource allocation—into three different processes. Each one could then be improved to reflect not just a VUCA world but also an organization with highly competent and responsible people.<sup>13</sup> This meant that the “games” mentioned earlier that are typically associated with traditional management systems were minimized and people could focus more on getting work done. But Beyond Budgeting is less about financial tools and more about a way of thinking. Bogsnes is unequivocal that what makes an organization more adaptive is a clear understanding of the values and principles—not specific techniques. Beyond Budgeting is hence not a management recipe to be followed step by step. Rather, it is a guide meant to give management and leaders an approach toward greater adaptability and performance.

Academic research also backs the relative effectiveness of this way of working. In 2013, Bourmistrov and Kaarbøe showed through an article published in *Management Accounting Research* that leveraging Beyond Budgeting helped improve strategy setting and forward-looking decisions in environments characterized by uncertainty and continuous learning. One concrete benefit of bringing decision-making down to the line managers was that information could flow faster and increase feedback loops: “*Problems can be pursued right away to ensure that both revenue and cost targets are achieved. This provides an opportunity to obtain quicker signals about what was happening in the business environment.*”<sup>14</sup>

Beyond Budgeting was created by finance professionals as a response to the dysfunction inherent in current management thinking, just as the Agile Manifesto was created to address the challenges with software development at roughly the same time. Although the authors of both artifacts never communicated with each other while these documents were created, it is remarkable how aligned they are, both in tone and substance. It appears both camps saw the challenges emerging, and each wanted to do their part to help

address the obstacles from their own vantage point. Unlocking enterprise agility requires both the leadership and the management guidance from Beyond Budgeting as well as the insights on building better software expressed in the Agile Manifesto.

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## The Death of the Traditional CEO?

Much of the thinking embedded in both Beyond Budgeting and Laloux's Teal organization makes the argument that decision-making needs to be made at the line level, where the action happens. If the organization as a whole is in fact a collection of leaders, do we then need a boss? Is the role of the CEO essentially dead in agile organizations?

Some organizations are embracing this notion. Crisp, a leading Swedish consulting firm and a progressive company by most accounts, decided to remove the CEO position altogether. Before this, Crisp employees voted in the CEO as a role that rotated each year. The thinking at the time was that they needed a leader at the top. Someone had to make a call if things got dicey; someone had to be in charge. Because Crisp is one of those companies that thrives on experimenting with new ideas, the company's employees wanted to test their assumption of leadership. Did they really need someone to be a "decider"? In 2013, they agreed to remove the CEO role as an experiment and have not looked back since.

Judging by Crisp's healthy business growth and employee engagement, the experiment seems to be working. Decisions traditionally made by a single executive are now made by a combination of hired staff and board members (who are also Crisp employees). In an interview with the BBC in February 2017, Yassal Sundman, one of Crisp's coaches, explained that leadership decisions are a collaborative process. In cases where there are major strategic decisions to be made, the employees decide together as part of regular internal conferences. And if things don't turn out the way they expect, they change course. "We say that we're going to make this decision, and it's valid until the next conference. We're testing it out."<sup>15</sup>

Granted, Crisp is a smaller company (about 40 people), and most examples of "leaderless" organizations tend to be tiny compared to Fortune 500 companies. Once the size of the organization expands, so does the

inherent complexity of communications and the need for more explicit boundaries. This reality may make it impractical to run an organization with 100,000+ people without a clear leader. Meg Whitman, former CEO of Hewlett-Packard Enterprise (a multinational corporation with more than 130,000 employees), argues that there are lots of well-meaning people who have opinions on where the company should be going, but that there ultimately needs to be a decider. “In the end, at the highest levels, that decision-maker needs to be me.”<sup>16</sup>

Whether a formal leader resides at the top of the organization may depend on the size and culture of the company. But while a formal *leader* may be optional, *leadership* clearly isn’t. The impact of leadership to the success of an agile transformation is substantial. Without the leadership support necessary to make mistakes, fail occasionally, and appear vulnerable, meaningful change is impossible. People need the latitude to dare to try new things without having their careers on the line.

Donna Potts-McKenzie demonstrated leadership when she stood in front of hundreds of people, letting them know she was not entirely sure what would happen next. But she did not stand alone. Without a CEO supporting her and making her feel safe that it was OK to be uncertain, she would not have had the necessary space to allow herself to be vulnerable. Potts-McKenzie’s sentiments validated how the rest of the organization felt and helped align everyone toward a common commitment: “Yes, this is going to be hard and yes, we admit we’re uncertain, but we’re committed to figuring this out together.” The behaviors we see in our teams and programs are a direct reflection of the messages and values espoused by leadership, whether it is a select group of people or the organization as a collective.

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## Three Essential Themes of Agile Leadership

When considering the available research and my personal experience working at both small companies (<40 people) and large multinationals (>100,000 people), I noticed there are a few key leadership characteristics that tend to transcend company size, culture, and industry. Whether displayed by a designated leader or throughout the organization, I’ve found these three leadership themes to be critical to unlocking agility in the enterprise:

- **Safety: Autonomy with Meaningful Constraints:** Collins calls it “Discipline.” Laloux calls it “self-management.” What they have in common is that leaders have the confidence and maturity not to keep tabs on everything and instead give employees the space necessary to perform their jobs within meaningful boundaries. As Collins states in his book, “when you have disciplined people, you don’t need hierarchy. When you have disciplined thought, you don’t need bureaucracy. When you have disciplined action, you don’t need excessive controls.”
- **Purpose: Go Beyond Profits and Revenue:** Laloux focuses on bringing more than the professional “mask” to work so that the whole self can be part of the organization. In other words, leaders need to articulate a purpose beyond merely profits so people can connect at a deeper level.

Rich Sheridan, of Menlo Innovations, is pretty clear on what purpose drives his company: joy. Although it may sound corny at first, he is dead serious about this.

*“Joy is what was missing in my life when I was working long hours at GM and constantly striving to climb the ladder. I was successful in terms of external rewards, but I felt empty inside—I had no joy. So that’s why I founded Menlo Innovations with my business partner—to create an organization where people can experience joy when they come to work and where we create products and solutions for our customers that create joy for them.”<sup>17</sup>*

So far, Sheridan’s approach seems to work well for Menlo Innovations: the company has grown steadily since its founding in 2001 and has experienced record profits every year since it’s been in business. Menlo Innovations is in good company. According to a *Harvard Business Review* article, 85% of purpose-led companies showed positive growth of at least 10% annually.<sup>18</sup>

- **Emergence: Embrace Change:** Level 5 leaders, according to Collins, display a clear sense of humility. They recognize that they do not know all the answers up front, and they even acknowledge that luck plays an important part in success. Teal leaders embrace uncertainty, too. They essentially assume from the start that they may be wrong but that the answers will emerge

as the organization has a chance to interact with the environment and learn more.

Beyond Budgeting is explicit about this idea: planning needs to be a continuous activity, not an annual event. Without viewing planning as a constant activity, learning does not happen. Without learning, companies do not adapt to a changing business environment. Without changing, organizations incur enormous risk. As W. Edwards Deming stated: “It is not necessary to change. Survival is not mandatory.”

These three themes—light-touch management, empowering people, and embracing uncertainty through experimentation—are common in both Collins’s and Laloux’s work. Both of these authors found that for organizations to sustain success over the long run, these core principles need to be embedded into the leadership DNA of the organization. Granted, they use somewhat different language to describe the same concepts, but somehow these management thinkers landed on the same ideas, despite the fact that they were studying quite different companies with more than 15 years separating their research. The clock speed of business has increased for some time now, and it is becoming ever more apparent that current leadership thinking isn’t keeping up.

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## Summary

This chapter focused on the impact of leadership as a catalyst for unlocking agility. We examined research showing what type of leadership behaviors are necessary for change to occur, and we highlighted Beyond Budgeting as a leadership model to be used in a VUCA world. We were careful to point out that there is not a “paint by numbers” approach to agile leadership. That is, the context you’re operating in will determine what type of behaviors will be appropriate in your particular case.

To have a lasting impact, leadership behaviors must be aligned with the organization’s existing culture. Therefore, without first understanding the impact of a given organizational culture, any change effort is going to be hard to sustain.

The next chapter is dedicated to this important topic. We'll explore what Culture is and why it is so important to tailor your change transformation strategy so it does not dramatically clash with the current culture, and cover strategies for changing the culture over time. Of the five dimensions of enterprise agility, no dimension is perhaps more misunderstood than Culture, yet it has more impact on the relative success of the transformation effort than anything else. We'll cover this topic next.

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## Q&A

### **1. Why is adopting the mind-set of an agile leader so important? Why do I have to change my management approach at all?**

If adopting a more agile way of working is important to the organization, it is also necessary to adopt a leadership mind-set coherent with this way of operating. Attempting to transform the organization to a more nimble and fast-moving player without the leadership support to do so is unlikely to succeed. Why? Because if the business strategy (set by executive leadership) does not align with the operational strategy (executed at line level), the disconnect is immediate.

For instance, if the business strategy defined by leadership emphasizes short-term, quarterly gains, employees are unlikely to allocate time for innovative and creative endeavors. After all, their incentives, performance measures, and strategic direction are focused on short-term gains—working on uncertain innovation efforts creates a lot of risk from the perspective of the employee and is therefore unlikely to be done. If, on the other hand, leadership exhibits the kind of mind-set coherent with a more agile way of working—and reflects this when articulating strategy, targets, and goals—employees will feel safe and supported in their efforts to move operationally in step with the new way of working.

Collins's research was pretty compelling: among those companies that were singled out as “great” companies over the 15 years of his study, the one factor that stood out more than anything else was Level 5 leadership. Although this is not a causal relationship, the leadership

style was strongly correlated with positive gains in performance. That alone is a good reason to consider evolving your leadership philosophy toward more “humility and fierce resolve,” to use Collins’s words.

**2. Do the principles of Beyond Budgeting—moving decision-making closer to the line level, and planning more frequently instead of annually—work for all types and sizes of business enterprises?**

Agile is not something you become; it’s something you become *more of*. In other words, Beyond Budgeting’s guidance that moving decisions closer to the people doing the work and performing planning more often are activities found on a continuum, not absolutes. Does this guidance work for all types of businesses? Yes, all businesses—regardless of size—will benefit from doing these types of activities. Is it true that what this looks like for Google might be different from what it looks like for General Motors? Yes, most likely—and that is as expected. Snowden’s Cynefin framework is a good guide in this case: the more your business tends to find itself in the Complex domain—as opposed to the Obvious domain—the more you’ll benefit from embracing a more agile way of working. In other words, all organizations benefit from thinking represented by adaptive management models such as Beyond Budgeting, but some benefit more depending on their unique business context.

**3. How do I measure success if budget-related goals aren’t my key metric?**

The fundamental purpose of “budget goals” is to gauge whether or not you’re performing as planned, according to when the budget is “set.” Because there is **no point in time when you know less about the product, customer, or other external factors than when the budget is initially set**, it makes sense to look at other measures of progress that take into account the changing marketplace, customer needs, competitive moves, and so on. Beyond Budgeting recommends looking at relative measures such as peer benchmarks as a more relevant gauge of progress.

**4. How can I be an effective CEO or boss in this type of environment?**

Although there is no recipe for agile leadership, we know that there are a few heuristics leaders can embrace that help organizations succeed in a VUCA world. Creating an environment where employees feel safe to make mistakes (and learn from them), instilling a clear purpose beyond monetary goals, and being open to changing business conditions are some of the fundamental characteristics of an agile business environment. Being an effective leader in this type of environment means expressing the values of safety, empowerment, and organizational learning authentically—through the language used in the strategy, through the rewards and recognitions used to incent employees, and through interactions with customers. But few things are more effective than when words turn to action. As we learned in the chapter, being vulnerable as a leader in the face of uncertainty can be an effective way to demonstrate support for psychological safety, for instance.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- Sheridan, Richard. *Joy Inc. How We Built a Workplace People Love.* Portfolio. 2013.

Sheridan's book is a deeply personal one about how his search for joy in work led to his creation of a small software firm with his good friend and business partner. Throughout the book, he details anecdotes, ways of working, and rules of thumb he has found helpful to create customer value and instill an agile way of working. Simple and unpretentious, the "Menlo Way" is founded on deep lessons from Lean and agile principles: fail (learn) fast, empower your people to do the right thing, and continuously strive to improve the way you work. I highly recommend this book!

- Bogsnes, Bjarte. *Beyond Budgeting: Unlocking the Performance Potential.* 2nd Edition. Wiley. 2016.

Bogsnes is an early adopter and one of the pioneers of the Beyond Budgeting movement. In this book, he takes us on a journey of his

experience in transforming more adaptive management thinking at Borealis and later Statoil, both large Norwegian energy companies. The description of his journey is not only informative and educational, but entertaining as Bogsnes writes in an informal and conversational prose. As you look for practical examples of leadership transformations, this should be one of your sources.

- Podcast: “How I Built This with Guy Raz.” Patagonia: Yvon Chouinard.  
<http://one.npr.org/i/504852483:505017995>

This NPR podcast is an excellent series for people interested in leadership in general and entrepreneurship in particular. In this episode, the founder of Patagonia, Yvon Chouinard, describes how the company was established, Chouinard’s philosophy on leadership, and some of the key elements of Patagonia’s success. Chouinard sounds like a guy you’d love to have a cup of coffee with to talk about everything and anything. His podcast shows that sometimes nice guys finish first. It’s definitely worth 30 minutes of your time!

### Note

Additional resources related to this chapter are available at  
[www.unlockingagility.com](http://www.unlockingagility.com).

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## Footnotes

- [1] [http://www.jimcollins.com/article\\_topics/articles/good-to-great.html](http://www.jimcollins.com/article_topics/articles/good-to-great.html)
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- [5] <http://news.gallup.com/reports/199961/7.aspx>

- [6] <https://www.strategy-business.com/article/00344?gko=10921>
- [7] [https://faculty.fuqua.duke.edu/~charvey/Research/Published\\_Papers/P89\\_The\\_economic\\_implications.pdf](https://faculty.fuqua.duke.edu/~charvey/Research/Published_Papers/P89_The_economic_implications.pdf)
- [8] <http://www.businessinsider.com/larry-fink-letter-to-ceos-2015-4?r=US&IR=T&IR=T>
- [9] “How I Built This with Guy Raz.” Patagonia: Yvon Chouinard. <http://one.npr.org/i/504852483:505017995>
- [10] <https://www.competence-site.de/the-origins-of-beyond-budgeting-and-of-the-beyond-budgeting-round-table-bbrt-interview-with-jeremy-hope/>
- [11] Hope, Jeremy and Fraser, Robin. “Beyond Budgeting: How Managers Can Break Free from the Annual Performance Trap.” *Harvard Business Review Press*. 2003.
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# Chapter 7

## Culture

The room was filling up fast. Everyone was clamoring for a seat in the business unit's quarterly review and outlook meeting. Oftentimes, people would call in for these sessions, especially if the meeting was being held in a building they'd have to walk to, but this upcoming talk was seen by almost everyone as a face-to-face event. And for good reason: this was the first time the newly hired director was going to lay out the strategic priorities for the next quarter and rally the troops toward high performance.

No one knew for certain what the new leader would say, but whatever he chose as a theme, it needed to address the elephant in the room: the quality of our products was deteriorating. Changes needed to be made. The current pace of development had been torrid over the past 6–9 months, and the teams were simply exhausted. People were taking shortcuts, development standards were lax, and the products were suffering as a result. The past quarter had resulted in more defects in production than had been reported in more than two years; tier 4 escalations (the “call-your-boss-at-night” kind of defects) were higher than they had ever been in the company’s 25-year history.

The meeting was about to start. A collective hush fell upon the room. The new leader walked up to the stage and wasted no time getting to the point. “Let me be clear: quality is job number one,” he said. “We’re not going to release anything to production—anything—unless it meets our high standards of quality. If that means we’ll miss dates, so be it. If that means certain customers will be unhappy with us in the short term, I am fine with that. We’re not going to release software just to meet a date—quality is too important.”

The room quickly filled with buzz. The new leader was clearly passionate about quality, and it was refreshing to hear someone at the top take such a clear stand. The message was clear: if the product wasn’t good enough, it wouldn’t

ship—simple as that. The engineers loved it; finally, they could get the job done right rather than hack a fix together just to meet some arbitrary date. Some were even wondering whether they'd finally have a chance to deal with that technical debt-ridden legacy code.

As the meeting came to an end, employees made their way back to their desks, replaying the talk among each other. A few optimistic phrases moved through the crowd: “sounds like a change is coming” and “finally someone who will break the cycle.” But as the teams were about to get back to work, one manager could be overheard in the hallway, declaring dismissively, “Well, that all sounded real good, but believe me, nothing’s going to change. I’ve seen this time and time again—when it comes down to the wire, the customer date always wins. In my 14 years working at this place, I’ve never heard of a release being held up because of quality concerns, unless it was so broken we simply couldn’t run it.”

He noticed people slowed down and were paying attention to him. This seemed to fuel him—he was fired up now. “We always find a way to patch things up so we meet our dates—but we pay the price later. It’s just what we’ve always done, and I don’t see that changing now, despite the fancy rhetoric. Sorry, guys. I’m just telling you how it is.”

Some six months later, time proved the manager’s cynicism to be well founded. Quality was still a problem, despite a few halfhearted attempts to introduce new development practices. When teams raised concerns regarding current commitments, they were told to “find a way to make it work” rather than fixing the root cause of the problem because the delay might risk missing the date.

Despite the new leader’s best intentions, things were back exactly where they were before he took on his new role. Quality was important as a marketing slogan and featured prominently on vision statements—not in reality. The new leader left the company less than 14 months after he started, unable to make any noticeable impact to the company’s problem with quality.

This anecdote is unfortunately an accurate reflection of one of the companies I worked with a few years back.

How can it be that the organization was unable to change, despite senior leadership support? What can be done to combat situations like these in the future?

In essence, the reason this company could not change can be summed up in one word: Culture. The last of the five dimensions of agility, Culture plays a

larger role than any other single dimension, and it affects the other four to a disproportionate degree. This chapter examines what Culture is, looks at ways it affects the organization’s ability to change, and explores concrete strategies to alter an existing corporate culture.

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## The Profound Impact of Culture

What is culture, exactly? Edgar Schein, a former professor at MIT and one of the most prominent thinkers of organizational culture, defines it as a “*pattern of basic assumptions—invented, discovered, or developed by a given group as it learns to cope with its problems of external adaption and internal integration—that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems.*”<sup>1</sup>

Culture affects the way employees think, act, and feel within the context of the organization. This means that, regardless of the tools or techniques deployed, the leadership being displayed, or even the organizational design we leverage, if these actions are not aligned with the culture of the company, any change management efforts are likely to be short lived and superficial. It is as if organizational “antibodies” attack the antigens of change—the culture sets unwritten rules regarding how “work is done” at the company, and anything that deviates from them will rarely survive.

For example, in the anecdote I shared in the chapter opening, the organization had been run with a distinct sales-driven focus for many years. The CEO of the company came from the sales department, and the previous CEO before him also had a background in sales. The idea of “meeting quota” by the end of the quarter permeated the organization to the point where missing a date was simply not acceptable. Quality was viewed as an important competitive differentiator, but never to the point where it would stand in the way of meeting a sales commitment. Therefore, despite new leadership, proposed new ways of working, and enhanced processes and tools, the idea of potentially missing a customer date for the sake of improving quality was not a valid option.

To be fair, this approach had served the company well for many years. Revenue had grown steadily, and innovation happened through strategic acquisitions. The problem was that by always focusing on the short-term gains, the company had built an extensive amount of technical debt over time, making it near impossible to make changes and adapt in a predictable manner. As

explained in Chapter 2, “Enterprise Agility,” the lack of sustainable pace had made the organization brittle and fragile. So when leadership recognized that a change had to be made and introduced a new director to help shift the focus to quality, they probably did so with the best of intentions. Unfortunately, the director had essentially lost before he begun; the prevailing culture had actively resisted building quality software for too long.

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## How We Experience Culture

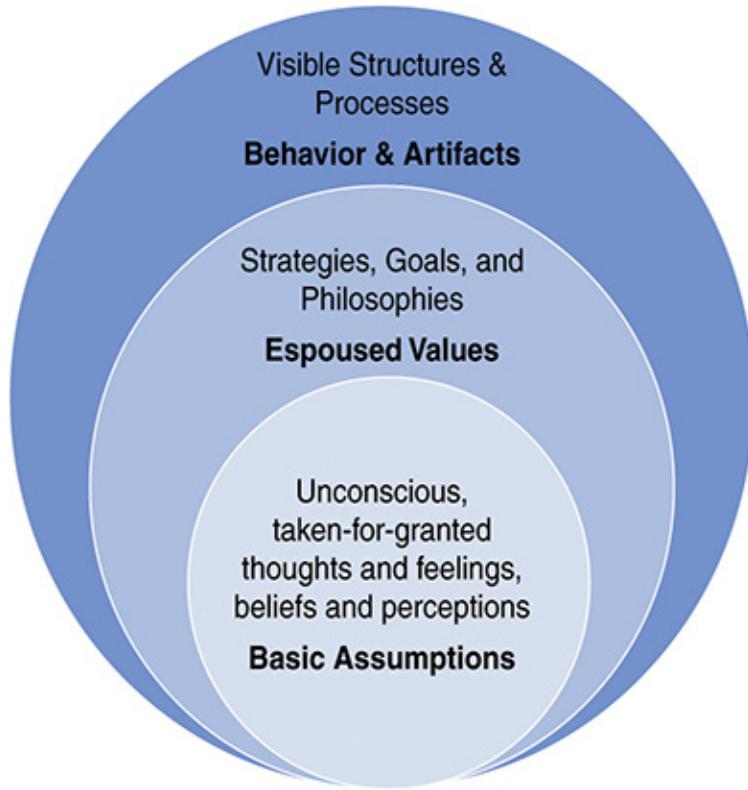
Schein points out that a culture is formed over time through a shared set of experiences and that the manifestation of this culture can be represented in many forms. For instance, companies will have a carefully designed workspace, dress code, and brand that represents the values that they want their culture to reflect. These are highly visible representations that are accessible to everyone.

Apple, for example, spent some \$5 billion to construct its Apple Park campus (aka “the spaceship”). The multinational technology giant’s trademark attention to detail was reflected in the construction of the building as much as it is reflected in its products. At times, this attention to detail caused tension and delays during construction; months were spent on discussing the signs in the building, for instance. Apple wanted a minimalist look—in line with its design philosophy—while the fire department—for obvious reasons—wanted something more visible, in case of an emergency. “I’ve never spent so much time on signage,” an exasperated fire chief who worked on the Apple Park project told Reuters.<sup>2</sup>

Schein calls these visible manifestations the “artifacts”—the first level of culture—an outward view that, although observable, may be hard to interpret. Schein’s second level of culture—espoused values—takes a more inward perspective and includes the philosophy, mind-set and values expressed by the organization.<sup>3</sup> Although not visible, this second level can be inferred from how the company’s employees explain what they do and how they do their work. Google, for instance, famously adapted the slogan “Don’t Be Evil” as its corporate code of conduct.<sup>4</sup> According to founders Sergey Brin and Larry Page, the motto prohibits conflict of interest and encourages objectivity. The motto is more than an attractive slogan and has a real impact on how people work: company lore has it that an engineer cited the motto in an argument to cancel a proposed advertising product—and executives obliged.<sup>5,6</sup>

The third level of culture—basic assumptions and values—is deeply embedded in the organization and constitutes the very essence of the company culture. These assumptions guide employee behavior and how work gets done, often without people being aware of it themselves. Many attribute Uber’s deep-seated macho culture and co-founder Travis Kalanick’s “take no prisoners” approach as the root cause for the company’s hostile work environment, which was exposed following engineer Susan Fowler’s account of life at the company.<sup>7</sup> Despite outward appearances of a positive work environment and a code of conduct disallowing inappropriate behavior, the underlying culture was one of rampant sexual harassment, leadership intimidation, and winning at all costs—ethics be damned. Several reports of questionable business practices followed in the wake of the initial revelations, ultimately leading to Kalanick’s ouster and a comprehensive culture overhaul.<sup>8,9</sup>

Figure 7.1 illustrates Schein’s perspective of the three interacting levels of culture. The essence of the culture is reflected in the basic assumptions of the organization—often unconscious to the employees. The goals and strategies of the organization are expressed through the values espoused by the employees; the artifacts and behaviors are the visible processes we can easily observe and identify.<sup>10</sup>



**Figure 7.1** Schein's Model Focuses on Three Levels of Culture That Move from the Visible to the Tacit; The Most Fundamental Level Is Not Consciously Known to Employees

As we saw in the Uber example, the assumptions, thoughts, and feelings of the employees are not so easily accessible; however, these are what ultimately define the essence of the organizational culture and drive decisions and problem solving on a day-to-day basis. Focusing on the manifestations of the culture—the fancy office or the inspiring slogan—can therefore be misleading and fail to capture what the culture is really about.

That's why an organization's culture can be challenging to identify correctly unless you've been part of it for some time.

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## The Schneider Culture Model

How do you get a sense of the organizational culture in your company? William Schneider, a consultant and scholar, found a way to classify cultures into distinct categories. He argued that, to make meaningful organizational change, it is critical to first be able to identify the culture within which one is currently operating. In his book *The Reengineering Alternative*, he built on the work of several other authors to create a corporate culture model to help classify what type of culture is dominant in an organization.<sup>11</sup>

Schneider identified four main categories, which he placed in a chart for easy reference: Collaboration, Control, Competence, and Cultivation (see Figure 7.2).

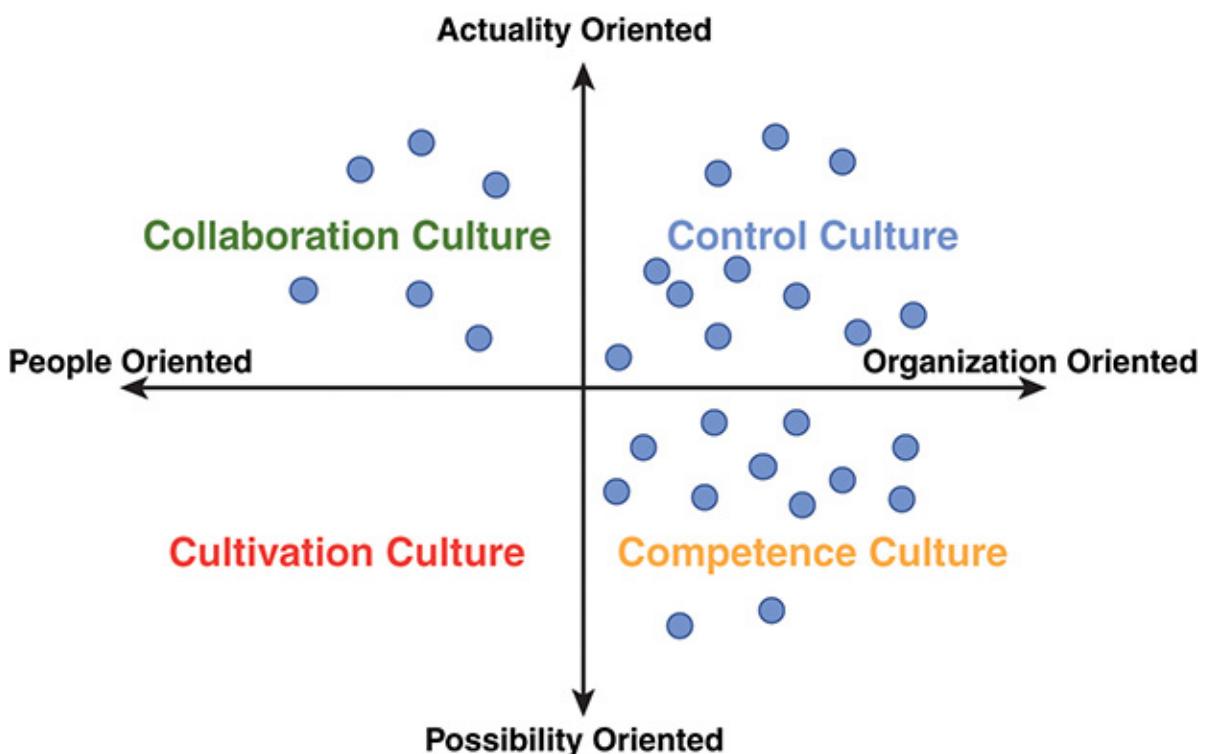


Figure 7.2 The Schneider Cultural Model—with “dot” voting from workshop participants

In the sections that follow, we take a closer look at each of the four categories and enumerate some of the characteristics that are unique to each. Understanding where our own organizations lie within this framework can help

us make decisions that align more closely to the incumbent culture when transforming our organization—thereby reducing resistance to change.

## **Collaboration—“We Succeed by Working Together”**

In the upper-left quadrant of his organizational chart (see [Figure 7.2](#)), Schneider placed what he labeled a “Collaboration” culture. This particular type of culture is characterized by consensus-driven, team-based ways of working. In this type of culture, individuals are rarely exalted for their individual skills, knowledge, and ability because the success of the group as a whole is more important than the advancement of the individual. It’s OK to make a mistake individually as long as the individual learns from it and the mistake ultimately ends up benefiting the group. Of this cultural style, Schneider notes: “Success is to put a collection of people together, to build these people into a team, to engender their positive affective relationship with one another and to charge them with fully utilizing one another as resources.”<sup>12</sup>

Organizations that typically fall into this culture category include family-owned businesses and healthcare, entertainment, and personal service enterprises. The archetypal leader in a Collaboration culture is the Coach—someone who’s able to get the best out of everyone as a group and build upon everyone’s unique characteristics.

[Table 7.1](#) depicts the characteristics of the “Collaboration” culture.

**Table 7.1 Collaboration Culture**

<b>Leadership focus</b>	Team builder, Coach.
<b>Management style</b>	Collegial, Democratic.
<b>Organizational form</b>	Group cluster.
<b>Role of employee</b>	Collaborate. Be a team player. Utilize others as a resource.
<b>Task focus</b>	Generalist.
<b>Nature of power/authority</b>	Relationship.
<b>Decision making</b>	Experimental. Lots of brainstorming. Trusting.
<b>Approach to managing change</b>	Team calls for change. Open to change.
<b>Key norms</b>	Synergy, Egalitarianism.
<b>Climate</b>	Esprit de corps/camaraderie.

An example of a company with a Collaboration culture is REI, the outdoor retailer. The company is structured as a cooperative where profits are shared with its member-owners, promoting an egalitarian environment. The REI culture is influenced by the belief that “an outdoor life is a life well lived”; people who work at the company tend to share a common passion for the outdoors and collaborate to promote stewardship of the environment. This passion apparently extends to happy employees: REI has been voted as one of *FORTUNE* magazine’s “100 Best Companies to Work For” every year since 1998.<sup>13</sup>

## **Control—“We Succeed by Getting and Keeping Control”**

In the upper-right quadrant, Schneider placed “Control” culture. In this type of environment, objectivity and empiricism are of utmost importance. Emotions and other “soft” elements are discouraged; instead, data and objective information fuel decision making.

Organizations in this category tend to be well-established companies in mature industries such as utilities, commodity markets, defense, and

manufacturing. Predictability and the ability to reduce uncertainty as much as possible is the name of the game here. A leader in this type of culture would be characterized by having an impressive title—and that leader's decisions would rarely be questioned, but rather carried out in a cascading manner across the organizational chart.

[Table 7.2](#) depicts the characteristics of the “Control” culture.

**Table 7.2** *Control Culture*

<b>Leadership focus</b>	Authoritarian/directive Maintain power
<b>Management style</b>	Conservative Policy and procedure oriented
<b>Role of employee</b>	Compliance Adhere to role requirements
<b>Task focus</b>	Individuals stay within a function
<b>Nature of power/authority</b>	Role/position titular
<b>Decision making</b>	Very thorough Push for certainty
<b>Approach to managing change</b>	Mandate it Resistance to change
<b>Key norms</b>	Order Certainty
<b>Climate</b>	Serious Restrained

A classic example of an organization traditionally known for exhibiting a control culture is the military. The rank of an officer and the officer's place in the hierarchy is of great importance in terms of influencing decision making. Orders are not “suggestions”—they are mandates to be followed according to a

detailed protocol. This type of culture has obvious benefits when decisions need to be made quickly and without hesitation. Failing to respond quickly and without a clear plan of action can have grave consequences in situations involving natural disasters and rescue operations, for instance.

## **Competence—“We Succeed by Being the Best”**

In the bottom-right quadrant of the chart is “Competence” culture. This type of culture is characterized by a relentless thirst for being the best and for high achievement. These environments are usually fiercely competitive. Superior performance is highly valued, whether this refers to a particular product, process, technology, or service.

In this environment, having an impressive title or being a great team coach will probably not be particularly valued in a leader. Rather, this culture is a pure meritocracy. Being the smartest person in the room matters, and the one with the brightest ideas and most groundbreaking innovations wins. Organizations characterized by this type of culture include think tanks, research organizations, prestigious universities, and many consulting firms.

[Table 7.3](#) depicts the characteristics of the “Competence” culture.

**Table 7.3** *Competence Culture*

<b>Leadership focus</b>	Standard setter Taskmaster
<b>Management style</b>	Task-driven Rational/analytical
<b>Role of employee</b>	Be an expert Function independently
<b>Task focus</b>	Specialist
<b>Nature of power/authority</b>	Expertise
<b>Decision making</b>	Very analytical Formal logic
<b>Approach to managing change</b>	Achievement goals drive change Open to change
<b>Key norms</b>	Professionalism Meritocracy
<b>Climate</b>	Competitive Intense pace

An example of a company that exhibits a competence culture is Google. The company takes pride in hiring the smartest people, and their interview process is infamous for being especially challenging. “Estimate the number of tennis balls that can fit into a plane” is an example of the type of question a Google interviewer may ask to throw off a potential candidate and gauge whether they can think clearly under pressure. Heck—even getting an interview can be famously puzzling. In 2011, Google anonymously posted a billboard that simply read: “{first 10-digit prime found in consecutive digits of e}.com.” For those of you who are into prime numbers, the answer is 7427466391.com, which then led to another equation to solve—and eventually to an interview at Google headquarters.<sup>14</sup> Despite this culture focused on competence, it’s interesting to note that Google has gradually shifted its approach to a broader set of skills over

the years, recognizing that performance is a result of more than simply raw intelligence.<sup>15</sup>

## Cultivation—“We Succeed by Growing People Who Fulfill Our Vision”

In the bottom-left corner is the “Cultivation” type of culture. Cultivation cultures are characterized by a deep faith and commitment to a firmly held cause. This approach is in stark contrast to the Competence or Control cultures, which rely on empiricism and validated data to make decisions. Environments in the cultivation culture believe success can be accomplished only by working diligently toward a common goal and growing the organization’s people in the process.

Leaders in this culture category are often viewed as charismatic and inspiring. They are able to make people believe in a common cause and work together to achieve it. Organizations in this category are often artistic outfits (orchestras, art galleries, and so on), certain media companies (especially visual design), and religious institutions.

Table 7.4 depicts the characteristics of the “Cultivation” culture.

**Table 7.4 Cultivation Culture**

<b>Leadership focus</b>	Catalyst Empower/enable people
<b>Management style</b>	People-driven Nurturing
<b>Role of employee</b>	Express yourself Be willing to change, develop, grow
<b>Task focus</b>	Functionalist Generalist Specialist
<b>Nature of power/authority</b>	Charisma
<b>Decision making</b>	Participative Organic/evolutionary
<b>Approach to managing change</b>	Embrace/assume change Change is automatic
<b>Key norms</b>	Humanistic Growth and development Freedom to make mistakes
<b>Climate</b>	Lively Caring

An example of a company with a cultivation culture is Apple, under Steve Jobs. Jobs, by sheer force of his personality and charisma, created what some called a “reality distortion field” in which he made employees believe they could achieve the impossible. Bud Tribble, an engineer working on the original Macintosh computer, explained Jobs’s influence to a new Apple employee: “He can convince anyone of practically anything. It wears off when he’s not around, but it makes it hard to have realistic schedules.”<sup>16</sup> It is unlikely the world would

have seen Apple’s line of game-changing products, ranging from the Macintosh, to the iPad, and to the iPhone, without the almost cult-like following Jobs was able to generate during his years at Apple.

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## Culture’s Impact to Sustaining Change

Schein and Schneider’s models are important because they provide us with tools we can use to understand the culture we’re working within. Without appreciating both the visible, tangible expressions of culture and the underlying values and assumptions underneath, one can risk advocating change that’s unlikely to stick or be otherwise ineffective.

When working with organizations that I have not worked with before, I will initially spend some time observing how they work to get a sense of what lies underneath the visible symbols of their culture. How are the company’s values manifesting themselves through the way people work? What seems inconsistent with their stated values? What are the deeper assumptions that guide behaviors when nobody’s looking?

To make sense of my initial observations, I typically run a “culture workshop” with employees where they help identify how they view their organization from their own perspective. Using the Schneider Culture model and simple “dot” voting, employees create a “map” of where they see their own organization.

For instance, one of the clients I was working with wanted me to help review a transformation strategy. After going through the approach with leadership, I thought that the proposed strategy appeared sound, but fairly aggressive. The client was looking to do a wholesale change over the course of less than two quarters across four business units. I asked to meet with employees in one of the business units that were part of the proposed transformation, and we ran a workshop where I introduced the Schneider Culture model and ultimately had them “vote” on where they viewed their organization on the map. (Refer to [Figure 7.2](#), which is an illustration of the result of the dot-voting from workshop participants.)

Although certainly not a scientific finding, having this employee-generated map—combined with my own observations and conversations—was useful to get a sense of the culture within which this company was operating. Clearly, Control was prevalent in this organization; this employee feedback was

confirmed by my own observations. Yet a Control culture would present a challenge. An agile way of working by definition invites more collaboration, faster feedback loops, and focus on technical excellence. To minimize the potential chasm between an “agile culture” and the current culture, we decided to spend additional time on leadership training and instead focus efforts on one business unit at a time so that we could learn and adapt the transformation strategy over time. Today, this client is transitioning to a global, agile player in the international insurance industry.

Understanding cultural context and being able to recognize when a company is thoroughly in the Control quadrant can be useful when recognizing the degree to which agile is incompatible with an existing organizational culture.

In *The Reengineering Alternative*, Schneider argues that all cultures are inherently equal—that a given culture is appropriate for its own unique context, and each type of culture has its own drawbacks and benefits.<sup>17</sup> For instance, the traditional, hierarchical management thinking we described in [Chapter 2](#) closely aligns with the “control” culture classification. In these environments, removing variance and increasing predictability are paramount: having a clear management directive and detailed procedures that everyone follows helps reinforce this type of culture.

For companies that are operating in industries where there is only incremental change year over year, Control might sound like a reasonable approach. If things are working well, why risk disrupting existing operations by trying to influence a culture change? My issue with this line of thinking is that there is no such thing as a “stable” industry anymore. Sure, there are some industries that are more prone to change than others, but as we discussed in [Chapter 1](#), no industry is immune to the forces of change. The VUCA world applies to all industries.

When Schneider developed his culture model in the 1990s, there might indeed have been certain industries that were not noticeably affected by continuous change—and hence it may have made sense to keep reinforcing a given cultural context. This is no longer the case, so it is in the best interest of an organization to embrace a more agile way of working regardless of the business context.

Make no mistake: becoming agile does not mean that all companies should emulate the Googles and Spotifys of the world. But it does mean that **all companies—regardless of industry—would benefit from making a conscious effort to create an environment that is more adaptable**, that optimizes for

flow across the enterprise, and that thrives in situations of rapid change. Cultures that discourage experimentation, thrive on titles over merit, and operate in a highly charged political environment will struggle to embrace a more agile way of working. In other words, cultures are *not* all created equal anymore. Some are inherently more suited for a dynamic business environment than others. Schein says it best: “Organizational Cultures that can embrace uncertainty more easily will be inherently more adaptive.”<sup>18</sup>

## Changing Organizational Culture

How can we deliberately alter an organization’s culture? Changing a company’s culture is not a trivial effort, and it does not happen through a mandate from management. But management can play an important role in creating an environment where cultural change can develop. In the sections that follow, I outline some of the ways leadership can affect cultural change and detail a few concrete strategies to create a more agile organizational culture.

Change is never easy or quick. Culture is the result of learned experiences over time. As an organization solves various challenges, the way decisions are made is what cumulatively defines what the culture of the organization becomes. In the example introducing this chapter, the company’s culture was dominated by a sales-driven mind-set: meeting the customer date was paramount, and quality was secondary. Despite the passionate call (and sincere attempt) for change from the new executive, the organization ultimately reverted to its standard notion of “how things are done around here” after a few months.

So how can leaders make a meaningful change in an organization’s culture and prevent history from repeating itself? How can new experiences and associated learnings be introduced so that the organization gradually changes how it views a given challenge? Schein outlines two main ways to affect cultural change: either through an *urgent crisis* or through a *managed evolution*. In my experience transforming both smaller and larger organizations, both are valid strategies—but circumstances matter.

## ***Culture Change Through Urgent Crisis***

An urgent crisis has a way of focusing transformation efforts. If an organization can identify a clear threat to its business strategy and ways of operating, getting widespread support and ultimately changing the underlying assumptions of the existing culture can happen across the entire enterprise. In a situation where the essence of the current way of operating is threatened, employees perceive that the way they work is no longer sufficient, that “an organization may fail repeatedly in attempting to solve problems in the way that historically has led to success,” as Schein states.<sup>19</sup>

This urgent crisis experience helps create motivation for unlearning existing assumptions previously held as unassailable—and serves as an environment ripe for change. John Kotter, author of *Leading Change* and a professor at Harvard Business School, describes the crisis as creating a “sense of urgency”—a combination of thoughts, feelings, and behaviors that aligns everyone in the organization around a need for change.<sup>20</sup>

A good example of “unlearning” through crisis is the case of Larry Kaplan, former CEO of NAVTEQ, a company that pioneered digital maps and location services. In 2009, Kaplan learned that Google was about to release free turn-by-turn directions in its competing product. He realized that his company’s fundamental business model was under attack. NAVTEQ could no longer continue to release map updates once a year. A much faster and adaptive way of operating was necessary to successfully compete with this new entrant. As a direct result of this crisis, Kaplan asked me to define a comprehensive agile transformation strategy, funded under a corporate objective called “speed-to-market.”

Through a deliberate communication effort, Kaplan and his leaders provided open and honest communication regarding the external threat and why NAVTEQ could no longer operate the way employees were used to. Through a series of employee town halls, regular group calls, and perspectives from all areas of the business, the entire organization became acutely aware of the potential crisis facing the business—and how we needed to adapt to survive and thrive.

The result? NAVTEQ’s employees sincerely questioned their existing assumptions and were open to finding new ways to compete. When the Agile Working Group (AWG) started to identify impediments to agility and helped empower people to improve the way they worked, employees enthusiastically drove changes at every level of the organization. Over the course of the following 36 months, the company changed virtually every part of their existing

operations to support a more agile way of working. Subsequently, they were able to maintain and expand their market-leading position in the car navigation market. Today, some four out of five car navigation systems are powered by HERE, formerly known as NAVTEQ.<sup>21</sup>

Having an urgent external threat like the one NAVTEQ was facing—and being able to clearly articulate this to employees—is a powerful way to motivate an environment open to change. An imminent crisis can ultimately lead to new ways of solving challenges and shaping a new culture.

Note that the organization did not change because leadership mandated the change. The organization changed because leadership *created an environment in which change could happen*. Employees were empowered to challenge existing constraints and disrupt well-established processes. For example, prior to the crisis, NAVTEQ traditionally developed products using a waterfall, gate-driven project management model. On their own, employees adapted and later completely replaced this project management model with an agile process that was more appropriate in an environment where speed and adaptability were at a premium. The result was a 300% increase in speed-to-market and a 2.5x decrease in the time required to resolve urgent defects.

But what if a clearly articulated crisis is not so easily discernible? What if the organization is doing quite well (at least for now), and this success is threatening a sense of complacency and a tendency to do more of the same? Schein argues that a more deliberate and planned culture change is also possible—but with a few important caveats.

### ***Culture Change Through Managed Evolution***

How can leadership bring about cultural change without an urgent crisis? Can a leader find some other way to rally the organization around a common cause? Schein argues yes—but it is critical to first recognize the roots from which the current culture grew. Over time, as an organization solves business problems, members of that organization learn that there are certain methods and decision-making criteria that tend to lead to successful outcomes. These learned behaviors gradually become deeply held assumptions that form the bedrock of an organizational culture. Over time, “members will find behavior based on any other premise inconceivable,” Schein notes.<sup>22</sup>

When a change of this culture is required, however, one way to accomplish a shift is to introduce a new set of challenges that a group is charged with solving.

This problem should reflect a situation the company needs to tackle in the future. For example, if an organization wants to find a way to radically improve customer focus, leadership can create a separate work group, charge it with addressing this challenge, and empower it to solve the problem in its own way—not using existing corporate processes. If the unit fails in addressing the problem at first, the company can give it space to try again and again until it succeeds. When the group does find ways to improve customer focus, charge it with ways to make this new way of working even more effective—and repeat this again.

Over time, the more this group uses its own ways of working, the more strongly these new behaviors will be reinforced within the group. Soon, the members make new assumptions, and a new organizational culture emerges. How can leaders spread this new culture beyond the group and into the organization at large? Rather than dispersing these team members into the current organization, gradually move team members from the current unit into the new organizational culture. Over time, the culture of the old organization will fade away, and the culture of the new organization will become the dominant one—a culture more appropriate for meeting the challenge ahead.

This approach takes time but can be very effective. Case in point: GE. The 125-year old company understood that it needed to change the way it worked and find out whether the products they were developing would appeal to customers. In short, they needed to instill an experimentation mind-set. Eric Ries, whom we introduced in [Chapter 2](#), established a group consisting of a handful of thought leaders from various parts of the company. Together, these people were responsible for embedding agile and Lean Startup thinking across the organization.

The group's first attempt at working in a more agile manner involved creating a refrigerator with French doors, opening from the middle. The team was given ambitious goals and not a lot of time to achieve them—complete a working product in 3 months, and get it ready for production in 12. The team worked in a cross-functional manner, where salespeople, manufacturing engineers, and frequent customer input were integrated from the start. Although the initial attempts were not met with much enthusiasm from customers—the stainless steel was too dark and the lighting was poor—after several fast revisions, customers started to respond. When GE released version 10 in 2015, customers responded enthusiastically. The revisions had helped the team hit the mark.<sup>23</sup>

Traditionally, GE revised products every 5 years or so. By working with these fast feedback loops, GE could introduce revisions every year, responding

to rapidly changing customer tastes. The CEO at the time, Jeff Immelt, liked what he saw and tasked Ries with a challenge: how can we spread the use of experimentation and learning techniques across the company in everyday work? Eric and his team trained more people and helped coach employees on this new way of working. The program was named Fastworks, and over the course of three years it has been adopted across every part of GE's business. Although Jeff Immelt left his position as CEO in October 2017 and was replaced by John Flannery, the Fastworks program endures.<sup>24</sup>

As we'll see in the next section, another approach to gradually changing the culture is to examine the current incentive structures of the organization and recognize what type of behaviors (and hence, culture) they drive.

### ***Culture Change Through Business Agility Metrics***

Schein shows us that culture is the result of learned experiences over time. Knowing this, how can we get experiences and behaviors that support a more agile way of working? One way to help encourage behaviors that shape a more adaptive culture is to ensure that our organizational reward systems align with the behaviors we're looking to drive. Unfortunately, in my experience, organizations too often establish performance systems that do the opposite. One way to do this is to make sure we're tracking and measuring the right behaviors and outcomes.

At one of the companies where I worked in the early 2010s, there was a push from management to improve efficiency at one of its major call centers. Support calls can be expensive because they require a number of relatively well-trained call-center operators to field questions. Because these call centers involve no revenue-generating activity, they represent a pure cost center. The faster calls can be resolved, the better.

When companies look at ways to improve operations at customer service call centers like this, the average length of time for a support call is a fairly common target. Looking over the numbers, leadership decided that the call operators for a particular group spent too much time, on average, resolving customer phone complaints. Leadership set an ambitious goal for the group: the average time spent on support calls was to be reduced by 20% over the next three months. If employees reached this goal, they could benefit from promotions and significant future bonuses.

On the surface, time on the phone might appear like a meaningful metric by which to run a call center; if customer complaints were resolved more

effectively, the organization would reduce the average wait time for customers, resolve more complaints faster, and ultimately create happier customers.

Unfortunately, the experiment did not turn out this way. The group did meet leadership's goal of faster call resolutions, but surveys indicated customers were less satisfied than ever. Also, surprisingly, the organization was spending more money on support and the overall customer "time-to-resolution" went up dramatically.

How can this be? To understand how reducing average support call time ended up causing so many problems, it may help to understand this company's customer support process from a high level.

Customer support calls fall into a number of categories. The most benign requests (such as a simple password reset) take only 30–45 seconds to resolve. The more complex requests (such as troubleshooting issues related to hardware incompatibility) can take several minutes. When tracking the time required to handle a call, operators create a support ticket as the call is received. This ticket starts the clock. When the issue is resolved, the operator places the ticket in a "done" status, stopping the clock.

However, if an issue is found to require more sophisticated assistance beyond the ability of the Tier 1 call operator, the operator can escalate the issue to the next level of support—in this case, Tier 2 support, made up of a smaller group of operators with more experience and training. When this happens, the original (Tier 1) call operator places the ticket in "escalation" status, effectively stopping the clock on the ticket because the issue has been resolved as far as the call center operator is concerned.

Knowing this, you can probably guess what happened when leadership's goal of reducing the average time of support calls was announced: as Tier 1 call operators received calls that they estimated would require more time to resolve, they quickly bumped them to the next level of support—whether or not they would have been able to handle the issue themselves. Before the incentive, Tier 1 call support would work with the customer to resolve the problem, even though this might have taken a few minutes. Now, with the new incentive in place, they did not even bother because this risked increasing their average call time. Instead, they promptly escalated the issue to Tier 2 at a much more frequent rate.

Passing the call up to Tier 2 was an effective way for call center operators to ensure their average call time decreased, but the move had some nasty side effects. Customers became frustrated as they were transferred to another

department. And because the company had fewer Tier 2 Support personnel, the average wait times for customers in this group increased dramatically, resulting in expensive additional overtime for those few Tier 2 support personnel to handle the additional call volume. The result was a whole host of unhappy customers. At the end of the three months, the call center group accomplished its goal of reducing its average call times (by more than 35%, in fact), but the end result was hardly what leadership was targeting. Needless to say, the incentive program was quickly disbanded once the customer satisfaction surveys came in.

There's an interesting phenomenon when it comes to metrics: be careful what you evaluate because *you're likely to get exactly what you measure*. Metrics can be a powerful tool as part of an effort to effect cultural change over time, but they can also be incredibly harmful if not implemented responsibly.<sup>25</sup> Before detailing some of the metrics that I have found to help support agility, it's therefore helpful to clarify a few heuristics regarding how to best leverage metrics in agile organizations.

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## Characteristics of Business Agility Metrics

When you're looking to enact meaningful, measurable change, the most important rule to remember is to avoid meaningless metrics. "Vanity metrics" is a term used to describe metrics that may look good but do not drive any concrete action or provide insight. A common vanity metric among companies is unique visitors to their website. Although it may look good to have a lot of people access your site, having site visitors does not mean anything unless these users actually take an action.

Similarly, when looking at leveraging metrics that aim to reward behaviors that will drive a more adaptive culture, it's important to ensure these metrics go beyond optics and get concrete. I'm a big fan of Eric Ries's "three As" to help describe characteristics of meaningful metrics: Actionable, Accessible, and Auditabile.<sup>26</sup>

## Actionable

Simply put, metrics should be able to drive a decision—they should help us decide to go one way or the other. Too often, metrics are there to make us look good or to tell a story, but they do not help us make a meaningful decision. Actionable metrics cut through the noise and let us prioritize so we can make hard choices.

For instance, tracking how many people have been trained in Test-Driven Development (TDD) may be interesting, but this data is ultimately a vanity metric because the number does not help us drive a decision. Does the fact that we have trained 200 out of 500 engineers actually tell us anything, other than the fact that we've done a lot of training?

However, doing simple split-testing, where separate groups of customers see different versions of a given feature of a product so we can track the difference in quality or customer experience, for instance, is actionable. Seeing how each version performs helps us determine which is more compelling—and allows us to make an informed decision regarding where to go next.

## Accessible

Meaningful metrics need to be as easily accessible as possible so that everyone in the organization can leverage them. There is little point in gathering data if the results are hidden away on a rarely shared report somewhere. Instead, make it a priority to ensure the metrics are highly visible to *everyone* in the organization—so all employees can learn from the information and understand how it affects their part of the world.

For example: As part of its push to increase lagging customer satisfaction numbers in some of their products, McAfee, the enterprise security company, made a commitment to share Net Promoter Scores (NPS) across the enterprise. NPS is a common industry standard used to track the degree to which customers want to recommend your product; it's a proxy for customer satisfaction. Leadership wanted everyone to see how the product they were working on was doing with customers. Being transparent about how each product was performing helped motivate employees to think deeper about how they could improve the overall customer experience. During this push to share metrics company-wide, one of the McAfee product groups I was coaching increased its NPS scores by more than 5 points in a quarter (to a total score of 16), an

impressive improvement for such a short amount of time. (Any NPS improvement over 10% in a quarter is generally considered very good.)<sup>27</sup>

## Auditable

Metrics are often controversial and may sometimes refute dearly held organizational beliefs, so it is critical that they are credible and auditable if questioned. The best way to ensure this is to collect the data automatically, with little or no manual intervention. Automation decreases the chance of errors and increases validity. It also helps alleviate the inconvenience related to collecting the data in the first place.

Fortunately, most objective sources of data are relatively easy to collect through real-time data feeds, but some information, such as customer satisfaction, will be more subjective. To avoid confusion, it can be helpful to provide skeptics with the opportunity to review the source data. This way, they can view unfiltered comments from users in addition to the scores.

## Additional Heuristics

Making your metrics *Actionable*, *Accessible*, and *Auditable* is a great start when instilling behaviors that drive a more agile culture, but there are three additional guidelines I keep in mind when implementing business agility metrics to drive meaningful change:

- **Limit the number of metrics you collect:** I recognize this advice may sound counterintuitive—the more metrics we have, the more insight, right? I disagree. Having too many metrics quickly overwhelms well-intentioned people with information overload. Too much information can actually instill apathy, effectively leading to no meaningful changes. At one of my client sites, the quality department collected some 35 metrics for each line of business in a report that was to be reviewed weekly. Not only did it take a long time to collect and go through each of these metrics, but managers would typically isolate positive numbers that would “fit their narrative” and help their units look good.

My recommendation is to limit your key business agility metrics to no more than 4–6—then ensure these measures are highly visible throughout the entire organization. The organization will not

necessarily use these same 4–6 metrics for all time; personally, I like rotating and evolving the metrics, to ensure we keep them relevant and to avoid getting stale.

- **Look at trends, not absolute numbers:** Business agility is about continuously improving the way we work. As such, when we gather metrics, the absolute numbers are interesting, but it is the *trending of the data* that helps us understand whether our changes are actually having an effect. Faster feedback loops help us gather more data over time and can help us gain a more nuanced picture quicker.

Remember also that some metrics are lagging indicators in that they may not change until other underlying factors have changed.

Consider Net Promoter Score (NPS) as an indicator measuring customer engagement, for example. If quality is one of the key reasons NPS is not where we want it to be, changing engineering practices to build quality in at the source, testing early, and increasing test automation coverage are likely to eventually lead to an increase. These changes will take time, however. Even though your NPS scores may continue to decrease in the short term while more robust engineering practices are established, the changes you're putting in place now will show positive outcomes in the long term.

- **Keep a holistic focus; measure competing items:** Just as looking at individual metrics over time to explore trends is important, it is also critical to look at a varied set of metrics as a whole to limit the risk of ignoring the bigger organizational picture. As we outlined in [Chapter 2](#), unlocking business agility is a balancing act between creating and innovating products that are compelling to the customer, doing it in a quality and sustainable manner, and optimizing for flow so that we minimize the friction between our initial idea and customer delivery.

Focusing on a single metric can be harmful to this balance because it is likely to lead to behavior that emphasizes one aspect over the other. For example, if we focus on improving quality to the point where we achieve a perfectly flawless software product, our production time increases.

Also, delivering a “perfect” product that customers do not find compelling is not a great strategy for a for-profit business venture;

you're better off balancing both the need for delivering an acceptable level of quality *and* delivering fast enough so you can satisfy current demand.

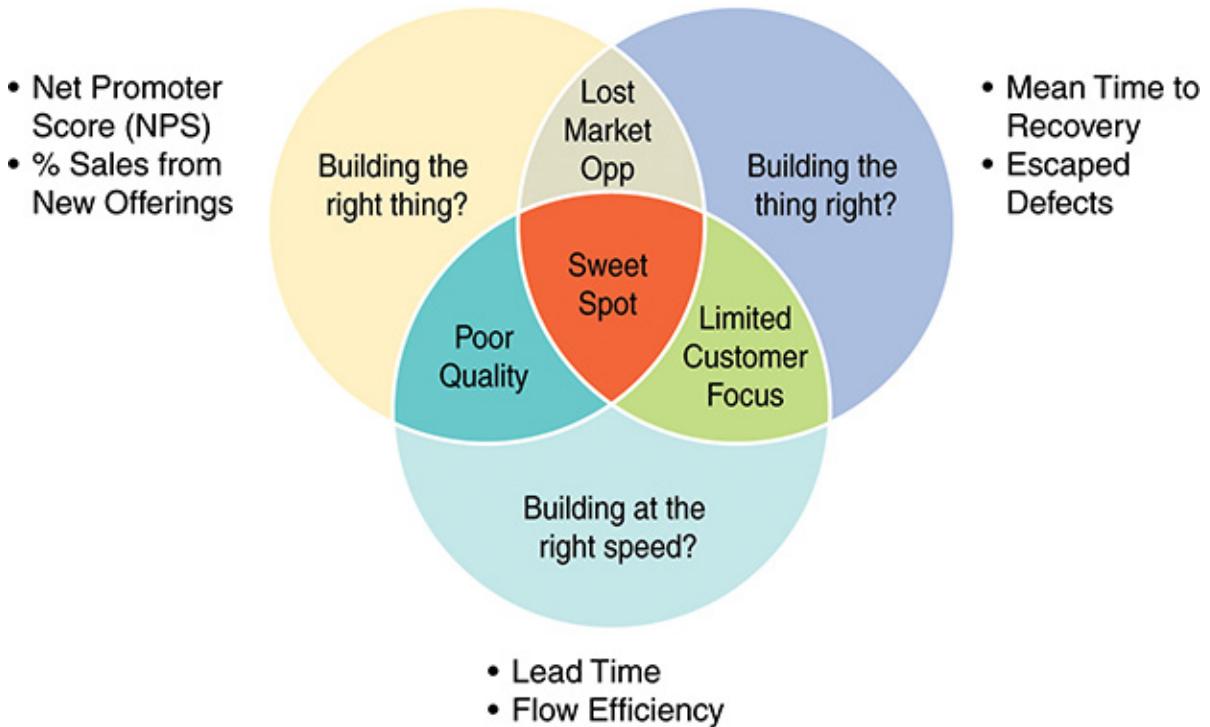
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## Examples of Meaningful Business Agility Metrics

In [Chapter 2](#), we explained how one of the fundamental challenges of unlocking agility involves balancing the three levers:

- Building the right thing
- Building the thing right
- Building at the right speed

Implementing a set of business agility metrics is one way to gradually incent behaviors and, over time, influence an adaptive organizational culture. Although there is no perfect set of metrics, [Figure 7.3](#) and the sections that follow detail a handful of examples that I've found to be effective in my experience as an organizational coach. Leveraging these metrics—while taking into account the heuristics discussed in the previous section—helps form a balanced, holistic view of agility across the enterprise.



**Figure 7.3** Holistic, Competing Metrics Viewed as Trends over Time Help Provide a Meaningful View of Continuous Improvement and Drive a More Agile Way of Working

## Metrics That Help Support Building the Right Thing

Building products and services customers love is essential to a successful enterprise. As obvious as this may sound, sustaining a healthy customer obsession is not trivial. Not only does this involve continually validating that you're still delivering on your promise—customer needs change faster than ever—it also means investing in the future: experimenting and identifying new customers, products, and markets. Although there are myriad measures that help us drive this type of organizational behavior, I've found two to be particularly helpful: NPS and sales generated through new offerings.

### ***Net Promoter Score (NPS)***

NPS is a customer loyalty score introduced in the early 2000s by business strategist and best-selling author Fred Reichheld in the *Harvard Review* article “One Number You Need to Grow.” NPS is an effective way to gauge customer engagement and loyalty; more than two-thirds of the Fortune 1000 leverages this metric today.<sup>28, 29</sup>

### *How Is It Calculated?*

NPS involves asking customers a simple question: “How likely is it that you would recommend our company/product/service to a friend or colleague?” The customers respond on a scale from 0 to 10, where 0 means “Strongly Disagree” and 10 is “Strongly Agree.” An additional, free-form question—“Why do you feel this way?”—is typically included, providing additional insight beyond the score.

People responding either with 10 or 9 are labeled Promoters, responses 8 and 7 are considered Passives, and all other responses (6–0) are considered Detractors. NPS is then calculated by subtracting the percentage of customers who are Detractors from the percentage of customers who are Promoters; Passives count as part of the total number of responses and hence contribute to reducing the total NPS score. In addition, a complementary comment field is typically included, providing open-ended input directly from customers regarding why they responded the way they did.

### *Why Is It Meaningful?*

NPS matters because it targets the veracity of customer engagement. More than simply “customer satisfaction,” NPS is a proxy for how strongly customers feel about the product or service—to the point where they are willing to put their own reputation on the line and recommend it to a friend or colleague.

Recommending a product or service is a pretty high bar to clear, but the impact to the bottom line is significant: Promoters are extremely loyal customers and can contribute to growing market share through positive word of mouth and social media outreach. The opposite is also true: social media savvy Detractors can quickly spread their dislike for a product and have an outsized negative impact on sales.

### *What Organizational Behaviors Does It Affect?*

NPS is easy to grasp and can help visualize quickly the extent to which the organization is able to delight its customers. When used as part of a balanced set of organizational metrics, NPS trends help the organization keep focus on the customer. By examining the complementary comments from customers, teams can get a vivid perspective on how customers feel about elements such as design, performance, and ease of use.

## ***Percentage of Sales from New Offerings***

Tracking the percentage of total sales generated from products or services introduced over the past three years helps measure innovation. Tracking this sales number measures the degree to which the organization is innovating and the degree to which it is keeping its product portfolio fresh. (More on why this matters in the sections that follow.)

### *How Is It Calculated?*

Calculating the percentage of sales generated from new offerings is fairly straightforward: simply identify what part of the total amount of sales comes from product or service offerings that did not exist more than three years ago. Having 30% of sales originating from fresh product offerings is considered excellent—industry leaders achieve close to 40%, while laggards hover in the mid-20%, according to a study conducted by the American Productivity and Quality Center (APQC).<sup>30</sup>

### *Why Is It Meaningful?*

Business agility entails both exploration and exploitation: exploring new business opportunities and being able to adapt to changing market conditions, as well as delivering a high-quality product in a predictable, quality manner. Examining how much of an organization’s sales is coming from a fresh set of product introductions clarifies the degree to which we are innovating and finding new business opportunities. If the product portfolio is getting stale, we need to refocus our product development strategy on more innovation. The APQC study was clear: among those companies that kept an innovative product portfolio, the profit contribution from new products was above 40%, whereas the other companies attributed less than 30% to new product offerings.

### *What Organizational Behaviors Does It Affect?*

By sending a signal that simply riding the wave of an existing successful product is not enough, the organization helps instill a continuous improvement mind-set at the leadership levels. Percentage of Sales from new offerings is one of the key metrics used by 3M, widely considered one of the world’s most innovative organizations. Sometimes referred to as the “Vitality Index,” 3M uses this metric to drive innovation across the company and to incent people to be thinking, always, of what’s next.<sup>31</sup>

## Metrics That Help Support Building the Thing Right

Rewarding behaviors that drive customer focus is important, but if these gains come at the expense of quality, any success will be short lived. As we saw in the example at the beginning of this chapter, focusing on customer needs and commitments is unsustainable without balancing quality. Building the thing right therefore involves not only building a quality product—meeting and exceeding the expectations of the customer—it also involves operating in a way that enables adaptability and does not slow you down in the long run. Two metrics I've found helpful in this context are Mean Time to Recovery (MTTR) and Escaped Defects.

### ***Mean Time To Recovery (MTTR)***

MTTR is the average time it takes to restore a system to working order after an outage. It provides a clear view of system performance, demonstrates how quickly the organization can respond to an unexpected event, serves as a proxy for the amount of technical debt accumulated over time, and can provide a perspective on team pride.

#### *How Is It Calculated?*

MTTR is calculated by measuring the average time it takes to restore a system to its working order, including the time required for notifications, failure analysis, and migration to production.

#### *Why Is It Meaningful?*

Examining MTTR trends over time for a given organization provides insight into a number of organizational aspects. If MTTR trends lower, this typically is an indication that the team is taking technical debt seriously so that the system can quickly be brought up when it fails. A decreasing MTTR over time also demonstrates a high level of technical maturity and pride within the team: if something fails, the root cause is found and fixed so it never happens again—and the system becomes more resilient today than it was yesterday.<sup>32</sup>

Note that the goal is not to have zero failures—this is impossible to accomplish and would be undesirable in a complex system environment. Rather, agile teams expect systems to fail, people to detect failures quickly, and teams to establish recovery procedures that result in fast recovery times.

Some companies even “create” failures to test their agility from time to time. Netflix, for example, famously created a tool called Chaos Monkey that simulates failures of some of its virtual machines. The purpose is to test how quickly engineers can deal with the failure and restore service back to normal.<sup>33</sup> The company figured it is smarter to learn valuable lessons in a “safe-to-fail” environment than to experience expensive failures during the *Stranger Things* premiere.

### *What Organizational Behaviors Does It Affect?*

More than anything else, MTTR drives a “fail fast” mentality, which is fundamental to business agility. In a VUCA world, failure is inevitable—agile businesses exploit this volatility by learning from the event, improving the system, and recovering quickly, without causing significant harm to the organization. MTTR is, therefore, an excellent metric to indicate the degree to which the technical architecture is designed in an emergent manner. It also indicates how teams learn and improve from failure and is a great proxy for technical agility.

### ***Escaped Defects***

The number of defects that “escaped” the team and made their way to a production release are typically called “escaped defects.” Defects found during development are not counted because this is merely work in progress. Once software is released to production, however, we aim to release without significant flaws. Escaped defects are a useful proxy for software quality.<sup>34</sup>

### *How Is It Calculated?*

Escaped defects are calculated as the sum of defects found in a given release over a defined period of time.

### *Why Is It Meaningful?*

As noted earlier, although the number of bugs itself is significant, understanding the trend is more important. A declining rate of escaped defects over time indicates a team that is continuously improving the way it works—and improving the resulting level of quality.

This metric can also save money and protect the brand. Defects found in production are expensive to fix and typically create additional work (explaining the problem to customers, taking support calls, releasing a fix, and so on). They can potentially harm a brand, leading to financial losses much larger than the direct effect of the defect itself.

### *What Organizational Behaviors Does It Affect?*

The escaped defects total indicates that there are flaws in our system—that our practices and processes ultimately created and failed to detect a bug, allowing it to be exposed to the customer in production. By digging into and finding the root cause of why the defect was created and how it escaped, we can learn from our mistakes and improve the system. By viewing escaped defects as opportunities for learning, escaped defects contribute to continuously improving the way we work. They help create a more resilient system.

## **Metrics That Help Support Building at the Right Speed (Flow)**

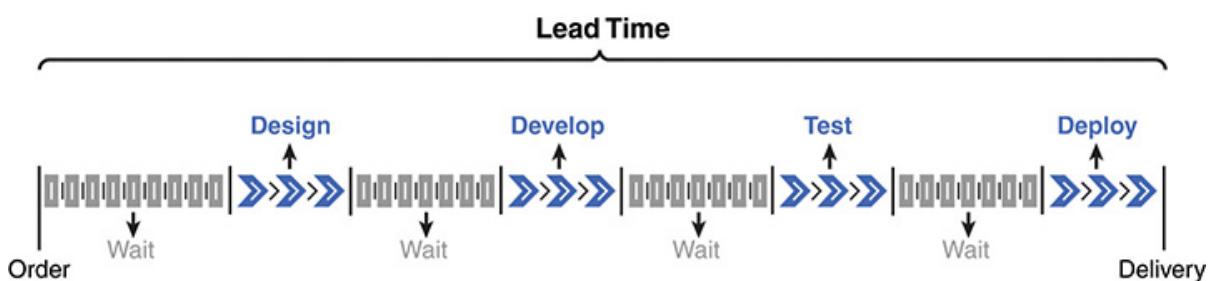
Unlocking agility at the enterprise level involves increasing the speed of organizational learning. Agile organizations appreciate that competitive advantage is fleeting and that the rate of change is accelerating; learning faster and adapting to changing market conditions are critical elements of agility. The rate at which we learn is highly dependent on our ability to optimize for flow of value across the organization. As described in more detail in [Chapter 2](#), this involves a number of factors. Two metrics that help crystallize our focus are *lead time* and *flow efficiency*.

### ***Lead Time***

Lead time is the time elapsed from the point a demand has been requested by the customer to the point the demand has been fulfilled. It is an extremely simple, yet powerful measure of how quickly an organization is able to deliver end-to-end value across its various business units and departments.<sup>35</sup>

## *How Is It Calculated?*

Lead time starts when a demand has been recorded and ends when the demand has been fulfilled. Wait times and other delays that happen while the organization is processing the request are therefore included. [Figure 7.4](#) illustrates what's included when we measure lead time. Notice that the wait times are invariably much longer than the time we spend actually working on the request.



**Figure 7.4** Measuring Lead Time Involves Keeping Track of Wait Times, Not Just the Time Spent Working on the Product

## *Why Is It Meaningful?*

Lead time is an important metric in agile enterprises because it defines how quickly an organization is able to produce customer value. This metric avoids the pitfalls of so-called “local optimization” because for lead time to improve, all parts of the organization involved in creating value need to work together. That is, if the product management team is somehow super effective and gets work ready at a rate of speed much faster than the development team, the bottleneck caused by the development team becomes everyone’s problem; lead time accumulates while the development team is busy with other work.

In my experience working with hundreds of teams, the wait times and bottlenecks (that is, the time when work is not being “touched”) typically amount to 75–85% of the total time required to deliver a product. In other words, one of the first things to focus on when improving organizational learning and speed to market is removing the impediments preventing teams from doing their work from an end-to-end perspective.

### *What Organizational Behaviors Does It Affect?*

As outlined in the preceding example, when the product management team realizes that it is not in their best interest to take on new work (because that will only make the development's queue of work larger and increase delays), the team will look for ways to decrease the root causes of *why* the development team is working at a slower rate than the other parts of the organization. This type of collaboration is at the heart of the continuous improvement mind-set and is essential to unlocking agility in the enterprise. (Recall that we discussed specific actions organizations can take to optimize for flow of value in [Chapter 2](#).)

### **Flow Efficiency**

Whereas lead time clarifies how quickly the organization can create value, flow efficiency defines the degree to which your value stream is filled with waste. Improving flow efficiency in your processes—and thus decreasing non-value added work—dramatically lowers the organization's lead time and ability to create value faster.

### *How Is It Calculated?*

Flow efficiency is defined as the time that a product has value added to it compared to the total time it takes to create that product.<sup>36</sup> It identifies the *percentage of time actually spent working on the product* over the total time it takes to create value from the moment a request has been made (Lead time), as illustrated in [Figure 7.5](#).

$$\frac{\text{Work}}{\text{Work} + \text{Wait}} \times 100\%$$

**Figure 7.5** Calculating Flow Efficiency Percentage Is Simply a Matter of Dividing the Time Spent Working on the Product (Effort or Touch-Time) with the Total Time It Takes from the Request Being Made to the Product Being in Production (Lead Time)

## *Why Is It Meaningful?*

Flow efficiency is important because it quantifies the waste inherent in our systems. It's similar to the lead time metric but more specific. Lead time measures the accumulation of time it takes for teams to work together to create value. Flow efficiency clarifies the degree to which this time is spent actually working on creating value—versus simply waiting or doing non-value added work. A “normal” flow efficiency in my experience is somewhere around 20–25%, leaving ample room for improvement. (High-performing organizations often see flow efficiencies in the 65–80% range. 100% flow efficiency is not a desired goal because this leaves no room for slack.)

## *What Organizational Behaviors Does It Affect?*

Like lead time, flow efficiency helps increase collaboration and communication between teams from different organizational units. It is simply not possible to improve flow efficiency without breaking out of the functional silos and working with teams both upstream and downstream from your own unit.

Flow efficiency is, therefore, an extremely effective metric to use as a way to incent collaboration between groups, especially when used as part of manager bonus criteria. Previously, managers may have been able to optimize for their particular group and reap the benefits, regardless of how these changes affected the entire production process, resulting in overall suboptimization. This counterproductive behavior is no longer rewarded when flow efficiency is used as part of a bonus component.

Perhaps more than anything else, flow efficiency makes it clear to the organization where their organizational improvement investments are best spent. If your organization operates at 15% flow efficiency, it follows that if you hope to make meaningful improvements, you need to focus on improving this percentage by decreasing waste in your processes. To do this, rather than trying to speed up your existing processes, it would be much more effective to focus your efforts on reducing the 85% that consists of wait time and non-value added waste.

Flow efficiency helps steer behaviors toward more flow optimization, rather than resource optimization. Thus, it guides a company away from plan-driven, sequential management thinking toward a more agile way of working.

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## **Performance System Changes → Behavior Changes → Culture Changes**

The importance of metrics in the context of culture cannot be overstated. The measures we use to assess the way we work affect how we work and ultimately shape the culture. The culture can be described using models such as those defined by Schein and Schneider, but the underlying assumptions are not quickly identified; they become part of employees' understanding of "how we do work around here."

My experience is that transforming to a more agile way of working affects the existing culture in fundamental ways. How and to what extent depends on what the current state of the culture of the given company is. The most pragmatic way to start affecting meaningful culture change begins with changing the system itself—namely, how we assess our work. By leveraging the metrics previously discussed (and considering others relevant for your company's context—this is not meant to be an exhaustive list)—we'll be able to affect behaviors over time, which ultimately changes the norms and underlying assumptions at the base of organizational culture.

This is not a quick fix; cultural change is not done in weeks and months. But although it takes time, it also creates sustainability, ensures the organization has a chance to shape a culture in its own image, and reinforces the larger transformation strategy. This is therefore not about adapting a "Spotify model" or implementing a framework; this is about evolving your own way of unlocking agility that is appropriate for your unique organizational context. Culture is at the heart of that effort.

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## **Summary**

This chapter started with an overview of the definition and impact of organizational culture as defined by Edgar Schein. We explored William Schneider's culture model to understand how we can more easily identify the specific characteristics of the culture within which we operate. We then took a closer look at how one can influence and change organizational culture to support a more agile way of operating.

We explored three ways of changing the culture:

- Through responding to a crisis
- By creating a separate unit working on a new set of problems
- Through a managed evolution

We also discussed meaningful metrics and how they can help affect cultural change. Culture consists of deeply held employee assumptions formed by learned behavior over time. By implementing meaningful business agility metrics that measure the right things and encourage agile behaviors, we can change the way we evaluate our own processes and thinking.

This chapter concluded by outlining a handful of metrics that not only support a holistic view of agility, but help drive behaviors that will influence a more agile organizational culture over time.

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## Q&A

### 1. How do I figure out what my company's culture is?

Although there are a number of culture models available, I find Schein and Schneider's work particularly useful because they are immediately accessible and quite practical. Perhaps more than anything else, they are useful because they help us be better observers of our own organizational culture. And that's my best advice when trying to get a better sense of the culture in your company: train yourself to be a keen observer. Schein can help us in this regard. What are some of the artifacts the company displays to convey its culture? What are its stated values and beliefs? What are behaviors and ways of working you see that contradict these values? Who are the people being promoted and otherwise rewarded in your organization—and why? What are some of the unstated, implicit rules of the game long-time employees have learned to take on?

As noted earlier, it can be hard for employees to truly understand their own culture; it's so engrained in how they think that it can be difficult to recognize it. Being more conscious regarding your surroundings and looking for those not-so-obvious clues can help in getting a better sense of the culture. Also, I've found visiting other companies and understanding their culture can be extremely helpful in this regard. When you get to appreciate another company's culture, it's easier to see the elements that

make your own company unique. My recommendation is to join a local Agile Meetup group (they are available virtually all around the world), connect with some of the passionate agile members there, and ask if you can come to visit their company over lunch sometime. Agile folks tend to be an accommodating tribe; we thrive by helping and supporting each other, so you'll soon be able to get at least a cursory perspective of a number of different organizational cultures by visiting various companies in your area.

## **2. If my company has a Control culture, is it hopeless for us to attempt a transformation to a more collaborative, agile working environment?**

Your company's culture is the result of many years of learned behaviors reinforced over time. As Schneider states, the different types of cultures defined in his model are not inherently "good" or "bad," but it is true that certain types of cultures will find it harder to move to a more agile way of working than others.

To answer your question, the first thing I would ask is this: why does your organization want to transform to a more agile way of working? What's the problem your company is trying to solve? If your organization has a Control culture, this has not happened by accident—it has been the result of many years of operating. Ask yourself: is this necessarily a problem? Is it working for your organization? If your organization has a problem it needs to solve—perhaps quality is suffering, employees are leaving at an accelerating clip, or products are not getting out the door fast enough—then the organization can start having a conversation regarding how working in a more agile manner might help. But if your organization is doing fine—whether that is perception or reality—attempting to fundamentally change the way it works is going to be an uphill battle.

Let's assume for a moment that your company has a distinct Control culture and leadership recognizes that it needs to change the way it currently works to be more adaptive in today's business world. In that case, you have a great opportunity to change to a more agile way of working, although you may go about it in a way that allows for a less radical transformation. Start small, for instance, by looking at one business unit or department at a time. Within this organization, and referring to the five dimensions of agility, what are some of the elements we can start changing that help encourage a more agile way of working? Perhaps we can upgrade their tools and technologies to reduce manual input and delays. We can look at creating closer collaboration between teams by having them located closer to each

other. Let's train our middle managers in the underlying principles of Lean and have them understand the trade-off between resource optimization and flow optimization. Leadership might benefit from executive coaching and visiting peers in similar industries that have gone through agile transformations. What are the lessons to be learned and what experiences can they share? And look at gradually changing some of the metrics we use to assess how we work to help reinforce more agile behaviors—always learning along the way.

What is important to note about this approach is that it starts with your current context in mind. We don't go ahead simply implementing a framework or hiring a consulting firm to train everyone to "go agile." Rather, we appreciate the context we're in, recognizing the organizational challenges we're here to address, and then applying agile and flow-based thinking to help unlock agility in your organization. It may not happen overnight, but this purpose-based approach to transformation happens to be sustainable, delivers results, and respects the incumbent culture in the process. And I have never seen it fail. Does it always deliver stellar results? Perhaps not—it is not a panacea. Some have significant organizational issues to resolve and these will not go away simply by changing the way we work. But by starting with the context in mind and focusing on the problem to solve, I have never experienced companies that want to go back to where they were before. That, in my mind, is progress worth celebrating. Agile is not something you become—it's something you become "more of"; it's about being more agile today than you were yesterday.

### **3. Where can I read more about companies who've succeeded in changing their cultures to support an agile way of working?**

Organizational change is a nontrivial effort, and it's easy to get discouraged when thinking of the risks and challenges ahead. Fortunately, there are a number of inspirational stories available, which can be great to keep in mind when things get hectic. In the "Further Resources" section, I've included a reference to two of my favorite stories: the story of Semco and Zappos.

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## **Further Resources**

- Schein, Edgar. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass Publishers. 1988.

This is by many viewed as *the* classic text on organizational culture. Although it is a pretty technical book and is not necessarily an easy read, it's worth the effort because it covers in detail the role leaders play in applying the principles of culture to achieve organizational goals. Recommended!

- Letter from the Founders—An Owner’s Manual for Google’s Shareholders ([https://www.sec.gov/Archives/edgar/data/1288776/000119312504142742/ds1a.htm#toc59330\\_1](https://www.sec.gov/Archives/edgar/data/1288776/000119312504142742/ds1a.htm#toc59330_1))

This original letter by Google founders Larry Page and Sergey Brin is an enjoyable read and a great example of how the leaders of the company are laying out their intentions for the company. Making it clear they intend to focus on the long game, the founders eschewed short-term profits already in 2004: “...we may do things that we believe have a positive impact on the world, even if the near term financial returns are not obvious.” Interesting reading!

- Focused Objective Blog—Troy Magennis (<http://focusedobjective.com/>)

Troy Magennis is an authority in the field of agile metrics, and his site is a treasure. Filled with insightful blog posts, free tools, and brilliant perspectives on metrics, Magennis’s site is required reading for anyone interested in finding meaningful ways to measure progress without unintentionally causing harm.

- Semler, Ricardo: *Maverick: The Success Story Behind the World’s Most Unusual Workplace*. Grand Central Publishing. 1995.

Semler’s book is an entertaining and inspiring story of a company (Semco) that chooses to operate in an unconventional way. The way Semco goes about it and how it adapts as a team is both humorous and entertaining. Granted, some of Semler’s ideas are quite radical (salaries are transparent to everyone!), but the story of Semco’s change efforts is well worth the read.

- Hsieh, Tony. *Delivering Happiness: A Path to Profits, Passion and Purpose*. Grand Central Publishing. 2010.

Hsieh is the CEO of Zappos and famous for building a culture that is relentlessly focused on the customer. When Jeff Bezos acquired the

company in 2009, he made sure to leave the culture and management team intact for that very reason. This book is uplifting and covers Hsieh's personal story from an early entrepreneur of his own startup to CEO of a fast-growing company that ended up redefining how people buy shoes. It's a great ride!

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## PART III

# Unlocking Agility

**Part III** focuses on how we can take the learnings from the previous chapters and translate them into a concrete transformation strategy. We'll cover the Agile Working Group (AWG), creating an agile operating model, and providing examples of an organizational impediments backlog as part of a strategic transformation roadmap.

[Chapter 8 Building Your Organization's Agile Working Group](#)

[Chapter 9 An Operating Model for Business Agility](#)

[Chapter 10 Unlocking Agility: A Strategic Roadmap](#)

## **Chapter 8**

# **Building Your Organization's Agile Working Group**

Building your organization's Agile Working Group (AWG)—the engine of your Agile enterprise transformation efforts—is a nontrivial task. Given the critical importance of this team and the impact it has on the organization, it is essential that the people in this group embody the characteristics, knowledge, and organizational credibility required to be effective. This chapter outlines what the main goal of the AWG is and what you need to consider as you build the group. I plan to show you how you can leverage external consultants in the process—to help you articulate the recruiting message for internal change agents and to consider where the group belongs on the organizational chart. At the end of this chapter, you'll have the background you need to establish your AWG and begin executing your transformation strategy.

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## **The AWG: Mission and Purpose**

An AWG is a dedicated team of change agents whose purpose is to remove impediments to agility across the enterprise. Let's have a look at why establishing such a group can be powerful when transforming to a more agile way of working enterprise level.

One of the key reasons establishing an AWG is so effective is that it creates visible, concrete evidence of executive leadership support. One of the most frequently cited reasons for failure to transform is that the necessary support at the executive levels is superficial and without real teeth. Sure, there will be an initial surge of excitement as the organization works on implementing a new way

of operating, but as the implications of the changes necessary permeate across the organization, the gravitational pull of the “status quo” will quickly destroy progress unless there is that visceral reminder that “we’re all in.”

Beyond being a powerful symbol of executive-level commitment, the AWG creates an agile center of excellence within the organization. Although there are likely to be pockets of agile enthusiasts across the organization, the AWG helps concentrate and focus agile and Lean thinking in an easily accessible manner. Employing external consultants and firms makes sense for areas of expertise where the organization is generally lacking, but the core set of agile expertise is centered in the AWG so that the organization is not held hostage to opportunistic consultants or tied to external resources that do not truly understand the organization’s business and culture. As such, the AWG becomes an engine of agile enterprise transformation. It combines sophisticated agile thinking with a deep understanding of the business domain—a powerful combination.

Although the specific activities performed by the AWG differ greatly depending on the unique context of the respective organization, here are a few examples of the type of work it performs:

- **Works with Facilities to redesign workspace:**

As we learned in [Chapter 4, “Organizational Design,”](#) teams that collaborate in a way that increases the energy and engagement of their communication patterns perform better. Oftentimes, the workspaces in which teams operate are not optimized for communication, but for square footage. Although teams may be able to make minor changes on their own to improve their collaboration space, they will quickly hit impediments when changes involve office redesigns, movement of team members, or other activities that require budget approvals or management sign-offs.

The AWG, armed with executive leadership support, can effectively work with facilities to ensure teams get the workspace they need.

We saw an example of this earlier in the book. These redesign efforts often require significant investments that are beyond the scope of what a team can take on without further support.

- **Collaborates with IT on tool governance and support:**

Agility is about seamless collaboration between teams and individuals. Tools are necessary to ensure communication flows effectively, especially in larger organizations. Infrastructure,

backlog management, testing suites—these are all examples of tools and technologies that need to interface effectively between teams and departments. Also, a balance must be maintained between the need for teams to choose the tools they require to be effective and IT's need for consistency across the enterprise for proper license control, support, and vendor management.

The AWG plays an important role as a liaison between IT's need for governance with the teams' need for access to effective tools. With the goal of ensuring the organization speaks “the same language, yet embraces accents,” the AWG helps find the balance between control and collaboration. For example, at McAfee, we had more than 50 testing frameworks in operation at one point in time—each framework having a champion in one part of the organization. The AWG, working both with IT and leads from the teams, was able to agree to consolidate the test frameworks to fewer than 10, ensuring easier management and support while teams felt their voices were heard in supporting the most useful frameworks.

- **Works with HR to establish career paths for agile roles and titles:**

Working in a more agile manner requires new roles and responsibilities typically not defined in traditional organizations. The role of the ScrumMaster, for instance, is often an informal role in which people take on responsibilities as a team's ScrumMaster *in addition* to a formal role as an engineer, analyst, or other more traditional title available in the organization. Doubling up on responsibilities and titles may be a convenient way to make the ScrumMaster role “fit” into a traditional HR role scheme, but it is not a sustainable strategy to build coaching competency within the organization.

People who take on the critical role of ScrumMaster deserve a career path and organizational credibility just like more traditional job titles. The AWG plays an important role in working with HR to help define this path so that the organization can recruit the best ScrumMaster and coaching candidates and provide teams with the support and counsel they need as they adapt a more agile way of working.

The examples in the preceding list are meant to give you an idea of just some of the work the AWG performs. [Table 8.1](#) provides a few more examples of what AWGs are doing in companies I've worked with.

**Table 8.1** Overview of Some of the Work Performed by the AWG Across the Five Dimensions of Agility

Technology	Org. Design	People	Leadership	Culture
Working with IT in upgrading infrastructure to reduce end-to-end lead time; faster cycles	Working with facilities to redesign workspace for better collaboration	Working with HR to create more team-based rewards, recognitions	Embracing Beyond Budgeting leadership values and principles	Identifying meaningful metrics to influence learning culture and faster validation
Tool management and support; balance custom needs while managing variability	Experimenting with new organizational structures (Holacracy, Spotify model, and so on)	Designing formal roles and career paths for agile titles such as Agile Coach and Product Owner	1:1 leadership counseling and coaching	Capturing and communicating narratives that symbolize who we want to become as a company
Ongoing train-the-trainer support, coaching, thought leadership	Working with facilities to balance “zones” of focused work with highly collaborative activities.	Promoting growth mindset and diversity efforts	Working with Finance to calculate Cost of Delay across portfolio; drive economic perspective	Reducing fear of failure; experimentation as a natural way to discover work
Designing and implementing new training and course offerings	Designing and implementing flow-optimized organizational structures	Design flexible work patterns; supporting distributed teams	Building and growing external partnerships with peer organizations.	Helping define organizational performance measures; optimizing for the whole

Considering the examples in Table 8.1, a few observations emerge:

- **The AWG is not a PMO.** The Project Management Office (PMO) is a unit well known in the world of traditional project management methodology. Its mission is mainly to standardize and govern business processes; as a result, the PMO plays an influential role in the organization. What should be clear from the preceding description, however, is that standardization and governance are *not* what the AWG does. Yes, it advocates a common language across the organization, but it's not a governance body. Rather, the AWG is a strategic and transformative unit; it's a nexus between the strategic intent expressed by executive leadership and the real implications of this strategy felt by those with feet on the ground. Although the PMO still plays a role in an agile organization (focused on more agile processes and with a lighter touch regarding governance), it is not a driving force in transforming the organization. Rather, the PMO codifies the new ways of working and helps remove the gaps from existing processes. As such, the AWG helps initiate and drive change, whereas the PMO is instrumental in creating meaningful boundaries and structure appropriate for the company's unique context and business domain.
- **The AWG is an incubator and accelerant to agile leadership across the enterprise.** People in the AWG work between departments, units, and teams across the enterprise. They use their expertise and organizational influence to help teams operate in a more agile manner. Sure, teams and their coaches are well-positioned to handle issues within their sphere of influence, but unlocking organizational agility requires going beyond the team and considering the entire organization. The AWG takes on that role.

This is exactly the type of work agile leaders do as a natural part of their job. But as the organization starts its journey toward unlocking agility, leaders need support to grow and develop, just as teams do. The mission and objectives of the AWG will therefore depend on where the organization is in its journey to unlock agility.

Organizations that are already working in an agile manner—companies such as Zappos, Patagonia, Intuit, and a few others we have mentioned throughout the book—may not need a formal AWG as we describe it here—being agile is business as usual. But for the majority of companies, the AWG is a necessary internal engine

designed to accelerate and unlock agility. As the organization evolves and becomes more agile, members of the AWG take on other leadership roles throughout the enterprise as their skills, knowledge, and abilities represent the very best of what it means to be an agile leader. More about this later in the chapter.

Let's take a closer look at the people who are part of this critical group. Who are these people who focus on building a more agile organization?

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## Characteristics of the AWG

Simply put, the AWG is the ScrumMaster to the organization—it's the group ultimately responsible for removing impediments to organizational agility across the enterprise. For the AWG to be successful, it's critical that it embodies a few key characteristics, as depicted in [Figure 8.1](#) and described in the sections that follow.



**Figure 8.1 Characteristics of the AWG: People in the AWG Are High Performers and Encompass a Set of Critical Characteristics That Help Them Be Successful Change Agents**

## Complementary

Having “T-shaped skills” is a reference to people who are experts in at least one area but somewhat capable in many other areas. This skill set makes them complementary—able to participate effectively in a team setting. Contrast this with people having “I-shaped” skills. This refers to those who are deep in one area but not very capable in others. Just as we encourage members of product teams to have “T-shaped skills” so they can deliver customer value incrementally and iteratively, we look for the same qualities of the AWG.<sup>1</sup>

Because transforming an organization involves skills, knowledge, and abilities not inherent in any one person, it’s important that the group as a whole has representation from members in subject matters such as technology, organizational design, people, leadership, and culture. Further, given that this group represents the entire organization, it needs to be composed of people from a cross-section of the company. To help facilitate this holistic perspective, when establishing their AWGs, organizations need to include people from areas

beyond engineering and product management, such as Sales, Marketing, HR, Finance, and IT.

Having this diverse, complementary perspective is critical to the success of the AWG. For example, at [Salesforce.com](#), a pioneer in enterprise agility, members of the company’s AWG (called the “enterprise coaching team”) are specifically recruited with the aim to involve people from different educational backgrounds, with varying experiences and interests. Kelly Currier, Senior Director of Agile Delivery and head of the group, explains why: “As a leader, I want to foster healthy debates and the crazy ideas that come from them, which is why I am committed to building an environment with a mix of people with different strengths and skills. Being in a room full of similar-minded people isn’t where the tough conversations are going to happen and not likely where innovation occurs. Teams need to be diverse in gender, ethnicity, beliefs, thinking, backgrounds, past experiences and technical expertise in order to support and inspire a large organization.”<sup>2</sup>

## Dedicated

The members of the AWG are 100% dedicated to the work of transforming the organization. That means there is no middle ground or compromise—AWG members are fully devoted to the team’s mission. There are three important reasons dedication is a core characteristic of the AWG.

First, a dedicated AWG is itself a clear symbol of executive commitment. One of the key reasons organizational transformation efforts fail is a lack of executive support. Although many talk the talk, when it comes down to making the hard decisions and investing real money and time in the effort, executives often balk when faced with a choice between pushing more features and fundamentally changing the way the organization operates. Having a dedicated AWG demonstrates that executives take the transformation seriously and are vested in making a real difference. As a corollary, if executives are not willing to invest in a dedicated team, this typically indicates a lack of commitment and is often a leading marker of change management failure. (There is, however, a “dual-boot operating structure” of the AWG that does accommodate a part-time component; we’ll cover that later in the chapter.)

Second, a committed group of people is more productive and expeditious than an unfocused team. Research on the negative effects of multitasking and task-switching is compelling; teams that have multiple, conflicting priorities end up ultimately doing less. They take more time to get work done, and when they

do complete work, it is with lower levels of quality. Because transforming the organization is of critical importance to the organization, it is important this team is dedicated solely to this effort and nothing else.<sup>3</sup>

Expediency is also worth emphasizing. Shorter feedback loops allow the AWG and the organization to learn faster, so experiments can be validated quicker and adapted to changes in the company environment more responsively. Speed is also of critical importance in a broader context, especially as the change effort finds itself in its beginning stages. Without early, compelling evidence of tangible progress, the transformation can quickly lose organizational support and stall. A dedicated team is better positioned to produce meaningful results quickly.

Third, a dedicated group has “skin in the game.” Author Nassim Taleb refers to the concept of “skin in the game” as the balancing of incentives and disincentives—those who want a share of the benefits need to also share some of the risks. So it is with the AWG. Coaches have the best intentions, but if projects fail or otherwise go south as a result of their work, there are rarely significant negative consequences for them. Good and bad, the coaches move on to the next assignment and never really get to directly feel the impact of their work. However, with AWGs, the people affected by the changes have to live with the new ways of working. The members of the AWG have a significant vested interest in making a positive change. After all, they are an integral part of the organization, and because being part of the AWG is their only job, they can’t simply fall back on their “day job” if things should not work out. Just as the rest of the organization, they will share in both the benefits and the risks of a transformation.<sup>4</sup>

## Knowledgeable

Members of the AWG need to have a deep understanding in two areas of knowledge: agile/Lean thinking and the organization’s culture and historical context.

Why do members need to understand agile and Lean values and principles at a deep level? You want your transformation team to appreciate nuances and avoid a simplistic, by-the-book interpretation of agility. Organizational change is far too complex to be distilled into a single framework or a simple how-to guide: what we’re looking for in members of the AWG are people who understand the values behind the Agile Manifesto and the philosophy behind Lean thinking and flow optimization—people who appreciate that Agile is a

mind-set, rather than a process or methodology. The majority of the challenges the AWG will deal with are not addressed in certification classes. Rather, through a deep understanding of agile and Lean thinking, the ideal AWG will be able to adapt and apply these principles to your organization's unique context and culture.

Members also need to have a deep understanding of the organization itself—its culture, its history, and an essential appreciation of what it means to be an employee at the company. The organization's culture will deeply affect the transformation effort, and only people who have been in the organization for a few years will fully appreciate what this means. This is also a main reason why having external consultants lead the AWG is not advisable: they will not be able to appreciate the unique situation of your organization and will make recommendations and decisions that may make perfect sense in isolation but that may actually be harmful for your organization's specific context.

## Credible

The members of the AWG represent the nexus between senior management and regular workers and are tasked with removing impediments to organizational agility. As you can imagine, this unique position is likely to lead to a lot of tense situations in which they often challenge and fundamentally change the way people used to work. For this reason, it is important that the members of the AWG have gained a fair amount of organizational credibility. Ideally, they will have proven themselves in the past through their performance in various roles and responsibilities throughout the organization. This notion of credibility is impactful: when people understand that change is driven from within the organization, coming from people who are “one of us” and who seek to understand the unique aspects of the company, change efforts become a lot less scary, and organizational resistance subsides.

One example: At Deere & Company, Chad Holdorf held a number of roles and had proven himself to be an effective, collaborative colleague before he was tasked with leading his company's agile transformation efforts. Holdorf credits his many relationships and proven ability to work across functions within the organization as two of the reasons he successfully led Deere toward a more agile way of working. Another factor in Holdorf's favor: he was recognized from within and earned his stripes as a Deere employee for several years before leading the larger change efforts. Having that internal organizational credibility

helps create trust and alleviates the notion that change is imposed from the outside.

## Humble

Members of the AWG are humble leaders. If the members of the AWG do not appreciate that making these organizational changes can only happen through listening and understanding with mutual respect for people, the change effort will quickly be viewed as a top-down, draconian mandate.

The concept of the servant leader is somewhat overused in the agile community to the point at which it often does not mean much. But serving while leading is an important component of the AWG; the people in this group are not joining it because they want to advance their careers or because they want to gain organizational influence. The AWG is a team of individuals who deeply understand and appreciate that meaningful change comes only when people affected by the change see the need and are motivated to alter the way they work. As such, members of the AWG are excellent communicators—they listen before they talk. They love to learn, and they understand that teaching others is never a one-sided proposition. They also understand that they don't know all the answers—and share authority. Hence, members of the AWG will not help by saying, “You’re doing it all wrong; let me show you the right way.” Instead, they will ask, “What is impeding you from making your work better and more meaningful?” or, “How is the work you do helping our company accomplish its promise?” or, “How is our product or service helping customers create more value?” Facilitating learning is a cooperative exercise. The humble change leader knows how to lead from behind.

## Champion

Lastly but perhaps most importantly, the AWG members are enthusiastic champions of both agile and the company for which they work. They believe that embracing change is superior to trying to control it. They believe iterative, discovery-based ways of working are superior to plan-driven, predictive approaches, and they are not afraid to put on their sales hats when needed. Are they cheerleaders? Sure, you can call them that because they passionately believe that responding to changing market conditions is fundamentally more beneficial than trying to predict the future up front. But although they may be enthusiastic champions of the cause, that's not to say they are zealots. They respect the thinking, processes, and methodologies that got the company to where it is now, and they recognize that there is no such thing as "one size fits all." In fact, as we pointed out earlier in this book, appreciating that there are environments and domains where working in an agile manner may add unnecessary overhead and offer reduced benefits (such as in Snowden's Obvious domain) is just as important as understanding where agile can be useful.

At its core, the AWG is a champion of meaningful change that adapts the enterprise to the world in which it operates. The AWG appreciates the need for the company to become a learning organization, an entity that continuously evolves the way it operates based on feedback signals. Those signals can come in the form of customer sales data, team retrospectives, or segment reactions regarding a geographically targeted product prototype. Regardless of the source, this is critical information. Only by considering empirical, validated data can the organization learn faster and alter its strategy in an iterative manner. Practice informs theory, not the other way around.

Similarly, the AWG members are champions of their company, not just the transformation. They believe in the organization's mission and are unabashed fans. You know the type; you see them sporting company logos on their shirts or getting excited about new initiatives.

This combination of people being champions of Agile *and* the company for which they work is a powerful mix. Make no mistake: AWG members need every ounce of this passion once the change effort gets tough and resistance to change kicks in. Believing in what they are working toward (organizational agility) and who they are serving (their company and its employees) is going to be an important motivator keeping the team engaged on its transformation journey.

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## Role of External Consultants

Now that we understand what characteristics we’re looking for in an AWG, it may be tempting to look to external consultants for help. After all, isn’t this exactly the type of deep expertise consultants are perfectly positioned to deliver? Unfortunately, it’s not that simple; there is no one “correct” way to transform into an agile enterprise. The culture of the company must influence the transformation effort for that change to stick. External consultants are therefore at a distinct *disadvantage* in some respects: they simply haven’t accumulated the “cultural knowledge capital” necessary to understand the context from which your company is changing.

Nevertheless, consultants can still play an important one, in the AWG and the transformation efforts overall, especially in its early formation. Given the ambitious set of criteria involved in selecting the Agile Working Group, forming this team can be challenging. Hence, hiring external consultants with the expertise to fill some of the knowledge gaps while searching for internal talent makes a lot of sense. Similarly, while having an internal perspective is critical, it’s also necessary to avoid internal groupthink and the echo chamber. Including an external perspective as part of the team—to ensure diversity of thought—is desirable.

For example, at NAVTEQ, the AWG was initially staffed with Drew Jemilo (then an external consultant and now the head of Scaled Agile, Inc.) as the Product Owner of the team. One of the high-priority items on the Backlog was to find an internal Product Owner to replace him. Jemilo agreed this was an important part of making the AWG self-sustaining as being too dependent on external consultants without growing internal coaching capabilities can become a liability. This is exactly what happened. After serving as PO for the AWG for its first release, the team was able to identify an internal candidate who ended up leading the enterprise transformation of NAVTEQ for the next several years.

Clearly, outside perspectives help at times; what you want to avoid is outsourcing your transformation completely. I understand this change effort is intimidating and it might be tempting to throw money at the problem and have the “experts” fix it. And yes, I’m aware of the glossy brochures from prestigious consulting companies that tell a compelling story—but I have yet to see a successful organizational change transformation driven entirely by an external consultancy. In my experience, it simply does not work—at least not for the long term—because unlocking agility requires the organization to change from within and fundamentally shift the way it operates. This change is not about being told

what to do or to be given a set of “best practices.” It’s about learning how to find better ways to collaborate, and in some ways to unlearn what we’ve been taught for years in business school and throughout our careers.

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## Organizational Structure and the AWG

Unlocking agility at the enterprise level requires a nontraditional, humanistic, value-driven, flow-oriented way of working. This way of working is reflected in the way the AWG is located in the organizational structure. By combining elements of both hierarchical and network-based organizational structures, the AWG increases speed and urgency while allowing change and detection of “weak signals” within the organization. In the following, we’ll take a closer look at the organizational implications of establishing an AWG.

The AWG as an organizational unit is characterized by three unique characteristics that distinguish it from more traditional organizational units with which you may be familiar:

- The whole system view
- The temporary lifespan
- The dual-boot operating system

In the sections that follow, we’ll take a look at these three features and examine why each one is so critical to the success of the endeavor.

### Whole System View

As we’ve established, the mission of the AWG is to remove impediments to organizational agility. As such, it is critical that the group captures an end-to-end view of the organization and that it is not limited to any one functional area. Too often, I hear of organizational change efforts that originate in IT, Engineering, or Operations. Although it’s understandable that change management efforts often originate in these areas, being too focused on any one functional area limits the overall impact on the organization. Instead, aim to find a home for the AWG that naturally covers an end-to-end perspective and is perceived as such.

Corporate Strategy, for instance, has the entire organization within its sphere of influence. An additional benefit to providing the AWG with an organizational home in Corporate Strategy is that sponsors in this part of the organization tend

to have the long-term, strategic perspective necessary when transforming an organization from end to end.

At Nokia's HERE location services unit, the AWG originated as part of an R&D effort but was moved to Strategy & Execution (a part of Corporate Strategy) when it became obvious that organizational agility was a company-wide objective, not merely an engineering initiative. Tom Fox, Chief Financial Officer at Malwarebytes, was the executive sponsor of the AWG at HERE at the time and appreciated the impact the new organizational reporting structure had on the group's ability to make an impact. Fox said, "It's fascinating how our agile transformation picked up momentum when the AWG was no longer perceived as "coming from IT," but instead was approached from a strategic and holistic perspective."<sup>5</sup>

## Temporary Lifespan

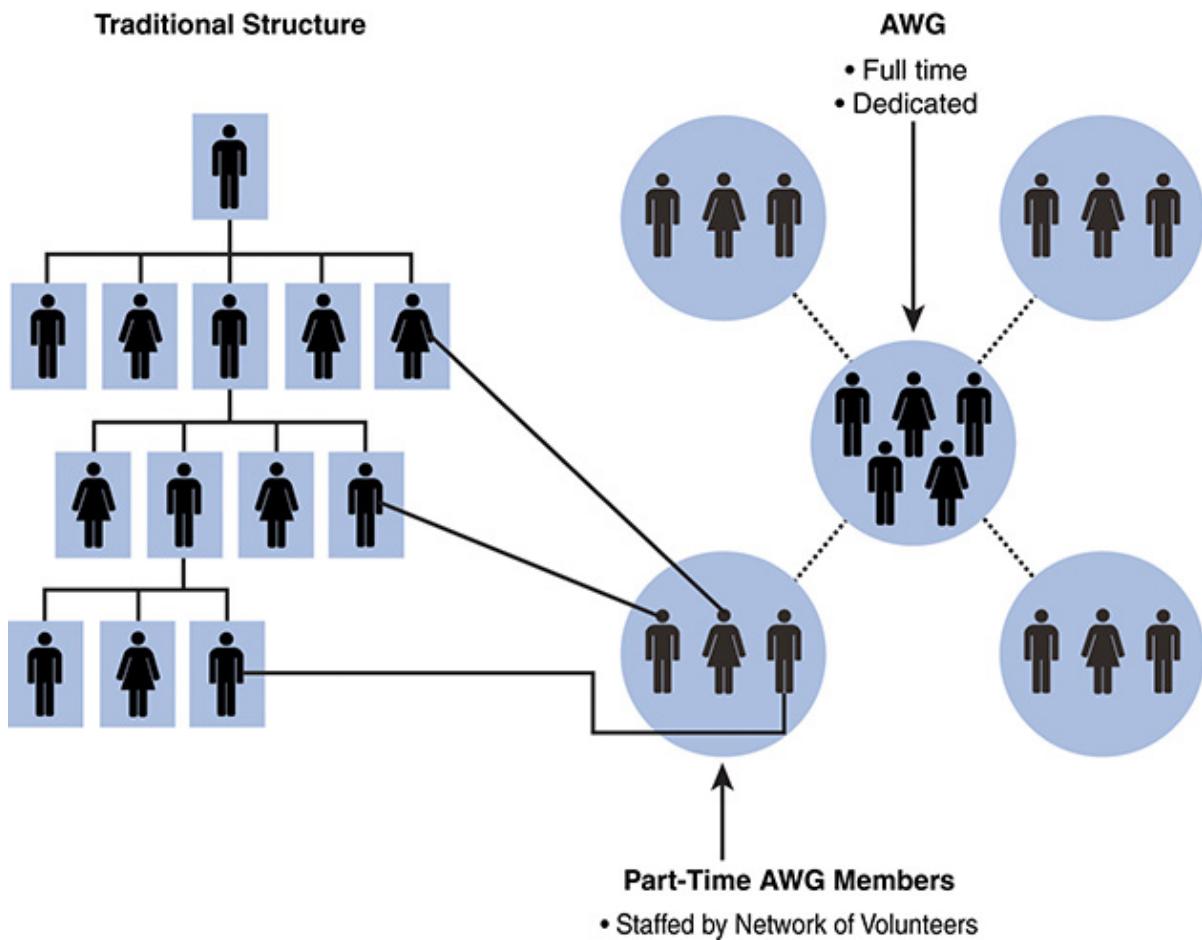
As the AWG succeeds in unlocking agility within the organization, the need for a dedicated group of people focused on this mission will gradually dissipate. This is exactly as it should be: the AWG's mission is to help remove impediments to organizational agility. When continuous improvement is part of business as usual, it's time for the AWG to cease as a dedicated unit and its members to be absorbed into other parts of the organization.

Although this natural ending can initially be difficult to accept for potential AWG members, they need not fear for lack of job opportunities. The skills, knowledge, and abilities they'll pick up as being part of this group and the cross-functional connections they'll establish will make them extremely marketable across a variety of strategic areas within the organization. Typical roles post-AWG will depend on the individual's unique background and skills and include titles like Engineering Manager, Chief Product Owner, Agile Program Manager, and System Architect.

This approach to "planned obsolescence" mirrors that of the ScrumMaster at the team level. Although it may take several years, a high-performing team that lives a continuous improvement mind-set should eventually outlive the need for a dedicated ScrumMaster. The ScrumMaster either moves on to another team that could use assistance or takes on another critical role in the organization, leveraging the important collaboration and communication skills that have been fine-tuned as ScrumMaster.

## Dual-Boot Operating System

The AWG's organizational structure is characterized by what author and Harvard Business School professor John Kotter describes as a “dual operating system” for the organization. In his book *Acceler8*, Kotter explains how effective change management efforts need not only to have a hierarchical component for efficiency and speed of execution, but also a “social network component” to enable organic change and grassroots influence.<sup>6,7</sup> Figure 8.2 illustrates how the AWG consists of both a full-time, dedicated staff, as well as a network of part-time volunteers who are allocating as much as 50% of their time to execute on the Organizational Improvement Backlog.



**Figure 8.2** The AWG Has Its Organizational “Home” in Corporate Strategy (or Equivalent) to Support an End-to-End View of the Organization; Part-Time Members Contribute to Execute from Various Areas of the Organization, Facilitating a Diverse Set of Organizational Perspectives

The AWG is inspired by Kotter's concept and embraces both components. The *full-time*, dedicated members of the group are part of a hierarchical structure ideally located in Corporate Strategy, as described earlier. The *part-time* members of the group are aligned through dotted-line relationships and link the AWG to the rest of the organization through a social network of influence and affinities.

The part-time AWG members have the same fundamental mission and responsibilities as their full-time cohorts; they work off the same Organizational Improvement Backlog. The difference, however, is that they dedicate at least 50% of their time to AWG efforts while spending the rest of their time focusing on their regular "day jobs." While this double duty might slow them down compared to full-time members, they provide a unique value to the AWG and the organization in that they act as a constant source of feedback about the impact the changes are having.

Just as important, this part-time portion of the AWG keeps the group honest and challenges the status quo. Kotter points out that designing a network-based portion of a change management effort into the effort itself helps keep momentum. Without continuous feedback loops and "idea injections" from a diverse population, the transformation effort could lose steam once the initial energy goes away.

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## Recruiting for the AWG

Understanding what type of people are necessary to make the AWG effective is only half the battle. Identifying and recruiting these people to join the team is often the harder effort. As you prepare to build your organization's AWG and identify the people in it, you're likely to encounter resistance on two main fronts: from their managers and (paradoxically) from the potential candidates.

### Resistance from Managers

It's easy to understand why managers of these high-performing individuals resist recruitment efforts of their people to join the AWG. After all, these are rock star assets who have consistently delivered for their teams and are well-respected in their organizations. It's only natural their managers would like to keep them; their important work for the department *has* to continue uninterrupted.

Although replacing such high-performing people is hard to do, executives can make it easier for managers to let go of their favorites by incenting managers to focus on the whole, rather than optimizing for their individual units. That sounds easy in theory, but how is this done in practice?

Here's what happened when Nokia did it in one of its lines of business, Location and Commerce. Rather than being rewarded solely for achieving department-specific targets (reduction in number of escaped defects, for instance), a significant portion of the manager's rewards were based on reduction of end-to-end lead time. Because reducing lead time is a goal that can only be achieved by working with other units, collaboration between different units becomes critical. At Nokia, when managers were faced with the prospect of one of their people being recruited to the AWG, they understood that despite the temporary loss of a valued team member, this change would ultimately benefit the overall organization. The success of the AWG would help the managers improve the larger goals of creating a faster, more responsive organization—hence positively affecting their own bonuses and the firm as a whole.

## Hesitation from Potential Candidates

Picture this. You identify the perfect candidate to join the AWG and help transform and benefit the larger organization, but although the candidate is excited and intrigued, she is reluctant to join. What to do? The most important step is to understand why the candidate is hesitant. In my experience, the reason has a root cause in the following key factors: uncertain career path, resistance to change, and lack of faith in the transformation effort. Here's how to address each:

- **Uncertain career path and resistance to change:** Organizational transformations are relatively common, but a career-path related to this effort is not. Furthermore, as highlighted earlier, the long-term prospect of members of the AWG is in fact to make themselves superfluous—to work themselves out of a job, as a good consultant would do. With this in mind, is it any wonder that people currently in a successful job (and with a clear career path) would be hesitant to join this effort?

When I approach candidates to join the AWG, I ask them the following question: "What are you going to do in five years? And

before you answer, think back five years ago—are you doing anything remotely related today to what you thought you would be doing back then?” For these candidates, this question helps them understand that they have no way of knowing what the future holds—and this is a liberating notion. I then point out that the AWG will prepare them for what’s next in their careers. It will give them a tour-de-force experience in building high-performing, nimble organizations—skill sets and experience that will always be valuable, regardless of where they end up.

I’ve been a PO for a number of AWG teams so far in my career, and I’ve seen my team members move on to become senior managers at Fortune 100 companies, program managers, directors of engineering, and yes, a good number of them became external consultants.

To be clear, being a member of the AWG is not for everyone. It means deliberately removing the organizational safety net you might have felt you had and jumping head first into dedicating your career into helping your organization do better. For some people, this is going to sound terrifying and off-putting.

And that’s OK, because for a select few, this will appeal to them as a once-in-a-lifetime challenge that can make a meaningful impact to the organization they care about. And that’s exactly the candidate you want!

- **Lack of faith in the transformation effort:** If you listen closely, your organization continuously gives you clues that help you gauge how you’re progressing toward your transformation efforts. If you get the sense that potential candidates are hesitant to join the AWG because they do not have faith in the transformation, this is an important signal that should not be taken lightly. As noted earlier, the AWG is the very manifestation of executive support: it is funded and paid for by executives. The AWG is their message to the entire organization that changing how we currently operate is vital to the organization’s longevity. None of this matters if the organization’s employees do not believe that you’re serious about making significant changes, however. If “unlocking agility” is merely viewed as a buzzword on a poster and a soon-to-be-passed fad, the effort is doomed.

When you sense there is hesitation in the organization regarding the strength and executive commitment of the effort, it's time to double down and provide highly visible and unambiguous signals to the contrary. For example, when NAVTEQ entered a critical phase of its transformation efforts and the hard work began, the AWG could sense that organizational support was waning and needed an energy boost. The CEO at the time, Larry Kaplan, was clear in his enthusiasm and agreed to attend quarterly town hall meetings to demonstrate to the rest of the organization (and to potentially doubting direct reports) his unwavering executive support for the efforts. Having Kaplan demonstrate support and showing his commitment through actions and words played an important part in sustaining momentum when organizational change fatigue set in. You'll recall Donna Potts-McKenzie's impactful talk on the role of HR from [Chapter 6](#); Kaplan was by her side every step of the way.

Candidates who are hesitant to join because they are uncertain of the organization's commitment to the change effort provide important information you need to take seriously. The company's dedication to transformation should never be at question. Following NAVTEQ's example—addressing the concern head-on and even allowing executives to show they don't know all the answers up front but they are dedicated to make the change happen—is an effective way to ensure that potential candidates (and the rest of the organization) can feel confident there is solid executive support for doing the hard work of the AWG.

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## The AWG: What's in It for You?

Simply put, the AWG is an incubator of agile and Lean leaders. The skills, knowledge, and abilities inherent in AWG members, combined with the unique experiences they'll gather as part of the group, are excellent resources for the work of the future. They will not only be excellent candidates for leadership positions in their own organizations as the enterprises themselves become more agile, they will be well prepared to take on strategic leadership positions in other organizations looking for leadership in a VUCA world. As more organizations aim to unlock agility, leaders with this type of experience will be in great demand.

Make no mistake—joining your company's AWG is not something you should do if you're looking for stability, predictability, and a linear career path. Then

again, a transformation effort itself is far from plan driven, and we've seen throughout this book that entire industries are going through major changes. The AWG is simply a reflection of the complexity within which businesses are operating today.

But if you're aiming to embrace change and execute with purpose—if you're looking to be part of shaping how organizations operate in the future and helping make work more meaningful for the people working within them—there are few career-moves I can recommend more highly than joining an AWG. Participation will give you the tools, experience, and practical know-how required to be an effective leader in today's accelerating business environment.

I should know. I made the decision to join the AWG at NAVTEQ in 2010, and I have never looked back.<sup>8</sup>

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## Summary

The AWG is the engine that helps your organization remove impediments. It is critical to your organizational change efforts. Make sure to look for the following characteristics in team members when establishing the AWG: Complementary, Dedicated, Knowledgeable, Credible, Humble and Champion. External consultants can play an important role in forming and being part of the team, but make sure you don't simply outsource the effort—the transformation has to be owned by the organization and that feeling of shared ownership must permeate the organization.

The organizational home of the AWG needs to be somewhere where it can naturally have a system-wide view; Corporate Strategy is one example of where this tends to happen. Combining this structure with a part-time, network-based scheme of people allows for expediency and organic feedback and input. When recruiting for the AWG within the organization, be cognizant of resistance from both managers and the candidates themselves. I've provided a few practical strategies for addressing these challenges in this chapter.

Now that you're ready to build the AWG, let's tackle the next step in transforming the organization. What does an agile organization look like? What are the essential elements required to embrace chance and execute with purpose? We'll cover these and other topics next.

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## Q&A

### **1. I've heard these change efforts are supposed to be organic. Why can't this just happen by itself?**

For an organization that's already working in an agile manner, this is correct—people recognize a change needs to be made and they are empowered to make the changes necessary, understanding that other priorities will have to change while building a more resilient organization.

However, in more traditional organizations that are struggling to get there because of their current organizational structures and cultures, an AWG is an effective way to jump-start the effort toward a more organic approach to organizational agility. The AWG is not a permanent structure; it is a *means to accelerate a change* that otherwise would have taken too long (if at all) in a traditional company structure.

### **2. Why would the organization let great people work on the AWG and not something else?**

View this from the perspective of an Organizational Backlog. If you were to prioritize the various tasks and projects you wanted to accomplish—and transforming the way your organization operates to deal with today's changing business environment happens to be among the top 1 or 2 things on your list—wouldn't it make sense to allow your best people to work on this effort? A common failure pattern I've seen is to create toothless change management teams: teams that consist of people with no desire to work on this type of "special project." It's a certain death sentence for the change-management effort, and it is a sure last-stop of the career for the poor souls who have been placed on the project.

The AWG is the exact opposite: a clear symbol of executive dedication in the form of monetary funding *and* a commitment from the best people the organization has to offer.

### **3. How do you know if you have the right people on the team?**

The characteristics provided earlier in the chapter are a helpful guide as you build the AWG, but a single team is not going to satisfy all these characteristics at once. The team will evolve over time, and its performance will do the same. The short answer is there is no such thing as the "right people" on the AWG—but if you have people who are champions

of your company and understand agile and Lean thinking, you're on the right path. Start with the best you've got and evolve from there.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- John Kotter. *Leading Change*.

John Kotter is a bit of a legend when it comes to change management. His 8-step framework detailed in *Leading Change* has been an inspiration for me, and I leverage a lot of his ideas as part of my own approach to large-scale organizational transformation. The book is written in an accessible, nontechnical style and is an overall enjoyable read. Any change agent worth his salt should read this!

- Blas Koz. <https://agileleanlife.com/>

I'll be honest—I had never heard of Blas Koz's blog until I did research for this book. I was impressed with his thorough examination of T-shaped skills, but as I looked at other areas of his blog, I came away pleasantly surprised with the amount of useful information on his site. A cross between Tony Robbins and an experienced agile coach, Blas is definitely worth a look.

- Taleb, Nassim. *Skin in the Game*.

I am a fan of Taleb's work. His latest book, *Skin in the Game*, does not disappoint. Although perhaps not as life changing as some of his earlier works (*The Black Swan* and *Antifragile* being among my all-time favorites), his latest book shows how taking personal risk is an essential driver of creating significant impact. Taleb's writing is light on editing and uses a colorful language; it's impossible to be neutral when it comes to Taleb's work.

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## Footnotes

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## Chapter 9

# An Operating Model for Business Agility

Early morning meetings were not usually a great reason to be excited, but this was different. I was about to meet Brian Dye, newly minted Senior Vice President at Intel Security, to discuss our agile transformation strategy and help clarify questions he might have as we were doubling down on our new direction as a company.

There was a lot of energy and buzz around the new SVP. Brian had joined our firm from Citrix, after Chris Young—head of the company—picked him as his right-hand man. It was easy to see why Chris picked Brian to help make the strategy of becoming the “Number One Security Partner for the Fortune 2000” real. Brian was wicked smart, with a degree in engineering from MIT and an MBA from Stanford. He had substantial experience in the security industry, having held senior positions at Veritas and Symantec for more than a decade. He also had an uncanny ability to take complex issues, break them down into their essential parts, and precisely identify the core of any problem. In short, he was one of those leaders who was able to make complex things seem simple, a skill set I’ve always admired.

And now I was about to meet him to go through our agile transformation strategy in detail. I was excited to share with him the great work we’d been doing and demonstrate some of the substantial gains we’d accomplished as part of becoming a more agile organization. But more than anything else, I was curious about what he was going to ask me. Given his experience working with top-notch companies in Silicon Valley over the past decade, surely he knew everything there was to know about enterprise transformations and large-scale

change management. What could I possibly help clarify for him that he did not already know?

As I went through the materials with him, it became clear that we were in sync right away. He loved our focus on optimizing for the organization as a whole over local suboptimization. He had already experienced the gains we were making in our ability to adapt faster, and he could see that our focus on quality was starting to bear fruit. Feedback from our customers and our key performance metrics told a compelling story—things were going in the right direction.

“Jorgen—this is great stuff, and I want to see more of it,” he said. “Let me know what I can do to help accelerate the progress you’ve already made—this is a key enabler of our strategy.”

Brian took a moment to pause, which was rare. He was already known in the company for his fast speaking pattern; if you did not listen intently, you’d be likely to miss a word or two.

“I do have a question for you, though. And this is something I’ve been struggling with at the other companies I’ve worked with also—and I haven’t really gotten a good answer yet.” I braced myself. What could be bothering him?

“Look, I get that agile is about responding quickly, building in quality at the source, and supporting high-performing teams in getting their work done—I get that. But what working in an agile way has not helped me do yet is drive innovation while at the same time delivering on existing customer commitments. You see—I have customers and partners that need confidence in our product roadmap and our ability to deliver. And at the same time, I want to be able to fuel innovation and ensure we don’t get disrupted by some small upstart. Right now, it feels like an either/or. How will becoming more agile help tackle all the change that’s going on in our industry *and* help me execute more confidently?”

It’s been a few years since my conversation with Brian, but his question raised an important broader issue. When larger organizations aim to transform to a more agile way of working, it’s critical to recognize that the context within which the organization operates matters. There are parts of the business that operate in extreme levels of uncertainty, where continuous validation of ideas, concepts, and business models need to happen. This is what Snowden, in his Cynefin model, categorizes as the Complex and Chaotic domains. Yet, the core of the business—the part that actually makes money and funds the innovation efforts—lies mostly in the Complicated and Obvious domains. The business

models have been validated and proven; the customers find the company's value proposition attractive, and now it's a matter of delivering on this promise.

**Business agility is not about choosing between these two modes of operating—it's about balancing both.** I view organizational agility as the ability to adapt quickly to changing market conditions—but also to deliver on commitments to customers in domains where the level of Volatility, Uncertainty, Complexity, and Ambiguity (VUCA) is known and manageable.

In this chapter, I describe how an agile organization can combine two seemingly conflicting goals—embracing change and executing with purpose—and give examples of organizations that are doing this successfully. At the end of this chapter, you'll have a good understanding of the conditions that need to be in place for each of these modes to coexist—and examples from which to build on as you unlock agility in your own organization.

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## Unlocking Agility: Embrace Change, Execute with Purpose

When a company achieves a degree of success and has validated that its value proposition resonates with its target customers, the implications for its operating model tend to follow a predictable path. Organizational structures are gradually set up to help optimize delivery of the respective product to decrease variability and increase efficiencies—thus increasing profitability and reducing time to market. We've already seen examples of some of these organizational structures in [Chapter 4, “Organizational Design”](#)—they are popular and work well in environments where the company can exploit a current market opportunity.

The challenge, however, is that these constructs optimize for stability and scale over value creation. Sure, as long as these resource-optimized structures align with current customer needs they work well. But the moment customer needs evolve or the larger business environment changes, these structures become impediments to adapting to change. They inevitably create barriers to innovation through silos and constrain information flow. Yet, these limitations are a result of doing precisely what resource-optimized organizational structures were designed to do—executing on a well-defined, clearly articulated value proposition. Anything outside of this is a distraction.

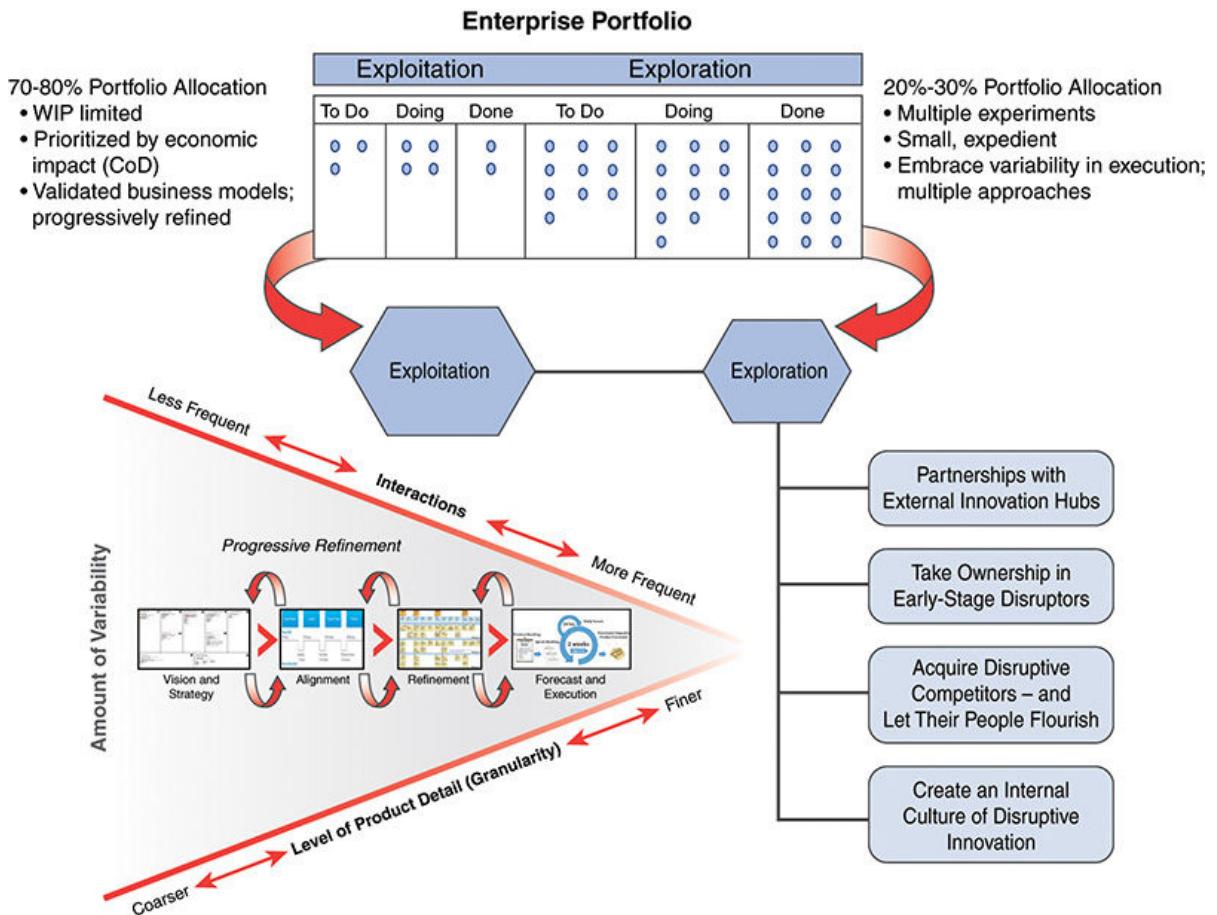
The fact that product roadmaps are nailed down without interacting with either the customer or development teams is at the core of why many

organizations may be agile but fail to unlock agility, even though their product development units may exhibit agile behaviors at the team level. Teams are iterating quickly, they continue to improve how they work, and product owners are actively engaging with the teams. Yet, the operating model of the organization is designed to resist deviating from existing plans because this will inevitably slow down speed of execution, decrease efficiencies, and risk upcoming executive bonus targets. So instead of continuously adapting to changing market conditions and listening for new customer needs, the organization is executing faithfully on plans that were locked down 12–18 months ago.

This dilemma is not new. Businesses have always had to grapple with balancing optimizing for resources (profitability) over optimizing for flow (customer value). The difference today is that the speed of change is accelerating at an unprecedented rate. Customers are more demanding than ever, and the barriers to entry for competitors to meet this changing customer need continue to vanish. There was a time when Henry Ford could say that a customer could get a car in every color they want, “so long as it’s black.” After all, Ford had found product-market fit, and there were no real alternatives out there. Today, customers expect a near limitless number of options and will get them—either from you or from a competitor.

**So how do companies create a balance between these ways of operating? How do they support a profitable, efficiency-driven way of executing while also embracing change and adapting to evolving customer needs?**

Successful agile organizations embrace both ways of working. [Figure 9.1](#) illustrates a high-level view of an organization that both embraces change and executes with purpose. The enterprise portfolio consists of work divided into two distinct categories: work that has a proven business model and benefits from reducing variability (exploitation), and work that is potentially disruptive where we benefit from embracing uncertainty (exploration). You’ll notice the allocation of the work follows the barbell strategy we highlighted in [Chapter 2](#).



**Figure 9.1** *Unlocking Agility Means Being Able to Balance Both Exploitation and Exploration*

In the following section, we'll describe this operating model in more detail. We'll illustrate what it means to create an engine of innovation while executing on commitments to markets, customers, and collaborators. The structures required to be successful at one are radically different from those needed to be successful at the other. Unlocking agility means being able to balance both ways of working.

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## Exploration: An Engine for Embracing Change

Business environments that fall in Snowden's Complex domain (see [Chapter 2](#), “[Enterprise Agility](#),” for more on Cynefin), such as new product development, are characterized by large amounts of VUCA and are, by definition, impossible to predict in advance. No amount of market research or SWOT analysis is going to help you make a better decision; the environment is such that you won’t know the answer to a given hypothesis until you run an experiment and observe what happens. This unpredictability can be both incredibly humbling and extremely liberating.

It is humbling because the expertise, resources, and technical know-how an established business may have built over the years no longer provide a competitive advantage in this environment. In fact, experience may instead become a distinct *disadvantage* because fundamentally altering established organizational structures may be culturally unacceptable or appear economically nonsensical.

However, operating in an environment with extreme uncertainty is also immensely liberating because the playing field is more even than ever before. The organization with the best ideas and ability to learn faster from its mistakes will emerge the winner—not necessarily the largest company in an industry with the highest barriers to entry. In fact, what may have been viewed as barriers of entry to competition may instead slow down incumbents from recognizing the threat from below, as more nimble competitors find opportunities that are ignored by the dominant market player.

Clayton Christensen, a Harvard Business School professor, introduced the “innovator’s dilemma” to describe this challenge. A new entrant targets overlooked segments of the business with new offerings or an innovative business model. These offerings are often not as sophisticated as the dominant player’s, but they are more affordable, simpler, or more convenient. The customers prefer the lower price point and increased simplicity. The entrant gets a foothold and gradually takes over more of the existing market, moving up the value chain until it eventually displaces the incumbent. Christensen calls this “disruptive innovation” as the new entrant changes the game and turns the incumbent’s perceived strengths into weaknesses by competing in an area of the business the incumbent can’t match.<sup>[1](#),<sup>[2](#)</sup></sup>

The classic example of this phenomenon is Netflix vs Blockbuster. When Netflix introduced DVD rentals by mail, Blockbuster largely ignored the upstart,

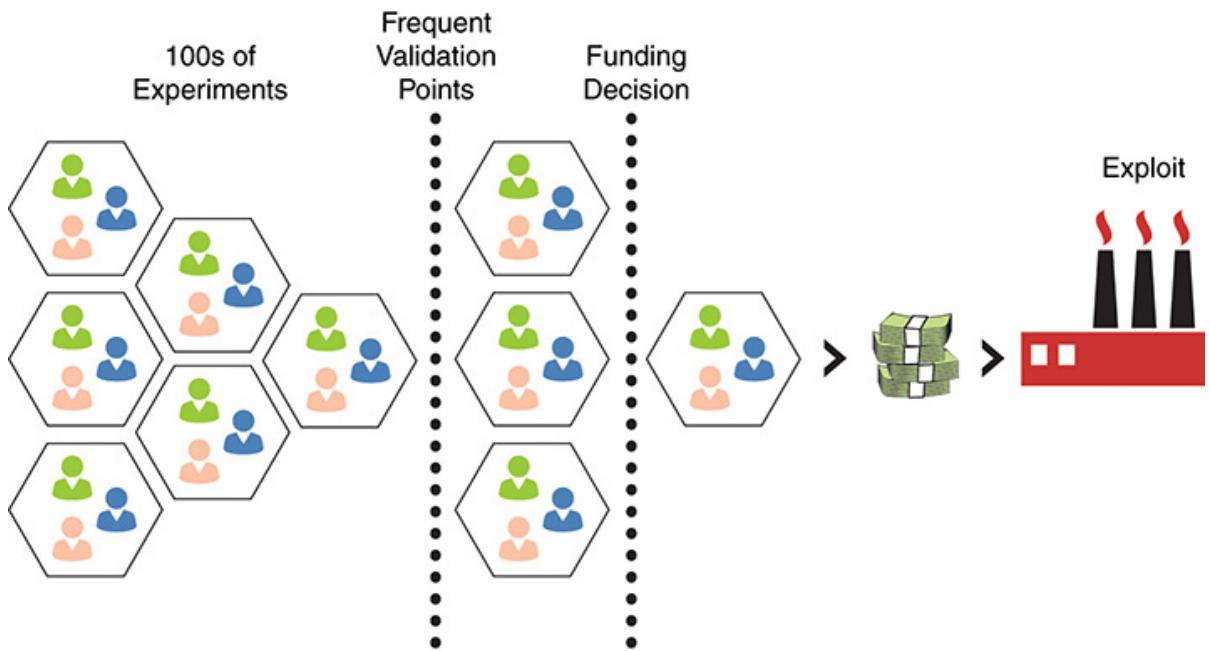
as this model was far less profitable than the retail model used by the market leader. The in-store sales of popcorn and candy, and the late fees, were big parts of Blockbuster's profits. This perceived strength became Netflix's opening: by eliminating late fees and allowing customers to have a given number of DVDs in their possession as long as they'd like, the new company removed a major pain from customers' DVD-renting experience. Customers no longer needed to keep track of "due by" dates—you simply returned a DVD when you wanted a new one. Blockbuster, with its large investments and sunk costs in real estate, found it challenging to change to a similar rental model and lost market share rapidly. Blockbuster went bankrupt in 2010.<sup>3</sup>

Embracing change is not simply about reacting quickly to changing market conditions. It's also about consciously experimenting and listening for "weak signals"—to identify those areas of potential disruptions where customers are over-served. Creating business environments that allow for this way of working requires as little structure, as much freedom, and as many opportunities for fast learning as possible.

What does this type of working environment look like? One approach is to establish an innovation hub inside the organization, separated and unencumbered by the trappings of the rest of the organization.

At Nokia, part of the agile transformation I was leading involved creating an "incubation organization" in Berlin. The organization was designed to operate much like a startup, where small teams formed to execute on any new ideas, business models, and technologies the company found compelling. Nokia's goal was to provide "just enough" funding to enable teams to validate quickly whether there was a compelling customer need, whether our proposed product solved this need, and lastly, whether we could build it in a manner that was economically feasible.

[Figure 9.2](#) illustrates how the innovation program was set up. The incubator launched lots of small experiments which then went through a number of "VC-like" funding decisions, where it was decided whether to "persevere, pivot, or punt."



**Figure 9.2 Failing Fast: Many Small, Affordable Experiments Were Launched in an Effort to Validate Whether Further Funding (and Later Scaling) Is Warranted**

The overall objective was to create a repeatable process for identifying, validating, and launching new growth businesses that could not only become an important source of business and product innovation for Nokia, but also help develop valuable skills within the organization. The key idea was to take many “shots on goal,” as quickly as possible—to “fail fast”—as we knew that these product concepts were incredibly speculative and most were never going to make it as part of the company’s formal product portfolio.

We set up this process by forming small teams of 3–4 people, and we assigned internal coaches to help guide and navigate the teams through various organizational impediments. Setup was not a trivial task; although the “incubation teams” were exempt from many of the requirements of regular Nokia projects, there were always corporate policies and regulations that needed to be managed so that teams could get their work done while dealing with as little red tape as possible.

After an initial concept phase, the teams would meet periodically with a small group of innovation product leaders through regular “validation points” to track progress and adjust funding as needed. When teams could validate that they had both customer-product fit and, later, product-market fit, funding could be increased quickly and be targeted for transition into the overall product portfolio.

In many respects, Nokia's incubation organization was a success. It drove a new way of thinking—across many areas of the organization—that helped us better articulate value in our “regular” product teams. It also helped us fail fast in that we pulled the plug on dozens and dozens of ideas that looked awesome on fancy PowerPoints and business plans but that turned out to be unrealistic or just plain uninteresting when tested on real customers.

Granted, it's hard to calculate the exact savings of *not* doing something at scale. Given the scope of our product portfolio, it is fair to say we saved millions of dollars by understanding sooner that many of our assumptions were simply wrong—either because our customers did not care or our business model was fundamentally flawed or the technology necessary to create the product was not ready.

Despite these financial benefits, however, the incubation organization never became an integral part of how Nokia operated as a company. It never became the source of disruptive innovation we hoped it would be. A few fundamental impediments prevented it from fully becoming a part of the “Nokia Way.”

First, it was hard to attract people to work in the incubation organization because there was a lot of risk involved from a career perspective. If your project was pulled (which was quite likely), you needed to find another project to join. This was fraught with a level of uncertainty that made many people working for larger companies like Nokia uncomfortable. Sure, you wouldn't lose your job, but for someone charting a career trajectory based on established company history, the incubation organization was viewed as a risky move.

Second, although we were able to identify and validate a number of compelling product concepts, to be part of Nokia's product portfolio, the concept needed to have a market potential in the hundreds of millions of dollars (if not billions). That's a tall order when considering truly innovative, untested concepts. Many ideas simply lingered—even after we demonstrated product-market fit—because the concepts were not deemed interesting enough from a financial perspective.

These types of challenges are far from unique to Nokia. My experience has been that integrating an innovation hub within a large corporate “mothership” is challenging; the established processes and policies that helped a successful corporation become more successful turn out to be the key factors that impede innovation from flourishing.

Take Intel, for instance. During the early 2000s, the world's largest manufacturer of microprocessors established a program named “New Business

Initiatives” (NBI), an incubation business unit that shared many of the same characteristics with Nokia’s organization. Despite some interesting ideas and modest successes (WiMax, the wireless standard, being one of them), NBI was never able to deliver on the promise of becoming Intel’s innovation engine.

Part of the core problem was related to how the company managed financials internally. Craig Barrett, a former Intel CEO, describes in a Harvard Business School case study why transitioning innovative products into the larger corporate product portfolio required very difficult decisions for senior management:

*“...even if a VP brings a profitable and high-revenue NBI business unit into his division, he still has to figure out how to cover its expenses. His budget does not automatically increase just because he wants to acquire an NBI startup. So, taking on an NBI group usually means shutting something else down, laying people off, or otherwise making tough choices. Very few VPs will do this unless there is tremendous strategic promise, and even then it’s painful.”<sup>4</sup>*

Essentially, VPs were asked to sacrifice part of their existing, proven portfolio of products to take on speculative concepts with lots of potential but little concrete evidence of meaningful results. It is not hard to understand why VPs would be less than enthused to take on risky prospects like this. Intel eventually phased out its NBI initiative.

The Nokia and Intel examples illustrate the larger challenges with internal innovation hubs within large, successful corporations. Indeed, significant benefits can be achieved by validating concepts more rapidly, helping to drive a more innovative culture and developing internal talent. But although internal innovation hubs may encourage incremental innovation, they rarely foster *disruptive innovation*—the kind that changes the game and ushers in entirely new markets and technologies.

Does this mean large corporations are fundamentally doomed and unable to “embrace change” in a way necessary to win? Does it mean the weight of the corporate environment in itself is an impediment to achieving organizational agility? No. In my experience, large corporations can indeed create an innovation portfolio and benefit from environments with large amounts of VUCA, but only if they also look “outside of the building” and not exclusively within their own environment. The sections that follow cover four strategies identified by Steve Blank, the Stanford professor and serial entrepreneur, that have proven to be effective in fostering disruptive innovation, even for large, established corporations.<sup>5</sup>

## 1. Establish Partnerships with External Innovation Hubs

Innovation hubs are geographic concentrations of technical, business, and investment resources located in a shared physical space aimed to accelerate innovation and entrepreneurship. Initially a concept associated with the spirit of Silicon Valley, innovation hubs are now being established worldwide, typically in urban centers. Large corporations can partner with innovation hubs by funding them, in exchange for which they gain access to new talent and ideas.<sup>6</sup>

Figure 9.3 illustrates a mutually beneficial relationship between an established corporation and an external innovation hub.



**Figure 9.3** Relationship Between an Established Corporation and an External Innovation Hub

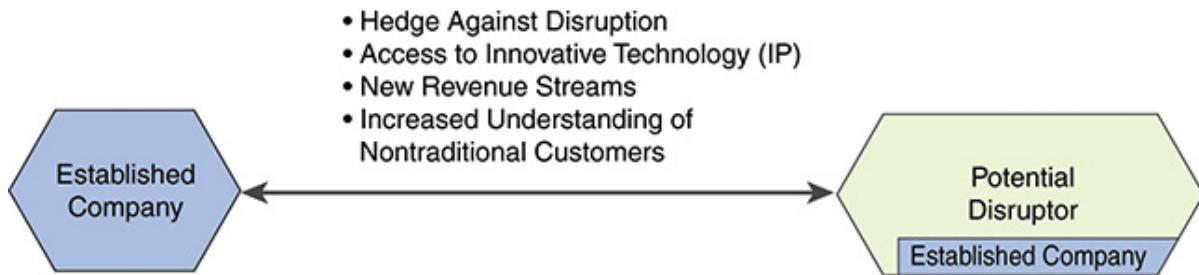
StartupLab, for instance, is an Oslo-based new-company incubator and accelerator funded jointly by large companies, government resources, and successful entrepreneurs. Its goal is not only to help new companies succeed, but also to help drive innovative efforts for its large company partners.

## 2. Take Ownership Interest in Potential Disruptors

Large companies have a vested interest in exploiting their current business model. After all, it's profitable, it's scalable—and it's successful. When they detect novel ideas introduced by much smaller upstarts, it can be easy to ignore them at first because their margins are typically smaller, the market may seem insignificant (in comparison to their established business), and the larger company's existing infrastructure may not support this new way of operating, allowing for limited synergies. Yet, ignoring these challenges from below can be dangerous. In today's rapidly changing business environment, an upstart can quickly become market-leading. Uber, for instance, launched its service in 2010; by 2015 there were more Uber cars in New York City than there were medallion cabs.

One way to embrace this potential disruption while executing on existing opportunities is to take an ownership interest in a potential disruptor. This ensures the incumbent (the large company) benefits from any technology and business innovation introduced by the potential disruptor—innovations that may be impractical to develop within the larger company itself as described.

[Figure 9.4](#) illustrates an approach in which a larger, established company takes an ownership interest in a potential disruptor to get access to its intellectual property (IP), create new revenue streams, and effectively hedge against being disrupted.



**Figure 9.4** *If You Can't Beat Them, Join Them: Gain Access to External Innovation by Taking Ownership Interest in a Potential Disruptor*

Intel, for instance, took a 15% ownership stake in HERE, the digital mapping and location services company, as a strategic bet toward the future of self-driving vehicles, IoT technological advances, and big data processing.<sup>7</sup> As the landscape in this highly volatile business environment is being developed, Intel—as it races against other Silicon Valley companies such as Google, Tesla, and

Apple—wants to ensure it is part of the game in areas like machine-learning and mapping. Whether the investment pays off remains to be seen, but at the time, the move was widely viewed by investors as an effective hedge against the future of driverless vehicles—a future that is far from clear.

### **3. Acquire Disruptive Competitors—and Let Their Culture and People Flourish**

When Amazon decided to acquire Zappos in 2009 for some \$850 million in stock and cash, it was not immediately clear to investors why the world's largest online retailer wanted a relatively small niche merchant specializing in online sales of shoes. From an online retailing perspective, Zappos was never a serious competitor to Amazon: its revenue was just over \$1 billion at the time of the acquisition, a small fraction of Amazon's \$24 billion annual revenue.<sup>8</sup>

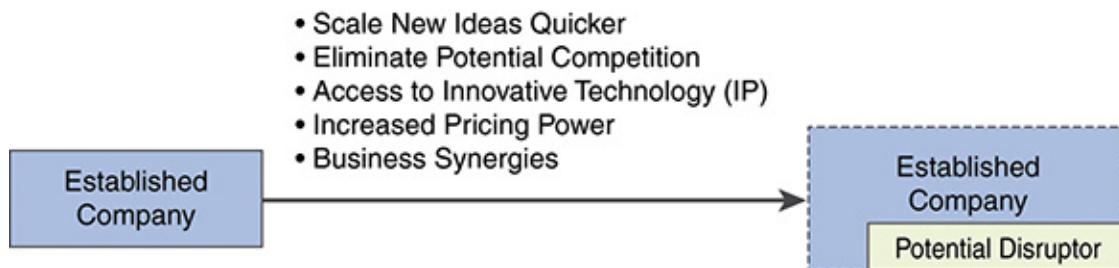
But Amazon saw something else in Zappos—something CEO Jeff Bezos viewed as truly disruptive to the industry (three things, to be exact):

- **A near-obsessive focus on customers:** At Zappos, profits were never viewed as the key goal; customer satisfaction was. Stories of Zappos's customer service commitment abound, but one has become legend: a customer service representative talking with a customer for more than 10 hours; that's quite remarkable in an industry typically focused on finishing customer calls as quickly as possible!
- **A distinct, but strong culture:** Zappos's core values statement, which includes creating “fun and a little weirdness,” is quite different from Amazon's, which is famously data-driven and has a reputation for being hard-charging. Despite the differences, however, Bezos recognized that Zappos had a strong culture that helped disrupt the shoe-selling business, and he wanted part of it. In a video statement to employees following the acquisition, Bezos gushed, “I've seen a lot of companies, and I have never seen a company with a culture like Zappos's. And I think that kind of unique culture is a very significant asset.”
- **A unique set of passionate leaders:** Zappos leadership is known for being a bit quirky. CEO Tony Hsieh, for instance, lives in a 240-square-foot trailer with a couple of alpacas despite a personal wealth of more than \$700 million. Yet when Amazon acquired the

company, it agreed to leave leadership in place and let the company be run autonomously, as long as certain key financial targets were met.

Although many doubted that Amazon would truly be hands-off once the deal settled, Amazon has kept Zappos independent, and leadership has remained free to manage the subsidiary as it sees fit. Hsieh's experimentation and commitment to the Holacracy organizational design model, as described previously in [Chapter 4](#), is a concrete example of how Amazon allows Zappos to continue to run the business according to its own wishes.

[Figure 9.5](#) illustrates a scenario in which an established company takes over a potential disruptor. By taking a hands-off approach, an established company can effectively embrace innovation outside of its own corporate culture.



**Figure 9.5** Acquiring a Potential Disruptor Can Be an Effective Way to Embrace Innovation Outside the Company's Own Culture

On the surface, Zappos and Amazon have little in common, aside from a shared obsession with pleasing the customer. But by acquiring a company that espouses a very different leadership philosophy and a quirky, innovative culture, Bezos and Amazon made a potential threat and disruptor to their own business a part of their portfolio—without having to divert attention from Amazon's already successful model.

## 4. Create an Internal Culture of Disruptive Innovation

The examples from Nokia and Intel earlier in the chapter illustrate how challenging it is to build a truly innovative, disruptive culture and embrace change from within an already successful, large enterprise.

In terms of embracing innovation, the very aspects of the business that have made it successful become de-facto liabilities for three main reasons:

- **Competing with disrupting businesses may cannibalize existing, proven business models.** This is especially challenging for publicly traded companies that need to show consistent, quarter-by-quarter growth to retain share value. Sacrificing a stable revenue stream by experimenting with unproven models is therefore not often an attractive option. Remember how Intel struggled to have internal VPs take on new businesses because they would have to sacrifice part of their own portfolio?
- **New entrants may render existing incumbent assets useless.** An incumbent may have built significant assets over time that help sustain its dominant position. When a disruptive entrant comes along, these assets may indeed become liabilities. Ignoring these “sunk costs” and essentially writing off the assets can be politically impractical. Imagine hotel chains as they noticed Airbnb entering the market, for instance. Big hotels trying to compete with Airbnb by developing their own similar products—while essentially ignoring the real estate assets upon which they built their existing success—would be inconceivable. Airbnb, as the new entrant in this market, never had to consider this trade-off.
- **Disruptors challenging established definitions of the market.** Market leaders have become superior by outmaneuvering the competition and executing on their strategy better than anyone else in the same market space. However, as Christensen notes, the new entrants often come from beyond the traditional market space and may not initially be seen as a competitor at all. Many of the established car makers, for instance, view Tesla as an important competitor, but they are competing within the same market space—although initially with technical differentiation. Uber, however, is a market disruptor because the “on-demand” transportation service concept is changing the entire transportation business. What does BMW’s “The Ultimate Driving Machine” look like in an environment where young people want to avoid owning a car and instead prefer transportation on demand?

Creating this capability and culture of embracing change within an existing company is therefore extremely challenging but not impossible. We saw some encouraging examples—with nontrivial benefits—in the example at Nokia. Yet the culture held efforts back from permeating the entire organization. It takes a strong vision and commitment from upper management to be willing to disrupt itself—to risk cannibalizing its existing successful ways of working in order to embrace a new business model.

For example, Netflix CEO Reed Hastings recognized early on that the future was not in DVD delivery of movies, but rather streaming movies over the Internet. In 2011, this leap was not intuitive, however. Netflix was making a healthy profit delivering DVDs to users across the U.S., and it had 14 million DVD subscribers. Hastings decided to split the company in two and create a DVD department and a streaming department. In essence, the departments were competing against each other, and it became clear which department was losing. In 2015, the number of DVD subscribers had decreased to 5 million. The overall winner, however, was Netflix: from 2011 to 2015, its annual revenue increased from \$3.2 billion to \$6.7 billion.

Yet, the best example of a company that I can think of that continuously disrupts itself by design is Amazon. Ever since its inception, Amazon has challenged itself to continuously cannibalize existing businesses, often at the expense of short-term profits.

When users wanted to sell their used books (often bought initially at Amazon), eBay was the natural choice. Amazon recognized this and allowed users to sell their used books on Amazon, as well. At first, this may have looked like a risky move because used—and cheaper—books would now compete head-to-head with new offerings in Amazon’s catalogue. Yet, Amazon is comfortable cannibalizing parts of its existing business as long as the customer gets a better experience and it keeps them within the Amazon ecosystem.

As covered in [Chapter 7](#), “Culture,” building this mind-set from within requires a commitment from upper leadership, a consistent display of behavior illustrating that this is how work is done, and gradual change over time. Exploration needs to come from the top, with authentic leadership as displayed by Netflix’s Hastings or Amazon’s Bezos. Simply trying to emulate these companies is not going to work, however, because the shift has to authentically represent (or come from) your company’s respective culture.

This section discussed several methods for initiating a culture of exploration and disruption within a large organization. Now let’s look at the other half of the

equation: how to continue executing proven value with purpose, even in the face of disruption and change.

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## Exploitation: Executing Proven Strategies with Purpose

By definition, innovation cannot be planned or implemented by fiat. Identifying, discovering, and fostering product and business innovation in a large enterprise is an effort that can only be encouraged by creating an environment of serendipity through strategies we discussed previously—not driven top-down from the executive ranks. Setting deadlines, creating customer commitments, and communicating external market expectations are therefore harmful in Complex environments like these. There are simply too many unknowns—too much VUCA—to be able to provide predictive insights. You can't force innovation.

Nevertheless, the majority of successful companies' net income comes from the product portfolio that's in Snowden's Complicated domain, where customers are clearly identified, the technology is established, and product-market fit has been confirmed. Customers are going to need to know what's coming up next, partners have a legitimate stake in understanding the product roadmap, and corporations need to provide meaningful guidance to the external market. And in these environments, we should be able to provide these answers. The level of unknowns is low enough for us to provide direction so that activities such as sales strategies can be defined, external partner conversations can start, and appropriate market guidance can begin.

Do these expectations mean there is no room for innovation in this space? Absolutely not—but the level of VUCA and unknowns within these established product offerings is clearly more limited than what you'd expect in the disruptive efforts we described earlier. This context thus requires a different set of tools and thinking than what we described when embracing change.

Enterprise agility requires both modes of operating—embracing change *and* executing with purpose—to compete in today's evolving environment. It's great when a company can continuously innovate and come up with novel business models, but exploiting a position of leadership requires an ability to execute with confidence as well. Most often, companies do either innovation or execution well; few can do both. However, unlike innovation, where so much depends on creating an environment of serendipity and inspiration, execution can

be improved by reducing uncertainty through progressive refinement and continuous improvement.

In the upcoming sections, I describe four simple workshops I've used in large organizations to help execute with purpose: to decrease the time it takes to get to production, to remove impediments within the value stream, and to keep end-to-end alignment between strategy and execution. Through these lightweight events, organizations can increase confidence in their ability to deliver quality software products while still ensuring critical feedback loops are maintained throughout the process.

But first, let's explore why "executing with purpose" is not quite as simple as it sounds.

## **Lost in Translation: How Product Strategy Turns from Vision to Hallucination**

After having joined my new employer (who shall remain nameless), I was excited that the CEO of the company was an excellent communicator who crisply summarized this year's product strategy as consisting of "four big bets." I loved the fact that the big bets were easy to remember—we could all get on the same page—but even more than that, I loved that there were just four key areas of focus. Four is a manageable number. If the organization is disciplined enough to focus its efforts on these four strategic bets and not get distracted by less important things, it should see clear advancements in speed, quality, ability to deliver, and employee engagement. As we've discussed throughout this book, limiting work in progress (WIP) is an excellent organizational improvement strategy in and of itself.

Alas, my excitement was short-lived. A few days after the all-hands meeting where the strategy was announced, I asked some of the teams I was coaching how their work related to the "four big bets". The answers were as clear as they were consistent—"not at all." I figured perhaps the bets would roll out over the next few months, so I decided to wait a few iterations before checking on what was going on across a few more business verticals. Unfortunately, the feedback I received did not change. In fact, if anything, the bets were more or less forgotten already. When I asked one of the developers why I did not see any of the big bets reflected in their backlog, her answer surprised me. "That whole thing you heard earlier is just something management uses to talk about strategy amongst themselves. The reality is that the work we do has very little to do with these

bets at all. It's always been this way, and I don't anticipate it changing anytime soon."

It turns out what took place in this organization was not unique and is a common problem in many large organizations today. Understanding the "why"—the purpose behind a company's strategy—is often lacking. This lack of purpose leads to teams executing on a hallucination, rather than a product vision. The vision is unclear to employees, rendering it essentially meaningless. In fact, according to a study by researchers Robert Kaplan and David Norton in the *Harvard Business Review*, some 95% of employees do not understand their company's strategy. Having an articulated strategy matters: according to a study by two principals at PwC, companies with a coherent strategy experienced greater profitability measured over five years than companies that didn't. There are other implications, as well: when a company's product strategy is unclear, employers see lower levels of employee engagement, higher levels of undesired attrition, and less productive workers overall.<sup>9,10,11</sup>

Why is linking a company's corporate strategy to the work teams actually do on a day-to-day basis so challenging? Given the clear benefits of distilling a larger product strategy into tangible work, why is this step not happening? Why is this such a widespread problem across larger organizations? My experience has been that the root cause of the problem is information processing. The nice PowerPoint slides, catchy taglines, and inspirational imagery are cool, but they fail to connect with teams in a concrete and meaningful way as the strategy is distilled through various levels of the organization. Put simply: the strategy is lost in translation and loses its meaning by the time teams are working on it. This is what I meant earlier by "hallucination." By the time corporate's plans make their way to the front lines, they've been transformed from a solid, executable vision to a hazy specter. Teams do the best they can to interpret the taglines and catch phrases, but they're never quite certain they're doing the right things. To fix this problem, organizations need faster feedback loops, more visibility, and better communications tools, starting from the moment the strategy is crystallized.

The next section looks at how to describe and execute strategy so everyone's on the same page. I describe four essential workshops that help companies improve communications, increase alignment, and reduce variability in a meaningful manner. The goal of these events is to enable everyone in the organization to better understand the corporate strategy and remove the hallucination: the Why, What, How, and When of the corporate vision.

## Executing with Purpose Through Progressive Refinement

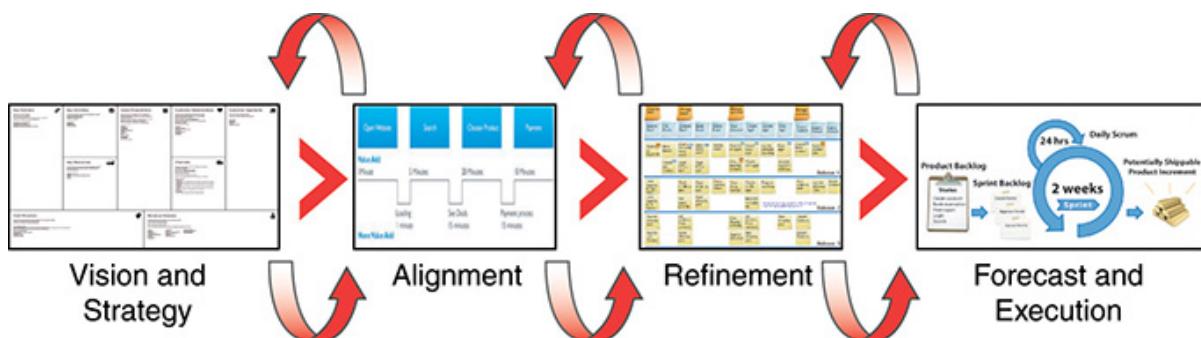
I recommend leveraging four simple workshops to help clearly link strategy to work being done in the teams, to align stakeholders at various levels of the organization toward a common product purpose, and to decrease the time it takes to go from concept to cash.

Specifically, these four workshops drive:

- End-to-end visibility of value delivery, from concept to cash
- An economic perspective from which we make trade-offs
- Involvement and collaboration from all groups necessary to create end value, including Sales, Marketing, Operations, Finance, and Support
- Frequent feedback loops to generate inspect and adapt opportunities
- Interactions and conversations over excessive process definition
- Speed: less time spent on non-value-added activities, and more time spent on product development

These workshops achieve all of this by facilitating targeted, face-to-face interactions with representatives of critical parts of the organization on a regular cadence. They instill frequent feedback loops and ultimately translate strategic intent into clearly defined deliverables.

In a nutshell, the workshops consist of four interactive, hands-on events outlined in [Figure 9.6](#).

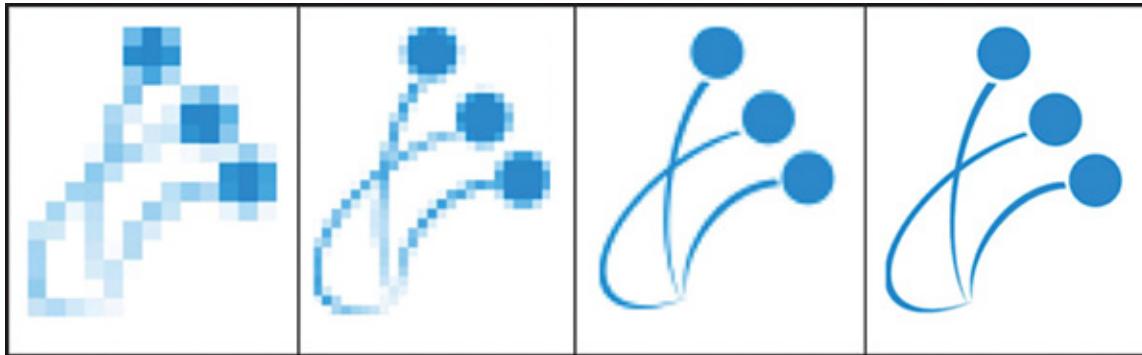


**Figure 9.6** Lightweight Workshops Facilitating Progressive Refinement; Through Four Distinct Events, the Link Between Strategy and Execution Is Made Tangible—Quickly and Effectively

In the sections that follow, I detail what takes place during each of the four workshops. I also clarify the audience in each—and the desired outcomes. At the end of this chapter, you'll be equipped with what you need to implement a progressive refinement approach in your own organization.

First, though—what exactly is progressive refinement, and what does it mean?

Progressive refinement as a concept has its origins in the early days of computer graphics. To accommodate for a lack of processing power, low bandwidth, and inadequate computer resources, programmers were looking for ways to render an image in a reasonable amount of time. Given the technical constraints, rendering a fully formed image at once would take too long. Engineers helped solve the problem by revealing coarse structures of the image first and then gradually revealing additional detail. [Figure 9.7](#) shows how an image gradually renders from almost indistinguishable to perfect clarity through multiple iterations of refinement.



**Figure 9.7** *Progressive Refinement Reveals Clarity by Gradually Improving Fidelity—Going from Coarse to Finer Levels of Granularity*

By gradually revealing the image, providing additional fidelity and detail over time, rendering became faster, errors were detected more quickly, and context was revealed to viewers with fewer resources. Progressive refinement helped optimize information processing in light of current constraints.

The four workshops I describe echo this concept by simplifying the complex organizational information processing necessary to distill a strategy into actionable work. They do this through four interactive events, targeted at a different level of granularity and audience within the organization. By leveraging the four workshops as part of an operational strategy in environments with

proven business models (exploitation), organizations can radically reduce the time to market, increase alignment, and more confidently execute with a common purpose.

Let's describe the four workshops in detail, starting with Vision & Strategy.

### ***Workshop #1: Vision & Strategy Workshop (“The Why”)***

The purpose of the Vision & Strategy workshop is to create a clear idea of strategy and an understanding of the economic framework guiding our decisions. This workshop is focused on creating a crisp understanding of “why” so that a cross-functional set of stakeholders at the executive level are aligned on strategic purpose. Gaining a deep understanding of the context behind a given product or service is essential to gain clarity and define organizational priority. Representatives from the AWG facilitate the session and recognize that getting the right level of executive participation at this session is crucial.

[Table 9.1](#) outlines the key elements of the Vision & Strategy workshop; note that the audience in this session is cross-functional and includes representatives from senior leadership. A premium is placed on face-to-face interaction.

**Table 9.1** Vision & Strategy Workshop: Key Characteristics

<b>Inputs</b>	Desired roadmap; preliminary financial projections; high-level technical architecture
<b>Audience</b>	Senior executives; sponsors and representatives one level down
<b>Functions Represented</b>	Product Management, Engineering, Finance, Sales, Marketing, Support, Legal
<b>Duration and Format</b>	2 Days; face-to-face
<b>Desired Outcomes</b>	Alignment of business model: value proposition, customer segments, revenue implications as well as costs, infrastructure and resources necessary to deliver Prioritized outcomes defined Understanding Cost of Delay (CoD) Identifying key stakeholders for Alignment workshop
<b>Perspective</b>	Strategic and long term

The two-day Vision & Strategy workshop revolves mainly around two key activities: Business Model Canvas and CoD.

### *Business Model Canvas (Day One)*

We described the Business Model Canvas (BMC) in greater detail in [Chapter 3](#). Although the BMC can be used for many purposes, the key objective in this workshop context is twofold: to create alignment across the executive levels on what the business model of a given initiative looks like, and to pressure-test assumptions made underway.

Product Management typically plays a key role in this activity, but all groups will quickly find that they also have an important role. For instance, technical architecture—critical for realizing the value outlined in the BMC—is represented prominently on the canvas. Representatives from Legal, Marketing, and Sales also quickly realize the implications of their work when they discuss the bigger picture as an organization.

Facilitated by the AWG, the BMC workshop involves representatives from a broad set of organizational functions as they interactively discuss, lay out, and define the nine building blocks of what makes a respective business model “tick” for a given product or service. From defining the customer segments and clarifying the value propositions to outlining the key resources and activities necessary to create them, the BMC provides an end-to-end perspective of what’s required to make the product succeed.

At the end of this first activity, all executive stakeholders will have a crisp understanding of the “why” underlying the respective business initiative, as well as a good, high-level understanding of what needs to take place for this effort to become reality.

### *Cost of Delay (Day Two)*

We covered CoD earlier in the book, as well. The purpose of this activity is to ensure the executive level—as a group—has a common understanding of the economic impact of the business initiative. This understanding enables them to clearly articulate the CoD of *not* having this effort be commercially available.

The purpose of this session is to gain a good grasp of the impact of time on value. That is, what does it cost our firm—per week or month—to not have this product or service in production? We’re not aiming for precision in this exercise, but accuracy—what is a fair assessment of the economic impact of not having this product or service available?

Just as Product Management may have played a more dominant role initially during the BMC session, Finance may start leading this session. As the other stakeholders chime in regarding technical implications, marketing spend, competitive market changes, and so on, a more complete picture of the CoD emerges across the executive levels. At the end of this activity, executive stakeholders understand clearly where this effort belongs in the context of a broader economic framework. The result? They are able to make priority decisions based on economics, not gut feel.

At the end of the two sessions, not only will workshop participants have gained a more comprehensive picture of the context behind the product, but the cross-functional representative of executives will understand the relative economic impact created by not having it available.

## *Workshop Outcomes*

The perspective of the Vision & Strategy workshop is rather long term: 9–12 months. We’re looking ahead to what’s on the horizon without getting too detailed regarding concrete deliverables. Ultimately, the workshop has two key goals:

- A clear understanding and alignment across executive leadership regarding the “why”
- An unambiguous perspective of what this effort means to the company in economic terms, helping to make product portfolio prioritization based on economics and not intuitions

## ***Workshop #2: Alignment Workshop (the “What”)***

Now that we have a clear understanding of the bigger picture and priority, it’s time to get a bit more granular. The purpose of the next event, the Alignment Workshop, is a clear perspective of short- and medium-term business goals, with a feature-level granularity in the short term, and an understanding of which teams are required to accomplish the goals.

In other words, this workshop goes one level deeper than the Strategy & Vision workshop. It allows us to get more concrete regarding what we’re planning to deliver, while identifying which groups and teams within our organization will be involved. The audience in this workshop is also less senior than in the previous workshop. Think “leads” closer to the action, not “executives.” As such, this workshop becomes a critical nexus between the “why” and the “how”—it details the “what.”

[Table 9.2](#) outlines the key characteristics of the Alignment workshop; we’re now translating the strategy into more tangible business outcomes.

**Table 9.2 Alignment Workshop: Key Characteristics**

<b>Inputs</b>	Understanding of business model, economic framework, key stakeholders
<b>Audience</b>	Mid-level managers and representatives from one level down
<b>Functions Represented</b>	Product Development, Engineering, Finance, Sales, Marketing, Support
<b>Duration and Format</b>	2 Days; face-to-face (2 days initially, 1 day on an ongoing basis)
<b>Outcome</b>	Review key outcomes identified through Business Model Canvas; refine and create prioritized Epics  Identify Jobs to Be Done; recognize the gains customers want and the pains to be alleviated  Conduct Value Stream Map; identify teams required to create value  Enumerate risks, issues, dependencies at the solution level; make recommendations regarding gap based on economic impact
<b>Perspective</b>	Strategic and medium term (Quarterly view)

The Alignment workshop consists mainly of two interactive activities: Jobs to Be Done (JTBD) and Value Stream Mapping.

### *Jobs to Be Done (Day One)*

JTBD is a framework used for creating a deep understanding of what motivates your customer. It can be powerful when identifying innovation opportunities. Harvard professor Clayton Christensen invented the framework as part of his work on disruptive innovation. Simply put, JTBD posits the question, “What job does the customer hire our products or services to do?” Christensen came to realize that understanding this question is a lot more meaningful than conducting weeks of customer research or running analytical algorithms and the like. By understanding the deep implications of what job our customers “hire” our products or services to do, we can more easily provide customers what they need—and start identifying opportunities for innovation.<sup>12</sup>

The classic example Christensen uses to explain the concept is related to milkshake sales. A large fast food chain hired Christensen and some of his colleagues to increase the sale of milkshakes. At first, the researchers attempted to understand what attributes of the product people liked. Would it help to revamp the strawberry flavor? Perhaps create milkshakes with fewer calories? They tried everything—market research, customer interviews, profile analysis, and so on, but nothing seemed to work; the sales did not move. Then one of the researchers asked an interesting question to some of the people who came in through the drive-in every morning: “What job do you hire this milkshake to do for you?” The answers were incredibly insightful and helped the researchers gain a deep understanding of what problem milkshakes “solved” when customers bought them every morning or afternoon at the drive-through.<sup>13</sup>

The answer? Customers needed something to do on their commute! Most customers had a 20-30 minute commute to and from work, and they were bored, so they wanted something to do while driving the same old trek. Donuts did not help with this because they were unhealthy and messy. Bagels were incredibly difficult to handle while driving, and Snickers bars were gone way too fast, leaving lots of time left in the commute.

Milkshakes, however, were perfect: you could buy them in the morning, suck on them throughout the commute, and by the time you got to work, they were done. Milkshakes meant no mess, and although not necessarily healthy, caused less guilt, and created a pleasant way to spend the boring commute every day.

Christensen’s JTBD framework provides insights that are quite deep. By understanding the “job” customers are hiring the product or service to do, companies can recognize uncommon insights about the purpose the product fulfills and its competitive context. For instance, the milkshake’s fiercest competitors were not other milkshakes, flavors, or even sodas. The competition was donuts, bananas, and the like—categories that are not immediately intuitive as natural milkshake competition using traditional competitive analysis. Also, if you understand that the “job” the milkshake does is to help make the commute more enjoyable, perhaps making the drink more viscous (to make it last longer while sucking it up through a straw) would be one way to enhance the product rather than adding exotic flavors or other more conventional features. (As it happens, this is exactly what the fast food chain did, and it had a positive effect on milkshake sales.)

Understanding the JTBD is a critical component of the Alignment workshop because it helps make the strategy more concrete through a robust discussion regarding what fundamental problem we’re solving for the customer. In the

activity, participants go through an interactive exercise aimed at helping to identify exactly what “job” customers hire a product or service to do. A large collection of customer statements are reviewed as part of the exercise, and representatives from Engineering, Product Management, Sales, Marketing and other areas create a deeper understanding of the value proposition our product delivers. Specifically, in addition to the “jobs,” participants enumerate what gains (benefits) the product delivers, as well as what pains the product relieves.

At the end of the session, a cross-functional group of both business and technical leaders across the company have gained a common understanding of what value the product creates for the customer.

### *Value Stream Mapping (VSM) (Day Two)*

We covered Value Stream Mapping (VSM) in detail in [Chapter 3](#). Now that a key set of cross-functional stakeholders have realized a deep understanding of what we’re creating for our customers, the next step is to be explicit regarding what parts of the organizations and teams need to be involved in realizing this value. When participants start mapping out the various units and teams that will need to contribute to making the vision a reality, they gain an end-to-end perspective of how value is created in the organization.

Almost without exception, this is also the point at which participants learn that the current way the organization is set up does not optimize for creating value. Rather, a number of cross-organizational dependencies become apparent and visible through the exercise.

The good news is that this team is empowered to do something about it. The workshop is at a high enough level that temporary organizational changes can happen as a result of the newly discovered impediments. Executive leadership is already onboard; after all, there is cross-organizational alignment on priority based on the CoD estimation of the product conducted earlier. When organizational changes are made to accommodate flow of customer value, these changes are supported at the necessary levels of the organization.

For example, one client I worked with found after conducting the VSM workshop that one of its products had multiple dependencies on a particular user experience group (UX) that was shared with many other products. The value stream revealed that by not removing these dependencies, we were likely to see wait times of 4–6 weeks—because the UX group was busy with other efforts also needing help. This is where having CoD became critical: we could show that the weekly CoD for this product was \$500,000, resulting in a total delay of

up to \$3,000,000 ( $\$500,000 \times 6$  weeks) because of this organizational dependency. When looking at the other dependencies, the other CoDs were nowhere close—most were under \$100,000/week. Because of this analysis, we changed the priority so that the higher CoD was provided the resources first, ensuring that we could decrease the organizational CoD. We optimized for the whole and what was best for the organization and our customers—not the individual project.

As should be evident, the perspective of the Alignment workshop is less long term than the Vision & Strategy workshop. The perspective is 6–9 months—we’re looking ahead a bit without going too far out on the horizon. We’re now creating a crisp organizational understanding both of why we’re working on a given product and what value it provides to our customer—and we’re being realistic regarding what parts of the organization will need to be involved in making it happen.

### *Workshop Outcomes*

This workshop has two key goals:

- Creating an unambiguous cross-organizational understanding of what problem the product/service helps us solve for the customers
- Creating clear alignment regarding what parts of the organization need to be involved in making this product come to life—and empowerment to make the organizational changes necessary to optimize for flow of value based on CoD

### ***Workshop #3: Refinement (the “How”)***

The purpose of the Refinement Workshop is to identify a prioritized set of work items (Epics), refine them so they are ready to be worked on, and ensure alignment with the strategic plan. At this point, we’re not yet ready to get our hands dirty; the main objectives of this session are to translate the value propositions outlined in the earlier workshops into concrete units of work, crystallize the customers we’re serving with our products, and sketch out a high-level understanding of how the work will be done.

As such, this is a rather technical session. While the business side of the equation may have had a bigger voice in the first two sessions, the next two sessions are more focused on the “how” and the “when.” The audience is also

more targeted. Whereas the other two sessions had a fairly broad organizational representation to create end-to-end alignment, these next sessions have more representation from product management and engineering. The timeframe in question is also shorter: while the previous workshop had a 3–6 month time period in mind, we’re not looking much beyond about three months.

[Table 9.3](#) outlines the key elements of the Refinement workshop. Note that this is still very much a holistic discussion between articulating the value we’re creating for the customer and figuring out how we’re doing it.

**Table 9.3** *Refinement Workshop: Key Characteristics*

<b>Inputs</b>	High-level work items, value stream map, mitigated risks/issues
<b>Audience</b>	Management and Team Leads
<b>Functions Represented</b>	Product Development, Engineering, Support
<b>Duration and Format</b>	2 Days; face-to-face (2 days initially)
<b>Outcome</b>	Groom work items using Story Mapping techniques; create end-to-end perspective; vertical slices  Review current risk and dependency mitigations; identify additional risks and dependencies  Medium-level granular roadmap; higher level roadmap near future  Architectural runway
<b>Perspective</b>	Short to medium term

The Refinement workshop primarily consists of two interactive exercises: *Product Canvas* and *Story Mapping*.

## *Product Canvas (Day One)*

The Product Canvas, created by product management thought leader Roman Pichler, is similar to the Business Model Canvas in that it allows participants to interact and collaborate with a low-fidelity, tactile tool that helps create a common understanding. But whereas the BMC covers a high-level view of the business model underlying the product or service, the Product Canvas focuses explicitly on information specific to the product and its immediate deliverables.

**Figure 9.8** shows the Product Canvas. Notice how the level of granularity in this canvas is quite a bit lower than in the BMC used in the Strategy & Vision workshop.

The Product Canvas			
<p>Designed for: _____</p> <p>Designed by: _____</p> <p>On: dd/mm/yyyy</p> <p>Iteration # _____</p>			
<b>Vision</b> <small>Explain your product in one phrase or sentence.</small>		<b>Name</b> <small>What is the name of your product?</small>	
<b>Personas</b> <small>The users and customers with the need to be addressed or the problem to be solved. Described as personas.</small>	<b>Big Picture</b> <small>The user's interaction with the product and the product features required to address the needs of the personas.</small>	<b>Product Details</b> <small>The goal of the next sprint. A prioritised list of items that can be implemented (stories).</small>	
<small>Based on Roman Pichler's Product Canvas (<a href="http://www.romanpichler.com/blog/agile-product-innovation/the-product-canvas">http://www.romanpichler.com/blog/agile-product-innovation/the-product-canvas</a>) Licensed under the Creative Commons CC BY-SA license.</small>			

**Figure 9.8** *Product Canvas; Through Interaction and Collaboration with Representatives from Product Management and Engineering, We Can Quickly Gain Insights into the Next Iterations of the Product (This work is licensed under the Creative Commons CC BY-SA license. Based on Roman Pichler's Product Canvas: [www.romanpichler.com/blog/agile-product-innovation/the-product-canvas](http://www.romanpichler.com/blog/agile-product-innovation/the-product-canvas))*

Using the Product Canvas, the value proposition so clearly articulated in the earlier JBTD workshop is now associated with representatives of the customers whose jobs we’re performing via personas. Personas is a marketing profile technique used to make customers more concrete and personal; instead of selling to a category—a woman, aged 24–34, with a college degree—we’re selling to Sarah, who’s 27 and went to Michigan State. By making the customer more real and representing her as a real person—a persona—we can empathize with her by being in her shoes and better understand how our product helps create value for her.

As the various customer personas are defined, we get more specific regarding how we’re going to develop this product or service. For instance: Sarah, the system administrator, has different needs than Jane, the Chief Information Officer, even though their basic job to be done—peace of mind from security breaches—is identical.

A high-level technical design, basic workflows, and mock-ups are sketched out by representatives from architecture, development, and UX so that everyone can get a general sense of how the solution is coming together. For instance, an application architect sketches out how she sees the solution coming together from a technical perspective. A UX lead provides mockups to show how he’s looking at the end-to-end flow of user interactions. Along the way, stakeholders challenge each other, seek to understand, and come to a general agreement among a cross-functional set of representatives. This approach clears up potential misunderstandings and avoids misconceptions.

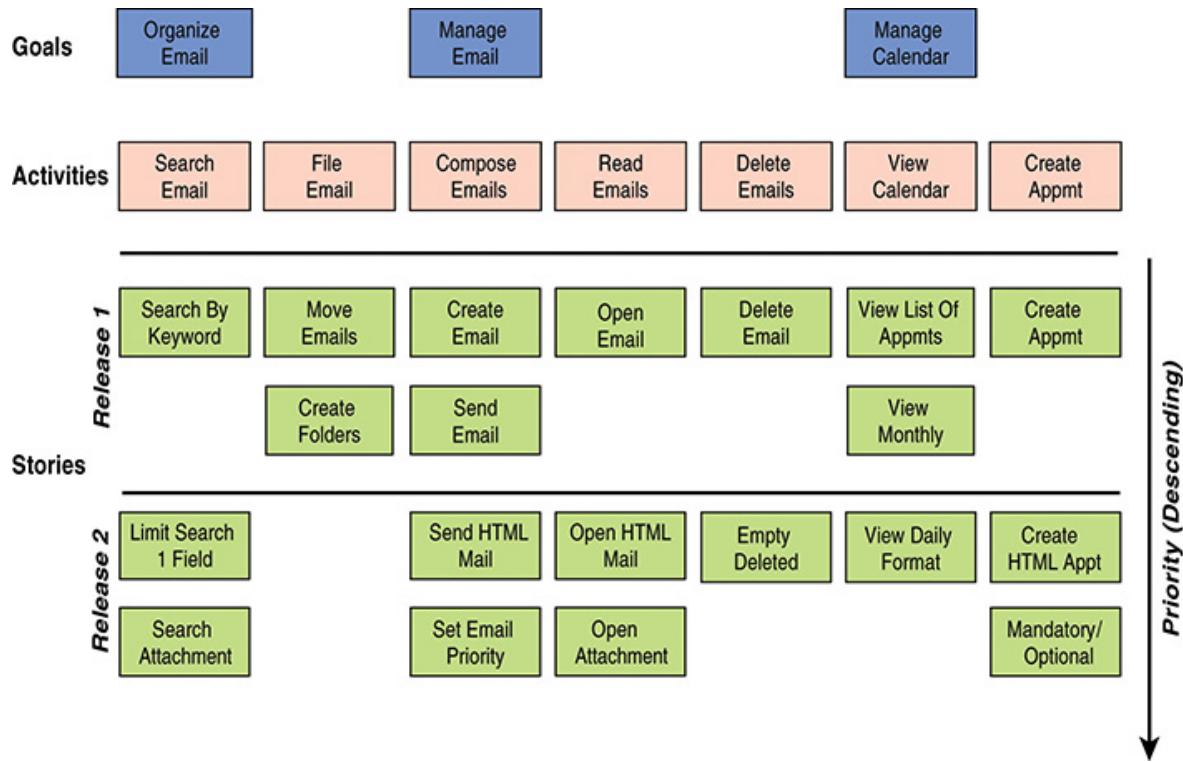
At the end of the Product Canvas exercise, the stakeholders collaborate to create a handful of prioritized Epics, or units of work, that describe what we’re going to create, for whom we are creating it, and what value it provides for our customer.

### *Story Mapping (Day Two)*

This technique, created by Jeff Patton, an author and agile product development thought leader, is an effective way to collaboratively align stakeholders on an end-to-end view of delivery. Using the output from the Product Canvas as context, the stakeholders in this exercise break down the work items into three parts: clearly defined Goals; Activities that need to happen for the Goals to be accomplished; and, high-level Stories made from these Activities.

Figure 9.9 shows an example of a story map for an email system. Notice that the horizontal axis represents the order of goals from the user’s point of view as

well as the behavior of the system. The vertical axis represents manifestations of value sorted by priority.



**Figure 9.9 Story Mapping Example: By Organizing the Work Through Vertical Slices of End-to-End Value, Customers Can More Quickly Provide Feedback, Facilitating More Team Learning and Reducing Uncertainty (Adapted from an example by Steve Rogalsky)<sup>14</sup>**

In the example depicted in Figure 9.9, the team is breaking down a work item (Epic) from the Product Canvas that describes an email client. One of the Goals of this Epic is to “organize email.” Going down the chart a bit further, you’ll see that one of the Activities required in organizing email is to “search email.” At this point, the stakeholders slice the activity of “searching email” into smaller slices in order of priority.

In this example, “search by keyword” has a higher priority than “limit search to one field” or “search attachments,” so “search by keyword” is tentatively slated for an earlier release than the other stories. The stakeholders then break down the other Epics in a similar manner until a more complete picture of the end-to-end value delivery is clear.

## *Workshop Outcomes*

At the end of the two-day Refinement workshop, the product management and engineering organizations have a common understanding of what we’re delivering, why we’re delivering it, and roughly how it is going to be delivered. Further details remain to be fleshed out, of course, as well as a clearer understanding around timing. These steps take place in the last of the four workshops.

## ***Workshop #4: Forecast & Execution (the “When”)***

After the first three workshops are complete—ensuring the Vision & Strategy are distilled into high-level backlog items teams can start working on, the fundamental needs of the customer are top of mind and the organizational priorities are clear—it’s time to break down the work and provide a meaningful estimate regarding deliverables. While planning work at this level of granularity can take place at various cadences, the objective is to find a timeframe that is useful for the context.

I’ve found 2–3 months to be a good compromise between providing meaningful guidance for the next few months and having enough detail to conduct realistic estimates for the shorter term, but you may find that a shorter timeframe is more relevant in your situation. We’re aiming to provide enough guidance so that collaborators, customers, and other stakeholders have enough information to align their plans without having the teams committing to granular dates and timelines. Find a balance that works for you; context matters.

The people in these sessions are primarily the people doing the work: the teams. Executive leadership and management attend to provide guidance and answer questions, but the teams responsible for delivering the value are the ones making the commitments.

Table 9.4 outlines the key elements of the Forecast & Execution workshop.

**Table 9.4 Key Elements of the Forecast & Execution Workshop**

<b>Inputs</b>	Groomed Epics, self-organized, end-to-end teams based on economic trade-offs and value stream maps
<b>Audience</b>	Leads and end-to-end team members; sponsors
<b>Functions Represented</b>	Product Development, Engineering, Support
<b>Duration and Format</b>	2 Days; face-to-face (2 days initially)
<b>Outcome</b>	Epics and high-level stories for the short term; more coarse-grained for longer term perspective  Prelude to Scrum; teams ready to get started to execute; clear understanding of higher-level goals and appreciation of value and economic choices when faced with trade-offs  Dependencies and risks mitigated, communicated, and accepted
<b>Perspective</b>	Short to medium term (Emergent Planning)—and daily view

One workshop, Emergent Planning, is a version of Program Increment (PI) Planning, popularized in the Scaled Agile Framework (SAFe).<sup>15</sup>

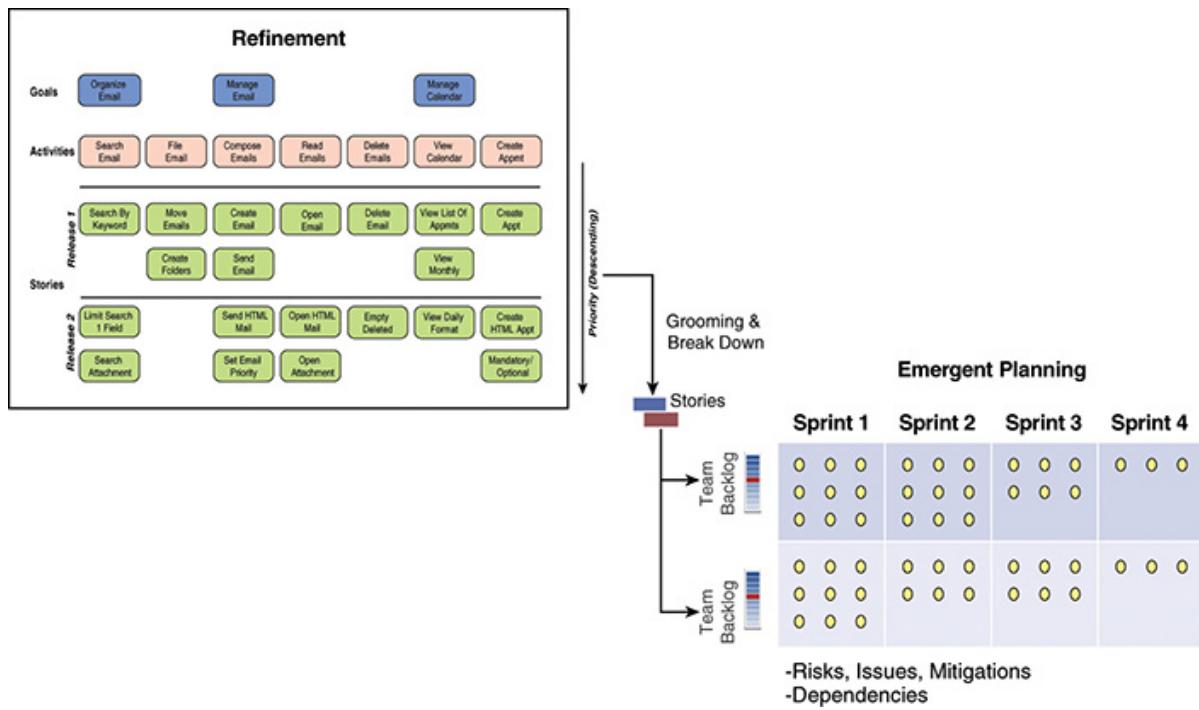
### *Emergent Planning (Two Days)*

In this workshop, team members break down the groomed Epics into User Stories that describe the work to be done and identify why it is being done and for whom. The teams discuss the stories together so they have a common understanding of the work and its scope. They also provide a rough sizing estimate to each other so they can slot the work within a defined timeframe.

All the teams involved do this work concurrently in a shared space, so it's easy to get a visual understanding of what the other teams are doing. The Value Stream Mapping exercise conducted in the Alignment workshop helped identify the teams involved, so large cross-departmental dependencies are rare. Nevertheless, dependencies, risks, and issues are inevitable, so this event is an excellent opportunity to bring up challenges at an early stage and allow stakeholders to make decisions on how to mitigate accordingly.

For example, if Team A is working on a story that Team B needs completed for its work to proceed, both teams coordinate efforts to minimize the delay for Team B. This collaboration helps teams plan how they work together and prioritize the Stories so they can slot them appropriately across the Sprints.

[Figure 9.10](#) illustrates how the work items identified in the Refinement workshop are being further broken down by the teams in Emergent Planning.



**Figure 9.10** The Work Items Defined in the Refinement Workshop Are Inputs to the Activities Performed by the Teams in Emergent Planning

Teams choose whichever method they want (such as Scrum, Kanban, ScrumBan, and so on); the important point is that they're able to coordinate, communicate, and collaborate effectively. In the example in [Figure 9.10](#), the teams are using Scrum (described earlier in [Chapter 3](#)).

Note also that in the chart, teams are not planning with the same level of granularity across each of the Sprints—that would not be very agile. Rather, they provide a high-fidelity overview of the first few Sprints—where there is more certainty—with less detail as the plan progresses and uncertainty increases. This encourage Emergent Planning while providing just enough detail so there's sufficient direction for factors like market guidance, partner communications, and the like to take place. Achieving this balance is the key objective of

executing with purpose: providing enough information so that stakeholders and external collaborators can coordinate efforts on their end with meaningful boundaries, allowing teams to deliver value that aligns with a clearly defined strategy.

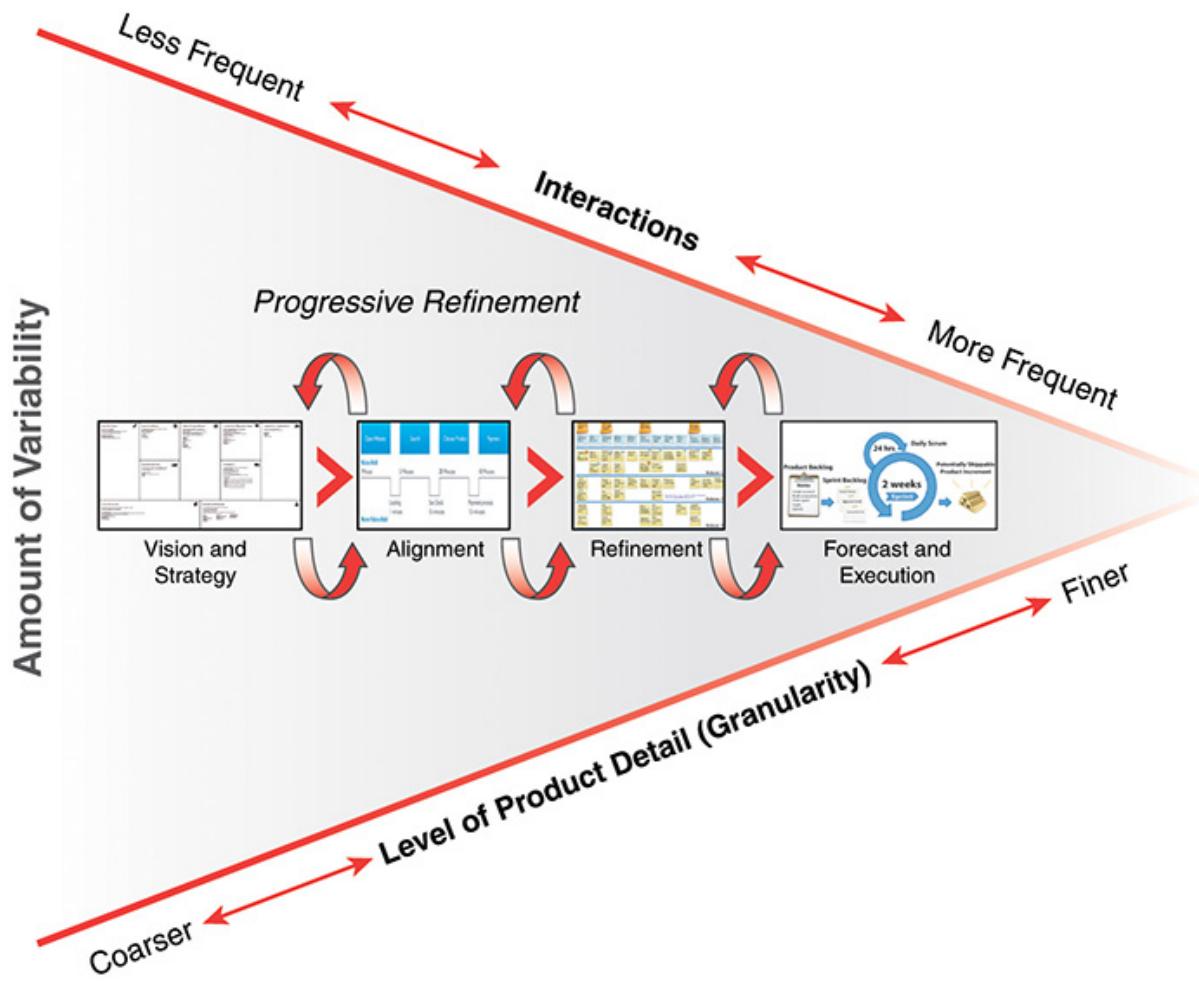
### *Workshop Outcomes*

At the conclusion of this final Progressive Refinement Framework workshop, a clear link from strategy to execution is achieved as virtually all parts of the organization—from end-to-end—have been represented in progressively refining the strategy from vision to execution.

## **Executing with Purpose Through Fast Organizational Feedback Loops**

Creating alignment between strategy and execution in a dynamic business environment requires an end-to-end view, with access to people and resources required to deliver value; however, executing with purpose also requires frequent opportunities for adjustments along the way. The four lightweight workshops we've discussed help facilitate this understanding through frequent inspect and adapt opportunities and progressive refinement.

[Figure 9.11](#) shows how the workshops help progressively reduce variability as product granularity is reduced from relatively coarse at the Vision & Strategy event to fine at Commitment & Execution. The frequency of interactions increases as we get closer to the work.



**Figure 9.11 Executing with Purpose Involves Progressively Refining Product Details Through Frequent Feedback Loops and Opportunities for Learning**

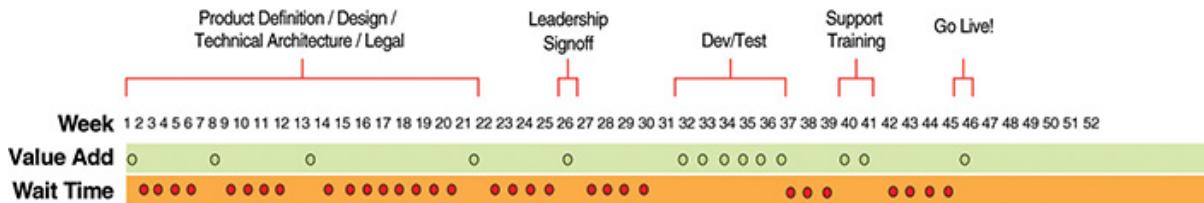
Through these four workshops, organizations create the transparency necessary to make economically sensible business decisions while reducing the time spent on non-value-added activities. This, in turn, frees teams up to develop compelling products customers love. At the core, these four workshops help us:

- **Reduce Organizational WIP:** By using CoD and having leadership involved early on, the organization can quickly prioritize one effort over the other—and decide what *not* to work on.
- **Decrease Cycle and Lead Time:** By having decisions made in interactive, cross-functional workshops, we can quickly make decisions, reduce hand-offs, and ultimately increase the proportion of time teams do actual work.

- **Reduce Variability:** Remember, this work has already achieved a validated product-market fit; we are reducing variability to a reasonable level by progressively refining product details in a collaborative, iterative manner.
- **Increase Resources:** We provide oxygen and resources to the efforts that create the most value for the organization as a whole; we delay the efforts that do not provide enough relative value from a holistic perspective.

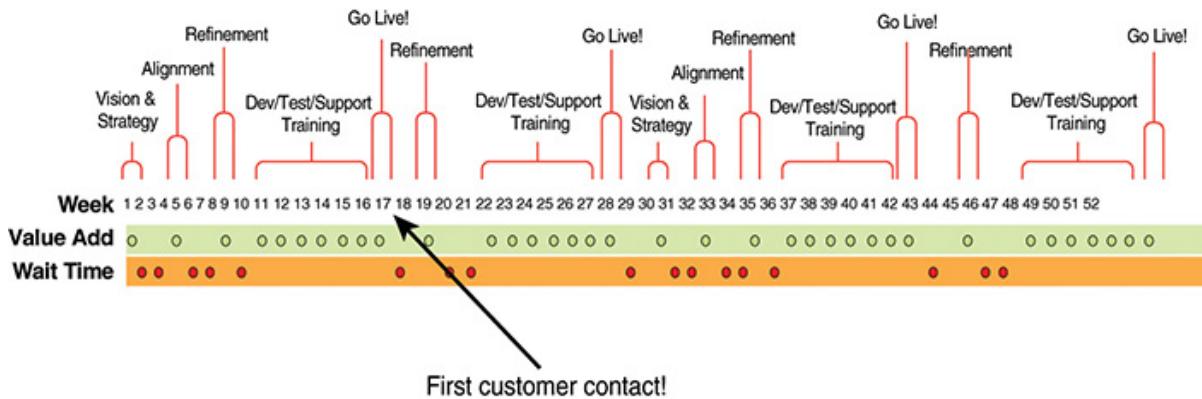
As an example, in one of the more traditional companies where I worked in this manner, we were able to reduce the time it took from planning to execution by more than 4 times as a result of optimizing for the whole, removing unnecessary hand-offs, and increasing flow efficiency.

[Figure 9.12](#) illustrates the situation before we optimized for flow: frequent hand-offs, failure demand, and wait times resulted in a 40-week wait before the organization actually released anything to the customer.



**Figure 9.12 An Illustration of a Plan-Driven, Resource-Optimized Process; Wait Times Multiply and Ultimately Delay First Customer Contact**

Contrast this with [Figure 9.13](#), which illustrates the process after we leveraged progressive refinement and optimized for flow of value.



**Figure 9.13** *An Illustration of a Process More Optimized for Flow; Hand-Offs Are Reduced, WIP Is Managed, and Teams Spend More Time Working on Items That Matter, Rather Than Keeping Busy on Many Things at Once*

It's important to note that the specific tools used in these workshops are not important; other tools that accomplish the same goals are equally useful, such as impact mapping and elements of design thinking. The real key to these workshops is that they facilitate cross-functional alignment at the appropriate levels of the organization in a short amount of time. There is a reason the first value of the Agile Manifesto states “Individuals and Interactions over Processes and Tools.”<sup>16</sup>

## Creating a Balance: Embracing Change and Executing with Purpose in the Right Proportions

Business agility is about quickly adapting to changing market conditions and being able to provide value to the customer. It is also about delivering a compelling experience—and delivering on commitments to our partners and customers. We need to be able to adjust our level of flexibility based on the relative level of VUCA within our context; one size does not fit all.

In environments with high levels of VUCA, we need to embrace change and encourage fast failure. Doing so allows us to learn faster, validate our assumptions, and get rid of the bad ideas sooner. Organizations can create this environment by establishing internal incubation units, acquiring disruptive competitors, partnering with external accelerators, and taking an ownership stake in potential disruptors.

In environments with proven business models, validated customers, and demonstrable value, the context is different. We need to exploit this environment of relative certainty as much as possible by reducing variance, decreasing cycle time, and reducing WIP. One way to execute on this strategy in an environment with less VUCA, such as Snowden's Complicated domain, is to embrace progressive refinement, as we outlined earlier.

Taken together, exploiting the knowns and exploring unknowns is fundamentally what unlocking enterprise agility is about. Doing so successfully entails deploying Taleb's "barbell" strategy that advocates "extreme risk aversion on one side and extreme risk loving on the other."<sup>17</sup> Why are we not recommending a "medium" risk approach? Because experience has shown us that predicting risk is fraught with errors—we simply don't know what we don't know. So instead of pretending to understand what "medium" risk looks like and waste efforts doing so, we either execute on known products and business models (validated low risk), or we explore highly speculative endeavors (high risk by definition). In other words, diluting efforts to execute on validated product offerings or conducting half-hearted "innovation Sprints" in an attempt to cover all bases is not productive. Rather, the barbell strategy diversifies an organization's portfolio strategy at the extreme ends of the risk spectrum to better prepare for an environment increasingly defined by higher levels of VUCA.

Finding the balance between these modes of operating depends on your industry. In my experience, an 80-20 split works well as a way to combine organizational exploitation with exploration: commit 80% of organizational resources to executing on validated business models, and allocate 20% to embracing "unknown unknowns"—the identification of potentially disruptive products, services or business models. By doing so, a company in the Complicated domain can protect what's working while leaving space to explore the frontier of what's ahead.

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## On Scaling Frameworks

As agile has grown in popularity, many "scaling frameworks" have emerged to provide guidance on how to work in a more agile manner specifically targeted for larger companies. These frameworks are both incredibly popular, yet also controversial. Next, I provide a brief overview of the most popular frameworks, as well as highlight a few benefits and drawbacks of leveraging these frameworks as part of your efforts to unlock agility.

## **Scaled Agile Framework (SAFe)**

SAFe, created by Dean Leffingwell, is by far the most popular agile framework available today. With parts of its DNA in the Rational Unified Process (RUP), of which Leffingwell was a major player, SAFe stands out with its comprehensive documentation, new roles/responsibilities, and compelling “Big Picture” visual. Although critics highlight its somewhat prescriptive design, SAFe has evolved over time and can be customized to fit a variety of organizational sizes and contexts.<sup>18</sup>

## **Large-Scale Scrum (LeSS)**

LeSS, created by Craig Larman and Bas Vodde, is focused on leveraging Scrum (described in [Chapter 3](#)) at scale. As such, there are few new roles to consider with people familiar with this popular framework, but some additional ceremonies are added to the team-based version of Scrum to accommodate for a larger organization. Whereas SAFe does not require organizational changes, LeSS is unequivocal that without building feature-based structures, organizations will never be agile. LeSS may therefore require more drastic organizational changes, which may or may not be attractive depending on the goals of the organization.<sup>19</sup>

## **Disciplined Agile Framework**

Disciplined Agile, created by Scott Ambler and Mark Lines, has its roots in Ambler’s work when he was a chief methodologist working at IBM Rational. Disciplined Agile is extremely well documented and brands itself as a “hybrid agile decision framework.” It contains three main phases—*inception*, *construction*, and *transition*—and has a focus on governance, architecture, and design at a greater extent than both SAFe and LeSS. Disciplined Agile is context specific and is meant to be tailored to a respective organization’s unique situation. This flexibility can also be its main challenge because it requires more experience and expertise from the coaches involved during a transformation.<sup>20</sup>

## Benefits of Scaling Frameworks

Transforming to work in a more agile manner is no trivial matter, especially if the organization is currently steeped in traditional, plan-driven processes. In my experience, scaling frameworks can be a useful part of your transformation strategy for two main reasons:

- **They can accelerate your transformation:** The scaling frameworks, although different, are based on the same underlying principles of Lean thinking, agile and its derivatives. As part of their offerings, the frameworks have amassed a fairly comprehensive number of resources, guidance, documentation, and training that is likely to accelerate your transformation efforts. At the very least, the frameworks will complement and most likely enhance your existing resources.
- **They can help you acquire executive support:** This is no trivial matter; as the next chapter shows, executive support is a critical success factor in unlocking agility. Whereas agile may have been viewed as quite foreign and obtuse to executives trying to make sense of the Agile Manifesto and how it relates to broader organizational change, scaling frameworks have, in large part, helped translate many of the ideas of the Manifesto into a more business-centric language that is accessible to executives. SAFe deserves special recognition in this regard: its “Big Picture,” which outlines the SAFe framework, looks just familiar enough to many people comfortable with traditional planning that it’s not too foreign and scary.<sup>21</sup>

## Drawbacks of Leveraging Scaling Frameworks

Although scaling frameworks can be a useful part of your transformation strategy, they also come with some potential drawbacks. Like any tool or method, scaling frameworks can also be misused, which can have negative implications:

- **Scaling frameworks can prevent you from being more agile:** Isn’t the point of scaling frameworks to help organizations be more agile in the first place? Yes, and they can be a useful part of that journey; but because of their guidance, “how-tos” and

“implementation plans,” they risk creating a situation where organizations do not evolve beyond a very basic level of agility. When new processes, structures, roles and responsibilities are introduced, these may help evolve thinking beyond traditional plan-driven processes initially, but they may also retard the idea that moving beyond this initial stage is possible. To be fair, the authors of the scaling frameworks have been clear to point out that the frameworks are not meant to be limiting and that evolving over time is encouraged, but there is a danger that the goal of the transformation becomes to be “SAFe” or to embrace “LeSS,” rather than a continuous improvement mind-set of being more agile.

- **Scaling frameworks do not embrace disruptive change:** My shortest description of an agile enterprise is one that both embraces change and executes with purpose. The scaling frameworks focus on the execution bit, but strategies for disruption and embracing change still leave a lot to be desired. As we discussed in this chapter, embracing change involves leveraging completely different organizational structures and ways of working, including innovation hubs and external partnerships. Although some language involving Lean Startup and Design Thinking has been discussed, in my experience the scaling frameworks largely ignores this critical component of agility.

I don’t view scaling frameworks as inherently harmful, as one of the agile signatories expressed when SAFe first started gaining popularity.<sup>22</sup> Rather, I view them as one of many potential tools to be considered as part of unlocking agility. There’s much to be gained from being familiar with the materials contained in the frameworks; LeSS’s feature teams focus, Disciplined Agile’s emphasis on emergent architecture design, and SAFe’s PI planning activities are all known practices that have been further popularized within the agile community thanks to these frameworks. In fact, I was personally involved with one of the most successful SAFe reference clients (NAVTEQ/Nokia) and worked directly with Leffingwell as he was formalizing what was then called the “Release Train Framework” into what became SAFe. Leffingwell’s efforts were a major reason why we were successful, but he was only one factor of many. We changed the framework to be more appropriate for our context as we evolved in our agile journey—that’s exactly what agility is about.

Scaling frameworks become problematic, however, when they become a means in and of itself. When organizations strive to be a “SAFe organization” or a “LeSS enterprise,” they are missing the point. Unlocking agility is about becoming comfortable with uncertainty—embracing change—by learning fast and continually adapting to volatile market conditions. Scaling frameworks can be useful tools on your initial path to continuous improvement, but they are not the goal in themselves. As your organization embraces an agile mind-set, it will move beyond frameworks and evolve its own ways. As we’ll see in the final chapter, that unique evolution is the essence of unlocking agility.

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## Summary

This chapter outlined a high-level operating model designed to “embrace change, execute with purpose.” We started out explaining how the organization needs to be intentional about investing in efforts characterized by exploration or exploitation using a barbell strategy. We then took a closer look at the various ways large organizations can embrace change by acquiring potential disruptors, taking an ownership stake, partnering with external incubators, or growing their own internal innovation hub. We highlighted the challenges inherent in the latter approach: the incumbent corporate culture is typically not very conducive to disruptive efforts by design.

We took a closer look at four lightweight workshops designed for driving frequent interactions and feedback loops in environments with lower levels of uncertainty. Through progressive refinement, these workshops reduce uncertainty to a level appropriate for making high-level commitments to partners and external markets. By prioritizing efforts using CoD, agile organizations can limit organizational WIP, reduce lead time, decrease variability, and increase resources where appropriate by optimizing for flow efficiency across the enterprise. We highlighted a real-life example that showed reducing wait times can cause a four times improvement in speed.

The chapter closed with a brief description of the most popular scaling frameworks and their benefits and drawbacks. We concluded that even though scaling frameworks may be helpful, they are not sufficient and certainly are not the end goal. The final chapter describes a high-level roadmap—and pitfalls to avoid—when unlocking agility in the enterprise.

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## Q&A

### 1. You say at the start of this chapter that “many organizations may be agile but fail to unlock agility.” What does that mean? How do I know if my company is one of these?

What I mean is that many organizations do a great job of “executing with purpose” without “embracing change.” Unlocking agility means balancing both modes of operating.

My perspective is shaped in large part by my experience at Nokia. By all relevant financial and operational metrics, we were killing it in the mid-to-late 2000s: our market share was growing, margins were healthy, and customer satisfaction was off the charts: we were invincible. And in terms of being agile within the confines of a proven business model, we were among the best: our ways of working were admired by companies worldwide, our innovation and ability to deliver was unsurpassed, and our level of quality was the envy of the world. Bas Vodde, a consultant at Nokia Siemens at the time, even devised what became known as the “Nokia Test” for determining whether you were doing proper Scrum. Nokia was in many ways *the example* of a high-performing, nimble organization.

Yet, Nokia failed just a few years afterward. How could that be possible? Although the topic around Nokia’s failure deserves a book in itself, the root cause was that although Nokia did a great job of executing on its stated strategy, it did not embrace change outside its comfortable area of expertise. When the iPhone was introduced by Steve Jobs in 2007, Nokia executives mostly ignored the device or made fun of it because of its poor mobile phone capabilities. (The first iteration of the iPhone was far inferior to Nokia’s from a call-quality and reception perspective.) What Nokia failed to recognize was that the entire mobile phone industry was about to be disrupted; no longer were people looking for mobile phones as devices to call with; phones were suddenly viewed as small computers.

When Nokia tried to answer, it initially outdid itself executing on its existing strategy—made even better phones, with better battery life, and better cameras. The problem, however, was that people were no longer looking for phones; they were looking for mini-computers. And when Android came along in addition to Apple’s iOS, Symbian (Nokia’s operating system at the time) was the clear loser among the three.

History is littered with companies who share a similar fate. Kodak and Blockbuster are a couple of the examples we've used in the book. Although these companies had the capabilities to compete against their respective disruptors, they were unable to because they clung to existing strategies, business models, and ways of operating. By ensuring that *exploration* is a key component of a company's strategy—where failure is acceptable and exposure to new thinking is common—established companies can build a hedge against disruption.

Is this a guarantee against disruption? Of course not—but it will increase the chances of your company being the disruptor, rather than the “disruptee.” Amazon famously encourages “cannibalization” of its existing businesses for just this reason. “Only the paranoid survive,” as Intel’s Andy Grove said in his book with the same name.

**2. In “Exploration,” you talk about how Nokia and Intel had trouble getting their incubation organizations to flourish. If they failed to foster disruptive innovation internally, what makes you believe other organizations might succeed?**

Driving disruptive innovation internally is incredibly challenging, and I list a few reasons for this in the chapter. Perhaps more than anything else, the prevailing culture of the “mothership” makes it incredibly difficult to successfully embrace operations that (by definition) disrupt the existing ways of working. Granted, some companies do this well—Netflix, Amazon, and a few others—but more often than not, I’ve seen internal innovation efforts having an incremental impact to innovation, at best.

This is why I recommend that part of an “exploration” strategy of an agile enterprise involves “going outside of the building” for expertise and impulses that are more disruptive. I list a few ways of doing that; partnering with external innovation hubs and taking ownership in existing companies are among my favorites.

**3. If I’m not upper management, how can I sell these principles and processes to the people in my organization who are able to initiate change?**

I’d recommend taking some of the lessons from what we discussed earlier in this chapter. Focusing on your leadership’s “jobs to be done” can be incredibly effective. What are the “jobs” that leadership is hiring us to do?

What keeps them up at night? What are the problems they are trying to solve?

In other words, it's not necessarily a great idea to sell the mind-set, principles, and processes we discuss in this book. Instead, focus on solving a problem that leadership is trying to solve. For instance, when I led the agile transformation at NAVTEQ, it was never about "becoming agile"; it was about "increasing speed to market." It just so happens that working in an agile manner supports that goal—but it's not the goal in itself.

Similarly, I am willing to bet that executives reading this book are not reading because they want to know more about Kingman's formula or how to reduce organizational WIP. Rather, they want to understand more about what type of strategies and approaches will help their organizations be more nimble, compete stronger, and be less vulnerable to disruption. It just so happens that unlocking agility will help with that—it's a means to an end.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- **Harvard Business Review IdeaCast: “The Jobs to Be Done Theory of Innovation”** (<https://hbr.org/ideacast/2016/12/the-jobs-to-be-done-theory-of-innovation>)

Clayton Christensen is considered the father of the theory of disruptive innovation and has been a significant figure in how we think about new product development today. In this podcast, Christensen explains how he came up with the Jobs to Be Done concept and why it is so important to understand what "job" we hire our products and services to do for our customers. Sounds strange? Listen to the podcast; you'll never think of milkshakes the same again!

- **Roman Pichler’s Product Development Blog** (<https://www.romanpichler.com/blog/>)

Roman Pichler has been a thought leader in the product management space for many years. His book *Agile Product Management with Scrum* is a

modern classic and a recommended read. While you’re buying the book, check out his blog in the meantime. There are lots of practical and insightful writing, free resources, and helpful visual guides. Don’t miss it!

- **Agile Scaling (<http://www.agilescaling.org/ask-matrix.html>)**

This is a nice resource for more information regarding the various scaling frameworks I covered briefly in the chapter. Compiled by a group of agile coaches, the so-called “ASK Matrix” (*short for “Agile Scaling Knowledge —the Matrix”*) is a comprehensive, head-to-head comparison between the most prevalent scaling frameworks on items such as training resources, level of flexibility, key risks and concerns, and so on. It’s worth taking a look for a neutral perspective of the frameworks.

- **The three most popular scaling frameworks:**

- SAFe (<http://www.scaledagileframework.com/>)
- LeSS (<https://less.works/>)
- Disciplined Agile Delivery  
(<http://www.disciplinedagiledelivery.com/>)

The source sites for the most popular scaling frameworks are worth a visit. They all offer lots of information regarding their respective frameworks and provide visual aids, guides, and other free resources.

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- [7] <https://newsroom.intel.com/news-releases/intel-acquire-15-percent-ownership-of-here/>
- [8] Video of Bezos explaining why Amazon took over Zappos:  
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## Chapter 10

# Unlocking Agility: A Strategic Roadmap

As you approach the end of the book, let's take a look back and reflect briefly on what we've covered so far. In [Chapter 1](#), “[The Agile Imperative](#),” and [Chapter 2](#), “[Enterprise Agility](#),” we defined business agility, identified why it is so critical in today’s ever-changing business environment, and explored its theoretical and practical origins. What was once a movement started by people in the software industry is now a fundamentally different way of working that embraces uncertainty, organizational learning, and optimizing for customer value.

We then took a closer look at the five dimensions of agility that greatly affect the degree to which we’re able to unlock agility in our organization.

[Chapter 3](#), “[Technology](#),” outlined some of the most common tools, techniques, and methods available to us and why they may be useful in this context.

[Chapter 4](#), “[Organizational Design](#),” reviewed some of the most common designs and explained why they aren’t necessarily best suited for today’s challenges. We also explored some new ways of looking at workspaces optimized for collaboration and considered the trade-offs.

[Chapter 5](#), “[People](#),” took a closer look at the skills, knowledge, and abilities required of people in digital organizations and provided examples of how organizations can better support, develop, and grow them. We also discussed some implications of this new way of working for HR and how becoming an enabler of agility is a critical aspect of modern HR in a VUCA world.

[Chapter 6](#), “[Leadership](#),” highlighted the importance of having strong executive commitment through the transformation and how empowering people by exhibiting trust and allowing for organizational learning through failure is critical to unlocking agility. We pointed to Beyond Budgeting as a useful model for agile Leadership values and principles—and its implications to organizational norms and policies.

[Chapter 7](#), “[Culture](#),” covered how an organization’s culture—although not easily controlled or directed—has an outsized impact on the success of the company’s ability to change and adapt. We explored some thinking from leading people in the field and outlined a few proven strategies for effecting cultural change through deliberate actions and behaviors.

Armed with this background, the last part of the book has been aimed at giving you what you need to help make this real. [Chapter 8](#), “Building Your Organization’s Agile Working Group,” detailed how a group of dedicated, internal (and some external) change agents is the engine of your transformation. The AWG helps create a highly visible nexus between unwavering support at the executive levels and the very real work that needs to take place where teams are producing value.

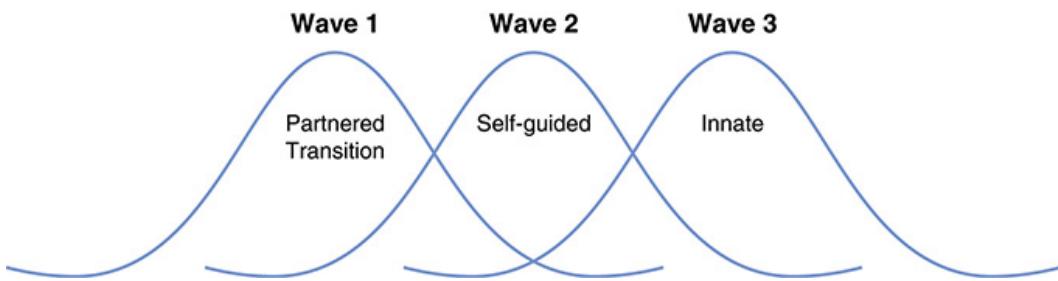
[Chapter 9](#), “An Operating Model for Business Agility,” outlined a concrete organizational “operating model,” describing agile enterprises that “embrace change, execute with purpose.” The tagline might be cute, but the implications are serious: unlocking agility at the enterprise level entails being able to *explore* business opportunities, invent new technologies, and quickly detect potential disruptors as well as *execute* proven business models with confidence, knowing that our partners and customers can trust us to deliver on our promises. The chapter explained how organizations are doing this by providing examples and anecdotes of both challenges and successes in making this happen.

The chapter you’re reading now is about putting all this together into a coherent strategy. We’ll go through a high-level strategic roadmap to unlocking agility in the enterprise and provide some characteristics of each of the five dimensions described earlier. We’ll then describe a simple continuous organizational improvement approach that forms the basis for identifying how we can help influence change across all levels of the organization. We’ll look at ways the AWG can execute on the roadmap and provide some concrete examples of organizational improvement backlogs I’ve worked on. We’ll complete the chapter with some heuristics that improve the chances of successful change and how to maintain momentum. At the end of this chapter, you’ll be ready to start your organizational transformation journey.

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## Unlocking Enterprise Agility: A High-Level Strategic Roadmap

Transforming an organization into a more agile enterprise is not a linear effort—it’s not simply a matter of completing a certain task and expecting a given outcome. Just as we explained how organizations themselves need to allow for experimentation and learning through failure in environments with high levels of Volatility, Uncertainty, Complexity, and Ambiguity (VUCA), the organizational change effort itself is work we find in Snowden’s Complex domain of the Cynefin framework. This means that although we may have a strategic roadmap and general direction for where we’re going, we need to validate our assumptions throughout the transformation and ensure our strategy is continuously informed by what we learn along the way. In my experience, the way organizational change is carried through the organization follows three interlocking “waves,” without clear beginnings or ends, as illustrated in [Figure 10.1](#).



**Figure 10.1 How Organizational Change Is Influenced Through the Organization**

I call these “waves” because, in contrast to phases, which have a clean start and end, waves have a fair amount of overlap in between. It has been my experience that there is not a neat cut-off between each stage when considering the transformation roadmap. Therefore, as the transformation advances, although some elements of a certain wave may be more pronounced, there may still be elements of a previous stage present. Let’s take a closer look at the three waves so we can understand the key objectives of each and why they are important to creating a self-sustaining, agile organization.

## Partnered Transition (Wave 1)

The first wave of the transformation, Partnered Transition, is about creating a foundation and helping to take the first deliberate steps toward a more agile way of working.

Transforming the organization is not something that can happen at once; depending on the current state of the company and its ultimate goals, several organizational impediments to agility need to be addressed. This first wave is therefore about ensuring the fundamentals are in place so that the organization can quickly evolve and grow more nimble and adaptive.

I’ve named the wave “Partnered Transition” because in this first phase of the transformation, the organization is typically rather unfamiliar with this way of thinking and may have a wide range of perceptions of what “unlocking organizational agility” really means. Although the specific work conducted in this wave will depend on the unique context of the organization, the nature of the work typically involves instilling a common organizational understanding of what we’re aiming for; creating a common language; ensuring everyone has access to appropriate training, coaching, and mentoring; and starting to look at existing organizational metrics to ensure a more holistic, end-to-end perspective of value creation.

For AWG and coaches, this first wave is typically more involved in terms of hands-on support and often requires external resources to augment their efforts and provide sufficient resources in a timely manner. This phase is also where the scope of the transformation effort is decided: do we aim to transform the entire organization or start smaller and expand over time? Although transforming the entire organization at once may be attractive, this can often be both cost prohibitive and risky depending on the size of the organization. I typically recommend starting the transformation by taking on smaller slices of the organization. Note

that with “smaller slices,” I’m referring to a smaller, end-to-end vertical, with representatives from all functions of the company. By focusing our efforts on this smaller, end-to-end slice of the enterprise, we can manage scope to reduce complexity while providing energy and a realistic preview for the rest of the organization.

For instance, when I led the transformation efforts at NAVTEQ, we decided quickly that taking on the entire 8,000-person organization at once would simply be too expensive and too complex. Instead, we provided a clear view of the overall vision for the transformation to everyone in the organization (so they knew where we were going and what to expect next), while choosing two verticals (lines of business) to focus on more deeply at first. This allowed us to provide the appropriate coverage and level of support as the teams got familiar with a new way of working, and to increase our organizational learning rate because we could share information faster when working with a smaller group of people.

Examples of some of the focus areas in Partnered Transition include:

- Creating a common language across the organization; balancing governance with collaboration
- Providing targeted training, coaching, and mentoring across all levels
- Increasing coherence between teams and across the value streams
- Establishing robust engineering practices, taking technical debt seriously, and increasing confidence in team-based delivery
- Growing and building high-performing teams

## Self-Guided (Wave 2)

The second wave on the roadmap, Self-Guided, focuses on unleashing the performance gains that result from becoming a more agile enterprise. As the name implies, the AWG and associated coaches will step back as each slice of the organization aligns to the overall strategy and removes impediments relevant to their situation. The teams and supporting functions are trained and understand better what becoming more agile means, and they’re able to adjust tools, techniques, and methods to fit their unique context.

For example, one of the verticals I was coaching at HERE adopted advanced engineering practices (now called DevOps) back in 2010. While impressive and ahead of its time, this approach was not appropriate for other verticals at that point, as they had other challenges related to teamwork and planning that they needed to address first. The idea, therefore, is not that everyone follows a set path to agility, but that they align to an overarching strategic roadmap that allows for nuance within each context. As such, the organization speaks the same language, while embracing “accents” across groups; context matters.

You’ll notice that the nature of the work done in this wave has a more organizational focus as opposed to the previous wave. In the Self-Guided wave, the AWG and coaches start expanding beyond teams and spend more time alleviating cross-organizational challenges such as suboptimized organizational metrics. They may also help to grow and

support organizational role portraits that are more appropriate for an agile context, work with Finance to adjust the budgeting process, and help decrease the fear of failure across the organization. Hence, teams can perform well on their own, but they are now starting to hit the larger enterprise challenges necessary to unlock agility. These impediments require a whole system view that goes beyond the aegis of the teams; it is at the organizational level where the AWG spends most of its time in this wave.

Examples of some of the focus areas in Self-Guided include:

- Establishing more meaningful organizational performance metrics
- Providing mentoring and executive coaching; growing internal capabilities with an emphasis on the growth mind-set
- Reducing fear of failure; focusing on frequent experimentation as a natural way of learning
- Increasing value-delivery across multiple teams in value stream; flow efficiency as strategic advantage
- Embracing Beyond Budgeting leadership values and principles; Cost of Delay (CoD) as core prioritization strategy

## Innate (Wave 3)

The last of the three waves is Innate, aptly named because at this stage the organization is a high-performing agile organization that is continuously adjusting and improving the way it works. In some sense, the Innate stage is an aspiration in that an organization does not simply “become agile” and stop focusing on improving how it operates. Rather, to unlock enterprise agility, the organization needs to *continue* to make deliberate steps toward becoming more agile than before—to continue to learn, adapt, and strive to perform better today than it did yesterday.

The AWG and organizational coaches are rarely seen at this stage; instead, they are absorbed into the organization. In some sense, you can argue the entire organization is one big AWG—always looking to remove impediments to creating value and improving how it operates. Organizations in this wave typically don’t explicitly call themselves “agile”; the mind-set has been fully absorbed into the organization, and business agility has become as natural as the air we breathe. These organizations tend to expand their influence beyond their own company and become influential industry leaders. They exude a clear sense of purpose, take a long-term view, and aren’t afraid to challenge a few established assumptions along the way.

Examples of some of the areas of emphasis in Innate include:

- “Executing with purpose and embracing change” comes naturally; agility is “business as usual”
- Instilling an anti-fragile mind-set; organizational exploration and execution are carefully balanced

- Demonstrating external thought leadership; leading operational innovation beyond the organization’s four walls
- Creating more fluid organizational structures; value optimization as key guiding principle
- Competing on business models, product innovation, and ability to learn faster than the competition

As an example, look to Amazon. I’ve referred to Amazon throughout the book, and it’s impossible to discuss digital enterprises without mentioning Jeff Bezos’s disruptive retailer of virtually every product on earth. Although the company has been in the headlines over the years as a demanding place to work, employees have come to the organization’s defense and provided a more nuanced picture of a meritocracy maniacally focused on creating customer value. Amazon is in the Innate wave, continuously adjusting and improving to meet this objective.<sup>1</sup>

Becoming an agile enterprise is not a destination; it’s a continuous commitment to improvement. At the heart of continuous improvement is the ability to learn through fast feedback loops. Bezos, in a 2012 “fireside chat” interview, revealed the question that he always kept top of mind: “How do you go about organizing your systems, your people, your own daily life and how you spend time, how do you organize those things to increase your rate of experimentation?”<sup>2</sup>

By unlocking ways to learn faster and increasing your internal clock speed, your organization can adapt and evolve over time. Amazon has disrupted others by being willing to challenge conventional ways of doing business—and is not afraid to throw a wrench in its own operations either. After establishing itself as the world’s largest online retailer, Amazon has demonstrated a willingness to disrupt the physical store experience. Its acquisition of Whole Foods in 2017 is unlikely to be its last foray into unexpected experiments. Continuous improvement, disruption, and innovation are part of its DNA.<sup>3,4</sup>

Appreciating the journey the organization goes through as it evolves from a plan-driven entity to a learning organization—where continuously improving and adapting how it works is part of its DNA—is helpful from a strategic perspective. My experience is that most large organizations aiming to unlock agility go through these waves in some form, but the journey is different depending on each organization’s context. This should not be surprising. Agile is not a process, so it’s not reasonable to provide a simple how-to instruction manual.

To make the journey a bit more concrete, providing an example is useful. This does not mean your journey will be identical; however, the heuristics and themes will apply broadly and guide your own journey.

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## What Agility Looks Like in Action: Applying the Five Dimensions of Organizational Agility

The roadmap in the preceding section provided a high-level guide to how the AWG and coaches help drive the transformation to a more agile enterprise. But what, exactly, is on the impediments backlog as the organization transforms to a more agile way of working?

Naturally, providing a one-size-fits-all backlog that can be used universally across companies and industries is not possible. Each organization is unique, and the business goals, technical challenges, and culture underlying it demand a case-by-case analysis.

That being said, it is helpful to provide a brief perspective of some of the characteristics I've seen in the organizations I've transformed across the five dimensions of agility:

- Technology
- Organizational Design
- People
- Leadership
- Culture

This overview serves as a guide to help you get a sense of what various levels of agility “look like” in an organizational context. It should help you recognize the challenges typically found as you prepare to define your transformation strategy.

### Technology

As you’ll remember from [Chapter 3](#), we view Technology as an enabler and a tool to achieving agility, not a goal in itself. Hence, implementing Scrum, a popular framework that may be used to help encourage more agile ways of working, will not necessarily make you more agile without considering the other dimensions of agility. It will, however, make the current organizational impediments more visible, as Scrum increases the rate of learning over more traditional methodologies.

[Figure 10.2](#) provides a perspective of the degree to which tools, methods, and technology affect how the organization creates value.

How We Use Tools, Methods, and Technology Affects Levels of Agility Across the Organization				
Characteristics:	Siloed systems, slow feedback loops, asynchronous communication	Tools over people, ineffective information sharing	Methods provide alignment, faster feedback loops	Technology unlocks learning; optimized for flow
Description:	Lack of visibility across organization, lots of inconsistencies	More consistency, yet low levels of collaboration	Established adaptive methods and tools help improve collaboration	Organization defines methods and tools unique to their context, always evolving

**Figure 10.2 How We Use Tools, Methods, and Technology Affects Levels of Agility Across the Organization**

When we started our agile transformation at NAVTEQ, we implemented Scrum within a waterfall process called “N-Gates,” which defined no fewer than eight sequential gates that had specific criteria that had to be met before proceeding. We knew this approach was not ideal, but given that NAVTEQ had a thoroughly established process, we needed to ease into a more agile way of working rather than risk disrupting all operations at once.

Scrum helped us be more agile as excessive documentation requirements were replaced with more interactive conversation and resulting product backlogs, for instance; but the information still did not flow effectively—it retained a top-down, “implement as I say”-type attitude at the core. As we formed our agile transformation roadmap, these impediments became among the first we sought to address, ultimately leading to us getting rid of the formal PRD (Product Requirements Document) and eventually having customers more directly involved in defining our product. For some teams, Scrum became too constraining after a few years and they started experimenting with shaping their own processes, combining elements of Scrum, Kanban, and Lean Startup. This type of evolution is exactly what unlocking agility means: continuously learning through experience and improving how teams work.

## Organizational Design

The Organizational Design dimension is about ensuring the organization’s structure and the teams’ workspaces are optimized for flow of customer value. We described some of the ways we can make these changes in [Chapter 4](#); [Figure 10.3](#) lists some of the characteristics you’ll typically encounter as you start your transformation.

Less Agility ← → More Agility				
Characteristics:	Top-down, hierarchical structure; departments defined by function	Matrix-like structure; workspaces are optimized for space; “cubicle-land”	More product-based organization; open work spaces and co-location	Organize for flow of value; flexible, nimble workspaces allow employees to adapt to work context and team needs
Description:	<i>Optimized for resources; lots of dependencies between teams and departments</i>	<i>Teams are allocated to multiple project across organization, multiple “customers” to contend with</i>	<i>Cross-functional teams are dedicated to value streams, more visibility to customer needs</i>	<i>Distance to customer is reduced continuously; co-location combined with virtual arrangements—emphasis on common purpose</i>

**Figure 10.3** *The Manner in Which People Are Organized Will Affect the Enterprises’ Capability to Adapt to Changing Customer Needs*

In my experience, one of the most effective ways to embrace a more agile way of working is to ensure teams are dedicated to a high-priority value stream. This means teams can more quickly react and adapt to changes in the business environment. It also forces the organization to make clear choices regarding prioritization. It’s easy to assign teams to 15 concurrent projects—essentially saying “yes” to everything. It’s much harder—but also more effective—to be able to say “no” to the less important efforts and instead invest people’s time and the organization’s resources where it matters the most.

At McAfee, one of the things we did when examining performance at the overall product portfolio was to cut the portfolio down from 15 to 8 concurrent projects. The result of this focus helped us organize the team better, decrease dependencies across organizations, and ultimately increase the speed of delivery.

## People

Chapter 5 covered some of the types of skills, knowledge, and abilities people working for agile companies need to possess, as well as ways that organizations can help grow, develop, and support those individuals. As work itself transforms, so do the people performing it inside organizations. Rather than individuals specializing in narrow disciplines and being able to do one thing very well, people are increasingly required to cross different knowledge disciplines, collaborate effectively with others, and take an active role in understanding how an organization can better serve the customer.

Figure 10.4 shows how the environment that organizations create around reward systems, role definitions, and the fear of failure can affect the organization's agility.

Less Agility ← → More Agility				
Characteristics:	People are rewarded for following a defined plan and procedure; non-compliance is unacceptable	Career paths are based on depth within a given field of expertise, "stack" rankings	Being an effective collaborator and communicator is considered desirable with domain expertise	Psychological safety is evident across the organization; practice informs theory
Description:	<i>People avoid mistakes at all costs; "stay in your lane"</i>	<i>More focus on specialists; less on generalists. "Soft skills" are deemphasized</i>	<i>People collaborate effectively within teams and across organizations; T-shaped skills are emphasized</i>	<i>People feel empowered to conduct frequent "safe to fail" experiments; continuous learning with a growth mindset</i>

**Figure 10.4 How Reward Systems, Job Roles, and “Freedom to Fail” Affect Organization Agility**

This difference in expectations became evident at McAfee, when I was coaching a program through a transformation a few years ago. One of the lead architects had built a reputation as an incredibly insightful, knowledgeable technical leader, but he was not known for sharing his knowledge with others. Becoming a “tower of knowledge” had served him well in his career—he was one of very few people with knowledge of a certain critical technical domain, so he could be confident his services were needed and predictable raises were guaranteed for fear of losing him.

But concentrating all this knowledge in one person had an organizational cost: when he was busy or otherwise unavailable, other work was often delayed because his input was needed on anything related to the component he knew so much about. This became very visible during a planning session the program was arranging: for three hours, more than 20 engineers were unable to provide any meaningful guidance on how their work would progress while the lead architect was at the dentist. When he returned, seeing all these people waiting for input from him to proceed with their work, he realized things needed to change.

With some help, he started actively pairing with more junior engineers and found himself enjoying taking on a role more akin to a technical coach, rather than a pure architect. McAfee benefited tremendously: the program-level bottlenecks started disappearing over the course of a few months, and people were able to get their work done faster without as many dependencies. Junior engineers enjoyed learning from an experienced peer, and he evolved into a very impactful engineering leader. His career did not suffer either: he continued to thrive in the organization and later on found himself recruited by Amazon, where he is a technical executive today.

## Leadership

[Chapter 6](#) provided insights into the kind of leadership behaviors and characteristics necessary to unleash a more agile way of working. Leaders who articulate a clear vision, yet are humble enough to recognize they don't have all the answers, can be very effective in creating a collaborative environment with their employees and create a sense of shared ownership.

[Figure 10.5](#) provides examples of some of the characteristics in the Leadership dimension and its effect on agility.

Less Agility ← → More Agility				
Characteristics:	Influence is highly dependent on title and position in organization	Decision making is normally opaque; cascading down the org chart	Transparency and openness in how critical decisions are made; leadership roles evident in all levels of the organization	Articulates a clear sense of purpose; combines vulnerability with strength
Description:	<i>Lack of organizational understanding of strategic intent; poor alignment</i>	<i>Decision making based on authority and following a clearly defined procedure</i>	<i>Clear link between strategy and execution; faster decision making</i>	<i>People have a keen sense of why the organization matters; there is a sense of pride in the work they do</i>

**Figure 10.5** Instilling Organizational Trust Through Transparency and Communication Grows Agility

Leadership in agile organizations is about articulating a purpose and creating an environment where employees can thrive, not demanding command-and-control. The language leaders use in this context matters. The best example I can think of comes from one of the organizations I helped transform. This leader, the head of a major product line, was infamous for being demanding and somewhat harsh in his communications with employees. At quarterly all-hands meetings, he would state, “I expect us to meet these deadlines” and “go above and beyond to meet our customer expectations.” The difference was stark when—after several months of training and going through his own personal transformation—he had another quarterly all-hands meeting with a very different message. He laid out the roadmap and our high-level commitments to our customers as before—but instead of demanding his employees “go the extra mile,” his language had changed to “how can I help?” and “what can I do to remove what stands in the way of us getting there?” It was a very different message. Employees noticed.

As we discussed in [Chapter 6](#), I've found Beyond Budgeting to be a useful Leadership model and guide. Leaders in environments with low levels of VUCA may prefer the consistency, standardization, and control that come with more top-down management, rules, and procedures. The Beyond Budgeting model, however, argues that empowering employees and trusting them to make the right decisions—within meaningful boundaries—will help improve business outcomes and increase organizational agility. Without leaders who understand how to build trust, encourage more transparency, and reduce the fear of failure, organizational agility will remain a challenge.

## Culture

As we described in [Chapter 7](#), the way a company operates—its corporate culture—is based on observable behaviors and actions taken when faced with challenges over time. When a customer identifies a defect, how does the company respond? Do teams review their requirements and find that the “defect” is indeed a “feature” that is working exactly as intended? Or do they find a way to fix the problem for the customer, taking time to explore why the issue appeared in the first place? The way the organization responds to everyday situations like this helps inform the corporate culture and is immensely more powerful than edicts communicated from leadership.

[Figure 10.6](#) shows some characteristics associated with the Culture dimension of agility.

	Less Agility ← → More Agility			
Characteristics:	Questioning leadership is career-ending; adhere to role requirements	Failure is rarely tolerated; risk reduction through elaborate documentation	Challenging leadership is respected; empiricism and data win arguments	Continuous improvement as part of the organization's cultural DNA; a learning organization
Description:	<i>Little tolerance for ambiguity; need for structure and process</i>	<i>Conservative and risk averse; procedures guide behaviors</i>	<i>High tolerance for ambiguity, frequent experimentation and collaboration between teams</i>	<i>A relentless focus on the customer; continuing to find new ways to improve how the organization creates value</i>

**Figure 10.6 Fostering a Culture of Continuous Improvement Is Necessary to Unlock Agility in the Enterprise**

Cultures are shaped by the stories of how a company responds to everyday challenges. Nordstrom, the retail store, is famous for creating a culture of excellent customer satisfaction. An example from the mid-1970s describes a situation in which an old miner returned a pair of worn tires to a Nordstrom employee in Fairbanks, stating he was not satisfied with the pair and would like his money back. Nordstrom clearly does not sell tires, but the customer was confused. The tires were bought in the same location a few years ago when it was the home of a tire retailer called Northern Commercial. That company was bought by Nordstrom and was no longer doing business at that location, yet the miner believed Nordstrom should honor his claim. The employee—who was 16 years old at the time—felt it was important that the miner did not leave disappointed and felt empowered to give the man \$25 out of the till, the fair market value of two tires at the time. The anecdote stands strong within Nordstrom’s culture and serves as a vibrant reminder that the customer’s needs are paramount. It was often viewed as an old tale—perhaps aprophyical—

but representative of the company's values nonetheless. It turns out the story is true. The 16-year-old employee back then—Craig Trounce—is now a customer service manager at Alaska Airlines, another company famous for its relentless focus on customers.<sup>5</sup>

Understanding how working in a more agile manner is affected through the five dimensions of agility provides a holistic view of what it takes to change the organization. Now, let's look at how the organization can unlock agility by communicating a clear purpose for the effort, identifying the key impediments staying in the way of agility, defining an Organizational Improvement Backlog, and maintaining momentum through the transformation.

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## Identifying and Driving Change Through an Organizational Improvement Backlog

The characteristics described in the preceding section give you an idea of the direction you're moving toward as you develop your strategy toward unlocking agility. The sections that follow provide some insights into how you can drive change through the AWG, how to validate progress along the way, and how to make continuous improvement an integral part of how your organization operates.

### Unlocking Agility in an Agile Manner

Ever heard the phrase “eating your own dogfood”? It’s not a particularly appetizing phrase, but it’s supposed to illustrate the idea that if you’re proposing a given solution or recommending a certain approach, you’d better try it yourself as well. (By the way, I prefer “drinking your own champagne,” which makes the same point but sounds a lot more pleasant.)

The AWG—the dedicated, cross-functional group of change agents that leads the transformation effort—also works in an agile manner. At NAVTEQ, McAfee, and Intel, we chose Scrum as the methodology to run our change efforts. Kanban should work just as well, but for us the timeboxed iterations helped us keep on track and easily align efforts with broader strategic goals.

The sections that follow outline the steps I used successfully throughout several organizations to drive large-scale, lasting change at the enterprise level:

**Step 1.** Define and communicate a clear purpose for the transformation

**Step 2.** Identify key impediments preventing us from reaching the goal

**Step 3.** Build and execute the transformation backlog

**Step 4.** Maintain momentum: Continuously monitor progress, communicate results, seek feedback, and celebrate failures

## **Step 1: Define and Communicate a Clear Purpose for the Transformation**

Throughout the book, we've discussed the profound effect of transforming the way an organization works to a more agile manner. What we work on will change. How we do the work will change. The mind-set of the people doing the work itself will probably be affected also. This is, therefore, not a decision to take lightly. The organization needs to communicate a clear purpose for why working in a more agile manner will address a particular urgent situation.

To do this, we need to be sincere. Simply stating, "Agile is good and everything good is agile" is not helpful. In fact, as we pointed out earlier in the book, sometimes agile is not necessarily a better way of creating value. And given the substantial cost and risk involved in transforming the organization, there needs to be a good reason why making these investments is right for the respective company's context.

For instance, at NAVTEQ, the enterprise transformation efforts were targeted to address a concrete and urgent business goal: speed to market. The company had observed that competitors were rushing into the market and disrupting existing business models; NAVTEQ needed to transform the organization so it could deliver value to its customers much faster and learn faster than it was capable of doing back in 2008.

Of course, you can argue that agility is about so much more than speed—adaptability, customer empathy, increased employee engagement, quality improvements, and so on, are some additional outcomes that working in a more agile manner can support. But these were not factors where NAVTEQ was being hurt. Our products were loved by our customers, our employees were generally happy to work there, and quality was on a par with the highest industry standards. Having the transformation effort tied to a compelling, urgent objective—speed—that everyone could agree on helped create a common sense of purpose. The message at NAVTEQ and what needs to be crisp before embarking on any transformation effort is a crystal clear signal: We're embracing agility not because it's cool and the thing everyone else is doing; we're transforming our organization because doing so addresses a substantial threat to our core business and can help us produce customer value faster.

## **Step 2: Identify Key Impediments Preventing Us from Reaching the Goal**

With a clear objective in mind, one of the first activities of the AWG is to identify where the key impediments to agility are and to define an organizational impediments backlog. This is not fundamentally different from the work we've described earlier in the chapter on the progressive refinement workshops—except here, the "product" of the AWG is a successful transformation. Tools like the Business Model Canvas, Christensen's Job to Be Done (JTBD), and the Product Canvas can be effective in identifying the key impediments that stand in the way of teams working in a more agile manner. The point is that we need to empathize with the customer (or people in the organization) and understand their needs, rather than simply assume a given tool or methodology is the right solution.

As covered throughout this book, understanding the context in which you work will help you choose the appropriate tools, thinking, and approach. When considering that organizations are more like cities than machines—more complex than complicated—we take a “Probe-Sense-Respond” approach to organizational change. That is, although we have an overarching strategy and a hypothesis in mind, we are humble to the reality that without first validating our assumptions, we can’t know for a fact that a given action will create a predictable result.<sup>7</sup>

To better understand where the organization’s challenges lie, I typically combine a set of subjective and objective observations gathered through four activities:

- **Modified Open Space Sessions:** Briefly, Open Space Technology (OST) was introduced by Harrison Owen in the early 1980s as a way to quickly scale and organize interactive meetings. Traditionally, Open Space meetings have no agenda, but they may have a theme. The outcomes, however, are unknown in advance, and the format embraces emergent understanding among its participants.

I modify the Open Space format to be more targeted toward identifying impediments of/to creating customer value and how those challenges can be addressed. I modify the Open Space format to be more targeted toward identifying impediments standing in the way of creating customer value and how they can be addressed. I typically arrange a session consisting of three main sections: “What,” “So what?” and “Now What?” The first session aims to identify the concrete issues facing teams today, the second session clarifies what impact these issues have on the ability to create value, and the third session enumerates ways to address them. (*See the companion website, [www.unlockingagility.com](http://www.unlockingagility.com), for more details on how to run a modified Open Space session.*)

This session takes about 3–6 hours and can support up to 80–100 people. At the end, we have a crisp understanding of the key impediments that stand in the way of creating value—and a few ideas on how to solve them. Hence, the session does more than just facilitate a shared understanding of the organization’s impediments; it also helps create ownership regarding the solutions. After all, if I helped identify the issues and suggested a few ways to solve them, I’d most likely be supportive of those efforts.<sup>6</sup>

- **Individual Interviews:** Armed with impressions and insights from the modified Open Space sessions, the AWG conducts a number of brief 30–45 minute interviews with a diverse set of people with different roles in the organization. The key objective is to get an honest, unguarded perspective of what is really going on in the organization and to better understand dynamics that otherwise might not be so evident in the previous activity.

Some of the questions we’ll ask vary from quite specific to broad in nature. For example, “If you were the CEO of this organization, what are the one to two things you would change right away?” or “What’s your opinion on why the build server stays broken for long periods of time despite our goal of trying to reduce it?”

The interviews are always confidential, and they are safe spaces for people to express their true feelings. (Granted, there are times these sessions can be merely opportunities to vent, but that can be healthy too.) More often, however, there are nuggets and insights that the interviews can reveal that you'd never find out in a more public session. (More examples of interview questions are on the *Unlocking Agility* companion website.)

For example, several interviews revealed that one of the technical architects had an outsized influence on younger engineers because of his gregarious personality, technical skill, and connections in the organization. But because he tended to belittle ideas that he considered “dumb” and make less proficient engineers feel stupid, many of the engineers expressed a fear of trying new approaches when the technical architect was reviewing their code. It turns out the technical architect’s actions were not done out of malice; he was unaware his comments had created a work environment where less experienced engineers avoided trying new things for fear of being called out by their hero.

When the technical architect was made aware of the situation, he was immediately shocked and sad, but he started to change his language right away. It turns out some of the new ideas engineers would propose frightened him, as he was not familiar with all the latest frameworks and language developments. Playing these ideas off as “stupid” was a defense mechanism for him. When he realized this actually hurt the company’s ability to embrace new ideas—and that we valued his contributions as a mentor and technical coach for the younger engineers—he changed his approach and became more supportive. Today, he’s a senior architect at one of the largest companies in the Pacific Northwest.

- **Observation (go to the work):** Open Space and Individual interviews can be helpful in unearthing the root cause of many of the organization’s challenges, but few techniques are more useful than observing and learning from the team as they do their work. From Lean, the Japanese term “Gemba” means “the real place,” which loosely translated means “the place where work gets done.” Some benefits of Gemba include gaining a deeper understanding—empathy—of what impediments the team encounters in daily work.<sup>8</sup>

Observing the teams doing their work can be incredibly eye-opening. One of the teams I was coaching at HERE had indicated that they had a problem with transparency and open communication, but individual interviews and open space sessions had given me few concrete indications to go by. After observing the team through an entire iteration of work, however, certain patterns became clear: when the functional manager entered the room, conversations became less engaging and challenges were downplayed. After seeing this pattern repeat itself over several days in the iteration, it became obvious that the manager—unbeknownst to her—had created an environment of fear and intimidation through her organizational reputation. Team members couldn’t really put their finger on it in separate conversations and workshops, but the difference in behaviors were evident when observed in meetings and her interactions with the team.

The manager was made aware of the situation, she brought up the topic during a team meeting and candidly acknowledged that earlier in her career her approach to leadership was sharp at times. She explained that she had evolved and asked the team to evaluate her on who she is today; not on what some may remember from years ago. Gradually, the team started to trust her based on her words and actions, and not the reputation—perhaps unfairly—that she had built over several years in the organization. Her team evolved into an engaged, high-performing team, contributing to building a very different organizational reputation for the manager.

- **Objective Metrics:** Now that we gained insights from Open Space sessions, individual interviews, and observations, it's time to collect some objective metrics to help better understand the current issues and gauge improvements as we make changes. I discussed metrics earlier in the book (see [Chapter 7](#)). Selecting metrics that are hard to game and help drive the outcomes you're looking for is not easy. I therefore like to select a handful of metrics that together form a more complete picture of what's going on in the organization.

I like looking at trends for lead time of value, for instance. This is an end-to-end metric that is simple to measure, yet hard to manipulate. The only way to improve it is to ensure all the necessary parts of the value stream align together so work can be completed faster. But by itself, the metric is incomplete. What if we're working faster at the expense of quality? Or what if the user experience is diminished by not paying enough attention to design? Collecting a balanced set of objective metrics—paying special attention to trends—is therefore an important part of helping to identify key impediments facing the organization.

After conducting the Open Space sessions and interviews and collecting metrics at the appropriate levels of the organizations, you can start to form a narrative and identify the first contents of the organizational impediments backlog. It's important to consider that challenges an organization faces at the team level may be very different from the challenges at the program levels. This discovery process therefore needs to target each level so you can form a comprehensive, cohesive, organizational transformation strategy.

For instance, you may find that at the very highest levels, the key impediments involving lack of an apparent strategy may be related to not having a coherent and consistent way of prioritizing the product portfolio. At the program levels, this may translate into excessive WIP, as program managers are frantically trying to run multiple programs (with unclear priorities) at once. Furthermore, at the team levels, the impediments may look like delay and quality issues as team members are task switching between contexts, coordinating dependencies with other teams, and working overtime.

The transformation backlog must take into account all relevant levels of the organization to create an end-to-end view of enterprise agility. I'll provide examples later in this chapter to help make this more concrete.

## Step 3: Build and Execute the Transformation Backlog

The previous activities are excellent sources for the transformation backlog; after collecting data, conducting interactive sessions and having meaningful 1:1 sessions with a cross-section of the organization, the AWG will have a good idea of where the main problems are. But how does this translate into a backlog that can be worked on so we can see real change take place?

Try looking at the problem through the perspective of the five dimensions of agility. By doing this, we're able to see a given problem from multiple angles, creating a holistic approach to addressing the challenges. I realize this can quickly get very theoretical, so let me provide a concrete example to help make the process real.

At one of the companies where I coached, we identified *improving quality* as a key objective across the organization. There are many ways one can go about approaching this objective, but after conducting Open Space sessions, performing interviews, and collecting trend data, we decided that introducing pair programming could be one way to help alleviate this problem.

We described pair programming in the earlier chapter; it's a technique popularized in eXtreme Programming (XP) in which programmers share the same keyboard and work together on the same code. Although proven effective in reducing defects and improving code quality, pair programming is not without controversy. Programmers often like to focus on their problems in solitude; pair programming radically changes this way of working and instead introduces a partner with whom you'll work for the majority of the day. So how do you implement a change like this, validate that it works, and make it stick? Here's what we did.

First, we looked at the implications of introducing pair programming through the five dimensions of agility as outlined in [Table 10.1](#).

**Table 10.1 Pair Programming Implications Through the Five Dimensions of Agility**

	Technology	Org Design	People	Leadership	Culture
<b>Enabling Factor(s)</b>	Introduce training on effective pairing techniques	Ensure team members are located closer to each other	Provide training regarding communication styles (introvert/extrovert); acknowledge provide coaching to help ease transition to a new way of working	Communicate support for trying out new things; acknowledge learning curve of the pilot teams across the organization.	Encourage team members to share experiences of the pilot teams across the organization. Be honest about the challenges, and don't sugarcoat.
<b>Epics (Experiments)</b>	Run an experiment for 3 months with workspace to accommodate a few teams; measure impact	Expand desk size, monitors, and workspace to work together	Ensure metrics are changed so people are not punished for pairing for a few teams; collect feedback	Lead by example and try pairing activities among managers; demonstrate support	Demonstrate that it's ok to be uncertain about this new way of working. Make it "safe" to go back

We quickly found that a large part of the organization would be affected by this change; this was not simply a matter of commanding that “thou shalt pair program” and leaving it at that.

From a Technology perspective, we realized we needed to provide training on how to pair in the first place. There are established “rules” on how to do this most effectively, and teams needed to be aware of them. We also decided it would be a good idea to run a pilot with a few teams over 2–3 months so that we could gather feedback, learn what worked and what didn’t, and help improve our approach as we expanded across the organization.

When considering Organizational Design, we needed to make a few changes right away. First, many of the team members, although in the same general vicinity, did not sit very close to each other. So one of the things we needed to do was make sure the team members sat in closer approximation to each other. Eventually, these became the “Agile Pods” that we discussed earlier, but at first these were less sophisticated efforts in that people just moved around so they could be closer. We also found that the current desk setups were far

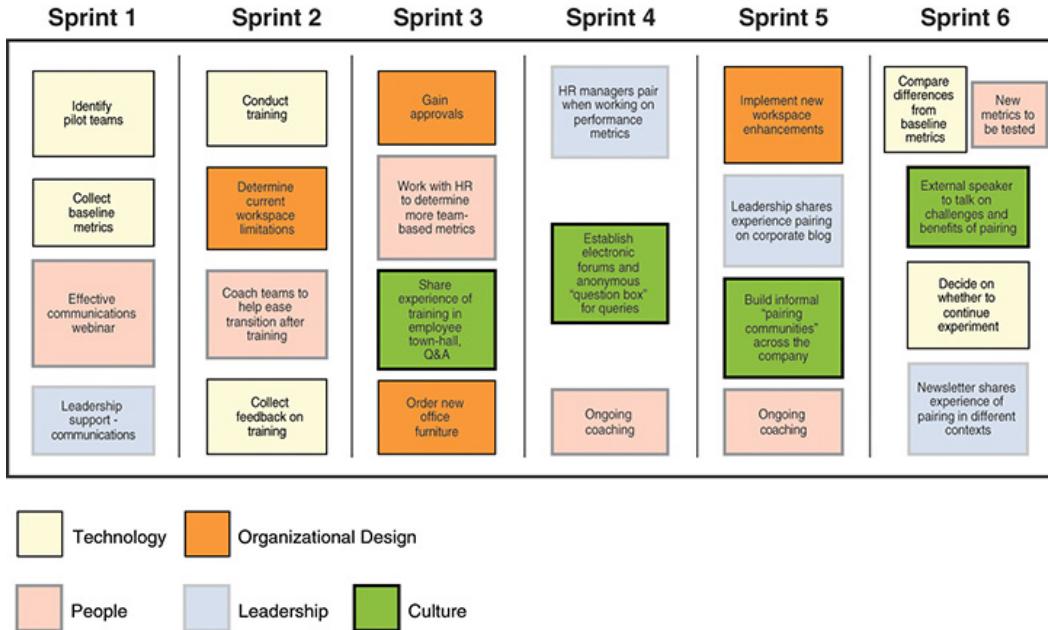
too small to be able to pair effectively. The monitors also had to be bigger to accommodate two people looking at the same screen.

From a People perspective, we realized we wanted to focus more on effective communication skills and being able to recognize how different personality types communicate. When working alone, this might not be quite as urgent, but in a setting in which you're working side-by-side for most of the day, it's important to be more cognizant of people's communication styles, so we provided training and resources to help with this. Perhaps even more importantly, we worked with HR and people managers to ensure that none of the performance metrics we had in place would inadvertently punish people for working together. Pairing may extend development times a bit at first, so understanding that productivity might take a hit in the beginning was something management supported. For people who needed to work from home at times, we arranged for remote pairing sessions, which also worked well.

Leadership had a huge role to play in this change effort. Not only did they support it through their financial backing (training, monitors, space changes, and so on are not free), they provided valuable support through their actions. The pair programming pilot was mentioned in one of the quarterly "all-hands" updates, and some of the managers even decided to pair together on some of their budgeting tasks. Making their support visible—and seeing how they were willing to change their behaviors as well—was a critical part of making the change work.

Finally, the Culture affected the way we approached the Backlog in the first place. We knew the organization had pushed the "rock star" mentality before, in which individual performers were rewarded and given special recognition. We also knew fear of failure was very real in this company: people who led failed projects would typically take a career hit. We addressed this by making leadership support very visible, but also by ensuring this was viewed as a "safe to fail" experiment. We provided a commitment on behalf of the developers: if, at the end of the experiment, we didn't see a quality difference and you didn't want to continue to pair, that would be OK. Ultimately, we did see a difference in quality (in fact, it improved by more than 30% based on the number of escaped defects in production), and most people enjoyed pairing together. A few decided to do it on a more periodic basis, which was OK, too.

How does the AWG backlog look when executing on this change? [Figure 10.7](#) shows how this effort looked in the AWG backlog over the course of six Sprints.



**Figure 10.7 A Sample AWG Backlog, Addressing Quality by Experimenting with Pair Programming**

The stories listed in [Figure 10.7](#) provide an illustration of the work being done and are not using the traditional user story format. Also, there are many ways to encourage pairing in an organization; this is merely one example of what we did the first few Sprints. The backlog keeps evolving as we learn more.

Pair programming is a technical practice proven to improve code quality and cross-team learning, affecting the five dimensions of agility. **It has been my experience that to create the necessary organizational support surrounding an effort, all dimensions need deliberate attention**, as observed in the preceding example. The degree of change in each dimension depends on the context of the change itself and the state of the organization.

### ***Evolution of Change Through the Transformation Roadmap***

Now, let's take another example to view a similar change effort through the prism of the transformation roadmap. One of the impediments to agility we identified at Nokia early on was a lack of automation and a deliberate strategy for emergent code design. Through an earlier experiment we found that Test Driven Development (TDD) was helpful in addressing this challenge—but how do we (the AWG) roll this out across the company?

Let's follow this change effort through the waves of the roadmap introduced earlier in this chapter.

### *Partnered Transition*

To help find a way to get started, we decided to run an experiment to observe how we could most effectively help teams take on TDD. Fortunately, many teams had already expressed an interest in learning more about TDD, so finding candidates for an experiment was easy. Four teams volunteered to participate, and the AWG created two basic scenarios. The first two teams were given a class taught by an experienced instructor lasting four days. The class was hands-on, so students would have a chance to practice various techniques leveraging a number of different problems and scenarios. The second two teams were given a two-day class by an instructor with less experience, but the instructor stayed embedded with the two teams for an entire two-week Sprint after the class ended. These teams received less instruction with a less experienced technical coach, but they were able to apply the learning on their own backlog right away and with embedded coaching.

The results of the experiment were stark. The teams with the one-day class, despite the more experienced instructor, reported that they were less satisfied with the experience and more importantly did not consistently pick up TDD several weeks after the experiment. The teams that did receive the embedded coaching, despite having an instructor with somewhat less experience, started implementing TDD at much higher levels of consistency.

We now felt we had a viable approach to rolling out TDD, and we implemented it by each end-to-end vertical. Over the course of about a quarter, all teams in the vertical received training and embedded coaching. We then moved on to the next vertical and accelerated the efforts further by adding technical coaches.

### *Self-Guided*

Six to nine months after first getting to learn TDD, we observed some interesting behavior among the teams. Internal “Champions” started emerging—people who were excited about the benefits TDD was creating for the teams. The AWG helped identify Champions in each verticals and received funding so that these thought leaders could get additional training externally. All in all, about a dozen “TDD Champions” emerged, and they quickly self-organized and created communities of practice across the verticals where they would meet during lunch on Thursdays. The AWG would not be very hands-on in this effort but would provide organizational support and funding for lunch and the occasional after-work meetup so that the Champions could continue to meet (and attract others—both inside and outside the company).

It was interesting to see how new tools, techniques, and developments were brought in organically through the interest groups and external events the Champions arranged. The efforts had taken on a life of their own—they were driving the TDD learning effort across the organization without formal change management involvement, other than occasional organizational support (and minor funding for food). What type of organizational support did they need? There were a few cases in which managers would argue against the technique for whatever reason. (In the beginning, fear of losing development speed was the biggest concern.) The developer would then sometimes ask the AWG to politely make the case to the manager, which was rarely a problem because upper management supported the

effort. Once the manager was assured that trying new things would not hurt his bonus metrics, this was typically a nonissue.

### *Innate*

About 12–18 months after initially rolling out TDD, we noticed that teams were not talking about TDD anymore. There were still meetups and the community of practice met regularly, but TDD was not often a topic. Why? It turned out that TDD was so engrained in how teams were doing their work that it was now part of the teams’ DNA. The topics that were discussed among the Champions had evolved into other things—what languages are more effective for error handling, which end-to-end stacks best support emergent work patterns, and so on. In fact, the only time TDD came up was when people wanted to discuss when it was *not* appropriate to use it. And we found there were times this was indeed the case—TDD was useful most of the time, but there were certain cases in which other techniques were just as good. (TDD for GUI development, for instance, was found to be more challenging.)

The AWG at this point did not have an active role in driving this change. In fact, one of the TDD Champions ended up joining the AWG to help drive other types of changes in the organization—both technical and nontechnical. For the purposes of this effort, the AWG was now simply part of the organization; TDD had become innate.

This example illustrates how concrete change efforts—executed through the Enterprise Improvement Backlog—affect the five dimensions of agility and go through the strategic transformation roadmap. In this case, the effort took less than 18 months before it was an innate part of how the organization operated; the timing will vary depending on the size of the effort, the type of change, and the current state of the organization.

## **Step 4: Maintain Momentum: Continuously Monitor Progress, Communicate Results, Seek Feedback, and Celebrate Failures**

After identifying the impediments standing in the way of organizational agility, defining a dynamic and evolving organizational backlog to address the impediments, and executing on the backlog through frequent experimentation and feedback loops, the next step involves sustaining momentum. Change efforts have a tendency to get a lot of attention and energy when they are viewed as new and fresh; once the novelty wears off, it’s critical to not let the foot off the pedal. In fact, as we’ve noted throughout this book, unlocking enterprise agility is a lifestyle, not a diet. It is about continuously improving the way you operate so it becomes part of the fabric of the organization, where challenging existing processes and experimenting with new ways of doing work is celebrated and encouraged.

From a change management perspective, I’ve found it useful to think of the transformation as a political campaign—with the backstabbing, lies, and nasty undertones we’ve seen all too often. A well-run political campaign involves nailing a few key elements that are similar to a sustained transformation effort:

- **Communications—Articulating a Crisp, Overarching Message About Why the Transformation Is Critical:** I've always viewed communications as one of the most critical aspects of the agile transformation efforts I've been involved in. Yes, you need the executive support, you need a solid AWG to help drive the change, and you need an organizational Culture that's open to have a chance to succeed. But without an effective communication strategy to complement your efforts and continue to build organizational support, another corporate initiative may enter and risk diverting attention away from the transformation before it's had a chance to become innate. The work we discussed earlier in this chapter—understanding the “why” behind the transformation effort—is therefore an essential part of your communication strategy to help maintain momentum.

At HERE, one of the conscious actions we took was to always tie our efforts back to the “why” in all our communications. For instance, we had weekly newsletters that provided a quick, easy-to-read overview of some of the AWG’s work. We made an effort to tie the work back to the corporate “speed to market” initiative, which was the main objective of our agile transformation efforts. “HR has changed their hiring practices by involving more team members in the screening process—and it has helped reduce the time it took to identify a successful hire by almost two months!”

- **Endorsements/Coalition Building:** As your transformation efforts gain momentum, there are going to be parts of the organization that may perceive they have more to lose than to gain from moving to a more agile way of working. I've always found it helpful to reach out proactively to these groups early and identify ways they can benefit and play an important role in the transformation. Granted, their role may not be the same as it was before—but by building coalitions early on, you can minimize the potential risk of creating organizational detractors.

At one of the companies I was involved with, the Quality department had traditionally been a very influential unit in the organization. Unfortunately, Quality was viewed as a separate activity, a process to be completed at the end of the development cycle, involving elaborate test plans, specialized “test engineers,” and months of effort.

As we outlined earlier in the book, moving to a more agile model involves integrating these capabilities into the teams who are doing the work and moving testing efforts up much sooner in the development cycle. It became clear that the Quality department could easily view moving to an agile way of working as a threat to its status quo—and rightfully so.

To reduce this organizational risk and develop an ally rather than an organizational detractor, the AWG identified ways the personnel in the Quality department could play a key role. As it happened, most of the people in the department had deep Lean Six Sigma backgrounds. Most of the Six Sigma

materials were superfluous for our software efforts, but their foundational knowledge in Lean became extremely valuable as they took on new roles as agile coaches, running Kaizen events and A3 problem-solving sessions.

- **Grassroots Organizing:** It's absolutely critical to have executive support when running an enterprise transformation effort, but without involving the grassroots of the organization, the change will never stick. Top-down efforts rarely succeed because they are typically viewed as "out of touch" and not relevant to the day-to-day issues the teams face routinely. This is one of the reasons why the AWG plays such an important role in the change effort—its members are supported by executives, yet they represent the grassroots, having proven themselves as capable team members in other units across the organization.

On an ongoing basis, listening to concerns from the teams and understanding how the change is affecting their work and their lives is critical. It's not enough to provide information *to* teams on a regular basis; perhaps even more important is the effort to gain insights *from* teams. At HERE, we scheduled regular "listening sessions" where employees were invited to meet with coaches who would dedicate their time to simply listen. No advice given, no active coaching took place, but the employees were heard. There were times these sessions did not produce concrete results, and that is OK. Just the mere fact that people felt comfortable expressing their experiences through the transformation efforts had value in itself. Other times, the team gained unique insights. One of the engineers had voiced a concern: the Sprints sometimes could get too intense, and there wasn't time to decompress. After listening to others who had similar concerns, the AWG acquired funds to buy Xboxes for all the teams. The teams then self-organized monthly gaming tournaments coinciding with the end of a sprint. Why gaming? "There's no better way to de-stress than to kick some zombie ass," one of the engineers said.

- **Ongoing Events:** To create transparency, facilitate organizational engagement, and keep energy levels up, I've found it incredibly useful to arrange a number of ongoing activities that share progress on the agile transformation journey. These activities range from more formal events on a quarterly basis to ad-hoc, spontaneous "pop-ups" that take place organically. What the activities have in common is that they aim to seek organizational feedback, demonstrate real progress toward our goals, celebrate (and make visible) failures along the way, and learn from our customers (the organization) how we can get better. Here are a few activities I've seen work well in this context:

- **Quarterly Town Halls Meetings:** These are relatively large, all-hands sessions where executives, as well as key players involved in the transformation efforts, provide an honest view of where we are, where we're going, and what's holding us back. Quarterly town halls are a chance to regularly assess the transformation roadmap and evolve it as an organization.

- **Regular Newsletters:** Although “newsletter” may sound quaint, having a regular update on current activities is incredibly helpful. Newsletters may also include a calendar of events and upcoming opportunities and highlight both success stories and challenges across the organization. Emails work well in this context, too; corporate blogs are even better.
- **Establishing Obeya Rooms:** An Obeya room (sometimes referred to as “Big Room”) is a dedicated collaboration space that ensures people have instant visibility, they can discuss key issues, and they can solve cross-cutting organizational issues. Although the space itself is permanent, the content in the room changes over time, as transformation efforts evolve. Having an Obeya room where information, challenges, and updates regarding the transformation efforts are shared can be an effective way to sustain momentum. (At Equinor, they decided to name some of these rooms to BEER rooms, to break the mold from the traditional “war” room nomenclature.)
- **Inviting External Speakers:** Investing in external speakers—either respected consultants or representatives from other companies going through a similar transformation journey—is critical. We can learn a lot from other people with similar experiences; it can be both motivating and informative to learn from peers. Returning the favor for other companies also helps build a community and extend a company’s influence beyond its own four walls.
- **Organizational Hackathons:** Hackathons are well-established in product management contexts. Developers come together to work on technical problems in a self-organizing, emergent manner. The same works well for organizational impediments, too. When faced with an organizational challenge to agility, tapping into the wisdom of the crowds and inviting people to work on the issue together can be incredibly powerful.

There are a number of other events that help share information across the organization. See the companion website for more ideas and tips of how to organize them.

The key objectives of these events are to engage the entire company, collect meaningful feedback from the organization, and provide a crisp view of where the company is in its journey toward unlocking agility. By executing on the transformation roadmap, learning and adapting along the way, the organization is on its way to unlocking agility.

Learning from failure is a key aspect of working in an agile manner. In this context, it might be helpful to learn from what I have experienced and observed from transformation efforts that failed to deliver on its promise—to ensure you don’t repeat the same mistakes.<sup>9,10,11</sup>

## Top 10 Items Leading to Transformation Failure

We have defined our strategic roadmap, we’re identifying an organizational change Backlog based on impediments to agility, and we’re adapting our approach along the way—what could possibly go wrong? As it turns out, quite a few things. In fact, according to research conducted by McKinsey, some 70% of transformation efforts fail to reach their desired goal.<sup>12</sup> The following are the top 10 factors I’ve observed that kill these efforts in their tracks, in no particular order.

**1. Lack of executive support:** In my experience, this is the number-one reason adapting a more agile manner often fails in enterprises. As should be evident throughout this book, unlocking agility is not about “implementing a process” or “installing a framework;” it is about fundamentally changing the way the organization operates so it can embrace change and execute with purpose. This requires changes in all levels of the organization—changes that will require executive support, budget authority, and organizational credibility. As such, without executive support at the highest levels, unlocking agility will remain beyond reach for most organizations.

**2. Believing we’re “done”:** We’ve discussed how unlocking agility entails being more agile today than you were yesterday; it’s about challenging the status quo and adapting a growth mind-set that spurs continuous improvement. I’ve seen many organizations achieve significant results in their agile transformation efforts only to take the foot off the pedal, believing they are “done.”

A few years ago, I was invited to speak at a Silicon Valley company, celebrating its accomplishments as an agile organization. There were a lot of smiling faces and a celebratory mood in the audience; the event had a “mission accomplished” vibe. I remember making a point in my talk highlighting that although great things have clearly happened, this is just the beginning of a journey—but I could sense the point was lost on the executives. They wanted to close a milestone and check a box: “agile transformation—done.” Less than 18 months later, I was invited back, but this time not as a speaker—as a potential consultant. They wanted me to help them “reboot” the transformation efforts because they had started slipping back to a more waterfall way of working. I politely declined.

**3. Failure to frequently measure progress toward objectives:** Many companies make the mistake of not articulating why they are moving toward a more agile way of working. What’s the problem we’re trying to solve? What gains are we hoping to realize, and what pains do we want to alleviate? Having this objective highly visible—as we explained earlier in the chapter—is critical so that people understand the business logic and purpose behind the transformation. It is just as important to measure progress toward this goal and be highly transparent about it. Is the overarching goal of our transformation efforts to reduce speed to market? Great; let’s show how we’re doing toward this goal. Let’s demonstrate progress, failures, and the learnings we’re gaining along the way. When organizations fail to connect the transformation efforts

with clear business objectives, efforts quickly lose momentum and ultimately falter like many other change management efforts.

**4. Ignoring the importance of Culture:** We've identified *Culture* as one of the five dimensions to consider when transforming to a more agile organization; [Chapters 7](#) and [8](#) cover this important topic in some detail. Ignoring the effect culture has on the success of your transformation is detrimental, and it affects your efforts in unforeseen ways. If your culture is characterized by risk avoidance and tight employee controls, it is likely that changing some of these cultural artifacts will take more time and perhaps be more challenging than if the incumbent culture is already aligned with many of the core elements of agile.

This does not mean aiming to work in a more agile manner is not possible in traditional companies; it means that the way you'd approach an agile transformation at a traditional insurance company may be different than what you'd do at a cloud-based software company, for instance. Context matters.

**5. Underestimating resistance to change:** Humans have a natural resistance to change. We are hard-wired to find a sense of equilibrium in our environment so that we can reduce risk, increase control of our resources, and ultimately improve our chances of survival. The irony is that nature is a complex system, and although having the illusion of control may make us feel better, it also makes us more vulnerable when change inevitably happens. As change leaders, it is our objective to allow our organizations to learn faster, to fail fast, and to continually improve business models, operations, and performance. This is painful to humans, and change efforts are bound to meet significant resistance, whether overtly or covertly. Recognize that change will be painful; it will take time. Organizations that underestimate this resistance are unlikely to be successful in the long run.

**6. Outsourcing your transformation:** Unlocking agility, as you've probably gathered from reading this book, is a nontrivial effort that requires changes to virtually all facets of your organization. Understanding your organization's culture and the deep, unspoken characteristics that define how work is done—what Schein calls the organization's most “Basic Assumptions”—is critical. I appreciate that a change effort like this is overwhelming, and it can be tempting to simply call up a reputable “Big 5” consulting firm and have them lead the effort. In my experience, that would be a mistake. By all means, take advantage of external expertise, and definitely involve credible consulting organizations where you have internal gaps, but do not simply outsource the entire effort. Your organization needs to lead this change and be fully committed to it; external people can guide along the way, but they don't own the transformation.

**7. Failing to address internal politics:** No organization is without some degree of office politics, the internal jockeying for status and power within the company. Unlocking agility can and will lead to changes that can be viewed as undesirable for some powerful internal players. Often evident in middle management—although certainly present in other levels of the organization too—some people openly support the change

effort while covertly trying to sabotage the approach if they feel their position in the company may be weakened as a result.

Although no panacea, one way to deal with this issue is to recognize there is a problem, ensure everyone has a chance to voice their fears of the change and how they may be affected, and look at ways to address the fears in an honest, open manner. Often, my experience has been that managers who fear losing organizational influence as part of the changes might experience a temporary loss but gain more influence in other, previously unfamiliar parts of the organization. There are also times when people may decide to leave the organization because the changes will be too great for their level of comfort. That's OK, too.

- 8. Failure to change existing performance and reward schemes:** If we're looking to create change, we also need to modify the existing structures that reinforce current ways of working. Reward, bonus, and performance management schemes can be incredibly effective in influencing behavior, and we need to modify these so they align with our change efforts. Not doing so can create a situation in which people find themselves trying to optimize for a more agile way of working, yet may find themselves punished professionally for doing so.

In one of the companies I was helping transform to a more agile manner, I met with a line of business leader who was frustrated with the situation he was in. "I understand what you're telling me about flow optimization," he said. "I see my fellow leaders in some other lines of business that could benefit from my help. I know it would objectively be what's best for my company if I paused efforts on some work in my portfolio and helped them instead; their work has a higher priority right now. But if I did that, I wouldn't meet my performance goals, and I'd lose out on a bonus worth potentially 25% of my salary. I'm sorry, I want to do the right thing here, but that's a steep price to pay for putting the company first."

Part of the transformation effort is not just to add new tools and introduce new ways of working—it's also to modify the existing structures that help limit agility. Performance management schemes that indirectly make people optimize for the wrong things are among the first factors that need to change. Failure to do so can be detrimental to the change efforts.

- 9. Not investing sufficiently in people:** Unlocking agility demands major changes across the organization and these changes require new roles, skills, and knowledge in the organization's people. A major reason why transformations fail is that leadership often invests heavily in tool upgrades, infrastructure improvements, and consulting resources, but it fails to provide the proper investments in people. Earlier in the book we discussed the AWG: a group of people dedicated to removing impediments to enterprise agility. This is a full-time position that requires investment to be successful; having this group be a part-time effort is unlikely to be successful. (Complementing the group with part-time AWG members from other parts of the organization is fine; however, the core group must be fully dedicated.)

What other investments are necessary? Supporting agile roles such as ScrumMasters and Agile Coaches is critical. Without the organizational credibility that comes with having a legitimate position in the company, it's no wonder that people may doubt the company's commitment when Agile Coaches are still officially labeled "QA Manager" in the corporate HR system.

Investing in proper education, training, and coaching support is another key ingredient to a successful transformation. People learn at different speeds and ways. Some may prefer access to books and other resources so they can read up on materials on their own. Others may need more hands-on, one-on-one coaching. Give them the support they need to be successful. Agility is a team sport.

10. **Treating agile as a tool or a process, not a mind-set:** Traditional, plan-driven processes are relatively straightforward to adapt. There is a "playbook" and best practices to follow from project management bodies such as Project Management Institute (PMI). Understand the process and follow the established guidelines, and you'll be able to organize your work according to the methodology. A mistake I've seen many organizations make is to view agility in a similar way: read the books, identify a framework, and "implement" agility by following a defined process.

Unlocking agility is not about following a given process or going by a step-by-step playbook. Yes, books like the one you're reading now can help you create a high-level roadmap, identify the key dimensions to consider, and understand what you need to focus your efforts on, but the journey to agility is unique to each organization. This is by design: unlocking agility is not about reaching a destination or meeting a given standard. It's about instilling a culture of learning, continuous improvement, and embracing of uncertainty as an opportunity, rather than something to avoid.

Too often, I hear of organizations that have "implemented" a given framework or adopted a methodology, believing they can now check the box and call themselves agile. That would be a mistake. Yes, achieving agility requires an investment in different tools and processes, but these serve us by helping us be more agile; they are a means to an end.

Unlocking agility requires changes to our toolsets, to the way we organize our work, collaborate, prioritize our work, and build our culture. But more than anything else, agility is achieved by changing how we think about how value is created; it's a mind-set. This means our journey never ends—we're continuously uncovering new ways of improving how we work. Agility is about being better today than we were yesterday.

In my experience as an AWG member and consultant, these 10 items are typical warning signs to look out for when transforming your organization. If you start seeing indications that the organization is reverting back to its old ways of working, make sure to call it out and make it visible. This is one of the reasons having frequent engagement opportunities at the organizational level is so important: be transparent and open about the challenges so everyone can be part of helping get the organization back on its path to agility.

There are a few positive signs to look for, too—signs that give you an indication you’re going in the right direction. Although not meant as a checklist, if you see evidence of the following signs in your organization, it’s a reason to be optimistic: your organization is on the right path.

## Seven Signs You’re on Your Way to Unlocking Agility

As the organization goes through the transformation, it’s likely that there will be setbacks along the way that threaten progress. Organizational focus might wane at times of temporary market instability, key people may leave the organization in the hunt for talent, competitors may introduce disruptive products that cause doubt in the current product roadmap. This is normal and part of the journey; it’s not going to be a smooth ride. As long as the fundamentals are in place, however—as long as you have executive support, the organization continues to execute on the evolving roadmap, and you see tangible evidence of the seven signs—you’re moving in the right direction toward working in a more agile manner. It takes patience and perseverance, but you will get there. To paraphrase Theodore Roosevelt: “Nothing worth doing comes easy.” Consider these seven signs that you’re on the way to unlocking agility:<sup>13</sup>

- 1. Ask Yourself: Would You Rather Be Right or Successful?:** When I meet with leaders who are looking to transform their organization to work in a more agile manner, I always ask them this question: would you rather be right or successful? If they are honest and they let me know they are committed to succeeding, not to necessarily be right, then that is an excellent sign the organization is on the right path. Unlocking agility is not a linear road—you’ll learn things along the way that will prove your initial assumptions wrong. The key is to have strong views weakly held; have an opinion and a clear vision of where the organization is going, but when faced with evidence that you’re wrong, own up to it and adapt your approach accordingly. And perhaps more importantly, allow all employees of your organization to do the same.
- 2. Distributing Skin in the Game:** An effective “test” of whether a transformation effort will succeed is to identify who in the organization has a stake in its success. If I see executives—as well as managers and people in teams—all share in the outcome of the transformation, I feel good about the organization’s chances. The opposite is often a death sentence: if executives declare “we’re going agile” with no discernible change to how they work and all risk placed on team members, it’s a sure sign of trouble. A shared responsibility and a degree of shared pain, as well as reward, ensures everyone has a vested interest in making this work.
- 3. Aiming for “Good Enough” Certainty:** We live in a VUCA world; complexity and chaos are a natural part of our business environment. Executives and organizations that take this to heart and understand that being 100% certain of anything is impossible are in a good position to unlock agility. Jeff Bezos has a rule of thumb that he goes for about 70% certainty before deciding on anything. In other words, some preliminary

analysis and preparation has been done, but it's by far not a complete picture. Having a bit more than 2/3 of the information needed is the sweet spot he's aiming for. Why not get to 80% or 90%? Because the value of this additional level of certainty is far outweighed by the time saved by making a decision earlier. Speed matters to learning organizations.

4. **Learning to Let Go of (the Illusion of) Control:** Successful leaders tend to attribute their good fortune to factors such as talent, motivation, and intelligence. These may all be important, but recent research has shown that timing, opportunity, and luck play a significant role in determining success as well. The sooner leaders recognize that there is a significant portion of their outcomes decided by random factors outside of their control, the greater the chance of successfully unlocking agility in the enterprise. If a significant portion of success cannot be predetermined or controlled, how can you improve your chances? Researchers found some of that luck could be harnessed by increasing “serendipity density”—essentially making your own luck through frequent experimentation and distribution of opportunity throughout the company.<sup>14</sup> You’ll recognize that this is akin to our operating model described in [Chapter 9](#)—“embrace change, execute with purpose.”
5. **Appreciating the Importance of Doing Less Work at Once:** In the beginning of this book, we discussed the concept of optimizing for flow of customer value. Organizations that recognize the impact of optimizing for flow over resources are in a great position to unlock agility in the enterprise. The implication of this understanding is that “busyness” is not viewed as a positive attribute of a thriving organization; rather, having slack in your day is desirable and a sign of a healthy, dynamic environment optimized for agility. Reducing organizational Work in Progress (WIP) to a point where value can be delivered in a sustainable manner, continuously managing bottlenecks, and monitoring flow efficiency, is a key attribute of organizations successfully unlocking agility. What’s the magic WIP limit? This will obviously depend on the unique context of your organization, but I am willing to bet it is lower than the amount of work your organization is doing right now. To get started, reduce the WIP limit a bit, measure the impact of more flow to speed and adaptability, and refine from there.
6. **Understanding the Economics of Your Decisions: Cost of Delay:** One of the most challenging decisions organizations need to make is not just determining what they need to work on, but also (and perhaps more importantly), what *not* to work on (yet). Being able to limit the amount of organizational WIP and prioritize work based on the economic impact to the organization is a critical success factor in unlocking agility. We covered CoD at some detail in [Chapter 3](#). Note that it’s not so much the precision of these numbers that matters. The importance of using this technique is that it invites an understanding of both the value and the urgency of the work; having this understanding helps organizations make better economic decisions and, as such, is an important sign of agility.

## **7. Recognizing That The Performance of a System Is the Product of Its**

**Interactions:** Russel Ackoff, the eminent systems thinker, stated that a “system is not a sum of the behavior of its parts, it’s the product of their interactions.” This implies that we recognize that companies are complex adaptive systems and that a company’s performance is the product of its interactions. In other words, by focusing on the interfaces between the various parts of your organization—and not solely on the performance of the individual parts themselves—change leaders can improve the performance of the entire system, a sign that the organization is on the right path to successfully unlocking agility. Pro tip: when you see metrics such as flow efficiency being used to measure performance of a value stream, it’s a good indication you’re doing well.

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## **The Road Ahead: Now What?**

Over the course of this book, we’ve outlined the roots of agile thinking and the reasons enterprises of all kinds—not just tech companies—may want to become more agile in today’s world. We’ve discussed the need to adapt faster so that companies in all domains can stay ahead of obsolescence—satisfying their consumers and embracing a world of VUCA. We’ve looked in detail at the five dimensions of agility, from internal communications to human resources to measuring our success differently—and rewarding that good work accordingly. We’ve also delved deeply into the whys and hows of agile transformation, from getting people on board to establishing an Agile Working Group that can seed culture change in a meaningful and lasting way.

So now what? Are you ready to get to work and unlock agility in your enterprise? You may feel overwhelmed and intimidated by the magnitude of the change involved and the road ahead. You may think you don’t know everything you need to know before you get started.

Don’t let that stop you; nobody does. This book has given you a blueprint for unlocking agility, but it can’t tell you what to do every step of the way. You will discover and learn along the way; this is part of the personal growth journey you’ll go through as a change leader. Aim for “good enough” certainty and not perfection—and have confidence that you know what you need to get started.

Transforming your organization to become more agile is a commitment to its future. In a world characterized by increasing rates of change and uncertainty, continuing to operate in a way optimized for a more stable environment is not a viable strategy. Agile companies are more successful and perform better than their peers. A recent McKinsey study found that 81% of their respondents reported a moderate or significant increase in performance for agile units compared to others; they were also 1.5 times more likely than others to outperform their peers in financial measures and 1.7 times more likely to report outperforming their peers on nonfinancial measures.<sup>15</sup>

Helping your organization thrive in today’s world and improving its financial performance are strong reasons to unlock agility, but those are far from the most important.

Working in an agile manner is simply more humane. It's a place of collaboration, of "individuals and interactions," of psychological safety and personal growth. Personally, what has made agile transformations so rewarding has without a doubt been the positive effect it has had on the people I've worked with.

And this is why you should get started now. It's important work, and it has the potential to significantly change the lives of your fellow co-workers for the better. I can't guarantee that you'll be successful, but the book you're holding in your hand will improve your chances of shaping an approach that works for you. I can't tell you you'll achieve 10 times productivity gains or zero defects, but if you strive to listen, learn, and adapt your approach along the way, I am confident you'll do well.

I have been involved in numerous agile transformations since 2009—ranging from big, 100,000+ organizations to smaller, private organizations with just a few hundred people. I can honestly say that although I did not achieve stellar results in every case, not a single organization I worked with wanted to go back to how they were before. Without exception, they all reported better performance. Customers received more value. People enjoyed their work more.

With what we've covered in this book, you're ready to start this journey. Experiencing the difference agility makes in people's lives is one of my great joys. It has been what makes my work worth doing. Now it's your turn. Let's get started!

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## Summary

This chapter put everything we've learned into a coherent strategy. We started with a high-level roadmap to unlocking agility in the enterprise. We reviewed the fact that agile transformation is not a linear effort; change is most effective if it proceeds in overlapping waves that allow us to validate our assumptions, listen to feedback from teams, and allow for continuous learning along the way. I call these waves Partnered Transition, Self-Guided, and Innate.

Next, we talked about removing impediments that stand in the way of an agile transformation. The Agile Working Group (AWG) needs an Organizational Impediments Backlog, but this Backlog will vary depending on your company's needs and context. Before creating a Backlog, however, you need to be clear on what the five dimensions of agility look like in an organizational setting. We revisited those five dimensions—Technology, Organizational Design, People, Leadership, and Culture—and touched upon how they look in action.

We then looked at concrete ways the AWG can execute on the strategic roadmap. I provided case studies of Organizational Improvement Backlogs I've worked on, including examples from my time working with NAVTEQ and Nokia. I outlined the four steps I've used successfully throughout several organizations to drive large-scale, lasting change at the enterprise level. We looked at these four steps in detail: defining and communicating a clear purpose for the transformation; identifying key impediments preventing us from reaching the

goal; building and executing the transformation backlog; and maintaining momentum as the change effort progresses.

Finally, we concluded the chapter with two lists that change leaders should keep in mind during change efforts. The first is a compilation of the top 10 factors I've observed that kill transformation in its tracks. This list revisits some of the most common pitfalls that stand in the way of an effective and meaningful change effort. Following this list, I outline its converse: seven signs—some of them subtle and easy to miss—that you're on the right path with your agile transformation. Keeping both of these lists in mind will help you recognize if you're moving in the right direction.

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## Q&A

### **1. On average, how long will an agile transformation take to proceed through the three waves?**

In one sense, this is a trick question in that unlocking business agility is not an effort that's ever done. Nevertheless, I appreciate that it's helpful to get an idea of the type of commitment we're considering in an organizational transformation like this.

Of course, many factors affect how long a transformation will take, but considering why transformations fail and the elements necessary to help them succeed, my experience is that a dedicated change effort with executive support in a medium-sized business will take anywhere from 24–72 months.

Partnered Transition is a wave that normally takes 6–24 months, depending on the size and complexity of the organization. Self-Guided may take longer, based primarily on the existing culture of the company. It's not unusual for this wave to last for 24–36 months; some companies fail to advance beyond this wave altogether without the proper dedication and support; this is where the organizational mind-set truly changes. Once we're in Innate, it is not a matter of “being done”; agility is business as usual and a natural way of working. We challenge ourselves, we improve, we innovate, and we create. Every day.

### **2. My company culture is resistant to change. Why rock the boat and try something new?**

As we described earlier in the book, change is accelerating in virtually all industries, and Volatility, Uncertainty, Complexity, and Ambiguity (VUCA) are characteristics describing virtually every business environment around the world. In other words, it does not matter if your organization “resists change” or not, the need to be nimbler and adapt faster is going to be necessary if your company is interested in continuing to thrive and grow. The barriers to entry—increased global competition and access to ever-connected technology—are simply too vast; if you fail to evolve and improve the way you operate over time, there is a good chance you'll be disrupted by someone who does.

Unlocking agility is hence not something you commit to because you want to follow a business trend or check off a buzz word: it's required if your business wants to be viable in today's economy and beyond.

### 3. If my organization is a traditional company, accustomed to following rules and going “by the book,” is there any real hope we can learn to become more agile?

Don't be intimidated by the Spiffs, Salesforces, and Amazons of the world. As long as the organization does not prevent learning, it can become more agile. We've emphasized the importance of context throughout this book and this bears repeating: there is no “one way” to be agile—it is not something you become. Rather, it's something you become *more of*. Organizations that unlock agility may therefore look very different from each other, depending on their industries, culture, and business context. Yet they will have a few things in common: they continually learn, they adapt how they work based on that learning, and they recognize they are never done. What this means for each organization will differ greatly. Google, the search and advertising giant, and The Morning Star Company, the tomato producer, are both agile organizations, yet they operate in very different ways. As they should.

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## Further Resources

The following are resources I recommend you explore further to gain a deeper understanding of the topics discussed in this chapter:

- Ryan Ripley's *Agile for Humans* podcast series (<https://ryanripley.com/agile-for-humans/>)

There are several agile podcasts available, but Ryan Ripley's *Agile for Humans* podcast series is at the top of my list. I can't put my finger exactly on why. Perhaps it's Ryan's relaxed demeanor and soothing voice, maybe it's the top-notch guests he brings in, or maybe it's the variety of topics he covers. Or maybe it's all three. But if you're looking for a high-quality, easily digestible source of agile goodness, this podcast won't let you down.

Started in 2015, *Agile for Humans* has been going steady since, releasing an episode roughly every two weeks. The episodes are completely free, with some sponsored content and targeted recommendations—never to the point where it takes away from the material. This is one resource you don't want to miss.

- The Agile Fluency Model (<http://www.agilefluency.org/>)

The Agile Fluency Model, created by thought leaders Diana Larsen and James Shore, is a great way to help teams understand where they are and provide insights necessary to develop a roadmap. Larsen defines fluency as things you do automatically without thinking; the idea is that just as you may speak

different languages at different levels of fluency, different levels of team fluency may also be appropriate based on the unique context of the organization. The Agile Fluency Model (a subset of the Agile Fluency Project) is complemented by an interactive game, workshops, and lots of articles. It's definitely worth considering as part of your transformation efforts!

- Comparative Agility ([www.comparativeagility.com](http://www.comparativeagility.com))

Comparative Agility is a continuous improvement platform that enables organizations to gauge how they work compared to other companies, their organization, or various points in time. Complementing a larger transformation effort, Comparative Agility can be a useful, data-driven tool to help inform strategy and direction.

Although benchmarking a given company against others can be interesting and provide uncommon insights, the most useful value provided by the tool is that it allows teams to quickly identify their perception of how they work over time. When you're leading large transformation efforts with hundreds of teams, having this type of information is invaluable. I used the tool myself when I was leading transformations at Nokia, McAfee, and Intel, and I found it to be extremely insightful—so insightful, in fact, that I acquired an ownership interest in the company a few years later. (In other words, this particular recommendation is not entirely unbiased.)

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# Index

## Numbers

- 3M, 197
- 1871, 21–22

## A

- accountability, 157
- acquiring disruptive competitors, 243–244
- adapting to change, optimizing for flow (building at the right speed), 44–45
- age, diversity, 135
- agile enterprises, defined, 29–32
- “Agile Manifesto,” 3, 13–15
- agile pods, case study: NAVTEQ, 101–102
- Agile Working Group. *See AWG (Agile Working Group)*
- agility, 22–23
  - enterprise agility
    - defined, 29–32
    - organizational context, 32
  - unlocking, 50–51, 235–237
    - embracing change, 237–241
    - executing with purpose, 246–247
    - roadmaps, 278–279
    - signs you’re on the right track, 308–310
- Ahlström, Per, 46, 47
- Airbnb, 23
- Aleppo (Syria), 5

Alignment workshop, 253

JTBD (Jobs to Be Done), 253–255

outcomes, 256

VSM (Value Stream Mapping), 255–256

Amazon, 22, 23, 131, 246, 282

Zappos, 243

Amber leadership, 155, 157

Ambler, Scott, 268

American War College, VUCA (Volatility, Uncertainty, Complexity, and Ambiguity), 16, 17

Anderson, David, 79

Andreessen, Marc, 15

AON, 98

Appelo, Jurgen, 106

Apple, 69, 176

culture, 182–183

Apple Park, 176

Arnold, Joshua, 68

artifacts, culture, 176

assumptions, culture, 177

Athens (Greece), 5

Atlassian, 137

AWG (Agile Working Group), 101, 117, 211–215

Backlog, 297

benefits of, 228

characteristics of, 216

champions, 220–221

complementary, 216–217

credible, 219

dedicated, 217–218

humble, 219–220

knowledgeable, 218–219

external consultants, 221–222  
organizational structure, 222  
    dual-boot operating system, 224–225  
    temporary lifespan, 223  
    whole system view, 222–223  
recruiting, 225  
    hesitation from potential candidates, 226–227  
    resistance from managers, 225–226  
type of work performed, 212–214

## B

Backlog, Scrum, 78–79  
balance, embracing change and executing with purpose, 266–267  
balancing resource and flow efficiency, 46–48  
Ballmer, Steve, 134  
barbell strategy, 33, 266–267  
Barrett, Craig, 240  
basic assumptions and values, culture, 176  
BBRT (Beyond Budgeting Round Table), 162  
Beck, Kent, 11–12  
Benson, Jim, 79  
Beretta, 4  
Berlin (Germany), 22  
Beyond Budgeting, 161–165, 287  
Beyond Budgeting Round Table (BBRT), 162  
Bezos, Jeff, 243, 282  
Big Room, 302  
black-box testing, 83  
Blanch, Audrey, 137  
Blank, Steve, 35, 37, 241  
Blockbuster, 238  
BMC (Business Model Canvas), Technology, 62–65

Bogsnes, Bjarte, 164–165

Brin, Sergey, 176

building an environment supportive of agile people, 137–138

building at the right speed (optimizing for flow), 43, 50

- balancing resource and flow efficiency, 46–48

business agility metrics, 199

- flow efficiency, 200–202
- lead time, 199–200
- flow efficiency, 44–45

Kingman’s formula, 49

Little’s Law, 48–49

resource efficiency, 43–44

Technology, 81–82

- VSM (Value Stream Mapping), 86–89
- XP (eXtreme Programming), 82–86

building the right thing (value), 33

business agility metrics, 195

- NPS (Net Promoter Scores), 195–196
- percentage of sales from new offerings, 196–197

case studies, Comes with Music, 36–37

exploitation, Product Development, 34–36

exploration, Customer Development, 37–38

Technology, 62

- Business Model Canvas, 62–65
- CoD (Cost of Delay), 68–74
- Lean Startup, 65–68

building the thing right (quality), 40

business agility metrics, 197

- escaped defects, 198–199
- MTTR (Mean Time To Recovery), 197–198

intentional product development, 41–43

technical debt, 40–41

Technology, 74  
    Kanban, 79–81  
    Scrum, 74–79

“Build-Measure-Learn” cycle, 39, 66

burndown charts, 129–130

business agility, 22–24  
    designing, 32–33  
        optimizing for flow (building at the right speed), 43–50  
        quality (building the thing right), 40–43  
        value (building the right thing), 33–40

business agility metrics, 192–194  
    building at the right speed (optimizing for flow), 199  
        flow efficiency, 200–202  
        lead time, 199–200

    building the right thing (value), 195  
        NPS (Net Promoter Scores), 195–196  
        percentage of sales from new offerings, 196–197

    building the thing right (quality), 197  
        escaped defects, 198–199  
        MTTR (Mean Time To Recovery), 197–198

changing culture, 189–190

characteristics of, 191  
    accessible, 191–192  
    actionable, 191  
    auditable, 192

Business Model Canvas  
    Technology, 62–65

    Vision & Strategy workshop, 251–252

Byblos (Lebanon), 5

## C

call centers, 189–190

candidates for AWG (Agile Working Group), 226–227  
Capital Group, 140  
career paths, 141–142  
case studies  
    Comes with Music, 36–37  
    NAVTEQ, 100–107  
CD (Continuous Deployment), XP (eXtreme Programming), 83  
CEOs, death of CEOs, 165–166  
change  
    adapting to, 44–45  
    culture, 183–185  
    driving, 289  
        step 1: define and communicate purpose for transformation, 290  
        step 2: identifying key impediments preventing reaching the goal, 290–294  
        step 3: build and execute Transformation Backlog, 294–297  
        step 4: maintaining momentum, 300–303  
    embracing, 237–241  
    resistance to, 305  
    roadmaps  
        Inmate, 299–300  
        Partnered Transition, 298  
        Self-Guided, 298–299  
Change Canvas, 65  
changing culture, 185–186, 202  
    through business agility metrics, 189–190  
    through managed evolution, 187–189  
    through urgent crisis, 186–187  
channels, 63  
Chaos Monkey, Netflix, 198  
CHAOS report, 12  
Chaotic context, Cynefin, 20

characteristics of

- Alignment workshop, 254
- AWG (Agile Working Groups), 216
  - champions, 220–221
  - complementary, 216–217
  - credible, 219
  - dedicated, 217–218
  - humble, 219–220
  - knowledgeable, 218–219
- business agility metrics, 191
  - accessible, 191–192
  - actionable, 191
  - auditable, 192
- Collaboration culture, 179
- Competence culture, 181
- Control culture, 180
- Cultivation culture, 182
- Forecast & Execution workshop, 261
- Level 5 leadership, 152
- people in agile organizations, 132
  - developing an enterprise growth mind-set, 134
  - embracing diversity, 135–137
  - fostering growth mind-set, 132–134
- Refinement workshop, 257
- Teal Leadership, 159–160
- Vision & Strategy workshop, 251
- charts, burndown charts, 129–130
- Château de Goulaine, 4
- Chicago, 21–22
- Christensen, Clayton, 237–238, 245, 253
- CI (Continuous Integration), XP (eXtreme Programming), 83
- Circuit City, 153

cities, versus companies, 4–6, 21–22  
coalition building, 301  
Cockburn, Alistair, 12–13  
CoD (Cost of Delay), 46, 68–74  
    Vision & Strategy workshop, 252  
Cohn, Mike, 31  
collaboration, Schneider Culture Model, 178–179  
Collins, Jim, 150–151, 152, 167  
Comes with Music, 36–37  
communicating purpose for transformation, 290  
communication, 300–301  
    high-performing teams, 99  
companies, versus cities, 4–6, 21–22  
compensation, 140–141  
competence, Schneider Culture Model, 181–182  
competitors, acquiring disruptive competitors, 243–244  
Complex context, Cynefin, 19–20  
Complicated context, Cynefin, 19  
concept-to-cash, 34  
consultants, external consultants, 221–222  
Continuous Deployment (CD), XP (eXtreme Programming), 83  
Continuous Integration (CI), XP (eXtreme Programming), 83  
control, Schneider Culture Model, 179–180  
Cook, Scott, 40  
Corporate Strategy, 223  
Cost of Delay (CoD), 46, 68–74  
    Vision & Strategy workshop, 252  
cost structure, 63  
Cottmeyer, Mike, 77  
co-working space, 21–22  
creating an internal culture of disruptive innovation, 244–246  
Crisp, 165–166

Crystal family of methods, 12  
cultivation, Schneider Culture Model, 182–183  
cultural fit, dangers of hiring for, 136–137  
culture, 52–53, 173–174, 175, 288–289, 304–305  
    business agility metrics. *See* business agility metrics  
    changing, 202  
    changing organizational culture, 185–186  
        through business agility metrics, 189–190  
        through managed evolution, 187–189  
        through urgent crisis, 186–187  
    creating an internal culture of disruptive innovation, 244–246  
    how we experience culture, 176–177  
    pair programming, 296–297  
    Schneider Culture Model, 177–178  
        collaboration, 178–179  
        competence, 181–182  
        control, 179–180  
        cultivation, 182–183  
        sustaining change, 183–185  
Cunningham, Ward, 40  
Currier, Kelly, 217  
Customer Development, value (building the right thing), 37–38  
customer relationships, 63  
customer segments, 63  
customer service call centers, 189–190  
Cynefin, 18, 234  
    Chaotic context, 20  
    Complex context, 19–20  
    Complicated context, 19  
    Disorder context, 20  
    Obvious context, 18–19

## D

- Damascus (Syria), 5
- dangers of hiring for, cultural fit, 136–137
- death of CEOs, 165–166
- debt ceilings, 41
- Deere & Company, 219
- defects, escaped defects, 198–199
- designing business agility, 32–33
  - optimizing for flow (building at the right speed), 43–50
  - quality (building the thing right), 40–43
  - value (building the right thing), 33–40
- developing an enterprise growth mind-set, 134
- Digital Rights Management (DRM), 36
- Disciplined Agile, 268
- Disorder context, Cynefin, 20
- disruptive innovation, 237–238
  - fostering
    - acquiring disruptive competitors, 243–244
    - creating an internal culture of disruptive innovation, 244–246
    - partnerships with external innovation hubs, 241–242
    - taking ownership interest in potential disruptors, 242
- diversity, 135
  - age, 135
  - ethnicity, 135
  - gender, 135–136
  - neurodiversity, 136
- divisional structure, Organizational Design, 110–111
- “Don’t Be Evil,” Google, 176
- driving change, 289
  - step 1: define and communicate purpose for transformation, 290
  - step 2: identifying key impediments preventing reaching the goal, 290–294

step 3: build and execute Transformation Backlog, 294–297  
step 4: maintaining momentum, 300–303  
DRM (Digital Rights Management), 36  
Drucker, Peter, 9, 52–53  
dual-boot operating system, AWG (Agile Working Group), 224–225  
Dutton, Janes, 142  
Dweck, Carol, 132–133, 134  
Dye, Brian, 233–234

## E

Eastern Berlin, 22  
Edmondson, Ann, 138  
efficiency, resource efficiency, optimizing for flow (building at the right speed), 43–44  
egalitarian management, 158  
Emanuel, Rahm, 21–22  
embracing change, 237–241  
    balancing with executing with purpose, 266–267  
embracing diversity, 135–137  
emergent organizational structures, Organizational Design, 113–116  
Emergent Planning, Forecast & Execution workshop, 262–263  
empiricism, 31  
employee empowerment, 158  
empowering people, HR (Human Resources), 142–143  
Endenburg, Gerard, 114  
endorsements, 301  
energy, high-performing teams, 99  
engagement, high-performing teams, 99  
enterprise agility  
    defined, 29–32  
    organizational context, 32  
    unlocking, 50–51

enterprise coaching team, 217  
escaped defects, 198–199  
espoused values, culture, 176  
ethnic diversity, 135  
executing with purpose, 246–247  
    balancing with embracing change, 266–267  
    how product strategy turns from vision to hallucination, 247–248  
    through fast organizational feedback loops, 263–265  
    through progressive refinement, 249–250  
        Alignment workshop, 253–256  
        Forecast & Execution workshop, 261–263  
        Refinement workshop, 257–260  
        Vision & Strategy workshop, 250–253  
execution, 33  
experiments, case study: NAVTEQ, 102–103  
exploitation, 33  
    executing with purpose, 246–247  
    Product Development, value (building the right thing), 34–36  
exploration, 33  
    Customer Development, value (building the right thing), 37–38  
    disruptive innovation. *See* disruptive innovation  
    high-performing teams, 99  
external consultants, 221–222  
eXtreme Programming. *See* XP (eXtreme Programming)

## F

Facebook, 23, 70  
failing fast, 238–239  
    Lean Startup, 67  
failure, 22–23  
Fannie Mae, 153  
fast organizational feedback loops, executing with purpose, 263–265

Fastworks program, GE (General Electric), 188–189  
feedback loop, executing with purpose, 263–265  
Fink, Larry, 157–158  
Five Critical Dimensions of Agility, 51–53  
    Culture. *See* Culture  
    Leadership. *See* Leadership  
    Organizational Design. *See* Organizational Design  
    People. *See* People  
    Technology. *See* Technology  
fixed mind-set, 133  
Flannery, John, 188–189  
flaws in Product Development, 35  
flexible work arrangements, 137  
flexible workspaces, 137  
flow, optimizing for flow. *See* optimizing for flow (building at the right speed)  
flow efficiency, 200–202  
    optimizing for flow (building at the right speed), 44–45  
Ford, Henry, 8–9, 235  
Forecast & Execution workshop, 261–262  
    Emergent Planning, 262–263  
    outcomes, 263  
fostering  
    disruptive innovation  
        acquiring disruptive competitors, 243–244  
        creating an internal culture of disruptive innovation, 244–246  
        partnerships with external innovation hubs, 241–242  
        taking ownership interest in potential disruptors, 242  
    growth mind-set, 132–134  
Fowler, Martin, 12  
Fowler, Susan, 176  
Fox, Tom, 223

Franklin, Benjamin, 68  
Fraser, Robin, 162, 163  
functional structure, Organizational Design, 108–109

## G

GE (General Electric), 40, 188–189  
gender, diversity, 135–136  
Google, 23, 31, 138, 176  
    culture, 182  
    job crafting, 142  
grassroots organizing, 301–302  
Green leadership, 156, 158  
Grenning, James, 15, 41  
Groupon, 64  
growth mind-set  
    developing, 134  
    fostering, 132–134

## H

hackathons, 303  
Halloween products, 71  
Hastings, Reed, 245  
Heather, 128–130  
HERE, 32, 129–131, 223, 242  
    communication, 300–301  
    grassroots organizing, 301–302  
    Organizational Design, 117–118  
heuristics of  
    agile Organizational Design, 120–121  
    business agility metrics, 192–194  
Hewitt Associates, 98

Hewlett-Packard, 23  
high-performing teams, 99–100  
Highsmith, Jim, 15  
hiring, dangers of hiring for cultural fit, 136–137  
holacracy, Organizational Design, 114–116  
Holdorf, Chad, 219  
Hololens project, 134  
Hope, Jeremy, 162, 163  
HR (Human Resources), 138, 143  
compensation, 140–141  
move decision-making closer to team, 142–143  
recruiting, 138–140  
roles and career paths, 141–142  
Hsieh, Tony, 116, 243  
human collaboration, 155–156  
human impact of effective workspaces, 106–107  
Human Resources. *See* HR (Human Resources)

## I

IBM, 23  
identifying impediments preventing us from reaching goals, 290–294  
Immelt, Jeff, 188–189  
incubation organization, 238  
ING, Organizational Design, 118–120  
Innate wave, 281–283, 299–300  
innovation, 21, 157, 246–247  
disruptive innovation. *See* disruptive innovation  
innovation hubs, establishing partnerships with, 241–242  
innovator’s dilemma, 237–238  
Intel, 105, 142, 240, 242  
age diversity, 135  
intentional product development, quality (building the thing right), 41–43

internal politics, 305  
interviews, 292  
Intuit, 30–31, 40  
inviting speakers, 303  
iPhone, 69  
Ivarsson, Anders, 118–119

## J

Jemilo, Drew, 221  
Jericho (West Bank), 5  
Jerusalem, 5  
job crafting, 142  
Jobs, Steve, 69, 182–183  
JTBD (Jobs to Be Done), Alignment workshop, 253–255

## K

Kaarboe, 165  
Kalanick, Travis, 176  
Kanban, Technology, 79–81  
Kaplan, Larry, 186, 227  
Kaplan, Robert, 248  
Karl, 127–130  
Kerievsky, Joshua, 85  
key activities, 62  
key partners, 62  
key resources, 62  
Kingman’s formula, 49  
Kniberg, Henrik, 40, 118–119  
knowledge workers, 8–9  
known knowns, 33  
Kongo Gumi (Japan), 4

Kotter, John, 186, 225

## L

Laloux, Fredric, 154–155, 159, 167  
Large-Scale Scrum (LeSS), 267–268  
Larman, Craig, 267–268  
lead time, 199–200  
Leadership, 21, 52, 149–150, 287  
    Beyond Budgeting, 161–165  
    death of CEOs, 165–166  
    essential themes of, 167–168  
    impact of, 150–152  
    Level 5 leadership, 152–154  
    pair programming, 296  
    Teal Leadership, 154–156, 159–160  
    Teal organizations, 160–161  
Lean Canvas, 65  
Lean Startup, 38–40  
    Technology, 65–68  
learning, organizational learning, 22–24  
learning organizations, 9  
Leffingwell, Dean, 130, 267  
LeSS (Large-Scale Scrum), 267–268  
Level 1 leadership, 151  
Level 2 leadership, 151  
Level 3 leadership, 151  
Level 4 leadership, 151  
Level 5 leadership, 151–154  
life cycles, 69–71  
Lines, Mark, 268  
Little, Jason, 65  
Little, John, 48–49

Little's Law, 48–49  
local optimization, 200  
Luoyang (China), 5  
Luxor (Egypt), 4

## M

machines, 7  
managed evolution, changing culture, 187–189  
management, 6  
    Scientific Management, 7–8  
managers, resistance to recruiting for AWG (Agile Working Group), 225–226  
managing technical debt, quality (building the thing right), 40–41  
*Manifesto for Agile Software Development*, 3, 13–15  
Martin, Robert, 11–12  
matrix structure, Organizational Design, 111–113  
Maurya, Ash, 65  
McAfee, 192, 285, 286  
Mean Time to Recovery (MTTR), 197–198  
Medium, 116  
Meister, Jeanne, 140  
Menlo Innovations, 30, 139, 159–160, 167  
meritocracy, 157  
metrics, business agility metrics. *See* business agility metrics  
Microsoft, 23, 134  
military, culture, 180  
Minimum Viable Product (MVP), 39, 66  
mob programming, XP (eXtreme Programming), 83  
modern management, 6  
Modig, Niklas, 46, 47  
Morning Star Company, 116  
MTTR (Mean Time To Recovery), 197–198  
music services, Nokia, Comes with Music, 36–37

MVP (Minimum Viable Product), 39, 66

## N

Nadella, Satya, 134

NAVTEQ, 149–150, 186–187, 284. *See also* HERE case study, 100–107

communicating purpose for transformation, 290  
external consultants, 221

NBI (New Business Initiatives), Intel, 240

Net Promoter Scores (NPS), 192

business agility metrics, 193, 195–196

Netflix, 198, 238

network effects, 64

neurodiversity, 136

New Business Initiatives (NBI), Intel, 240

newsletters, 302

Next Generation Map Building (NGMB), 117–118

N-Gates, 284

NGMB (Next Generation Map Building), 117–118

Nishiyama Onsen Keiunkan, 4

Nokia, 225–226, 238–239

    Comes with Music, 36–37

Nonaka, Ikujiro, 10

Nordstrom, 40, 288

Northern Commercial, 288

Norton, David, 248

NPS (Net Promoter Scores), 192

    business agility metrics, 193, 195–196

## O

Obeya rooms, 302

objective metrics, identifying impediments preventing us from reaching goals, 293

observation, identifying impediments preventing us from reaching goals, 293

Obvious context, Cynefin, 18–19

ongoing events, 302

Open Space Technology (OST), 291

optimizing for flow (building at the right speed), 43, 50

    balancing, resource and flow efficiency, 46–48

    business agility metrics, 199

        flow efficiency, 200–202

        lead time, 199–200

        flow efficiency, 44–45

    Kingman’s formula, 49

    Little’s Law, 48–49

    resource efficiency, 43–44

Technology, 81–82

    VSM (Value Stream Mapping), 86–89

    XP (eXtreme Programming), 82–86

Orange leadership, 156, 157–158

organizational context, enterprise agility, 32

Organizational Design, 52, 285

    HERE, 117–118

    heuristics of agile Organizational Design, 120–121

    ING, 118–120

    organizational structure, 107–108

        divisional structure, 110–111

        emergent organizational structures, 113–116

        functional structure, 108–109

        matrix structure, 111–113

pair programming, 296

physical workplace design, 97–98

    case study: NAVTEQ, 100–107

designing for great teams, 98  
organizational feedback loops, executing with purpose, 263–265  
organizational hackathons, 303  
organizational learning, 22–24  
organizational structure  
    AWG (Agile Working Group), 222  
        dual-boot operating system, 224–225  
        temporary lifespan, 223  
        whole system view, 222–223  
    Organizational Design, 107–108  
        divisional structure, 110–111  
        emergent organizational structures, 113–116  
        functional structure, 108–109  
        HERE, 117–118  
        ING, 118–120  
        matrix structure, 111–113  
organizations  
    organic ecosystems, 158–159  
    Teal organizations, 160–161  
OST (Open Space Technology), 291  
Osterwalder, Alex, 62  
Owen, Harrison, 291  
ownership interest in potential disruptors, fostering, disruptive innovation,  
    242

## P

Page, Larry, 176  
pair programming, 295  
    Culture, 296–297  
    Organizational Design, 296  
    People, 296  
    Technology, 296

XP (eXtreme Programming), 83  
Partnered Transition wave, 279–280, 298  
Patagonia, 160  
Patton, Jeff, 259  
Pay to Quit program, Amazon, 131  
PBIs (Product Backlog Items), 75  
Pentland, Alex, 99  
People, 52, 130–131, 285–286, 306–307  
    building an environment supportive of agile people, 137–138  
    characteristics of people in agile organizations, 132  
        developing an enterprise growth mind-set, 134  
        embracing diversity, 135–137  
        fostering growth mind-set, 132–134  
HR (Human Resources), 138, 143  
    compensation, 140–141  
    move decision-making closer to team, 142–143  
    recruiting, 138–140  
    roles and career paths, 141–142  
pair programming, 296  
percentage of sales from new offerings, business agility metrics, 196–197  
physical workplace design, Organizational Design, 97–98  
    case study: NAVTEQ, 100–107  
    designing for great teams, 98  
Pichler, Roman, 65, 258  
Plovdiv (Bulgaria), 5  
PMO (Project Management Office), 214–215  
PO (Product Owner), Scrum, 75  
Points of Interest (POIs), 117  
politics, 305  
Pontificia Fonderia Marinelli, 4  
Poppendieck, Mary, 81–82  
Post och Inrikes Tidningar, 4

Potts-McKenzie, Donna, 149–150, 153, 166  
PRD (Product Requirements Document), 77–78  
Product Backlog Items (PBIs), 75  
Product Canvas, 65  
    Refinement workshop, 258–259  
Product Development, value (building the right thing), 34–36  
product launch stages, 34  
Product Owner (PO), Scrum, 75  
Product Requirements Document (PRD), 77–78  
product roadmaps, 235  
product strategy, turning from vision to hallucination, 247–248  
product strategy definition, 74  
productivity, companies versus cities, 6  
progressive refinement, executing with purpose, 249–250  
    Alignment workshop, 253–256  
    Forecast & Execution workshop, 261–263  
    Refinement workshop, 257–260  
    Vision & Strategy workshop, 250–253  
Project Management Office (PMO), 214–215  
project teams, success, 12  
psychological safety, flexible workspaces, 138  
purpose, 167

## Q

quality (building the thing right), 40  
    business agility metrics, 197  
        escaped defects, 198–199  
        MTTR (Mean Time To Recovery), 197–198  
    intentional product development, 41–43  
    technical debt, 40–41  
Technology, 74  
    Kanban, 79–81

Scrum, 74–79

Quinn, Pat, 21–22

## R

Rally Software, 158

Rathbornes, 4

Rayy (Iran), 5

recognition plans, 140–141

recruiting

for AWG (Agile Working Group), 225

hesitation from potential candidates, 226–227

resistance from managers, 225–226

HR (Human Resources), 138–140

Red leadership, 155, 156

refactoring, XP (eXtreme Programming), 84–85

Refinement workshop, 257–258

outcomes, 260

Product Canvas, 258–259

story mapping, 259–260

REI, 179

Reinersten, Don, 68

remote work, 105–106

resistance to change, 305

resource efficiency, optimizing for flow (building at the right speed), 43–44

Retrospective, Scrum, 77

RevCast, 98

revenue streams, 63

rewards, 140–141, 306

Ries, Eric, 38–40, 65–66, 188

roadmaps, 278–279

waves

Innate, 281–283, 299–300

Partnered Transition, 279–280, 298  
Self-Guided, 280–281, 298–299  
Robertsen, Brian, 114–115  
roles, 141–142  
Rubin, Kenny, 94  
Rutzen, Allen, 32

## S

SAFe (Scaled Agile Framework), 267, 268  
scaling frameworks, 267  
    benefits of, 268  
Disciplined Agile, 268  
drawbacks of, 269  
LeSS (Large-Scale Scrum), 267–268  
SAFe (Scaled Agile Framework), 267  
Schein, Edgar, 175, 176, 186  
Schmidt, Lars, 137  
Schneider, William, 177–178, 184  
Schneider Culture Model, 177–178  
    collaboration, 178–179  
    competence, 181–182  
    control, 179–180  
    cultivation, 182–183  
Schwaber, Ken, 11, 74  
Scientific Management, 7–8  
Scrum, 11, 128–130, 284–285  
    Technology, 74–79  
ScrumMaster, 223  
Sean’s Bar, 4  
Self-Guided wave, 280–281, 298–299  
self-management, 167  
Senge, Peter, 9

serendipity density, 21–22  
Sheridan, Richard, 30, 84, 139–140, 159–160, 167  
Shirley Plantation, The, 4  
Sidon (Lebanon), 5  
Singer, Judy, 136  
Smith, Brad, 40  
Snowden, David, 18, 19, 20, 234  
sociocracy, Organizational Design, 113–116  
software developers, 10  
software development, 10  
software development teams, 10  
Southwest Airlines, 158  
speed-to-market, 186  
Spotify, 118–119  
St. Peter’s Stifskeller, 4  
Starbucks, 158  
StartupLab, 241–242  
story mapping, Refinement workshop, 259–260  
sustaining change, culture, 183–185  
Sutherland, Jeff, 11, 74

## T

Takeuchi, Hirotaka, 10  
Taleb, Nassim, 33, 218, 266–267  
Taylor, Fredrick Winslow, 7–8  
TDD (Test Driven Development), 191  
    Innate, 299–300  
    Partnered Transition, 298  
    Self-Guided, 298–299  
    XP (eXtreme Programming), 82  
Teal Leadership, 154–156, 159–160  
Teal organizations, 160–161

teams

AWG. *See AWG (Agile Working Group)*

physical workplace design, Organizational Design, 98

science behind high performance, 99–100

Scrum, 76–77

software development teams, 10

successful project teams, 12

technical debt, quality (building the thing right), 40–41

Technology, 52, 62, 284–285

building the thing right (quality), 74

Business Model Canvas, 62–65

CoD (Cost of Delay), 68–74

Kanban, 79–81

Lean Startup, 65–68

optimizing for flow (building at the right speed), 81–82

XP (eXtreme Programming), 82–86

pair programming, 296

VSM (Value Stream Mapping), 86–89

temporary lifespan, AWG (Agile Working Group), 223

Test Driven Development (TDD), 191, 298

Innate wave, 299–300

Self-Guided wave, 298–299

XP (eXtreme Programming), 82

Thiel, Peter, 136

titles, 141–142

Toyota, 42

Transformation Backlog, 294

building and executing, 294–297

transformation failure, items leading to, 303–308

Tribble, Bud, 182–183

Trounce, Craig, 288

t-shaped skills, 216

## U

Uber, 23, 176, 242, 245  
unknowns, 246  
unlocking agility, 50–51, 235–237  
    embracing change, 237–241  
    executing with purpose, 246–247  
    roadmaps, 278–279  
    signs you’re on the right track, 308–310  
urgent crisis, changing culture, 186–187

## V

value (building the right thing), 33  
    business agility metrics, 195  
        NPS (Net Promoter Scores), 195–196  
        percentage of sales from new offerings, 196–197  
    case studies, Comes with Music, 36–37  
    exploitation, Product Development, 34–36  
    exploration, Customer Development, 37–38  
Technology, 62  
    Business Model Canvas, 62–65  
    CoD (Cost of Delay), 68–74  
        Lean Startup, 65–68  
value propositions, 63  
Value Stream Mapping (VSM), Technology, 86–89  
vanity metrics, 191  
virtual teams, 106  
Vision & Strategy workshop, 250–253  
    Business Model Canvas, 251–252  
    Cost of Delay (CoD), 252  
Vodde, Bas, 267–268

Volatility, Uncertainty, Complexity, Ambiguity. *See* VUCA (Volatility, Uncertainty, Complexity, and Ambiguity)

VSM (Value Stream Mapping)

Alignment workshop, 255–256

Technology, 86–89

VUCA (Volatility, Uncertainty, Complexity, and Ambiguity), 16–17, 46–47

## W

Watts, Dr., 21, 22

waves, 278–279

Innate, 281–283, 299–300

Partnered Transition, 279–280, 298

Self-Guided, 280–281, 298–299

West, Geoffrey, 4

Whitman, Meg, 166

Whole Foods, 283

whole system view, AWG (Agile Working Group), 222–223

Whole Team Ownership, XP (eXtreme Programming), 84

WIP (Work in Progress), 48

Kanban, 81

women, 135–136

Work in Progress (WIP), 48

Kanban, 81

work processes, 7

workplaces

flexible workspaces, 137

Organizational Design, 97–98

case study: NAVTEQ, 100–107

designing for great teams, 98

workshops

Alignment workshop, 253–256

Forecast & Execution workshop, 261–263

Refinement workshop, 257–260

Vision & Strategy workshop, 250–253

## X

XP (eXtreme Programming), 11

Technology, 82–86

## Y

Young, Chris, 233

## Z

Zappos, 116, 243



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