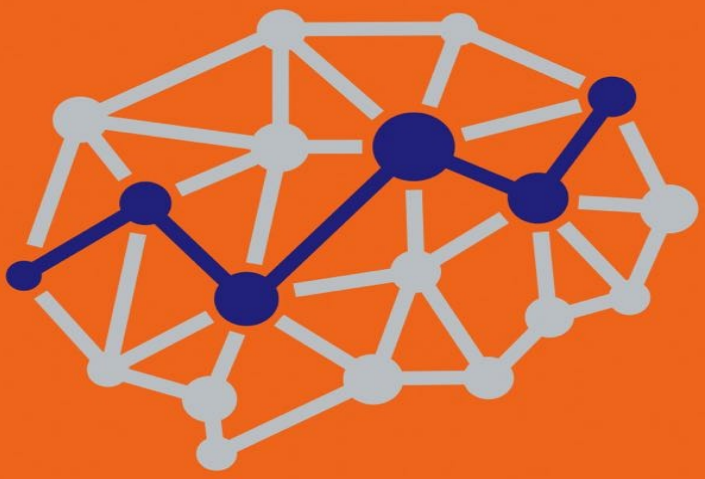
THE PRODUCT MINDSET



Succeed in the Digital Economy by Changing the Way Your Organization **Thinks**

DAVID H. DeWOLF AND JESSICA S. HALL

ADVANCE PRAISE

"I'd tell every entrepreneur I know that The Product Mindset is required reading. It offers concise recommendations for how a company can set itself up to succeed in the digital economy."

—Kevin Harrington, original "shark" on the hit TV show *Shark Tank*

"The Product Mindset isn't just another business book—it's a refreshingly pragmatic guide to building a successful company with a thriving culture that revolves around product development and customer relationships."

—Michael Hyatt, *New York Times* bestselling author, CEO of Michael Hyatt & Co.

"David and Jessica's endeavor to equip companies with the tools and perspective to succeed in the evolving future of our digital environment is a worthwhile and essential read. Ninja Innovators everywhere must pick up The Product Mindset."

—Gary Shapiro, CEO of Consumer Technology Association

"The Product Mindset is the perfect antidote to an era where too many companies think, 'if they build it, customers will come.' Chock full of practical insight, including the author's mantra, 'digital products must be chosen,' this book flips the way executives and their teams have to think about building digital experiences. This is a must-read for anyone operating in the digital economy and offers a new way to do so successfully."

—Anthea Stratigos, CEO of Outsell

"The digital landscape is changing so rapidly that even innovative companies can struggle to keep up. That's where we were several years ago. The Product Mindset was still a new idea at that time, but David DeWolf literally transformed our thinking around technology. This book is a must read!"

—Michael Dering, former CEO of ServiceBench

“Any company—big or small, new or old—would be better off for adopting this way of thinking. Business leaders that pick up The Product Mindset have unique insights into digital-era success in the palm of their hand.”

—Kevin Conroy, former president of MGM

“David and Jessica’s approach to the digital economy is insightful and incredibly relevant. The Product Mindset can and should be employed by any company looking to grow and thrive in today’s fast-paced business climate.”

—Mary Dridi, former CFO of webMethods Inc.

“David DeWolf and Jessica Hall offer strong, clear ideas for executives to create meaningful changes in their movement toward digital transformation. As someone who trains and educates busy executives of all backgrounds every day, this book offers a clear path and concise recommendations that are easily implementable regardless of technical background.”

—Mark Timm, serial entrepreneur and executive coach

“The Product Mindset has revolutionized our approach in serving students’ and colleges’ technology needs and improved our work to break down barriers to higher education. Whatever your mission, this approach is the way to accomplish it.”

—Jenny Rickard, CEO of Common App

“The approach David and Jessica have spelled out in The Product Mindset is precisely the one business leaders need to take if they want their company to excel with customers and succeed in an ever-changing, increasingly competitive market.”

—Tiffany Kleemann, CEO of Distil Networks

“No business is immune to the challenges of the rapidly changing digital economy, but by adopting The Product Mindset, you can ensure your company is prepared to flourish.”

—Ashish Kachru, CEO of Altruista Health

“As a two-time 3Pillar client, I’ve witnessed firsthand the transformational impact The Product Mindset can have in the media industry. Every company looking to succeed in the digital age can learn invaluable lessons from Jessica and David.”

—Jonathan Rivers, CTO of Fortune

“I’ve been building products and product teams for over 30 years, and always felt it requires a different mindset than for building IT applications or doing consulting projects. However, until now I’ve struggled to articulate what The Product Mindset is, or what it entails. Thankfully David and Jessica have nailed it!”

—Phillip Merrick, CEO of Fugue

“Winning in today’s saturated digital market is a challenge for any company. The Product Mindset gives leaders a practical roadmap for how to take ideas through to value with speed and focus and the highest likelihood of success.”

—Haniel Lynn, CEO of Kastle Systems

“The Product Mindset will absolutely change the way you do business—and be prepared for impressive results.”

—Mike Daniels, former chairman and CEO of Network Solutions; BlackBerry board member

“David and Jessica recognize that every business today is a data business. Through writing The Product Mindset, they’ve laid out an innovative and valuable framework, as well as a way of thinking, that can be applied to any company to help it grow and succeed.”

—C. E. Andrews, advisor and board member of MorganFranklin Consulting

“The Product Mindset can and should transform the way business leaders think about their companies. It’s not just a good idea—this book will help you get the results you really want.”

—Kathryn Petralia, co-founder and president of Kabbage

"David and Jessica are absolutely right—The Product Mindset is a game-changer for businesses in the digital age."

—CHASITY A. JOHNSON, DIRECTOR, PRODUCT MANAGEMENT AT LEXISNEXIS

LIONCREST

PUBLISHING

ISBN: 978-1-5445-1377-5

CONTENTS

FOREWORD

If you're reading this book, chances are you have a good idea. Maybe even an amazing idea. And chances are that your amazing idea will be dead on arrival—if it arrives at all.

We tend to think that million-dollar ideas are hard to come by. The truth is that great ideas are a dime a dozen. Humans are made for creativity. Just watch a bunch of kindergarteners in an art room or on a playground. Give a group of grown-ups a pile of sticky notes, an empty conference room, and a design thinking workshop, and the same thing happens.

But most of the time, million-dollar ideas don't translate to million-dollar products. Successful products are not the same as good ideas. Good ideas fail all the time, because ideas are inert—they don't become, do, or change anything unless we execute them. It's how we execute them that determines whether or not they succeed.

And therein lies the problem: it's not so much a failure of ideas as it's a failure of execution. If you want a successful product, you need to fall out of love with your idea, and fall in love with your customer. That, in a nutshell, is the Product Mindset.

As Jess and David will explain in the pages that follow, successful digital products have three characteristics in common: they're self-funding, they're chosen by consumers, and they're never quite finished. Successful companies share these three core principles: they minimize time to value, they solve for need, and they excel at change.

The Product Mindset establishes the link between the principles of products and the characteristics of companies. It provides a shared experience that connects people at every level of an organization and allows them to communicate and make data-driven decisions. Customer centricity is not an afterthought—it's the governing ethos of the entire company. *Everyone*, from coders to CEOs, is focused on the customer.

That's what makes the Product Mindset so valuable: it applies to every possible industry, from technology to transportation and from medicine to media.

The first time I encountered 3Pillar, I was building out the cloud infrastructure for PBS. I was accustomed to engineers asking questions like: *What are we building?* and *When do you need it?* and then following my directions and going off to code. That's not necessarily bad; I could even argue that it's essential for what I think of as "little p" product development.

But in reality, it's really just project management: attending to details about software, time, and completion so that you can launch Product X by Date Y. But more often than not, you're launching it in a vacuum because you don't really have a handle on whether the thing you want to build is the thing that customers want to buy. Which is sort of important when you're running a business.

And as it turns out, humans are also pretty opinionated. We know what we like and don't like, what we want and need, what's visually appealing, what's useful and usable, what products or habits we'll adopt or ditch.

So at PBS, 3Pillar's engineers were asking: *Why are we building this? Who wants it and why? What are they going to do with it? Which parts do customers want most and need first? Why does it matter? How soon can we get part of it into their hands? What business factors are driving this?*

The result was incredible. It's not that they weren't developing great software—but their primary focus was on the people the software was *for*. It's a radical shift. Is Product X the right software? Is it providing value for actual…humans?

That's what I call "big P" product development. It's not tech for tech's sake, it's tech with purpose. What the customers want—not what *you* want, or what you *think* they want. Their needs drive every phase of design and development. *That's* the differentiator.

Because the 3Pillar team understood the context and empathized with the customers, our efforts were suddenly faster, better, and more streamlined, with fewer iterations and less rewrite. Working with engineers who approached our challenges from the Product Mindset shifted my entire view of product development—and it will do the same for you.

Whether you are an entrepreneur ready to launch a startup, a longtime CTO, or somewhere in the middle, the Product Mindset can transform your team, your company, and your career. The Product Mindset is not another strategy. It's not a methodology. It's not a leadership theory. It's not about technology or software;

it’s not a product itself.

The Product Mindset is quite literally *a way of thinking* about product development and execution to create value for your business.

Jess and David have the battle scars to prove it. This book is not a list of steps that will “guarantee” that you get things done, get to yes, get more, get to the top, or get inner peace. They present practical lessons, not management theory. These pages are a gold mine of wisdom acquired from more than a dozen years of working with hundreds of teams and hundreds of software products across every industry.

Anyone can have a good idea. But a good idea can’t change the world without the right mindset. The Product Mindset is what can truly take you from good idea to great career.

—JONATHAN RIVERS, CTO, *FORTUNE*

INTRODUCTION

More than a dozen years ago, a chance encounter changed the course of my professional life. ServiceBench, a company renowned for innovation, asked me to come in to diagnose and help solve an unanticipated problem: their technology had grown stale and was no longer flexible enough to meet customer demand. In their efforts to bounce back, the company had tried to modernize its technology platform and had burned through millions of dollars working on a next-generation software product, only to fail spectacularly. The company had never been in this position before. No one knew what to do.

I went in confident *I* would know what to do. Relying on my experience in the tech world, I was certain the core problem had to be driven by one of the usual culprits: the people, the process, or the technology. I had no doubt I'd find one of these—or some combination of them—to be the source of the trouble.

I was completely wrong.

The people I was working with were razor sharp. The processes they were using, though not perfect, were more than adequate. And the technology they had selected was almost exactly what I would have recommended.

So what had gone wrong? Why was such an innovative company suddenly struggling to keep up with customer demands?

As I worked to restore ServiceBench to its full strength over the next year, I discovered answers to those questions. In the process, I also discovered my calling, gained insight and inspiration, and began to build a business I had never dreamed of building. My life was changed forever, but more importantly, my way of looking at the world was transformed. I had developed a new mindset—a mindset I believe is necessary for all organizations to thrive.

I call it the Product Mindset.

A COMMON STORY

It turns out that ServiceBench's story was far from unique. Countless companies have spent precious resources attempting to build a new product or refresh an existing one, only to underperform or fail completely. McKinsey research shows

that though some companies are seeing financial returns on that investment—25 percent, 50 percent, or more—most struggle just to break even.[1]

Why is this happening?

It's happening because companies navigate product development by focusing on how they *do* the work, rather than how they *think about* the work. Success in today's world means doing just the opposite.

There's no question that the digital revolution is disrupting industries across the board. Companies understand this. A recent McKinsey survey revealed that "only 8 percent of companies…said their current business model would remain economically viable if their industry keeps digitizing at its current course and speed."[2] Unfortunately, many companies don't understand that if they continue to blindly execute against a list of tasks, they cannot possibly navigate disruption of this magnitude.

The way companies approached product development ten years ago will not work today, but many of them feel paralyzed, unsure of how to change. Despite the growing pressure to adapt, they may kick the can down the road for years. Or they try some changes, without success, and then shy away from trying anything else. They revert to the old path and get stuck there. It's no wonder almost 75 percent of S&P 500 companies have turned over or will turn over in the next five years.[3] Over the next ten years, we expect about half of the companies in the S&P 500 to be replaced.

Even software companies need to think about product development differently. As tech companies, they can easily assume they already have the right mindset, but often that's not true. Many software companies make the mistake of developing technology for its own sake, without truly understanding the product's purpose or value.

I know, because my company comes in to clean up the messes left behind when these efforts fail. Companies are overwhelmed and struggling, not because they lack talent or vision, but because they are evaluating their success based on obsolete metrics. They aren't slacking—on the contrary, most have tried many tools, processes, and governance structures, but none of these solutions set them on the right course.

That's why I launched my company, 3Pillar. Over and over, we find that companies suffer misconceptions about successful product development. When executives and practitioners hear our message, their eyes go wide as they recognize the true source of their challenges—their mindset. Then it all begins to click into place for them—they need a new mindset. They need the Product Mindset.

BUILDING THE PRODUCT MINDSET

Over the past ten years, 3Pillar has continually asked the question: What are the keys to success when building a digital product? What are the fundamental differences between software built in the old IT world and products that are driving growth in the digital economy?

One key is *context*. The Product Mindset cannot develop if teams don't understand the big picture, but lack of context is a common problem—it's not unusual for each member of a team to have a very narrow view of the product in development. They rarely understand exactly what it is they are building, let alone *why* they are building it.

Understanding context requires that teams understand this "why"—that they have a clear ultimate objective in mind—but that's only half the battle. The other key comes from understanding the market and the customer. Only when product teams understand where business outcome and customer outcome meet can a company build a profitable product, not merely an IT asset.

ELEMENTS OF A PRODUCT MINDSET

CHARACTERISTICS

We have found that there are three key *characteristics* common to successful digital products (which are different from other types of software).

These digital products:

- must be self-funding;
- must be chosen; and
- are never done.

PRINCIPLES

We have found that the Product Mindset is governed by three overarching

principles.

Successful companies:

- minimize time to value;
- solve for need; and
- excel at change.

Together, these three characteristics and principles make up the Product Mindset.

Here's an overview of how they interact, with much more to come in the following chapters:

- First, for a product to be self-funding, a company must minimize time to value. Remember, the product is responsible for creating dollars, not saving pennies. A product must create revenue in and of itself, not just support an existing value proposition.
- Second, if consumers are going to choose your product above all others, your company must solve for need. You must deliver real value to customers so that they continually choose to pay for what you're building.
- Finally, once a company recognizes that a product is never done, they will realize they must excel at change in order to leverage this reality of the digital economy.

WHO THIS BOOK IS FOR

We started out teaching the keys to developing a Product Mindset to our employees. When we had trained nearly 1,000 of our employees around the world, our clients started noticing. They knew there was something different about what our employees were doing, but they couldn't put their finger on it. Soon enough, they started to ask us, "Can you train us too?"

When we began to offer workshops to teach this mindset, we noticed two reactions every time. First, excitement. Product development practitioners were thrilled. The concepts we shared resonated and they felt we were speaking their language. Second, anxiety. These managers and directors wondered how this new idea would be received back at their companies. To get everyone on the same page, they asked us to also present to their CEOs, CTOs, and other decision-makers. Hearing this request over and over again only reinforced what we already knew to be true: executives needed to commit to this mindset too, or else it would be ineffective.

That's why we wrote this book—to inform business leaders who are charged with helping their organizations compete amid constant digital disruption. We hope it also serves as a reference for all product development practitioners.

The insights shared in these pages are the culmination of over ten years of laser focus on helping companies build successful digital products by instilling the Product Mindset. We have worked with companies of all sizes and across a spectrum of industries—from software companies such as ServiceBench, Eloqua, and SourceFire to large media brands such as PBS, NPR, and Univision, to publicly traded information companies such as LexisNexis.

Every company we work with asks the same question: "How do I compete in this new world order?"

They worry that they don't know enough about technology to lead their business through this era of digital disruption. They're concerned that the latest and greatest startup could surprise them at any moment, taking the space by storm with a single YouTube video.

If you've had these thoughts, you're not alone.

The thing is, you cannot combat fear with certainty. This is not the time to be more autocratic. But if you're willing to release your need for control, it can be a time of tremendous hope and progress. You may not have all the right answers right away, but the right mindset generates an innovative environment and repeatable processes. This book will teach you to do both.

By explaining the essence of the Product Mindset in these pages, our goal is to equip your business to repeatedly deliver digital products that are relevant to your customers and stay competitive in your market.

How do we know the Product Mindset works? At any given time, we are building 150 different product lines for some of the most well-known brands in the world. We worked alongside PBS, helping them think and work differently. Together, we built digital products that transformed them from an old-school media company to one of the biggest innovators in the media space, despite being a quasi-governmental nonprofit. If PBS can do it, so can you.

YOUR RESPONSIBILITY AS AN EXECUTIVE

We believe that change comes from the top down and the bottom up. If leaders and practitioners aren't working from a shared strategy toward a shared goal, neither wins. The space between these two is where even the most promising initiatives begin to fall apart.

We want to encourage all leaders reading this book. It's critical that you understand the stakes in this environment, as you are ultimately the one who will drive change in the digital economy. Your sponsorship is essential. If you don't help create a culture in which the Product Mindset can thrive, no one else will. By making space for practitioners to embrace this digital economy and innovate, you are setting yourself up for success.

WHAT TO EXPECT

In the pages ahead, 3Pillar Vice President of Product Strategy and Design Jessica S. Hall and I will share all we know about the Product Mindset: what it is, why it's vital, and how you can leverage it to make your business thrive.

In Part I, we'll set the stage for the Product Mindset. We will consider why this mindset is not only relevant but really essential in today's economy. We will also introduce the concepts of the Product Mindset through stories and examples, and we'll refer back to the framework throughout the book.

Part II covers two areas of the Product Mindset: theory and practical application. In the even-numbered chapters, we explain the three characteristics of successful digital products (they must be self-funding, must be chosen, and are never done). We also articulate how the DNA of a digital product is different than other software assets. In the odd-numbered chapters, we delve into the principles (minimize time to value, solve for need, excel at change) that will help you to shift the way you think about and conduct your business.

Finally, in Part III, we will discuss how the Product Mindset intersects with your culture and look at common methodologies that guide product development. Our goal is not to create another methodology or supplant the existing ones: the Product Mindset supports whatever you have in place by providing a common language and attitude to implement across each aspect of your business.

We believe that a team fully aligned around the Product Mindset will always outperform one that is not. Armed with an understanding of the unique characteristics of digital products—and how to honor those characteristics—all leaders can build successful products and thrive in the digital economy.

—David H. DeWolf, President & CEO, 3Pillar Global

---

1 Jacques Bughin, Laura LaBerge, and Annette Mellbye. "The case for digital reinvention." *McKinsey Quarterly,* February 2017. https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/the-case-for-digital-reinvention.

2 Jacques Bughin, Tanguy Catlin, Martin Hirt, and Paul Wilmott. "Why digital strategies fail." *McKinsey Quarterly,* January 2018. https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/why-digital-strategies-fail.

3 Scott D. Anthony, S. Patrick Viguerie, Evan I. Schwartz, and John Van Landeghem. "2018 Corporate Longevity Forecast." Innosight, https://www.innosight.com/insight/creative-destruction/.

PART I

FRAMING THE PRODUCT MINDSET

CHAPTER 1

THE DIGITAL CHALLENGE

David here. Every time I try to explain to my mom what, exactly, 3Pillar does, she looks puzzled. After twelve years, I'm still not convinced that I can communicate it in a way that means something to her. The reason is frustratingly simple: the world in which I work and raise my kids is dramatically different than the world in which the previous generation came of age. The recent explosion of digital products means we have had wildly different life experiences. My mother and I don't even share a common vocabulary—which is part of the reason I find it so challenging to describe what I do all day.

That's why, in this chapter, we'll set the stage for this journey by defining exactly what we're talking about. Before you dive deep into adopting a Product Mindset in the digital age, let's make sure we speak the same language.

You've probably heard, or even spoken, some of these sentences:

"We live in a digital world."

"It's a digital economy."

"What are you doing about digital transformation?"

"Disrupt or be disrupted."

"We're in the midst of a digital disruption."

But do you know what they mean?

For instance, what do we mean by "digital disruption"? Is digital disruption

about technology startups fundamentally changing the ways that entire industries do business, such as the way Google and Facebook upended the media industry? That was pretty disruptive; the way money flows throughout the ecosystem of content producers, editors, publishers, and distributors is so different today, we can barely remember how the industry operated even a decade ago. Certainly, Amazon disrupted traditional retail. Amazon Web Services has even disrupted former high-tech stalwarts like Dell and HP. The term "digital disruption" covers a lot of ground.

And what do we mean by "digital economy"? The term describes more than just a technology-driven world. That definition is much too broad—and it discounts the fact that businesses were certainly powered by technology before this millennium. So, what exactly is different about the digital economy?

In thousands of hours working with executives to navigate digital transformation, we have found that most leaders have an "I know it when I see it" feeling about these terms, but no firm definitions. Therein lies the problem: if leaders can't identify exactly what's changing, how can they successfully navigate the transformation? They can't. It's no wonder so many digital transformations fail.

Today's corporate leaders do agree on two aspects of digital disruption: it's exhilarating, and it's terrifying. Executives across the spectrum of industry are urgently struggling to identify exactly how things are changing so they can figure out how to survive—and more importantly, how to thrive.

WHAT THE DIGITAL ECONOMY IS NOT

To fully understand what the new digital economy is, we first need to understand what it is not.

First, it's not solely about the ubiquity of software. Too often, those who discuss this new age focus only on software, saying things like, "Software is your brand" or "Software is eating the world."[4] These clichés hold some truth, but plenty of software was created before the existence of the digital economy.

Second, we can't shoehorn the entire digital economy into a few business sectors or a single industry, such as tech. Many technology companies did help to define this economy, but a wide variety of businesses are now "digital" companies too. Uber is officially considered a transport company.[5] It is also a digital company.

Other traditional and legacy businesses, like media companies and financial institutions, have also found ways to innovate and are participating in the digital economy.

Third, the digital economy is not limited to digital marketing. In the marketing space, people sometimes equate "digital" with social media, email automation, and digital advertising—technology-enabled mechanisms for lead generation. But comparing old marketing techniques with new technology doesn't work in the digital age. Yes, more and more digital products are emerging in the social media and marketing arenas, but these products alone are not responsible for transforming the economy. The change has occurred because of a fundamental shift in business models, not just because we have new ways to advertise.

Finally, "digital" is not simply a new word for information technology (IT). Traditional IT was concerned with the operational efficiency of a business. It's undeniable that IT gave us extraordinary improvements in how we operate businesses, but it did not transform the way we live, work, and play the way the digital economy has.

DEFINING THE DIGITAL ECONOMY

The word "digital" is often used to describe any asset that relies upon bits and bytes, such as digital cameras or digital signs—but it can be applied to almost anything. The "digital economy" rests on a particular understanding of *the role of digital within new business models*.

Technology played a role in the economy before the turn of the century—it has long provided support for business—but we weren't yet living in a truly digital economy. Technology could help you sell, track, and deliver, but it wasn't the thing you bought and sold. Only when digital became the product in its own right did technology turn the economy on its head. Now that the digital asset—the technology itself—*is* the good or core to the service that is being offered to a target market, not just the *enabler* of the good or service, traditional business models are being totally disrupted.

Today, the technology itself is the value proposition. The digital product is either the asset being purchased or the primary mechanism by which the service is delivered. The digital economy is, therefore, a *product* economy: powered by software and fueled by data. For this reason, we will use "software product" and "digital product" interchangeably throughout the book.

Uber is a perfect example. From the very beginning, Uber thought digitally: its service is entirely predicated on the use of software, which enables anyone to hail a ride at the touch of a button. This made life more convenient for customers by an order of magnitude. It also represented a wild departure from the traditional business model of most transportation companies. Technology allowed Uber to disrupt the transportation industry: by 2017, it operated in 600 cities across seventy-eight countries and managed to give four billion rides.[6]

Before this disruption occurred, cab companies were limited by the size of their fleet, the number of drivers they had, and the number of passengers available. Uber transcended this model by leveraging the data they could collect through software and analyzing it to provide a near-instantaneous ride service. Add to that the convenience of seamless payment transactions, and it's no wonder Uber was able to disrupt an entire industry—one that has been around for hundreds of years.

It all comes down to having a *digital product*. Uber doesn't own, operate, and maintain its own fleet of vehicles. It's a digital company with a digital product that facilitates an entire ecosystem. To take advantage of this new economy, where technology is front and center in the way people work, live, and play, business models must adapt similarly.

HOW DID WE GET HERE?

To successfully navigate this moment and prepare for the changes that are already speeding toward us, we need to develop an understanding of how we got here.

THE AGE OF INFORMATION TECHNOLOGY

The Age of IT was characterized by the increased availability of computing power, the expansion of networked computers, the spread of software development to customize a computer experience, and the focus on personal and corporate productivity.

Information technology started out as a tool that enabled businesses to run more efficiently—computers made workers much more productive. Networked computers and client-server architectures took that one step further by initiating an age of enterprise systems, back-end office systems that could save even more worker hours by handling basic functions like timekeeping, payroll, and inventory management. We take such automation for granted today, but not so

long ago, basic functions could only be accomplished manually.

As technology started impacting businesses on a larger scale, it started trickling into our personal lives as well. Personal computers and desktops became commonplace, and people began sharing information across networks. Email became a primary means of communication. By 2000, over 50 percent of households in the United States were connected to the internet.[7]

As software applications grew in the business world, the IT department—historically responsible for computers and networking infrastructure—naturally became the owner of software application development. Because most IT was born from a desire to boost personal productivity, drive corporate efficiency, and share data across the business, IT departments typically focused on managing the costs and benefits of developing new software.

Not surprisingly, most IT departments operated with what we have dubbed the "IT Mindset." Creating operational efficiencies was their reason for being. Their goal was to ensure that the cost of automating a process was paid for by operational cost reduction over a period of time—ultimately leading to a return on investment that could be clearly measured by the business.

The IT Mindset weighs the tradeoff between the cost of investing in new technologies and the operational efficiency and long-term cost savings that would result from that investment. These tradeoffs were typically big bets, but they led to big returns. As the cost of technology decreased, IT organizations grew.

EVOLUTION OF THE INTERNET

Technological innovation has historically been expensive. So expensive, in fact, that until recently only governments and large institutions had the research and development budgets to create truly transformative change through technology.

Take the internet. Concepts for wide-area networking originated in the early 1950s. By the 1960s, the United States Department of Defense invested heavily in developing these ideas.[8] It took decades—not to mention billions of dollars—to perfect the technology as it was adopted first by government-funded research institutes, then large corporations, and finally the general public.

THE AGE OF PERSONAL TECHNOLOGY

It may be more accurate to say they exploded. Three trends revolutionized how technology was being used—the cloud, social media, and mobile computing.

At an industry conference on August 9, 2006, Eric Schmidt, then-CEO of Google, introduced the world to modern cloud computing—shared resources and services that can be rapidly accessed and managed over the internet—aka the "cloud."[9] As the cloud matured (largely thanks to Amazon), it allowed instantaneous access to nearly infinite computing power, dramatically reducing the capital costs required to run distributed systems. Just one month after Schmidt's talk, on September 26, Facebook opened to the public, allowing anyone with a valid email address to connect with people across the world. And the following January, Steve Jobs announced the release of the original iPhone, launching the era of mobile computing and ubiquitous connectivity.[10]

The collision of these three applications of technology—the cloud, social media, and mobile computing—ushered in a transition period that we call the Age of Personal Technology. During this period, businesses began to explore the new potential that came from the uber-connectivity that social, mobile, and cloud provided. Automated marketing solutions such as Eloqua, online Customer Relationship Management (CRM) such as Salesforce, and other business tools became popular. The Age of Personal Technology shifted us away from pure productivity and cost savings and toward a focus on using distributed software to advance the business and the investment in software development capabilities across the entire enterprise.

THE DIGITAL AGE

By 2016, nearly 50 percent of the world's population was connected to the internet.[11] It was around this time that the business community seemed to fully embrace that technology could be best deployed to drive revenue and business growth, as opposed to driving operational efficiency.

Thus, we crossed the threshold of the Digital Age, characterized by the economic disruption we see today. The flow of money within industries is changing because of new offerings and business models. New products and services, powered by software running on mobile devices and the cloud, are rapidly replacing old, antiquated offerings.

Across every business sector, the Digital Age is powering a massive adoption of

software as the primary user experience and the mechanism by which modern businesses deliver a good or service. It's also an age where the customer's experience is critical to success.

EFFECTS ACROSS INDUSTRIES

Things move at lightning speed in this Digital Age, and we stand on the precipice of some major changes. For example, while Uber and Lyft have transformed a small niche within the transportation industry, we have yet to see the full disruption of the transportation industry—and the adjacent auto industry—as a whole. We have seen road tests of self-driving cars and incremental innovations that increase connectivity, but it won't be long before we see total disruption.

Soon, a company like Tesla may be the norm, not an outlier. Tesla is attempting to change the current standard of buying cars from a network of dealers. Digital companies such as Carvana have tried to build upon this idea and further change the industry by selling cars digitally and shipping the car directly to the customer's doorstep, sight unseen. This model cuts car dealerships—the middleman—entirely out of the economic picture of the industry. This is true disruption. Soon, perhaps, we will question whether or not we need to go to a garage for maintenance. Why not maintain and upgrade through digital services?

CARFAX has leveraged a wealth of data to fuel their digital offerings. Initially, CARFAX faxed customers their core product: a vehicle history report. With the rise of mobile technology, a fax-based business was a prime candidate for obsolescence, so the company didn't rest on its laurels: it innovated. Now, CARFAX is the dominant holder of critical data about cars and has made it easier for anyone to track their car's history, manage its maintenance, purchase a used car, and more. As of this writing, CARFAX has over nineteen billion records and 110 thousand data sources.[12] The company found new ways to serve different needs with the same data set.

The mortgage industry has been disrupted too, by companies such as Quicken Loans (originally called Rocket Mortgage). Once upon a time, the process of buying a house required painful, time-consuming paperwork. Rocket Mortgage recognized this pain point and found ways to automate the entire process, interfacing with customers purely through software—an innovation that helped the company become the largest mortgage lender in America.[13]

Service-based companies have also joined the digital economy. We once worked with a boutique, high-end financial services company that advises large holders of capital. Historically, they had exclusive access to certain data that allowed them to provide white-glove service. But several years ago, they noticed their traditionally exclusive data was becoming more widely available. Forced to innovate, the company created a premium software product to augment their bespoke consulting service and keep out competitors. Because they embraced the need for a digital product, they were able to provide better services at more competitive rates. Adopting the digital product was a game-changer in a traditionally stodgy industry.

What do all of these successful companies have in common? They were able to understand the digital economy and adapt themselves accordingly. Digital products can transform any business and even entire industries. If you want to succeed and grow, you have to transition from an IT Mindset to a Product Mindset.

Let's talk about what that means—to you personally and to your organization.

---

4 https://www.wsj.com/articles/SB10001424053111903480904576512250915629460.

5 Sam Meredith and Arjun Kharpal. "Uber suffers setback as EU rules that it's a transport service, not a digital company." *CNBC Tech.* December 20, 2017. https://www.cnbc.com/2017/12/20/eu-rules-that-uber-is-a-transport-service-not-a-digital-company.html.

6 Johana Bhuiyan. "Uber powered four billion rides in 2017…" Recode. January 5, 2018. https://www.recode.net/2018/1/5/16854714/uber-four-billion-rides-coo-barney-harford-2018-cut-costs-customer-service.

7 http://www.pewinternet.org/fact-sheet/internet-broadband/.

8 Barry M. Leiner, Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel C. Lynch, Jon Postel, Larry G. Roberts, and Stephen Wolff. "A Brief History of the Internet." *ACM SIGCOMM Computer Communication Review.* Volume 39, Number 5, October 2009. https://www.cs.ucsb.edu/~almeroth/classes/F10.176A/papers/internet-history-09.pdf.

9 Eric Schmidt. "Conversation with Eric Schmidt hosted by Danny Sullivan." Search Engine Strategies Conference. August 9, 2009. https://www.google.com/press/podium/ses2006.html.

10 Rich McCormick. “Watch Steve Jobs introduce the iPhone 10 years ago today.” The Verge. January 9, 2017. https://www.theverge.com/2017/1/9/14208974/iphone-announcement-10-year-anniversary-steve-jobs.

11 Adam Taylor. “47 percent of the world’s population now use the Internet, study says.” *The Washington Post.* November 22, 2016. https://www.washingtonpost.com/news/worldviews/wp/2016/11/22/47-percent-of-the-worlds-population-now-use-the-internet-users-study-says.

12 https://craft.co/CARFAX/metrics.

13 “Quicken Loans Becomes Largest Home Lender in America.” Quick Loans Press Room. February 1, 2018. https://www.quickenloans.com/press-room/2018/02/01/quicken-loans-becomes-largest-home-lender-america/.

CHAPTER 2

DISCOVERING THE PRODUCT MINDSET

David here. I began working with ServiceBench on August 20, 2006—and the timing could not have been more serendipitous. It just happened to be ten days after the advent of modern cloud computing, a month before Facebook opened to the public, and six months prior to the launch of modern mobility. I'm about to share my story of coming to realize I was approaching businesses in this new age with the wrong mindset—an IT Mindset rather than a Product Mindset—and how my perspective changed over time. For me, this transition was life-changing. Not only did it shift the way I thought about software, but it also changed the trajectory of my career. I believe that it has the potential to do the same for you.

Now that you have a foundational understanding of the digital economy, you can see why companies across industries are starting to embrace the reality that the digital economy is a product-based economy. The next step is to understand how to leverage the Product Mindset to excel in the digital economy.

Discovering the Product Mindset transformed me from a passionate technologist to the CEO of a multinational company with nearly one thousand employees at the time of this writing. Over this period, our company has built hundreds of digital products, served billions of users, monetized dozens of terabytes of data, and created billions of dollars of equity value for our clients. We have seen firsthand just how difficult digital transformation is and how much opportunity exists for those who conquer these challenges and excel at leading the change.

MY PERSONAL JOURNEY

After six-and-a-half years as a software engineer and architect for various consulting companies, I was ready to jump to the next level. I found the art of

software development electrifying. The idea that I could create something out of nothing and that this something had the potential to change a life—the way someone worked, lived, or played—was exhilarating. I wanted to do more of it.

So almost without thinking—and despite having a wife and three kids at the time (we now have seven!)—I left the comfort of my steady salary and struck out on my own to consult with companies I believed were building the most innovative software. At the time, I would not have been able to put my finger on what constituted "the most innovative software." I just knew it when I saw it. But over time, I learned how to define it precisely. That knowledge revolutionized my thinking about successful business and it changed the trajectory of my life.

MY INTRODUCTION TO SERVICEBENCH

In August 2006, I walked into the ServiceBench lobby for the first time as an independent consultant. Glass doors welcomed visitors and gave the perception of a sleek, modern technology office. Juxtaposed with this was a pair of heavy wooden doors, whose windows provided barely a glimpse of the long hallway that ran opposite the main entrance.

I made my way over to the telephone that sat on the reception desk, where I found a paper list of names and numbers. I dialed Rob, one of ServiceBench's three founders and its vice president of engineering. Rob and I had met earlier and immediately hit it off. I knew he was looking for someone to help him architect a new version of their product. And I knew he had the three characteristics that I believed made great technology leaders. Like most, he was technically savvy. Like some, he understood the business. Finally, unlike most of his peers, he was also emotionally intelligent. I really wanted to connect with him that day, but the phone rang off the hook.

So, I dialed Keith, Rob's director of engineering and an integral part of the project I was about to sink my teeth into. Little did I know that when Keith answered the phone, I would begin a journey that would change my life forever.

INITIAL ASSUMPTIONS

Rob and his co-founders first imagined ServiceBench when they were working in their small consultancy, Sideout Technologies. They had built Sideout a decade earlier after recognizing the inefficiencies in the warranty management ecosystem for large appliance manufacturers, their distributors, and service providers. In response, Sideout built technology that managed the processing of

warranty claims and the interaction of all the service providers within the ecosystem.

Their software was revolutionary for its time (the late 1990s and early 2000s). It included an online service that was accessed through a browser, disrupting the warranty management supply chain for large appliance manufacturers. This disruption looked a lot like the “most innovative software” I was seeking. I couldn’t wait to get started.

Rob and Keith hired me to do a job that I had done many times before: help architect and build a new version of their software. In this case, though, I was intrigued by something more. I wanted to understand why a software company—especially one that I saw as fairly innovative—would need my help.

I started by sitting down with Rob to learn more about how he perceived the task at hand and the challenge we faced. I was surprised to find out that ServiceBench was indeed stuck. After disrupting the space, their technology had grown stale and they were struggling to keep up with the pace of their customers’ expectations. Their software was not nimble enough to adapt. The pace of innovation and feature development had slowed. Worse, they were a couple of months into a new attempt to revamp their software with an outside vendor—and feared that they were on the wrong path.

I was there because Rob and Keith wanted an outside perspective to help them make the right technology choices. They recognized that their own software architecture and development skills had atrophied due to lack of exposure to new technologies and methods. I, on the other hand, had exposure to, and in some cases had built, all of the modern frameworks they were trying to use. My background as an architect and engineer for a myriad of organizations—including the Apache Software Foundation, the preeminent open source software organization, and the Java Community Process, the governing body for the Java programming language—made me a perfect fit.

Rob was also intrigued by my experience with Agile software development methodologies. At the time, the Agile movement was creating big waves among software engineers. The movement argued that nimble processes that promoted adaptability to change were more efficient than the traditional rigid methods that produced heavy documentation and change control.

Rob and Keith had gone head-to-head on whether these methods were right for ServiceBench. They hoped I could bring the latest thinking to bear and help break their deadlock. Rob wondered if their stale processes were part of the problem, while Keith believed that the problem was not process, but people. He was convinced that ServiceBench had not been able to recruit enough talent because their stale technology wasn't attractive to the best developers. Furthermore, Keith was convinced that they had exacerbated the problem by hiring an Indian offshore development company to build their next-generation software. To his mind, it was simple: saddling internal employees with the old technology and relying on cheap labor to re-architect an outmoded product and reinvigorate innovation was never going to work.

People. Process. Technology. Which one was the culprit? My mandate was clear: I needed to uncover the root of the problem and help ServiceBench turn things around.

ELIMINATING POSSIBILITIES

Over the next six months, I worked diligently to analyze ServiceBench's people, process, and technology decisions and provide recommendations for improvement. Almost immediately, I was able to eliminate technology as the source of trouble. The frameworks that ServiceBench and their offshore provider had selected were not only adequate, they were nearly identical to those I would have recommended.

Analyzing their process maturity proved to be slightly more challenging. Like many technology companies at the time, ServiceBench was just beginning to embrace emerging Agile software development processes. As such, they were only beginning to embrace and leverage the power of this iterative approach to development. I dove in to help them deepen their understanding, but ultimately found that, while not perfect, ServiceBench's processes were not the root cause of their inability to rapidly innovate and keep up with market demands for their product.

It seemed as though the only possibility left was the people. Was Keith right? Were limited access to talent and a reliance on "cheap labor" the real problems?

ASSESSING TALENT

Assessing software development competency is a tricky thing. It is well known within the industry that the best software engineers are ten times more

productive than their average counterpart (that's why we call them the "10xers"). The best of the best have an uncanny knack for thinking through and solving difficult challenges. They hone their craftsmanship and perfect the art of writing code to solve problems in the simplest way possible. They are able to understand how the line of code they are writing relates to the rest of the codebase. They see abstract commonalities and organize code in a logical way that enhances reusability and maintainability. They are masters of the tool they use to write code (in fact, it is a badge of honor among engineers to write code without ever taking their fingers off the keyboard or using a mouse).

Knowing that it's difficult to spot these talents through an interview and that software developers tend to be a proud bunch, I knew I couldn't simply quiz them on what they knew. So, borrowing an interviewing technique that was popular among firms using Agile methods, I decided to assess the team by working with them side by side. This approach would allow me to experience firsthand the talent of the individual team members while monitoring their overall process discipline. I had to become one of them.

For the next six months, I worked side by side with ServiceBench's offshore development team. I cranked out code, participated in meetings, and worked as a player coach. What I discovered changed my perspective on software development.

It quickly became clear that the Technical Lead was a 10xer, and many on his team were strong developers as well. They were sharp and clearly knew their stuff. The Technical Lead was also humble and eager to learn. He never grew defensive; he embraced my help and quickly became a collaborator. He asked good questions and challenged me, and I learned a tremendous amount from him. He was definitely someone I'd want on my team.

Simultaneously, I found a disconnect between the software craftsmanship that I witnessed when working alongside the team and the actual code I saw in the existing codebase. In discussion, and as we developed, members of the team appeared to have a strong sense of what good software looked like. But the existing codebase seemed messy. It lacked the types of abstractions that would make it easier to maintain and included peculiar implementation decisions I couldn't understand. To my frustration, neither the team nor I could explain this gap. The disconnect was a warning sign, but I still wasn't sure what to do.

FINDING THE COMMON DENOMINATOR

As I came to know members of the team, I could see they had knowledge, skills, and good intentions. Collectively, however, they seemed to lack good judgment. They were producing code, but they weren't producing working software. How could I teach good judgment? How could I turn this team around?

The business was becoming increasingly frustrated by the teams' lack of productivity, and we were feeling the pressure from all sides. Frustrated, Rob, Keith, and I acknowledged that we had a troublesome gap between skill and judgment. So we doubled down on training and communication. We wanted to ensure that the teams understood the "user stories" (which are called "features" or "requirements" in an Agile process) that they were building.

It was then that we discovered the real problem. And it was deeper than any of us had ever imagined.

The teams understood the requirements for the software. What they didn't understand was *context*. That was made very clear when one developer asked, "What's a warranty?" When we heard this, our chins just about dropped to the floor. Of course, our initial reaction was to blame the lack of industry knowledge on the realities of offshoring. However, this was a total deflection of the real problem; over time, we would learn that this limited understanding was *not* exclusively found in our Indian counterparts and was actually the result of being globally unclear on the *why* of what we were trying to accomplish.

Despite working relentlessly on the software for half a year, the team somehow lacked the big picture perspective. They didn't understand how ServiceBench made money. They didn't understand their customers. And they didn't understand the business value of the software. In other words, the team didn't comprehend *why* they were building the software. From their perspective, they were building technology for its own sake.

TURNING IT ALL AROUND

Recognizing that the knowledge gap was too large to overcome, Rob made the decision to cut ties with his existing offshore partner. He charged me with building a tiger team to help him catch up. The stakes were high: the company had blown through a significant budget and was rapidly running out of money. Rob needed to make up ground on the project—and fast.

I built a small, high-performing team, and over the next six months, we released roughly nine times more working software than the former team had released in the previous six months. Confidence grew among stakeholders, and customers began to rave about ServiceBench's new ability to "innovate." Several of the features we released resulted in significant revenue growth, providing us additional capital to continue our efforts.

The product became a huge success for ServiceBench—so much so that one of its customers, perceiving them as a disruptive threat to their core business, acquired the company.

This experience was life-changing. It forced me to rethink the way I understood product development. Instead of focusing on the software, I learned to filter every decision through business objectives, customer needs, and product realities. That's how I grew a tiger team within 3Pillar and began to grow a company focused exclusively on building digital products. More importantly, I discovered the principles that became the genesis of the Product Mindset: minimizing time to value, solving for need, and excelling at change.

In Part II of this book, we'll look closely at all three principles. But first, I'm going to turn the next chapter over to Jessica S. Hall for a deep dive into what the Product Mindset is, what it looks like in action, and why it matters to the future of your business.

CHAPTER 3

DEFINING THE PRODUCT MINDSET

Jessica here. Not long ago, I spent an entire day with a client that has extraordinary potential. They have talent, they excel at process, and they have a unique technology solution to a vital security problem. All the ingredients are there. Yet the company is struggling. No one can articulate what their goals are for the next three to six months. Everyone has a different idea of what's most important. But it's clear that if they can align their collective sight on the same target, they have the firepower to do amazing things.

The good news is, once companies are ready to embrace the Product Mindset, there's no limit to what they can achieve.

WHAT IS MINDSET?

Mindsets aren't just any beliefs. They are beliefs that orient our reactions and tendencies. They serve a number of cognitive functions. They let us frame situations: they direct our attention to the most important cues so that we're not overwhelmed with information. They suggest sensible goals so that we know what we should be trying to achieve. They prime us with reasonable courses of action so that we don't have to puzzle out what to do. When our mindsets become habitual, they define who we are and who we can become.[14]

—Gary Klein, PhD

Stanford professor Carol Dweck has been instrumental in researching and explaining the importance of mindset, particularly the "growth mindset."[15] The growth mindset is based on the idea that we can all grow through experience, learning, and taking risks. By contrast, the "fixed mindset" means that you believe your levels of intelligence, creativity, and skill are innately fixed: you

can’t change and you can’t improve; you are what you are.

One powerful feature of the growth mindset is that it can be adopted and strengthened not just by individuals but by organizations. Dweck and colleagues studied employees at seven *Fortune* 1000 companies and found that employees with a growth mindset were 34 percent likelier to feel a strong sense of ownership and commitment to the company, 65 percent likelier to say that the company supports risk-taking, and 49 percent likelier to say that the company fosters innovation.[16]

Many thought leaders still support a fixed-mindset approach to strategy; they argue that if we have the right solution, roadmap, or go-to-market plan then we will be successful. But on-the-ground experience tells us something different. In a world that is continuously changing, having the right frame of reference (or mindset) to guide tradeoff decisions and judgment calls is at least as critical as having a solid strategy—and probably more so.

You cannot succeed in the digital economy with a fixed mindset. Only those companies with the growth mindset—those that embrace challenges, push through barriers, and learn from criticism—will thrive.

WHY MINDSET MATTERS

Our mindset matters because it guides, frames, and shapes the decisions we make every day—the big and the small. It is at the root of every judgment call we make. Understanding mindset helps us understand the ways we contribute as people, teams, and as organizations within an overarching ecosystem.

On an individual level, our mindset guides our actions. For instance, when a person with a “me-first” mindset finds a $10 bill on the sidewalk, his instinct is to pocket it. A person with a more altruistic mindset, in the same situation, might instead try to figure out who dropped it so it can be returned. If she can’t find the person it belonged to, she might offer it to a child or a homeless person. Same situation; two very different outcomes.

Mindset is equally crucial at a team level. A product team with a growth mindset can deal with complexity and change. It will constantly improve, learn, and adapt. Instead of stopping when they come to apparent dead ends, these teams see problems as solvable. They are willing to take risks, work hard, and overcome adversity to figure out the answers.

Getting to the right mindset starts with asking the right questions. In the digital world, if we ask our engineers to write code, we'll get code. If we ask our designers to make things pretty, the product will be pretty. If we ask our leaders to faithfully execute a roadmap, they'll get us to the destination. Unfortunately, the sum of code, pretty things, and execution rarely adds up to a successful digital product.

What happens if we ask our teams to reach a revenue target instead? What happens if we ask them to solve our customers' problems? If we set out to answer these questions, we set product teams up to succeed because they understand what is most important—and respond accordingly. Mindset is everything.

WHERE MINDSET FITS IN BUSINESS STRATEGY

Strategy and vision are important. They tell us what mountain to climb, why, and what it will look like at the top. Still, strategy doesn't help the team make the climb, to spot and adapt to everything they'll encounter on the way up. Strategy is critical, but it isn't sufficient. Harvard professor J. Richard Hackman put it this way: leaders must choose the mountain but leave climbing it to their teams.[17]

Methodology is also valuable, but it is not a golden hammer either. Our teams and the individuals on them have to make many decisions every day, from which tools to use to which path to travel. Many rely on methodology or process as a guide for making the decisions. They believe the desired results come from dutifully following processes. But as we have all seen in work and life, a process may tell you when to make a decision, but it cannot ensure that the decision you make is right. All too often, methodology wonks serve the process or methodology and not the business.

The Product Mindset is not simply another strategy or methodology—instead, it provides a means by which people across the organization can connect, communicate, and make sound judgment calls. The Product Mindset is the missing piece that moves us from hoping for magic to making magic happen.

When we started teaching the Product Mindset outside of our organization, heads of product management, engineering, and business said it helped them improve communication and collaboration. Just as it had for our employees across various disciplines and in the three countries (the United States, Romania, and India), the Product Mindset helped diverse leaders across a digital business

coordinate more effectively. On a highly practical level, it improved communication for people who work a few feet away, not just oceans away.

Eric Baughman, Director of Product Management at Coras Cloud, said this about the Product Mindset: “It gave us a good chance to bring our VP of Engineering, our CEO, and my role together, really on a single sheet.” Adam Podbar, Senior Director of Technology at Blink Fitness, echoed this endorsement: “Following the Product Mindset…I understand Craig (Product Manager) just a little bit more than I did in the beginning of the day.”

The Product Mindset allows everyone to view their ultimate goal through the same lens and connects the whole organization through a shared language. It pushes everyone working on a digital product to join their distinct methodologies and different tools in pursuit of common goals. For these reasons, the Product Mindset is not meant for only teams or only executives. It can’t flourish on its own or take off without sponsorship. The *entire organization* needs to embrace it, from the bottom up and the top down. Once it takes hold at every level, it can align your whole organization. With the resulting clarity of purpose, you will see your organization change and grow in ways you can’t imagine.

Yes, we need to start with the vision of our mountain. Yes, we need to equip the team with the right tools and processes. But we *also* need to give every member the right mindset—the Product Mindset—so they can scale the mountain and reach the top.

WHAT IS THE PRODUCT MINDSET?

The Product Mindset is a collection of characteristics and principles, which guide executives and their teams to build digital products that drive outcomes. *Characteristics* describe the qualities that are fundamental to digital products; *principles* guide our thinking and point the way.

The following chart provides an overview of these characteristics and principles.

Characteristics	Principles
The Product Must Be Self-Funding: A successful product generates revenue and support that fuels the business and justifies	Minimize Time to Value: Value exists in the hands of customers. Put the smallest solution to their biggest

further investment.	problems in their hands, monetize it, and learn what to do next.
The Product Must Be Chosen: Success requires that someone choose your product, use it, share it, and keep using it as new competitors enter the market and new customer problems emerge.	Solve for Need: Being chosen means understanding the customer and anticipating and meeting their needs today and tomorrow.
The Product Is Never Done: Customer needs change, markets and regulations change, and new competitors appear all the time. Successful products stay ahead of the change.	Excel at Change: Know when to change course, hold fast, let go, and have the tools to do it smoothly.

WHAT DOES THE PRODUCT MINDSET LOOK LIKE IN ACTION?

We will look closely at each characteristic and principle of the Product Mindset in Part II. First, let's listen in on a team *without* the Product Mindset. Here's what they're saying:

- What is the requirement?
- That's not in scope.
- It's on the roadmap, so we have to do it.
- I did what the ticket said.
- Go talk to someone else about your problem.

These conversations are limited and strained; folks are just trying to check boxes. In many cases, these are circular conversations in which nothing gets decided and everyone has a different idea of what they're trying to do.

Listen in on the team *with* the Product Mindset on the other hand, and you'll hear questions like:

- How can we improve engagement?
- What problem are we solving?
- Why are we doing this?
- How do we make it easier for customers to…?
- Could we try…?
- Can we boost our conversion by…?
- If we want to achieve (an outcome) how about…?

These conversations are lively and stimulating; people are engaged and truly care about the customers and business.

Why such a difference between the conversations? We can find the answer by exploring where the IT Mindset and Product Mindset lead.

IT MINDSET: GETTING STUFF DONE

The IT Mindset often leads to an ill-connected series of closed-end tasks and projects designed to lead to maximum output. When success is measured by time, scope, and budget, the entire organization is constantly "trying to get their stuff done." This attitude fosters isolation of teams, which impacts organizational culture and each team's overall engagement with the overall mission.

The IT Mindset also encourages a risk-management mentality. Ultimately, each team in the organization is concerned with checking off its requirements on time and under budget. They can't risk a bad release, whether or not the product ultimately has value.

Mindset doesn't feel tangible, but it leads to specific results. Imagine two teams: Team A has an IT Mindset and Team B has a Product Mindset. Both teams are given the same software product to build. Team A considers itself successful if it completes the job in a certain amount of time, meets the requirements, and follows the budget. Team B pursues the outcome of building a successful product that customers will adopt.

Three weeks into the project, both teams learn that 30 percent of the features they were planning to build are no longer considered important to their customers. Team A dismisses this as unimportant information because it's basing success on time, scope, and budget. Team members decide to deal with it once the project is complete, if their project sponsor wants to extend the project.

Team B accepts the information and sees it as integral to its success. Team members believe it's a total waste of time to continue building the 30 percent of features that would be useless to their outcome. Instead, they prioritize the 70 percent of features they now know are important to the customer and remove the 30 percent from the roadmap. They will get to the important features faster.

Both teams had the same budget and the same capacity, but Team B's product is ultimately more useful and drives more significant outcomes. The only

difference was their mindset.

PRODUCT MINDSET: BUILDING FOR OUTCOMES

Over and over, we've witnessed the magic that happens when product development teams focus on solving real customer problems and driving real business results. Lose sight of either one, and you lose the magic. If you build software that a customer wants but can't be monetized, you do not create a sustainable situation. If you build software without knowing what customer problems you are solving, you have another sort of problem—good luck finding anyone to buy what you're selling!

True innovation occurs at the intersection of customer desires and business outcomes. When people need to get around, Lyft steps in. When they need to manage their money, they can turn to Mint. If the basement floods, USAA is there, and for navigating the logistical chaos of family and work, there's Google Calendar. When a product can create the outcome people are looking for, they're willing to give it a try. If it delivers, they pay for it, use it, and share it.

Unfortunately, that is not the mindset most companies have. Historically, most teams are rewarded not for outcomes, but for outputs. Before joining 3Pillar, for example, I worked on a big content management system (CMS) project with about thirty-six people. The performance of each team member was evaluated by different criteria. Thirty of them were measured by how much code they created. Two were measured by how well we hit scope and time targets. Three were judged by how much design work they did. Only one was measured by how the project increased member engagement. Who do you think wins when it's one against thirty-five?[18]

We have worked with many clients who get stuck on the technology; they can't escape an IT Mindset that focuses on output. By ignoring the outcome, they wind up sabotaging their customer's ability to choose. One client developed a phenomenal technology that leveraged sensors on phones. Their technology knew whether or not the holder of the phone was a driver or passenger in a car, and how fast the vehicle was going. The company could build interesting and compelling products with such technology, but they were so entrenched in the technology itself that they only built for output. They focused on making the technology better and better, but ignored their customers' real problems. Had they paid attention to the outcome for the end user, they could have made customers' lives better and safer in multiple ways.

To make matters worse, this client didn't focus on business outcomes either. They lasered in on refining their algorithms when they could have been developing products that would drive revenue and adoption. The company had the perfect recipe for success: but because they had the wrong mindset, they couldn't gain any momentum and ultimately failed.

It's comforting, on some level, to focus on outputs. They are easier to measure. We come away knowing how much code got written or how many mockups were made. We can kick out loads of reports showing how much has been done. We're in control.

It's scarier to be held responsible for outcomes for the business, like revenue growth or market share, because you can't control the buyer's behavior. Outcome-based goals are also harder to measure and achieve, but the reward is far greater. We're not here to write code. We're here to build a business and serve customers—and when we do that, the product, not the productivity chart, will make history.

Remember: your mindset governs your decision-making. The way you think about and measure success—building for either output or outcome—determines the path you follow and whether you reach your ultimate destination.

The Product Mindset promotes flexibility. Companies that embrace this mindset may plan some steps, but their approach encourages experimentation as teams work together toward a common goal. By leveraging the Product Mindset, these companies create a culture of smart risk-taking.

MEASURING SUCCESS WITH THE PRODUCT MINDSET

Companies that embrace the Product Mindset measure success by signs of growth and value exchange. Metrics should show top-line revenue growth, improved retention, and increased market share. If the product creates value for the customer, the company can reach their goals too.

When building for outcomes, a company can also measure success by examining adoption, engagement, and referrals. The more value created by the company, the more the customer will keep buying, engaging with, and referring the product to others. This is how products, and ultimately companies, continue to succeed.

BENEFITS OF THE PRODUCT MINDSET

The Product Mindset sharpens focus, eliminates distractions, and prevents companies from trying to be all things to all people or serve ten thousand customers before they've served ten. It encourages leaders to stop trying to conquer every vertical and be the solution for every problem and instead concentrate on what matters.

A vital by-product of focus is speed. If you can't develop and release a digital product quickly, you're in trouble. You may have the best ideas and the smartest engineers, but none of that matters if your products never see the light of day. Development teams are expensive, and you will lose money if someone else beats you to market. For a product to be self-funding, you need to develop a value exchange with the customer. The Product Mindset helps guide development teams to create that value quickly.

The Product Mindset encourages experimentation and learning. It gives you the freedom to create sketches, prototypes, workflows, sample marketing materials, and limited feature products, and then take them out to your customers, prospects, and stakeholders for feedback. That learning helps you decide what to do next, what to invest in, and what to abandon. Every time your team learns something about the customer, the product or the technology team gets smarter and faster.

Experimenting is key in our digital economy; you cannot simply sit in a room with engineers and come up with the best answer. As we will see throughout Part II, the right answer exists out where your customers are. The faster you experiment with something new—and get it into the hands of the consumer—the faster you find out the best right answer. When the Product Mindset drives experimentation, agility follows.

Finally, an organization that is empowered by the Product Mindset will attract and retain talent. Most employees want to be part of something bigger than themselves. They don't necessarily want to be told what to do or be seen as code monkeys or pixel pushers. They want to have a voice. They want to create products that are meaningful, interesting, and immediately relevant. If you have a mindset that encourages and rewards creativity and open communication, employees become more engaged and active participants. Not only will they be happier—many of them will become your future innovators, leaders, and department heads.

LOOKING AHEAD

In Part II, we're going to move into a deeper understanding of the elements of a Product Mindset. We'll zero in on the three characteristics of every successful digital product and match each with a key principle that will allow you to respond effectively to the dynamics of the digital age.

---

14 Gary Klein, Ph.D. "Mindsets." *Psychology Today.* May 1, 2016. https://www.psychologytoday.com/us/blog/seeing-what-others-dont/201605/mindsets.

15 Dweck, Carol S. (2008). *Mindset: The New Psychology of Success.* New York: Ballantine Books.

16 Harvard Business Review Staff. "How Companies Can Profit from a Growth Mindset. *Harvard Business Review.* November 2014, https://hbr.org/2014/11/how-companies-can-profit-from-a-growth-mindset.

17 J. Richard Hackman (2002). *Leading Teams: Setting the Stage for Great Performances.* Harvard Business Review Press.

18 Jessica S. Hall. "What is an 'outcome' and why does it matter?" Hallway Studio. March 17, 2018. http://hallwaystudio.com/what-is-an-outcome-and-why-does-it-matter/.

PART II

UNDERSTANDING THE PRODUCT MINDSET

CHAPTER 4

THE PRODUCT MUST BE SELF-FUNDING

David here. As an entrepreneur, I've faced the daunting reality of having to make sure I could cover payroll. I'll never forget the day it hit me that six families were depending upon me for their paychecks—so they could pay rent, buy groceries, put gas in the car, and build a future for their children. A month later, I came within six hours of running out of cash and letting them down. These were defining moments for me. They changed and clarified my perception of business. As an engineer, revenue and profit were never core to my thinking. Once everything depended on me, I realized that they are actually the lifeblood of business—and essential for any of us to do great things.

Several years ago, 3Pillar began working with a publicly traded information services company whose core business was eroding. The company had a new product idea that was supposed to stabilize its revenue, and its leaders decided to make a big bet on bringing it to market. They launched an effort to build the product with over $1 million in funding. Throughout development, our client shared the product with customers and received overwhelmingly positive feedback. Customers couldn't wait to get it into their hands.

Yet to 3Pillar's great regret, the product ultimately failed. The issue wasn't a lack of interest: to the contrary, our client saw inordinately high demand for what we were building. The problem was that we couldn't convince our client to release the product to customers before it was "completed." Once the new venture had spent the initial million-dollar investment, the parent company decided not to provide any further funding. The CEO did not see enough traction to justify further investment. Encouraging words were not enough. He was looking for revenue.

DON'T LET THE PERFECT BE THE ENEMY OF THE GOOD

Customers were enthusiastic about and receptive to the product. Each time they saw a demo, they offered more ideas about how the product might evolve and what features they'd like to see. The possibilities seemed endless—and in response, our client continued to modify the definition of "done" to include these ideas.

When we pushed our client to get customers to try their product, they responded by showing the customers a demo. When we requested user feedback from real customers, the company responded with more demos, conversations, and research. At each iteration, we delivered working, customer-ready software. In return, we received rave reviews and growing excitement about the promise. We saw a growing sales pipeline, but the client was never quite ready to push the button and release the product into the marketplace.

The result: we failed to convert enthusiasm into revenue or adoption. Customers who had been willing to pay for early, imperfect versions of the software were left empty-handed and disappointed. In hindsight, these adoption statistics could have been used to justify further funding. Early sales could have provided funds for future development. Instead, over $1 million evaporated before a single purchase was made. And once the coffers ran dry, the company pulled support for the new idea.

Based on the business metrics they were watching—revenue, adoption, market share—no progress was being made. Caught up in anxiety over missing features, they wound up missing a tremendous opportunity. This debacle all came down to one thing: mindset.

The product owner wanted to "finish" building the product before they sold it to clients: a classic trap of the IT Mindset. In their quest for perfection, they failed to embrace two vital characteristics of software product: one, it must self-fund; two, it's never done. In this chapter, we'll focus on the first.

WHY GENERATING REVENUE MATTERS

It may seem obvious to point out that a digital product must self-fund. Obviously, no business can be successful without earning enough revenue to cover costs and drive some sort of profit. Over the years, however, we have found that being explicit about this reality is essential for two reasons.

First, the vast majority of software development in business has traditionally been sponsored by the IT department. IT departments are cost centers. Their mandate is to *support* the business and drive operational efficiency and process automation. And the IT Mindset means stakeholders view the entire engineering process as a means for driving cost out of the business, not a means for contributing to the top line.

In this world, ROI is determined by subtracting the cost of development from the number of pennies saved over time. Operating under this formula, the IT Mindset focuses exclusively on defining the scope of requirements up front, setting a timeline and budget, analyzing return, and then managing development efforts against these parameters. The ultimate definition of success is a piece of software that was developed on time and under budget.

Unfortunately, that is not the definition of success in a "product world," where there are no pennies to save. Developing software to remove cost from a revenue stream of zero always results in a negative return. By definition, this is a failure. The IT Mindset is all about cost controls and management. The Product Mindset is all about risk-taking and experimentation, with a goal of creating revenue. These two mindsets are inherently in conflict. You can't save your way to growth.

Second, outside the IT world, R&D executives typically correlate digital product development to physical product development, though digital products are orders of magnitude less capital-intensive than their physical counterparts. There are many similarities between physical and digital products, but the comparison breaks down once you take into account both the speed of change and the capital efficiency expectations for software.

What do we mean by capital efficiency? Let's compare one aspect of building a traditional bank versus a digital bank: the user experience. A traditional bank requires significant outlays: architects, city planners, utilities, construction workers, and so on. If the foundation is laid incorrectly, ripping it up and starting over becomes cost prohibitive.

In the digital world, you can modify anything without losing momentum. If you need to, you can tear the entire bank down in seconds—literally—by dragging the code into the virtual trash can.

If you want to thrive in the digital economy, you have to build products that can be self-funding. Digital products, unlike so many other types of software, are not built to drive savings from an existing expense base. Digital products are built to drive dollars. Their entire purpose is to generate the revenue stream that will pay for your ongoing development—either directly (through sales) or indirectly (by justifying an alternative funding mechanism).

If you remember one thing from this book, remember this: when we're building software *products*, we're creating dollars, not saving pennies.

THE RISK-REWARD TRADEOFF

It's not surprising that most companies are not thinking this way. The return models of digital products and the IT investments they are used to considering are fundamentally different. IT investments have relatively known returns. We can measure the current cost of operations and estimate how much we'll save once the new system is deployed. Because we control this supply chain, we can ensure (to a certain degree) that we will realize our estimated return. The downside is that the return is capped. There are only so many pennies you can save.

Digital products, by contrast, provide near unlimited return. The only limitations are your ability to expand and capture the total addressable market. There is far less certainty. If you are relying on market adoption in order to create dollars, you have significantly less control over the results. You must experiment in order to find a product that fits the market. You're not optimizing existing cost structures; you're betting that you can build something of value. Obviously, this comes with a much greater risk profile.

When a product is self-funded, your ROI is incremental, and you can manage that risk. You avoid burning through your resources and failing to return dollars. You replenish your capital in increments, forcing yourself to build something of value—either immediately, for the consumer, or by demonstrating long-term promise to investors.

Pursuing incremental ROI has another momentum-building advantage: success breeds success. Developers and investors love when their products are used and their brand is recognizable. Seeing market traction will energize your product team; when they feel they are winning, their morale and creativity will soar. They'll be motivated to pursue new ideas without too much risk or waste.

For some companies, this is easier said than done. Even the most successful businesses will run into all kinds of trouble by clinging to an IT Mindset in the digital world. Let's look at some of the common stumbling blocks to building self-funding digital products.

THE EXCESSIVELY GRAND VISION

We talked earlier about not allowing the "perfect" product to become the enemy of the "really, really good" product. A corollary to that rule is this: when you try to please everyone, you usually wind up pleasing no one.

When companies are not working incrementally, it's often because they have an excessively grand vision that they are committed to delivering before launching their product. As a result, their progress never leads to actual transactions. For example, we worked with a healthcare client that wanted to create an app to support caregivers of people with long-term health needs. The product would have done a lot of good, and there was a huge market opportunity present with insurance companies, caregivers, and public health institutions.

Unfortunately, instead of building and launching for one type of care situation at a time, the client wanted to build a product that fit every situation before releasing anything. The company's engineers believed they were building for the future, but focused too much on development and not enough on the release. The team spent 70 percent of its time planning instead of building. In the meantime, their funding partner ran out of money—and patience—long before they got to market.

CAUGHT IN THE WEEDS

On the other hand, some companies lose sight of the long-range view and get caught in the weeds. A manufacturing company we worked with shows how easy it is to get caught in this trap. The company made household products and sold a certain series of products in storefronts. Its leaders wanted to take the company national, so they engaged us as an engineering partner, along with another design partner. The designers came up with a lot of interesting features for a modern web product. Most of these customization options weren't necessary in the first draft of the web product, yet the company didn't want to launch anything until 80 percent of the pieces were in place. Their insistence on following up on every detail of these features led to months and months of delays, with no execution.

This company's ability to assign appropriate priorities stemmed from a lack of focus on the business value. The company's goal should have been simple: get the customer to see the product and buy it. Instead of starting there, the company began by focusing on a CMS that wasn't essential for the end product. Instead of starting small and then connecting the dots, the company was nearly consumed by its desire to have every piece perfectly in place.

We helped them step back and disentangle themselves from the weeds so we could all clearly see the challenges and opportunities. We revised the roadmap to help them reach their destination with room for continual evolution. We urged them to release early and often, moving toward their grand vision gradually. As a result, our client began to incrementally garner value from their investments. Today, they have a profitable product and are moving steadily closer to their desired vision—which itself has evolved as they have learned and grown.

A MILE WIDE, AN INCH DEEP

The common pattern we see in all of these companies is that they try to do too much, too late, instead of working through self-funding with continual return. They fall prey to the allure of the "mile-wide, inch-deep" approach: cramming in more and more features—not better and better features or a single awesome feature. They try to match every permutation that every competitor has instead of concentrating on doing one thing—their differentiator—so well that no one else can top it.

Successful companies cannot be all things to all people. Moving toward self-funding means saying "no" to features that may be valuable at some point but aren't part of the value proposition you need *right now*. Winning companies are standouts; they carve out a niche that's a mile deep and then leverage what makes them unique to build momentum—and build business.

GETTING SELF-FUNDING RIGHT

Let's take a look at a company that got self-funding right: CardMunch. In the early days of mobile, CardMunch proposed getting rid of the business card. They developed a way to take a picture of a business card from your phone and automatically input the information into your address book.

CardMunch was smart. They got their product into the hands of customers who would use the product, which in turn helped them build momentum. They focused on creating a value exchange—trading something valuable that you have

produced (in this instance, digitizing business cards) for something of value from others (in this instance, adoption, usage, and ultimately dollars). CardMunch quickly built a simple interface on which users could upload a picture to the cloud. The company manually transcribed the information on the card and pushed the results back to the user's phone, where it could be automatically imported into their address book.

Instead of building the costly technology for character recognition, CardMunch used manual labor. If the concept worked and people liked it, then they would build out the technology. It worked so well and so quickly that they sold to LinkedIn in 2011 for over $2.4 million and never had to build the technology at all.[19] Adoption alone drove the value in the simplest way possible.

WhatsApp is another success story. They started small and were able to reach 900 million users with only fifty engineers.[20] The company did one thing well, pushed it out, and grew its user base substantially without growing its staff.

Unicorn companies—those rare, privately held startups valued at more than $1 billion—understand that value is at the heart of a self-funded product. Companies like LinkedIn and StitchFix build momentum with value exchange, and as the value of their products increases over time, that value translates into more eyeballs, more users, and, ultimately, more revenue.

YOUR RESPONSE

As you build toward a self-funded product, reward your employees for experimentation and iteration. You want to get new versions of your product into the hands of customers and stakeholders early and often. Find a way to make sure customers pay for the solution, either in dollars or some intangible currency, such as social capital.

The best way to create a return and lower risk is by releasing software early on in the product development life cycle and then continue releasing often. This initiates, and then fuels, continual value exchange. You must focus on and solve one problem at a time. To do this, you must keep in mind this simple principle: minimize time to value. Let's break that down.

---

19 Austin Carr. "A Year After LinkedIn Came Calling, CardMunch Poised To Make 'The

Rolodex Obsolete.'" Fast Company. January 1, 2012. https://www.fastcompany.com/1807189/year-after-linkedin-came-calling-cardmunch-poised-make-rolodex-obsolete.

20 Cade Metz. "Why WhatsApp Only Needs 50 Engineers For Its 900M Users." *Wired*. September 15, 2015, https://www.wired.com/2015/09/whatsapp-serves-900-million-users-50-engineers/.

CHAPTER 5

MINIMIZE TIME TO VALUE

Jess here. A while back, a team brought me in to help them figure out why a product into which they'd poured tremendous resources wasn't making any headway with customers. They believed that customers would have adopted the product if only they had waited longer. They wished they had spent even more resources working out every bug and "perfecting" the product.

After analyzing the issue, I told them that their mistake was certainly an issue of timing—just not the way they thought. They should have released a smaller version of their product much earlier. The feedback they'd have received would have helped them figure out which features of the product to build next.

They looked at me like I had two heads.

Getting a new company, business line, product, or team off the ground is grueling work. The approvals, budgets, staffing, and political hurdles can seem insurmountable (and exhausting). But it all feels worth it the day of the kickoff, right? You're awash in a sea of sticky notes, emails, meetings, and whiteboards. Wireframes are being designed and code is being written. Something is happening here. In the midst of this flurry of activity, though, it's vital to step back and ask: Is this creating value? Is the work helping to solve a problem for your customers? Is it helping to acquire new customers?

Conflating activity with value leads to failure. Value exists in the hands of our customers and stakeholders. It exists when we can learn, when customers can take action, and when we start to drive business objectives (revenue, adoption, and retention).

Product leaders often seek our help because their teams are doing lots of

interesting work, but that investment is not translating into features that customers love—which means it's not transforming into revenue. Meanwhile, money flies out the door every month and support among stakeholders or investors erodes. Eventually, you're left wondering, "What did I get for all of that?"

As the examples in the previous chapter illustrated, when companies take too long to get their product into customers' hands, they risk going broke before customers are able to adopt their digital products. Instead of releasing early and often, they don't discover any bugs in the product until it's too late. Precious resources are wasted before any value is created. Put simply: they failed to minimize time to value.

Consider, for example, the Common Application, a nonprofit organization that allows students to apply to more than 200 colleges and universities using a single system. When the time came for the Common Application to build a mobile app, they weren't sure what it should be. They had some ideas and survey data and a timeline to impact the application season already in progress. Talk about minimizing time to value!

We worked with their team to do six rounds of prototyping with thirty-five students in just thirty-three days. We discovered that students were struggling to manage complicated application requirements and multiple timelines along with regular schoolwork, activities, and jobs. For them, value meant being able to manage and complete all of the requirements for their top schools on time. This knowledge guided our team to create an app that did just that. Understanding students' needs allowed us to prioritize and sequence each step and deliver them a valuable product in no time at all. We know it added value because of the flood of downloads and high ratings in the app store.

GET IT IN THEIR HANDS

You may have a crack team of engineers, designers, and coders, but remember: value only exists when your customer can touch, test, interact with, and even deliver feedback about your product. You have to get it in their hands.

There are three obvious upsides to minimizing time to value.

First, it increases efficiency. Getting feedback from your customers as soon as possible leads to better decisions from development teams, who can adapt

quickly to respond to customer input. You won't spend too much time and money without a tangible ROI, and end users benefit from regular improvements and new features, which help sustain buzz about the product. This doesn't mean you put forward a shoddy product; instead, put forward a smaller product made well.

Second, it strengthens stakeholder investment. By keeping a laser focus on the current iteration of and reaction to the product, they'll be invested in supporting its future iterations to both maintain and expand the customer base.

And third, it creates a feedback loop that deepens the commitment of employees and customers alike. Often, the products customers use become a part of their professional identity. They appreciate being part of the user community and being heard, so they are quick to help test betas and provide feedback. In return, the product gets better, and the user feels reciprocal appreciation from the company.

Let's look at three examples of success stories from companies we've helped—companies that embraced a "pay it forward" mentality and continue to reap the rewards.

PVH Corp., a clothing company, wanted to give store associates an app to boost employee engagement. We didn't worry about making it all-encompassing or perfect, and so in just a few weeks, we were able to put the product in the hands of store associates. They could physically handle it and try it out with customers in real time. This initiated a positive feedback loop: we started with one store and quickly expanded the app to stores nationally and internationally.

In another case, we helped a top-three financial institution minimize time to value by giving stakeholders access to a product designed for small and local businesses. All stakeholders had the latest version of the product on their phone. They could show it to people inside the organization and get feedback on it. As excitement grew across the business, so did strong organizational and financial support for the product.

Atlassian—a large Australian company that creates tools for software development, project management, and collaboration—is known for building strong, engaged user communities. Early on in their relationship with the company, customers feel a sense of ownership because they know they're

helping to shape the continual evolution of the product they rely on, which leads to continual buy-in. Because they are invested in Atlassian and feel Atlassian is invested in them, they engage, adopt, and refer.

By making incremental improvements, each of these companies has created a cycle of value exchange that has led to self-funding products.

REJECT COMPLETENESS

Minimizing time to value is often the hardest principle to achieve, because many leaders struggle with perfectionism, even when they understand it's getting in the way of success. They insist there is *no way* the product can be released until every last feature is complete. They believe no one will buy it unless it can do everything that is needed. They worry customers will complain about missing features. They fear their reputation will be damaged if their product does not solve all problems for all people. They equate "not complete" with "not valuable."

But they are wrong. If you think this way, you run two grave risks: one, you're more likely to run out of money before you release a successful product. Two, your product is less likely to make a splash because it doesn't have a clear value proposition or it doesn't solve a need. Your company will never become self-funding if you insist on achieving the whole solution up front or postponing release until you've developed additional features. Having a customer who uses the product and wants more from it is a good problem to have! Most important, it means you have customers. And because of those customers, you also have a clear sense of how and where to make further investments in the product.

You don't need an end-to-end solution right this minute. What you need to do is solve the most important problem and do it really well. Teams need to decide what to focus on, not what to give up. Focus on figuring out what "pain point" you can alleviate—and then go and do it, without worrying about constant negotiations with stakeholders.

When leaders reject the need for completeness, they give their teams freedom to think creatively, to solve smaller parts of the problem, and to deliver pieces of the product more quickly.

BUILD SLICES, NOT BLOCKS

Many people think of building software products in the same way they think

about building anything else. For instance, someone building a home has to pour the whole foundation at once. We call this the “big block” approach.

Building software, however, is fundamentally different from building homes, roads, or buildings. A software engineer or architect needs only enough of a foundation to support what they are working on in that moment. They always have the option of adding more later or ripping out the first layer and replacing it with something better. We call this the “slice” approach.

BIG BLOCK APPROACH

The requests for proposals (RFPs) 3Pillar receives reveal that most people think about product development in terms of building blocks. RFPs always include a section describing how the vendor should sequence the work (or stack the blocks):

- Phase 1: Discovery
- Phase 2: Infrastructure
- Phase 3: User Registration
- Phase 4: …and so on.

The expectation here is that the vendor will learn everything in Phase 1, build all the infrastructure in Phase 2, and complete all of the account management in Phase 3. Let’s say each phase takes a month. A team could spend tens of thousands of dollars *without actually creating any business value*. What they gain is documentation, infrastructure, code, and potentially design, but those things don’t equal value. Moreover, if the customer has nothing to see and react to, how can the team know if they’re headed in the right direction? They can’t.

Each area of the “big block approach” represents a complete component that does everything that is “required” of it. Here is an example:

You own a physical therapy business helping teenagers recover from sports injuries and want to build the best platform on the market for helping other physical therapists. It’s a good mission, and there’s revenue potential from therapists paying for your products. You are sure there will be a market if you can just deliver the package that provides the complete solution, including:

- Account creation and management
- Exercise library

- Exercise program builder
- Progress tracker
- Session tracker
- Patient portal

Building each big block could take weeks and cost thousands, and you will need to finish most or all of the blocks to sell the product. You risk wasting time and money on building the wrong thing, and self-funding is impossible.

Minimizing time to value requires a different approach: slices, not blocks.

SLICE APPROACH

Good software engineers solve for today with tomorrow in mind. They know that tomorrow is not guaranteed—and that it's entirely possible their needs will change in weeks or months. A team that's focused on minimizing time to value accepts that it won't know everything and just needs to solve part of the problem. They set out to build just enough that they can put something in their customers' hands. In other words, they think in terms of "slices," not blocks.

Slices cut across the blocks of functionality and allow a customer to complete some or all of a workflow. A slice can be released faster and allows the team to incorporate feedback before going too far down the product development path.

Here is how you can slice up the physical therapy app example:

- Create a group on social media where you share videos of exercises, programs, and tips. You'll see quickly (and for free!) if there is a market for the content.
- Focus on a narrow customer segment. If rotator cuff injuries were common and tricky to treat, you could focus on creating a single program with a few exercises and a simple way to collect payment and manage accounts.
- Tackle the nasty part of the workflow. If designing the program is the biggest pain point, focus on creating something that solves a single problem well and connects to other systems.

Below are a few additional examples of slices to consider:

- Sell a single product using a single payment method on an e-commerce site before adding customization and payment options.
- Use a small data set and display a single, high-value chart for a data product

before adding a larger data set and more charts.
- Start an email list and share apps and products with friends. Ryan Hoover of Product Hunt had tremendous success this way. Product Hunt quickly grew to a few hundred people, and eventually they built out a full-featured platform.[21]

Here's what a timeline for this kind of team might look like:

In weeks one and two, they meet with stakeholders, interview with customers, brainstorm features, do minor infrastructure setup, and plan the next two weeks of work. For the next two weeks, they build. At the end of week four, they release working software and solicit feedback from stakeholders and customers.

Don't aim for perfection. Build thin slices of functionality that let your customers complete a task from end to end. Worry about complexity later.

BALANCE PREDICTABILITY AND FLEXIBILITY

Sometimes the barrier to minimizing time to value doesn't lie with the team per se, but with stakeholders who don't trust the team to deliver. Trust is everything. Maybe they've been burned in the past by teams that overpromised and underdelivered. When trust is low, teams spend more time planning instead of building, and there are disagreements about how to prioritize work. The sales or customer service teams then feel pressured because they can't answer customer concerns or questions.

Many of our clients are under pressure from their leadership and customers who want to know exactly when they are getting a certain feature or the solution to a problem. Not being able to predict when things are going to be done means stakeholders can't align their efforts, which creates frustration in the organization. Most companies sacrifice flexibility to achieve predictability. Managing the process to get both flexibility and predictability requires discipline and ruthless prioritization—but it can be done.

Transparency is the answer. Acknowledge the unhelpful patterns of the past, show stakeholders the benefits of minimizing time to value, and give them a clear view into what the team is planning to release.

Remaining visible is an excellent way to be both predictable *and* flexible. At 3Pillar, internal research found that the number-one driver of stakeholder

satisfaction is release planning: transparency about what the team is going to release and when. The product manager, team, and stakeholders review the release plan regularly (usually every two weeks). They can see what is coming and how much effort it's likely to require, so they can make informed decisions about tradeoffs and priorities.

If a team gets release planning right and delivers on their commitments, they will win trust and confidence from stakeholders—which makes it easier to minimize time to value.

HOW TO CHANGE MINDSETS

Jessica here. A few years ago we worked with an education client that was running out of money. In the education sector, the window for selling is narrow: they only make buying decisions once a year. This company had an enormous list of new features they wanted to push out so they could sell more—but there was minimal time to get it done. I had them write each individual item on a sticky note. Then, I asked them to choose the three things that were most important to buyers. One by one, I picked up each sticky note and asked if it met any of the buyer's needs. We put each note in a prioritized list.

After about ten minutes, I held up yet another sticky note, and the client said, "I know what you're going to say. Put it at the bottom."

Successful companies are in the habit of forcing themselves to make decisions by limiting what they can actually accomplish. So we always ask:

What would we do if we had half the development capacity?

How could we structure this as if the plug could be pulled at any time?

If we can only solve a part of the problem, which part should we choose?

I tell clients that if they're furious with me by the end of the process, and are convinced that what they've decided on is not enough, then they've done it right.

Old habits die hard—and so do entrenched mindsets. But adopting a new mindset is by no means an impossible task. The fastest way to change minds about minimizing time to value is by demonstrating the benefits. Faster and more frequent releases translate to less wheel spinning, faster decision-making, fewer conflicts, and more positive feedback. Engineers and developers don't

want to waste resources, they don't need more stress, and they shouldn't fear reprisal for trying something different. Leadership is likely to jump on board if they see how their teams can do more, and more quickly, with this new approach. As a bonus, this nimble, forward-looking environment is also a lot more fun.

Minimizing time to value is a surefire way to move a product through development and into the hands of consumers. After that—it's up to them to choose it.

---

21 Amber Leigh Turner. "The Product Hunt Story: How it all began according to its founder Ryan Hoover." The Next Web. May 4, 2017, https://thenextweb.com/insider/2017/05/04/product-hunt-story-began-according-founder-ryan-hoover/.

CHAPTER 6

THE PRODUCT MUST BE CHOSEN

David here. I'm a passionate brand loyalist for Southwest Airlines. I love that they are a purpose-driven company and believe that they operate a business the right way. I support their purpose of democratizing travel and even recommend Southwest to others—yet I've only flown with them a total of two times. I'm a frequent business traveler; their product just doesn't work for me.

I choose to fly United because their hub is nearer to my house, so I have plenty of flight options to all the places I need to go. United's frequent flyer program also gives me exceptional benefits. For me, the user experience is a matter of convenience, not brand loyalty.

If you want your product to be chosen, put yourself in the user's shoes. Customers may love the idea of a brand, but they often choose the products that get the job done, full stop.

No matter how interesting, snazzy-looking, or compelling they are, your digital products will only succeed when they are *chosen*. Software as a commercialized product—as opposed to software that is made internally for the sake of operation—will only be successful if people use it. Often, that means they need to choose to *buy* it, which sets the bar even higher.

Of course, whether we're talking about a pencil, a house, or a digital product, consumer choice is always important. But its impact is exaggerated in the digital world because nearly anyone can bring a digital product to market at a relatively low cost.

Building a house takes capital. Even making pencils requires capital, from manufacturing to inventory. In software, on the other hand, production costs are

incredibly low. A software developer with a laptop, credit card, and a Wi-Fi connection can write code overnight, deploy it into the cloud, and launch it to the world for less than a hundred dollars. It's not unheard of for a unique idea to be built and released in a single sleepless night. Startups have nothing to lose. They don't need capital or a big marketing push. If their idea works, and they find a unique feature no other product can match, they are off and running. That's when you're in trouble because they can chip away at your market share, attract talent, and get capital.

In the digital world, users have a lot of choices, and the cost of change for the user is low. They can change their streaming service more easily than they can change their car or house. Today, customers not only expect to be able to choose products easily, but they also expect to be able to quit them easily. It's tempting to try to keep them on the hook—in fact, in both the B2C (business to consumer) and B2B (business to business) worlds, subscriptions are supplanting use licenses—but remember that users don't want to navigate bureaucracy to opt out; they want the ease of going online and pushing a button. Companies that make it harder to quit actually get burned. When people bashed companies like Comcast and Verizon on social media for making it difficult for their customers to quit their services, their reputations were tarnished.

Your takeaway: the low cost of production (on the company side) combined with the low cost of change (on the customer side) means that there is an abundance of choice. Competition is constantly a major threat. As a result, both initial and ongoing choice matters more in the world of digital products than anywhere else.

HOW PEOPLE CHOOSE PRODUCTS

Different people choose different products for different reasons: status, convenience, habit, loyalty, utility. All you can control is the product. For your product to succeed, you need to understand your buyers—who they are and what motivates them.

UNDERSTANDING VARIOUS BUYERS

In his book *Crossing the Chasm*, Geoffrey Moore details the theory of diffusion of innovations, initially researched by Everett Rogers in 1962. Moore expands upon the technology adoption life cycle. He explains that "Innovators" and "Early Adopters" use products for dramatically different reasons from the "Early Majority." Understanding these differences, and how to entice users to choose, is key to product success.

Innovators (assumed to make up 2.5 percent of a market) and Early Adopters (13.5 percent) have high degrees of social status, financial flexibility, and risk tolerance and are likelier to experiment with new technology. Moore categorizes these buyers as “Enthusiasts” and “Visionaries.” Enthusiasts buy for emotion: the thrill of trying something new, the status of being the first to adopt, and the pure love of technology. Visionaries want to be perceived as ahead of the trend, so they are willing to take risks on new products.

But at a mere 15 percent of the market, you cannot grow a business off of them; they will soon abandon your product and move on to the next cool thing. Early Adopters, or “Pragmatists,” as Moore calls them, buy for different reasons and have significantly different expectations. To win them over, a digital product must address the product definition, positioning, product-market fit, proper channels, and a mature pricing model.

Moore calls the gap between Visionaries and Pragmatists the “chasm.” Successful digital products find a way to cross this chasm and build revenue streams. Whatever your strategy, it must drive customer choice.

THE FACTORS THAT DRIVE CHOICE

Your job is to understand the various factors behind choice as you create your product. Will someone choose it out of desire or need? Substance or style? Several tradeoffs are especially important when it comes to digital products.

USER EXPERIENCE VS. FEATURES

Throughout history, we have seen technologically superior products lose in the marketplace to lesser competitors. Remember the Zune? Maybe you don’t, because the iPod crushed it. Zune was a media player that arguably had better features, quality, and sound than the iPod.[22] So how come it failed?

Zune assumed that “if you build it, they will come.” They loaded up on features and ignored the user’s experience. Their focus was fully internal—on the product itself or the problem to be solved. Apple obsessed about providing an exceptional user experience, and users rewarded them.

MapQuest suffered a similar fate. Although it was originally the dominant player in its field, Google Maps effectively put MapQuest out of business by adding a new click and drag functionality that significantly improved the user experience. Even if the new product was inferior in *many other* aspects, this *one* feature

made its users so much happier that it rapidly took market share.[23] Waze then entered the market with crowdsourced data that outshone Google Maps and customers followed. Even though Google Maps had more advanced technology, Google bought Waze for $1.15 billion in order to neutralize it.[24]

The lesson learned is clear: your product requires an exceptional user experience, not an overabundance of features. If your product is intuitive and easy to use, the user may well value simplicity over something fancier or more complicated. A McKinsey study backs this up: companies that offer best-in-class customer experience grow faster and more profitably.[25]

CUSTOMER VALUE VS. TECHNICAL SUPERIORITY

Consumers have long chosen seemingly inferior products because they get more value from them—which is why you have to understand what *customers* value. Betamax was the premier product in the early days of video cassette recorders. It was technologically superior to the VHS, but people chose VHS because it was better supported by cameras and VCRs, and there was a much larger selection of videotapes from which to choose. Though the product wasn't as good, the value proposition was clear. Users were willing to sacrifice quality for availability and diversity of videotapes.

A few years back, we worked with a company building wearable devices. Their technology measured biometrics, and their algorithms were orders of magnitude more accurate than competitors like Fitbit. Their problem? Users didn't care. Customers valued Fitbit's widespread adoption and practical advice on how to get into shape more than they did a perfect measure of what their heart rate was and how many steps they took.

In Chapter One, we shared the story of 3Pillar's client, a boutique consulting company that had collected the gold standard of industry benchmark data for the investment community. Through their white-glove services, they advised premier investment clients on how to deploy their capital. Their differentiator was their data. Over time, upstart technology companies began to encroach upon their competitive advantage. As data became more accessible, competitors built software platforms to provide digital benchmarking as opposed to expensive consulting services. Their data weren't as good, but they could provide their service on demand through a slick digital interface and at a much lower price point. Our client's customers suddenly had a real choice to make, and our client didn't always win.

Our client responded correctly. Though it wasn't a digital company or even a product company, it had to become both to fend off their competitors. So employees built a software product and entered the market at a lower price point and with a brand-new delivery model for their services. The explosion of options challenged their business, but its leaders were able to right the ship and ultimately attracted more users and experienced more growth than ever before.

PERFORMANCE VS. FEATURES

Another common trap is focusing too much time building new functionalities and not enough time perfecting existing features and ensuring optimal performance. Performance refers to the ability of the software to instantaneously respond to a user's actions. If you build an internal system that every employee is forced to use, you might get away with solely focusing on requirements. (Of course, employees might be frustrated if your application is slow or spotty, but they don't have a choice.) Once users have a choice, they will quickly grow impatient with unresponsiveness and move on.

A recent report sponsored by Google found that 53 percent of all users will abandon a mobile website if it takes longer than *three seconds* to load.[26] If that's true for a simple mobile website, imagine how people respond to digital products. In our experience, users expect products to respond instantaneously.

The other aspect of performance is availability. Products that crash or become unavailable at peak load times are a sure way to alienate customers: research shows they are eight times less likely to return after a crash.[27]

In 2007, Microsoft launched Windows Vista. To this day, it is widely recognized as one of Microsoft's biggest failures. The problem? Performance. Users complained that their PCs felt slower and their internet connections were crashing. It got so bad that one of Microsoft's biggest channel partners, Dell, went backward and began offering Vista's predecessor, Windows XP, just a few months after Vista was introduced. In 2012, just five years after its original launch, Microsoft stopped supporting Vista. Poor performance led to quick failure.

CHOICE VS. BRAND LOYALTY

Product choice does not necessarily equal brand loyalty. True choice is often about utility: we choose something because it makes our lives better, our jobs easier, or solves a real problem. Brand loyalty connotes an emotional connection

and strong feelings about the company—which means it can be fragile and may not translate into sales.

THE ANATOMY OF CHOICE

Choice can be dissected into two critical components: initial choice, which drives users to try your product, and ongoing choice, or what retains users.

INITIAL CHOICE

During initial selection, choice is based on several factors. Yes, customers often choose a product because it solves a real problem. But they may also respond to the "hotness" or "buzz" around the product, its ease of adoption, or how fast they can begin using it. Many consumers are looking for minimal barriers to entry and want to avoid negotiating complex contracts or providing something of value (e.g., money, email address). Let's look at the key components of initial choice.

- **Social Capital.** Social capital refers to the credibility that a product has among those within the user's circle of influence (e.g., family, friends, celebrities). Social capital can lead to a quick, emotional decision.
- **Barrier to Start.** Users understand that they have choices and that the cost of change is low. Instead of researching and weighing a decision, what they really want to do is just give it a try. Providing an easy on-ramp to the product can prompt a user's initial choice.
- **Perceived Utility.** Value proposition matters. A user's perception of how well your product will solve their problem will lead to initial selection.

Sometimes a single prevailing factor can drive users to their initial choice in a matter of seconds. Just as often, it's a combination of these factors. Remember, too, that some drivers—like social capital and a low barrier to start—typically don't last. So your product needs to make a swift, strong case that it meets the user's need for utility and a concrete value proposition.

ONGOING CHOICE

Once users make their initial choice, the product must continue to meet their needs and win their ongoing loyalty. Every time they use the product—or see the recurring charge on their credit card—they will likely reevaluate the service. Does it still meet their needs and expectations? As soon as they are unimpressed by or annoyed with the service, the exit door opens.

Consider ongoing choice within the context of Kano's theory of customer needs.[28] Kano, a Japanese economist, outlined three categories of needs: basic needs, performance needs, and delighters.

Basic needs are those things that you expect, such as towels in a hotel room. Basic needs don't provide any satisfaction by being met; they can only lead to dissatisfaction in their absence. They rarely influence initial choice, but they will absolutely drive a decision to discontinue service.

Performance needs can drive initial and ongoing choice if a customer is looking for a particular feature. The better a company does at implementing that specific feature, the more likely the customer will be to stick with their product.

A delighter is something small and unexpected that catches the customer's attention because they didn't ask for it—think of chocolate left on a hotel room pillow. The absence of a delighter doesn't cause dissatisfaction—you don't know what you're missing. But its surprising presence can absolutely build deep loyalty.

When you apply this theory to digital products, you see how easily they can move from one category to the next. What was once a delighter becomes a performance need once you start to expect it—shouldn't every hotel pillow provide dessert? Think of backup cameras on cars—what was a "wow" moment not so long ago is now a basic safety feature (or at the very least, a performance need).

Understanding that delighters eventually become performance needs—which eventually become basic needs—helps you win a customer's ongoing choice. You have to be forward-looking, anticipating the future want while meeting the present need.

MAKING CHOICES IN THE B2C SPHERE

In the B2C sphere, the markets are highly fragmented with large audiences. The buyers and the users are the same people; they hold the credit cards and use the tools. They are the decision-makers and the ones you need to please.

It's hard to stand out in this noisy world. Word of mouth can make or break your reputation. Your product must go beyond serving your customers' needs to actively improving their lives.

Take Evernote, a productivity app that has met the needs of seventy-five million users and continues to make their lives easier. At one point the company was valued at over one billion dollars.[29] It provides a simple way for users to keep track of their notes, files, receipts, and more. As of this writing, Google Keep—which works in a similar way but is free—has begun to pose a competitive threat. Because brand loyalty will only go so far, Evernote will have to keep offering a better solution to keep its customers.

Winning ongoing choice in the B2C sphere often means differentiating their offering. Spotify and Netflix are leading the way with cutting-edge solutions. Mint and Flipboard found their niche in the area of personal software services. Companies like StitchFix, ADT Pulse, Instacart, and USAA blend digital services into their unique business models. For example, The Honest Company lets you customize your diaper delivery online, and ADT Pulse added remote access to its security camera service.

Across the board, successful B2C companies provide simple processes for opting in and out of services, and many also offer pay-as-you-go options. These features allow customers to more easily choose the companies over and over again.

MAKING CHOICES IN THE B2B SPHERE

In the B2B world, you have two audiences to please: the buyer and the actual user. The buyer has to want to purchase the product initially—but if the users aren't happy and aren't getting their jobs done, buyers will take their money elsewhere.

In this world, the purchasing process is getting easier. Many businesses today buy B2B products using credit cards. At the end of the year, they look at the invoice, see if the product was used, and cut it off if it wasn't.

Barriers to entry are lowering, so buyer and user choices carry more weight. In the past, if a company wanted to purchase a tool for customer relationship management (a CRM), they might have invested many years and millions of dollars. Today, they need one software purchase of Salesforce, and their CRM can be up and running in a few months.

We are also experiencing a "consumerization" of business products. Software is a part of our day-to-day existence, not just our professional lives, so customer

standards drive product choice and innovation happens from the ground up. The younger workforce, in particular, is moving consumer products into the workplace, driving expectations, and influencing how B2B purchases are made.

It grows easier each day to adopt—and abandon—digital products. To make sure customers choose you over your competitors, you must focus on building products that solve for need.

---

22 Matthew Miller. "3 weeks later and the Zune is better than the iPod." The Mobile Gadgeteer. December 5, 2006, https://www.zdnet.com/article/3-weeks-later-and-the-zune-is-better-than-the-ipod/.

23 Greg Sterling. "ComScore To Report Google Maps Now Number 1." Search Engine Land. February 14, 2009. https://searchengineland.com/comscore-to-report-google-maps-now-number-1-16570.

24 Julie Bort. "Waze cofounder tells us how his company's $1 billion sale to Google really went down." Business Insider. August 13, 2015, https://www.businessinsider.com/how-google-bought-waze-the-inside-story-2015-8.

25 Tanguy Catlin, Ewan Duncan, Harald Fanderl, and Johannes-Tobias Lorenz. "The growth engine: Superior customer experience in insurance." McKinsey & Company. April 2016. https://www.mckinsey.com/industries/financial-services/our-insights/the-growth-engine-superior-customer-experience-in-insurance.

26 Daniel An. "Find out how you stack up to new industry benchmarks for mobile page speed." Think With Google. February 2018. https://www.thinkwithgoogle.com/marketing-resources/data-measurement/mobile-page-speed-new-industry-benchmarks/.

27 Apteligent Product Team. "Data Report: Crash & Churn Edition." Apteligent. https://www.apteligent.com/2016/11/data-report-crash-churn-edition/.

28 Jared M. Spool. "Understanding the Kano Model—A Tool for Sophisticated Designers." UIE. https://articles.uie.com/kano_model/.

29 "Evernote—The $0 Growth Engine." Growth Studies. https://growthhackers.com/growth-studies/evernote.

CHAPTER 7

SOLVE FOR NEED

Jessica here. Eight weeks after giving birth to my first child, it was time to go back to work. I had no idea how I was going to do it. I was exhausted, stressed, and anxious about how I could possibly make it all work. And on top of all that, I had nothing to wear. My whole life was radically different and so was my body. I had no idea what to wear and no time to shop. I needed help. A colleague shared that a few women at 3Pillar used StitchFix, a clothing subscription service. I filled out a profile, explained my need and preferences, and then a box of clothes arrived at my doorstep, in the right sizes and styles for my new life as a working mom.

It was easy, it was convenient, and it helped reduce my stress in a time of tremendous disruption. Not only did I feel like I could go to work looking professional, I felt supported. I'll always be grateful for this service!

A successful product must solve a need. The personal finance giant Intuit know this; they have run their "follow me home" program for years to keep staff apprised of user needs. In the program, staff members spend time with people in their homes and offices to better understand their lives and work. User Experience practitioners call this "ethnographic research."

By getting to know their customers so personally, Intuit noticed that some of them were using Mint to tag expenses in unexpected ways. A growing number of customers were involved in the gig economy (e.g., driving for Lyft or renting out their home on Airbnb) and were trying to track expenses for taxes. Intuit also noticed that thousands of dollars of potential tax write-offs went unclaimed.

As Intuit innovation leader Ben Blank shared at Lean Startup Week in 2017,

Intuit's observations uncovered a new need in the market—their customers needed an easy way to capture those write-offs—and the company was uniquely positioned to meet that need.[30] In response, Intuit developed and launched QuickBooks Self-Employed.

Most companies don't develop in direct response to a discovered need. It's far more common for a great product to launch with considerable hype, only to fail when it becomes clear there isn't a need for it. Dean Kamen, inventor of the Segway, expected to sell 10,000 Segways per week as soon as the product launched. Shockingly, he sold just 30,000 Segways over the next *six years*.[31] What could possibly account for this massive misjudgment? The Segway was certainly a superior piece of technology. But nobody needed it—*nobody chose it*—and so it failed.

Kamen is not alone. Products such as Google Glass, Amazon's Fire Phone, and Facebook Home have followed a similar path. A study by CB Insights found that 42 percent of failed startups collapsed because there was no market need in the first place.[32] "I realized, essentially, that we had no customers because no one was really interested in the model we were pitching," wrote one respondent, whose product helped doctors run their offices more efficiently. This was a "nice to have" for doctors, but it didn't solve for their core need: attracting more patients.

Successful products thrive at the intersection of customer outcomes and business outcomes, where a self-fulfilling cycle between the customer and business begins. In essence, the satisfied customer funds the next iteration of your product, making it even more desirable and useful.

So, will it help to learn more about your customers? Maybe. Many companies do invest heavily in learning more about their customers by collecting data on their purchasing habits. They assume that the more they know about customers, the more accurately they can predict what customers will buy. But Harvard professor Clayton M. Christensen argues that demographic data (race, gender, income) or purchasing data doesn't actually help us understand need; it simply shows correlation. Instead, he urges companies to look at the jobs customers are trying to do: what are they trying to accomplish in a given circumstance?[33]

A successful product will help someone do the job that they can't do today. The job isn't purely transactional; the social and emotional dimensions matter too.

Consider the success of the Dollar Shave Club. Shaving is not the most exciting topic. It's just one of those things people take care of in the bathroom but no one wants to talk about. Until suddenly, everyone was talking about it.

Michael Dubin, the founder and CEO, launched a hilarious, offbeat, and totally relatable promotional video that had viewers in stitches while they absorbed DSC's value proposition: an affordable, fun solution to an everyday need.[34] "Unlike other big brands," writes Ramona Sukhraj at Impact, "DSC makes the act of buying your monthly razors something worth looking forward to and smiling about—and they even have the added bonus of being more affordable. As a customer, you really can't go wrong."

And the customers kept coming. The video went viral—it has been viewed almost twenty-six million times.[35] By July 2016, the company had 205 employees, three million subscribers, and was purchased by Unilever for one billion dollars.

The product was ordinary—but the presentation was extraordinary. All men and women need razors, but Dubin found a way to make them want to choose his. He tapped into the thirst for a delightful "experience" associated with the product—in this case, attractive packaging that includes free samples, a monthly lifestyle newsletter, and a sense of belonging (the little word "club" goes a long way). The product experience transforms something mundane into something amusing and enjoyable; yet, at its core, it meets a need.

FAST, FOCUSED, AND FLEXIBLE

We need to listen, watch, and learn more about our customers in order to anticipate their needs, but this doesn't mean we should expend precious resources to commission complex studies that produce little in return. How often have you been in a meeting when someone shares hefty research documents, decks, journey maps, or reports and says, "You know, not much came of that." Instead, focus on uncovering need through fast, flexible, and focused research.

FAST

Fast means doing just enough research to inform the *next* step, not *every* step. This yields a far higher ROI and chance of success than heavily involved research efforts. In just a few weeks, it's possible to confirm if ideas are viable and define the major elements (i.e., flow, content model, interaction model, key screen).

FOCUSED

Stay focused to answer the big, seemingly intractable question of the day. Over time, you will get a holistic picture of your customer's needs—but you don't need it to get started.

FLEXIBLE

Being flexible means having the tools and practices in place to learn regardless of constraints. Collect qualitative and quantitative data in person and through remote interviews and surveys, sketching and prototyping ideas as you go.

You may think you know already know what your customers need, but you have to ask. And you have to ask the right questions.

You've probably encountered the quote often attributed to Henry Ford: "If I had asked people what they wanted, they would have said faster horses." (There's no evidence that Ford actually said this, though lots of people still deploy it to justify their belief that they know better than their customers.)[36]

If you could go back in time and ask people about their *challenges* instead of what they *wanted*, you'd probably hear that people wanted a lot more than faster horses. Travel by horse was slow, yes, but also expensive, unreliable, smelly, and dangerous (you can easily be crushed by a 1,000-pound animal). You would clearly see a market hungry for an affordable, comfortable, safe automobile. Henry Ford decided to serve that market. In *My Life and Work* by Henry Ford and Samuel Crowther, Ford writes:

> I will build a car for the great multitude. It will be large enough for the family, but small enough for the individual to run and care for…it will be so low in price that no man making a good salary will be unable to own one—and enjoy with his family the blessing of hours of pleasure in God's great open spaces.

Ford's solution dominated the market at first, but over time, other companies moved toward installment selling, different models, and annual model changes. Ford stalled when it failed to recognize and adjust to the changing market. Solving for need never stops.

WHAT IS A NEED?

Customers' needs are seldom simple, and it pays to recognize that as Ford did.

Needs have four characteristics. Stanford professor and entrepreneur Steve Bank, credited with developing Customer Development (a precursor to Lean Startup), identified them this way:[37]

1. The customer knows it's a problem.
    - They say, "Ugh, invoice reconciliation sucks."
    - Customers will only pay to solve problems that they see and accept —not ones that are invisible to them.

2. The customer is feeling pain.
    - They say, "It takes up to a week each month."
    - Pain comes from wasted time or money, frustration, mistakes, or risks. The less it hurts, the more likely the customer will ignore it. The more it hurts, the more likely the customer will consider change.

3. The customer is trying to solve it alone.
    - They say, "We've tried x, y, and z with no luck."
    - If an existing method fails to meet people's needs, they may go to great lengths to solve the problem using tricks, workarounds, or spreadsheets.

4. The customer is willing to spend money on a solution.
    - They say, "I'll sign a contract tomorrow if you could just make this easier."
    - If it's a real need, they will give you an email address, credit card number, letter of intent, or signed contract. You don't have a business until someone is willing to pay. Anything before that is a public service.

DISCOVERING NEED

More traditional and formal research methods with large sample sizes and deep inquiry do have value, but that's not our focus here. Although these conventional methods are useful for answering big, strategic questions and pointing teams in the right direction, the work of making products is best done nimbly.

Uncovering needs is surprisingly simple. You don't have to expend tons of capital, administer extended surveys, or conduct time-consuming analysis to uncover the problem, the pain, and a potential solution. You just have to talk to

people. Every day, we pick up fascinating details in casual conversations—think of those interactions as interviews, which are a great tool for discovering needs. You can conduct these interviews while waiting in line, ordering food, or driving for Lyft. You never know where the next game-changing idea may come from; it could be a customer support representative, a salesperson, or an accountant in your finance department.

"Need Discovery" should be part of everyone's job description. Companies that charge everyone with discovering need have a competitive edge. If you get everyone in the company in the habit of asking questions and trying to understand customers beyond isolated transactions, you'll uncover all sorts of needs. Encourage your people to investigate different aspects of customers' lives and find out how your product or services fit into them. Help people take note of customers' challenges and proactively find ways to address them—even if at first glance those challenges seem unrelated to the project at hand.

You want your team to do more than just execute orders. Solving for need means your team members should think of themselves as researchers or diagnosticians. They must resist the urge to administer the usual medicine, slap on a bandage, or perform a single major surgery. They have to probe until they find the true source of pain—the root cause of the challenge—not just the symptoms on the surface. Understanding the scope of the need will not only help you design a solution for that one client's challenge—it may open up an entirely new solution that could apply to a variety of customers.

You don't have to talk to that many people or ask complicated questions, either. Nielsen Norman Group found five to be the ideal number of participants—enough to confirm your findings to the point you can start work on the next idea.[38] If you want to get gut-reaction feedback about whatever you want to build or sell, describe the idea minimally, and ask, "What do you think?" By casually throwing out an idea, you can gauge how different people interpret the idea based on their experience and needs.

A needs inquiry should feel friendly. Follow the natural flow of conversation. Asking structured questions is impersonal and unlikely to make people open up. If you have a general sense of what you want to know, just let the conversation flow and ask connected questions; more often than not, you'll learn things you didn't even realize you needed to know.

This isn't an easy transition to make. Taking this approach means getting comfortable with smaller samples, more frequency, more prototypes. Teams will need to get used to prototyping ideas and showing them to customers without worrying about "waste." Not only should it be okay to discard prototypes, it should be encouraged.

Think of your prototype as a movie set. Do just enough to make it believable and easy to change when the director needs something different. Behind the set, it's ugly and unfinished. So what? The idea is what makes a prototype valuable, not the code behind it.

Do more listening than talking. Test ideas, assumptions, and customer segments between interviews. Then go back to the customer and iterate with another prototype.[39] In the follow-up conversation, you might present a black-and-white drawing, a website landing page, or a limited functionality prototype—just walk them through it and see what they say.

Always ask if there is anyone else you should talk to. Not only will you find more people to interview, but you'll also learn how the person you're talking to thinks about your product and customer target.[40]

HOW WILL WE KNOW IF WE'VE SOLVED FOR NEED?

To know if you have solved for customer needs, you can reference three factors: adoption, engagement, and referrals.

ADOPTION

Adoption is the process of someone becoming an active customer or user. Adoption doesn't occur with one download or occasional use of the product; instead, it is connected to the initial frequency of use and looks different for each type of product.

For example, you would not be counted as an adopter of a fitness tracker app if you simply downloaded it, poked around it a bit, and didn't come back to it for days. To be fully adopted, a fitness product should be used three to five times a week, depending on how often the user works out. Once they log in for a set number of days, they are more invested and probably see value in the product. Other adoption behaviors include connecting with friends on Facebook, hiring a cleaner from TaskRabbit, or booking a yoga class on MindBody.

Keep a lookout for factors that might be hindering frequent use. First, beware of solutions that look “cool” from an engineering standpoint but don’t actually solve any problems. If you aren’t testing against clearly perceived needs, chances are you are building something for yourself—something no one has a reason to adopt. Another adoption limiter is a lack of differentiation from competitors. People won’t flock to your product unless it has a unique value in the market. Trying to be all things to all people won’t bring high adoption rates.

The best way to drive adoption is by clearly explaining how you uniquely solve a specific problem and then making it easy to buy or get started. Dropbox initially drove adoption by creating a video that showed users how they could share files quickly and easily—without carrying around physical media. The video clearly identified how Dropbox solved an emerging problem; as a result, its waiting list jumped from 5,000 to 75,000 “overnight.”[41]

ENGAGEMENT

True engagement means regular and meaningful use. Engaged customers return to you on a regular basis because they still get value from your product. Engagement brings retention and revenue.

Again, the metrics differ depending on the product. A top insurance provider is happy if customers engage on their app four or five times a year. They are coming back to the app when needed—to adjust their coverage or manage a claim. Other companies, like Airbnb, measure engagement much more intensively—they devote entire teams to analyzing who uses their platform, how often, and what types of listings get more views and conversions.

Poor user experience is one sure way to limit engagement. When PBS hired us to help them move from being a stuffy television station to a respected digital property, we focused first on improving the user experience, particularly video quality. Optimizing the viewing experience brought more, and better, engagement. People were willing to come back for the seamless experience PBS began to provide.

If the product is not intuitive—or is inefficient—users feel they are wasting their time. It’s fine to add extra features—the “nice to haves”—but customers won’t continually stay engaged if their “must haves” are not met. Pay attention to the hierarchy of your customers’ needs. Solve problems and they will stick around; ignore them and they will leave.

You also must fulfill your brand's promise of performance and dependability. The Ritz-Carlton promises to be a premium provider with "ladies and gentlemen serving ladies and gentlemen." If you showed up at one of their hotels to find rude staff and dirty premises, you probably wouldn't go back.

If you listen to your customer and adapt to their needs, your product will continue to evolve and customers will stay engaged. If you track engagement using surveys or analytics tools, you'll begin to see patterns. Remember: measure engagement meaningfully, and it should inform development.

REFERRALS

Referrals are a sign that you are doing something right with the customers you have. When your customer believes in your product enough to spend some social capital on you by actively promoting your brand and sharing it with others, you know you're on the right track.

First, get your net promoter score (NPS), which you can find via a simple survey that gauges customer loyalty. Your NPS is not a diagnostic—it's more of a course grade that serves as a benchmark against other companies in your sector. Most important, your NPS will give you a good idea of how likely it is that your customers will refer you to others.

Referrals in the form of reviews are powerful. Even if customers are allergic to your marketing and sales pitches, they might react favorably to "pitches" from others they perceive as being like themselves. Much of Amazon's explosive growth is due to engaged users, who rate and review products.

When your content is relevant, personal, and engaging, customers will want to share it—so make referrals easy for them. You can even incentivize them. The easier the referral process is, the faster your user base will grow. Evernote's simple "share" feature helped the company expand to over seven million users. But don't push too hard—asking too frequently may be off-putting and wind up backfiring. If your customers are satisfied and engaged, they will refer you to others on their own accord.

IMPLICATIONS OF SOLVING FOR NEED

When you recognize what brings your customer pain and pleasure, your product (and your team) will improve. Every time you release a new product, you'll learn something that will inform the next one. How would your product score

when it comes to adoption, engagement, and referrals? Combine this information with quantitative metrics—market share, profit, and revenue—and you'll be able to see where customer outcomes meet business outcomes. But remember: the product is never done.

---

30 https://www.youtube.com/watch?v=0GwQ5KEDhAA&t=6s.

31 Jordan Golson. "Well, That Didn't Work: The Segway Is A Technological Marvel. Too Bad It Doesn't Make Any Sense." *Wired*. January 16, 2015. https://www.wired.com/2015/01/well-didnt-work-segway-technological-marvel-bad-doesnt-make-sense/.

32 "The Top 20 Reasons Startups Fail." CB Insights. February 2, 2018. https://www.cbinsights.com/research/startup-failure-reasons-top/.

33 Clayton M Christensen, Taddy Hall, Karen Dillon, and David S. Duncan. "Know Your Customers' 'Jobs to Be Done.'" *Harvard Business Review*. September 2016, https://hbr.org/2016/09/know-your-customers-jobs-to-be-done.

34 Ramona Sukhraj. "How Dollar Shave Club Grew From Viral Video to $1 Billion Acquisition." Impact. July 21, 2016. https://www.impactbnd.com/blog/how-dollar-shave-club-grew-from-just-a-viral-video-to-a-615m-valuation-brand.

35 https://youtu.be/ZUG9qYTJMsI.

36 Patrick Vlaskovits. "Henry Ford, Innovation, and That 'Faster Horse' Quote." *Harvard Business Review*. August 29, 2011, https://hbr.org/2011/08/henry-ford-never-said-the-fast.

37 Blank, S. G. (2007). *The four steps to the epiphany: successful strategies for products that win*. [California], S. G. Blank.

38 Jakob Nielsen. "How Many Test Users in a Usability Study?" Nielsen Norman Group. June 4, 2012. https://www.nngroup.com/articles/how-many-test-users/.

39 Jessica S. Hall. "What is a prototype?" Hallway Studio. March 19, 2014. http://hallwaystudio.com/what-is-a-protoype/.

40 For detailed instructions on interviewing, see the work of Indy Young and Cindy Alvarez.

41 "How DropBox Started As A Minimal Viable Product." TechCrunch. 2012. https://techcrunch.com/2011/10/19/dropbox-minimal-viable-product/.

CHAPTER 8

THE PRODUCT IS NEVER DONE

David here. Early in 3Pillar's history, we were a boutique consultancy. As a matter of course, we would do project work for our clients, often cleaning up the "mess" of offshore development gone wrong. One day, after completing yet another cleanup project for a particular client, the CFO said something to me that I will never forget: "You know, we love you guys, but we just can't afford to keep doing this. I don't need cheap offshore prices. If you'll figure out how to deliver this value proposition at a more sustainable cost, we'll keep you around forever."

That comment changed the course of our history. We pivoted our strategic focus to delivering "sustainable innovation"—and haven't looked back.

Development teams tend to think in terms of discrete, closed-end projects. To make matters worse, software development budgeting has traditionally been done on a project basis, exacerbating "project thinking." Like the IT Mindset, a project mentality is counterproductive, because a digital product is never done. Customers expect ongoing evolution and improvement of their favorite products: fail to meet their expectations and you'll lose the customers you worked so hard to win.

At the onset of the digital economy, it was said that Amazon released new software into one of their products every 11.6 seconds.[42] Today, Amazon releases software *every second*. The lesson? The companies that dominate are always innovating.

Companies with a Product Mindset don't fear the inevitability of change; they embrace it. They don't consult an old checklist to call a product done. They

understand that a healthy backlog indicates they are collecting feedback—which helps determine how and when they'll evolve next. And they must evolve—or they'll dissolve.

THE INEVITABILITY OF CHANGE IN THE DIGITAL ECONOMY

Blockbuster is often cited as a company that failed to adapt. But few remember that Blockbuster actually competed quite well against Netflix in the early years of disruption.[43] At first, both Blockbuster and Netflix thrived in the mail-order DVD rental business. And because Blockbuster's "Total Access" program allowed people to return DVDs to a physical location and exchange them for new ones then and there, they almost beat Netflix.[44] Blockbuster's mistake was in considering disruption a finite project. Once they adapted their retail business, initiated their first digital product, and survived the onslaught of a new business model, they rested on their laurels.

Netflix kept going with a singular focus on defeating Blockbuster. According to The Motley Fool's Aaron Sankin, "At virtually every stage, Netflix designed its system by asking a single question over and over again: How do we make this experience better than renting a movie from Blockbuster?"[45] Netflix went all in on video streaming, to the point of renaming the core DVD rental business (Qwikster) and nearly sabotaging the entire business by losing 800,000 US customers.[46] While a tactical marketing error, the overall strategy proved correct and ultimately put Blockbuster out of business.

Blockbuster failed to embrace *continual* evolution and instead faced dissolution. Similarly, MapQuest didn't embrace the degree of change that was needed and ceded its primary spot in the market to Google Maps and Waze. Kodak had more digital capabilities and patents related to digital photography than anyone in the world, yet was unable to use them to disrupt their own business. Even software companies such as Adobe Creative Suite have been outdone by companies that offer nimbler tools.

All of these companies got comfortable and began to play defense instead of offense. Success in the digital economy means innovation. Product development is not a finite project. Your work is never done.

WHAT DRIVES CHANGE

Historically, innovation was driven from the top down. Even the internet was originally driven by government research, then large research institutions, then

the corporate world, and finally the average Joe.

Now, innovation often comes from the bottom up, as it did with the iPhone. The iPhone's path was the exact opposite of the internet; in this case, customers drove innovation, wreaking havoc on businesses by bringing these devices into the enterprise and expecting to use them. IT organizations had to scramble to figure out how to deal with the devices. These days, customers in general demand incremental improvements instead of slow, institutional attempts to minimize disruption and control the environment.

The market itself, and business model innovation, also drive change. Consider the introduction of financing into the automotive world. GM was able to gain market share over Ford because it adjusted its business model to embrace that change. Today, the market is driving change again as we transition from the long-held license model to a pay-as-you-go model—software as a service.

Technology drives change that alters entire industries. The proliferation of devices and mediums that deliver media (Roku, Apple TV, OTT distribution) have allowed some organizations to adapt and become content aggregators. Netflix does not offer just one channel.

Technical standards drive change. How many times a day do you pull out your phone to see that your apps need updating? The process of updating is seamless. With heightened technical standards, consumers expect products to work. Today, slow loading times and performance issues will sound the death knell of a product.

Finally, regulation drives change. In the digital economy, increased regulation is entirely plausible—just look at net neutrality and the emergence of the European GDPR.

FUNDING A NEVER-DONE MINDSET

Change is inevitable and comes from many directions. IT organizations that have been trained to gauge success based upon meeting time, scope, and budget commitments need to make a shift in their thinking and embrace change. The never-done Product Mindset values not a single finished product but its continual evolution—which in turn drives ultimate success in terms of market share, revenue, and profit.

This means that instead of treating product development as a project—like a campaign, a CMR implementation, or an audit—you need to treat it as a core component of your ongoing monthly operational spend. We view building sales teams as a long-term, ongoing investment in the growth of business. Product development is no different. By baking change into product development, you will thrive off of innovation, take the right risks, and have a much greater chance of long-term success. In short, you will excel at change.

---

42 https://www.youtube.com/watch?v=dxk8b9rSKOo.

43 Greg Satell. "A Look Back At Why Blockbuster Failed And Why It Didn't Have To." *Forbes.* September 5, 2014, https://www.forbes.com/sites/gregsatell/2014/09/05/a-look-back-at-why-blockbuster-really-failed-and-why-it-didnt-have-to/#5bf4c6311d64.

44 Aaron Sankin. "How Blockbuster Almost Beat Netflix." The Motley Fool. November 14, 2013, https://www.fool.com/investing/general/2013/11/14/how-blockbuster-almost-beat-netfilx.aspx.

45 Ibid.

46 Ashley Rodriguez. "As Netflix turns 20, let's revisit its biggest blunder." Quartz. April 14, 2018, https://qz.com/1245107/as-netflix-turns-20-lets-revisit-its-biggest-blunder/.

CHAPTER 9

EXCEL AT CHANGE

Jessica here. Five years ago, I worked at a company with huge data and content products. One Saturday a month, an alarm would wake me at 2:00 a.m. Bleary-eyed, I would stumble to the couch and open my laptop. Why in the world would I need to be up at this hour? Good question.

My company could only release software once a month. And to make sure that what our team designed showed up the way it was supposed to, I had to do user acceptance testing (UAT) in real time—in the middle of the night, when taking the system offline would cause the least amount of disruption to users. I had it easy, though: a whole team of system administrators, project managers, and engineers worked from Friday night straight through to Saturday afternoon to do the full set of testing deployments. Every single month.

Despite the regular frustrations and limitations around deployments, they still served a purpose: they constrained how much could be done at any one time. After all, just because you can change something doesn't mean you should. My experience then and now has convinced me that you can either try to "manage" the inevitable change or you can embrace change for all it's worth. You can excel at it.

Change is hard. Big transitions rarely go smoothly. When Netflix split their customer base to create Qwikster, it cost them 800,000 US subscribers almost instantly; recovering from this miscalculation took years.[47] When Hertz added an asterisk to their forms, thus confusing the vast majority of users, their form completion rates tanked and they lost thousands of orders within twenty-four hours. Even social media giant Facebook is not immune; when Facebook decided to roll out "year in review" posts, it failed to consider that in addition to

highlighting the best moments of the past year, the feature would also remind people of the tragedies that had befallen them. (One user was reminded of a child who had died.)[48]

Although these examples show how well-intentioned change can go terribly wrong, most companies are acclimating to a faster pace of change. In fact, a recent 3Pillar survey showed that more than 60 percent of companies were deploying changes not once a month, in the dead of night, but instead somewhere between once a week and once a month. More than 4 percent deploy multiple times every single day.

Many companies already excel at change. Amazon is legendary on this point. The company makes a thousand little changes every day—adjustments so small that you probably don't notice them. Google takes a different strategy. They often let users preview new features before launching them. Users appreciate this collaborative approach to change, and most stay with Google's products and services as the company progresses.

Other companies are learning as they go. One of these was an early 3Pillar client, a company called WellAware. They wanted to create a system of sensors to be placed in assisted living facilities to monitor residents and sound an alert if something was wrong (e.g., if someone wasn't moving, or if the stove was on too high). After months of work with no product release—and tremendous pressure from investors—WellAware asked us to step in. They had about five months of "runway" left—their future existence depending on them being able to outlive the runway and get a product out.

But they didn't have the sensors. They hadn't completed the algorithm. They hadn't finalized the visual design. We could see we would have to run fast over shifting ground—a scenario that would have sent many teams sprinting in the other direction. But not this 3Pillar team. Instead, we dove in and got the product running in a test environment. We made frequent updates, pulling this out, putting this in, seeing what would work. WellAware evolved rapidly. By embracing swift change, the team delivered a working product in very little time—and saved the company.

CHANGING THE RIGHT WAY

The keys to excelling at change are accessible to all. Let's look at what you need to do to make change wisely.

TRACK RESULTS

The success of all of the companies mentioned above depends on tracking. By continually monitoring the results of changes as they are made, teams can address problems quickly. They can afford to make mistakes here and there because they are constantly noticing trends and evolving as needed. Tracking also minimizes risks: if a mistake happens, and it's found quickly, it will have less impact. This is sometimes known as "failing forward."

COMMUNICATE EVERYTHING

The most effective changes are clearly communicated and aligned with the greater business mission. Engineering, customer service, operations, and marketing should all know what's coming.

ITERATE VERSIONS

Change should be iterative. Quick iterations are like a series of small bets: when users can interact with each new version of a product, they can offer useful feedback. When development teams are attuned to the effects of each change, they can better anticipate and meet customer expectations.

BE EFFICIENT

Change should be efficient. Effective change shouldn't require huge expenses, or asking entire teams to work through the weekend, nor should it rely on one team member who has all the know-how. If the change goes horribly wrong, it should be easy for anyone on the team to backtrack.

CHANGE INCREMENTALLY

To excel at change, you must deploy in small pieces so as not to overwhelm users or run unnecessary risks. UX expert Jared Spool tells the story of an e-commerce company that released an entirely new version of its website and lost two million dollars in the first few hours. It took them a year to make that money back. That lesson was clear: excelling at change does not mean changing everything all the time. It means being deliberate and thoughtful—optimizing your sequence of actions to make the most out of your change.

EVALUATE DATA

In addition, you have to be careful about how you respond to data, the market, or customer demand. Sometimes what you hear is only noise, not a true signal. Other times, you need to pay attention to an important trend. The key is to change when you need to and hold back when you don't; don't be afraid to

watch for a while before jumping in.

STAY CURIOUS

Organizations that excel at change are naturally inquisitive and want to explore new possibilities. Let curiosity guide you as you navigate your options, determine the best decision, and make one small change at a time.

CREATING A CHANGE-READY ORGANIZATION

An organization that's ready for change must also be equipped with the right processes, people, and tools to manage it. These will look different to different types of businesses.

For instance, a small startup trying to survive until the next month will generally have a much greater tolerance for change than an organization with a large customer base that's counting on them to stay. The more established your proven systems are, the less you want to make changes—especially too many changes at once. Consider air traffic control towers: none of us want the people who build these systems to play too fast and loose with the rules. We might be okay with little changes here and there, but we'd probably think twice about boarding a flight if the entire system looked different overnight.

The personalities of some leaders will vary too. Some are constantly drawn to change—beware "shiny object syndrome," or always wanting to try new things. Others will be more cautious. Both will need to learn to balance—when to stretch and when to hold.

FOSTERING CHANGE-READY EMPLOYEES

Along with developing change management processes in your organization, you need change-ready employees. When your organization needs to accelerate changes, employees are directly affected. The employees that can roll with the punches are the ones who will make your organization successful.

Leadership coach Alan Stein, Jr. says that when people hear the word "change," they immediately think of something being *taken away* from them. "Change" has such a negative connotation that people rarely consider the benefits. Viewing change as a positive opportunity is counter-cultural, so you have to actively, deliberately, and repeatedly train your employees to adopt this mindset.

Change is inevitable. Consider that the typical organization has undertaken five

enterprise changes in the past three years, according to Gartner, and 73 percent of organizations expect more change initiatives.[49] Change is also expensive—some 66 percent of these changes will fail, costing millions of dollars. Employee buy-in can make all the difference here. Gartner's research shows a higher probability of success when employees understand the goals of the change, have the skills for change, and are ready for change.

One way to help a development team navigate change is by involving them in the decision-making process. Encourage them to suggest and evaluate options alongside leadership. Together, everyone can look at potential changes, evaluate how they will affect the business, and then decide if they have a good fit or not.

Vetting every change decision may seem arduous, but it can actually be quite efficient. With the right attitude, you don't have to re-make decisions; you can acknowledge and mine your backlog at designated review points and then make fresh decisions based on what you see in the larger marketplace. When leaders provide the context for the problem, the team can offer better solutions—and together they will make better decisions with tradeoffs in mind.

Remember to also reward experimentation. Develop your teams so they feel free to pursue this kind of decision-making and are unafraid to risk making a mistake. You want them to feel comfortable enough to make bets, even if they don't pay off. Embracing change and not punishing failed bets also demonstrates for employees that even when a mistake happens, there are ways to minimize its impact. When leaders model a shared willingness to change direction and shape tradeoffs, employees learn how to bend, not break.

Also encourage your teams to look elsewhere for ideas and insights. Many organizations won't engage with ideas that did not originate within their own walls. The "not-made-here syndrome" suggests that anything that didn't come from inside the organization is a virus that needs to be attacked. This mindset has led to many a missed opportunity in many a business. There's no downside to seeing how other smart, capable organizations run things.

PRACTICES TO EXCEL AT CHANGE

Nurturing a growth mindset in your developers—teaching them to be intellectually curious, ask smart questions, make informed decisions, and take more calculated risks—is crucial to excelling at change. Specific practices can reinforce the new culture and help developers excel at change, including delivery

pipelines, test automation, communication, and continual adjustment.

DELIVERY PIPELINES BRING CHANGE

The core of this practice is the ability to quickly and confidently deliver product changes, whether it's new functionality or fixes to known issues. Delivery pipelines encompass many specific steps and ideas. The most common one is Continuous Integration (CI), which is the ability to test each change, in real time, as it's made. Another is Continuous Delivery (CD), which is the ability to propagate software modifications automatically through testing, staging, and production environments.

TEST AUTOMATION ENSURES PREDICTABILITY

There's no point in delivering a feature on time if the quality is low or causes problems or failures for the user. Automating your testing allows for:

- Early detection of bugs and defects, reducing the negative impact they have and the cost of fixing them
- Testing more things without adding more employees
- Covering more of the codebase
- Testing performance, security, and other nonfunctional areas
- Running tests 24/7 from any location in the world (fewer late nights at the office)

COMMUNICATION TO CREATE TRANSPARENCY ABOUT WHAT'S DIFFERENT

As your ability to excel at change increases, so does the number of changes you make, so it is critical to ensure that all stakeholders know about current and upcoming changes—what has been done, what's next on the docket, what's far down the road. There are lots of tools we can use to prioritize and track work. Pick a tool and use it consistently. Automating and streamlining a work process keeps teams instantly apprised about the status of changes. Shortening the time between coding and failure notification means it takes less time to fix any issue that crops up, as all the context and knowledge is still fresh. Clear communication carries over into communications outside the team as well—issue tracking, for instance, allows product owners to understand and be able to accurately communicate when changes will arrive to their users.

CONTINUAL ADJUSTMENT OF YOUR DEVELOPMENT PROCESS

To excel at change, focus on easy deployment, automated testing, and better environments and tools for developers. Then adjust your planning and

development processes as needed. Be prepared to break work into small pieces and constantly reevaluate your priorities. Try to limit dependencies. The way you architect your product should allow you to work like a kid with a bin of LEGO bricks: take things apart and transform them into something else, experiment with different pieces and different fits, and reconstitute them when necessary. Use automated, reusable tests for better coverage. Make learning an explicit goal of your planning cycles, and use your feedback loop to continually adjust. When you learn faster, you lessen waste and lower risk.

THE GOAL: BUILD FOR CHANGE

The ultimate goal of excelling at change is to be able to build *for* change—to build an environment that is flexible and streamlined. It takes a lot of effort to make a million-dollar decision; it takes no effort at all to make a $100 one. You can start building for change today.

Now that we understand the characteristics of digital products—and how we can leverage them—let's discuss how culture creates the environment for the Product Mindset to thrive.

---

47 Ashley Rodriguez. "As Netflix turns 20, let's revisit its biggest blunder." Quartz. April 14, 2018. https://qz.com/1245107/as-netflix-turns-20-lets-revisit-its-biggest-blunder/.

48 Todd Leopold. "Facebook's 'Year in Review' brings up tragic events." CNN. December 30, 2014. http://www.cnn.com/2014/12/29/living/feat-facebook-year-in-review-tragedy-death/index.html.

49 CEB HR Change Readiness Survey. CEB. https://www.cebglobal.com/content/dam/cebglobal/us/EN/best-practices-decision-support/human-resources/pdfs/making-change-management-work-whitepaper1.pdf.

PART III

USING THE PRODUCT MINDSET

CHAPTER 10

THE PRODUCT MINDSET AND CULTURE

Jessica here. Whenever we teach the Product Mindset, we see eyes light up. I can pinpoint the moment our team has articulated precisely what a company has been struggling to define and explain to others. As soon as our message is clear, the participants ask if we can hold the same training session for their engineers and their executive management. They immediately grasp that the Product Mindset must be something that everyone adopts, no matter their title or job description.

There is often a palpable feeling of hope in the room—hope that they can succeed in the digital economy. It's exciting to be a part of that transformation. This excitement doesn't always last. Putting the Product Mindset into practice is easier said than done. A new paradigm may not mesh well with existing systems, processes, and bureaucracies—not to mention entrenched attitudes. Many corporate cultures simply are not set up for success in the digital age. We've discovered that the companies that are best able to implement the Product Mindset are the ones you'd probably want to work for anyway, because they have an appealing culture.

For more than five years, we have worked with one of the largest and most successful insurance companies in the world. The products we have launched together have driven significant revenue growth and brand recognition. Yet results have been rather hard to come by, in part because the company's large, bureaucratic management style resists many of the concepts inherent in the Product Mindset. Their R&D efforts are buried within an IT organization that rewards cost control. Their funding and procurement processes are project-oriented. Their concern for data security prevents them from reaching out to customers for feedback. The entire organization seems built to resist the Product

Mindset. *C'est la vie*.

On the opposite extreme, we have worked with multiple organizations who have enthusiastically embraced Agile methods. With a laser focus on engineering execution, these organizations tend to excel at change, but they struggle to solve for need—and only minimize time to value when they get lucky.

In this chapter, we will explore the challenges you will face in putting the Product Mindset into practice—and offer ways to overcome them and create a culture where the Product Mindset will thrive.

A SURPRISE FINDING

Several years ago, 3Pillar commissioned a study alongside the University of Maryland to determine the top drivers of innovation. We wanted to answer this question: "What are the most important things an organization can do to ensure success in their product development efforts, specifically as it relates to innovation?"

The results shocked us. The number-one thing successful companies have in common? An attractive culture. The results also revealed that four of the other six most critical factors that make up the Product Development Success Index were directly related to how people think and behave—which is a wider definition of culture:

- *Culture*: including the ability to attract and retain top talent, provide career growth, and offer appropriate rewards and recognition
- *Feedback*: the frequency with which feedback on products is collected from customers and end users
- *Communication*: between business and technical team members as well as within the development groups
- *Staffing*: the appropriate mix of staff from in-house, outsourced, domestic, and foreign workers
- *Collaboration*: the extent to which staff members assist each other and can cut across hierarchy to interact
- *Time/Budget Focus*: traditional project metrics (e.g., on time, on budget)

By far, the clearest finding was that organizational culture is the main asset—or hindrance—to establishing a Product Mindset.

WHAT IS CULTURE IN A PRODUCT ORGANIZATION?

Culture is "not anything you write down on a slide, it's what you do," says Patty McCord, former chief talent officer at Netflix. Now a leadership consultant, she tells CEOs that "the job of creating a culture is yours and yours alone, forever."[50]

Both our experiences and our study support this assertion: the culture of an organization shapes the way an organization thinks and runs. So we need to understand it and figure out how organizations can leverage their culture to positively impact product development.

Culture includes habits that happen by default—what an organization naturally does—and those the company can foster deliberately. The two often go hand in hand. Is the environment of the company one where feedback is embraced? Positive or negative? Is experimentation promoted and failure permitted? Does management require perfection and extinguish the desire for change? What stories does the organization tell, and what stories are corporate legend? These stories shape how people behave and respond.

Culture will either improve or undermine employee engagement and satisfaction, allow or disallow creative thinking and good judgment calls about change, and build or erode trust when it comes to iteration. If the organization embraces new ideas, employees will feel free to experiment—Google calls this "psychological safety." A Google study showed that psychological safety is the defining factor for high performing teams.[51] When ideas are valued and debate is encouraged, people are less fearful of negative consequences and more willing to share diverse ideas. The environment then becomes highly collaborative—and ultimately innovative.

A culture that adopts the Product Mindset empowers everyone—leadership and practitioners—because they share the same vision and have clear guidelines. Employees writing code in a Product Mindset culture do not just implement what is written in a requirement. If it doesn't make sense, they ask questions. When they understand *why* it is being built, they aren't just following directions: they're making judgment calls that align with the company's effort to build to outcomes. And they should be rewarded for it.

Furthermore, a company culture that embraces the Product Mindset allows space for iteration. They understand that perfection is the enemy of progress and allow room to make mistakes, learn, and do things over, ad infinitum.

CHANGING YOUR CULTURE

Some leaders think culture "just happens." But studies have shown that you *can* deliberately create (or change) the culture of your organization.[52]

First, hire wisely. Recruit employees that have the Product Mindset. Then, shape the behavior of a team through training, feedback, discipline, rewards, and so on.

Then, define the culture you want and hold everyone accountable to it. Be candid about the strengths and shortcomings in your organization's culture and what might sabotage the Product Mindset. Define the easy wins that are going to energize everyone, so you can start creating a self-funding environment.

Though there is no cookie-cutter culture that works for every organization, some companies provide excellent models. Netflix, for instance, works to create a "dream team" environment where all employees are expected to contribute. They describe what sets them apart this way:

- Encourage independent decision-making by employees
- Share information openly, broadly, and deliberately
- Are extraordinarily candid with each other
- Keep only our highly effective people
- Avoid rules[53]

Software company Asana takes a different tack: the company intentionally promotes a family-oriented culture, in which they seek to grow and learn together, with a strong focus on mindfulness. One employee describes Asana's approach as "eliminat[ing] ego and practic[ing] mindfulness" and notes that "there's minimal politics, stress, and chaos." Culture is not a by-product; it is, quite deliberately, another Asana product. Justin Rosenstein, a co-founder of Asana, puts it this way:

> "The bottom line is that we're here to fulfill our mission. The way to achieve that mission as quickly as possible is through a fast-growing business. And the way to achieve that for the long run is providing a workplace where employees can thrive, not only by working hard, but by living well."[54]

Facebook's culture couldn't be more different: its motto is "move fast and break things." This was the guiding principle behind Facebook's ability to minimize time to value. Their mantra reinforced the idea that speed was more important

than perfection or stability. This makes sense at a company like Facebook; for obvious reasons, we wouldn't want automakers or air traffic controllers to adopt such a motto. For the most part, Facebook's approach drove a strong Product Mindset culture—but like anything, it has downsides. Recently, concerns regarding security and data privacy have called into question whether speed truly is more important than anything.

There is no one culture that is right for every organization. Each of these companies took a different approach, but each clearly defined their ideal culture. And culture shapes how employees think and behave—and whether or not they embrace the Product Mindset.

THE TONE AT THE TOP

Culture travels from the top down and from the bottom up. Firms like Deloitte or Ernst & Young often look at "the tone at the top" when doing audits. When assessing the risk of fraud in an organization, they want to know if leadership is known for integrity, or if they seem more inclined to prioritize results, public perception, or other items over an accurate representation of the facts.

The tone at the top will inevitably shape culture—for better or worse. Leaders must clearly identify what behavior will or will not be tolerated. At Enron, for example, leaders praised "creative finance" at the cost of everything else. This led to a façade of exceptional financial performance and, eventually, to Enron's infamous demise.

SAYING NO

Whatever the culture, one of the major challenges all leaders face is deciding what to say no to. Saying no means making hard calls that create space and time for teams to be innovative.

Here's an example. One of our clients specialized in providing data and insights to the financial services companies. They wanted to change their performance, but were unable to make the hard decisions necessary to effect the change. They had forty digital products within their portfolio—and although only ten produced any significant revenue, senior management wouldn't shut the rest down. There was always a reason: it would be too disruptive, too costly, too upsetting. There was always a promise: a little more time, a few more dollars, or a newly imagined vision would change the financial picture.

They didn't want to tell their clients that the underperforming products were

going away, even though the cost of carrying them—in mindshare, resources, and time—far exceeded the value created. Product teams had to continue to maintain and test them. Profits that otherwise would have been used to reinvest into the infrastructure and ongoing evolution of their core products were instead used to support them.

These products were a huge drain on the company, yet leaders weren't willing to take anything off of the to-do list. In fact, they continued to add more feature ideas, more product ideas, and more initiatives. They declined to answer questions about what they would stop doing to create space for new things. And so, dynamic new products and initiatives lay dormant because no one had time to do them. They defaulted to the activities they did in the past that helped them hit their personal performance goals.

TROOPS ON THE GROUND

Troops on the ground drive and shape corporate culture as much as the tone from the top. As an executive, it is essential that you create an environment where a strong product culture can thrive. Without your executive sponsorship, culture will undoubtedly go awry.

To encourage the development of a healthy product culture, focus your efforts on providing the following guardrails for your team, which will ensure that your efforts to empower are effective.

First, provide the guardrail of *strategic direction*. We can gather the best mountain climbers in the world, buy them the most expensive equipment, and empower them to climb—but if we don't tell them that we are trying to scale Mount Everest, there is a low probability that they will reach the summit. Teams need to know what they are building. They need to be pointed in the right direction. Empowerment without strategic direction is not empowerment at all; it's a *lack* of leadership.

Second, provide the guardrail of *guiding principles*. Guiding principles tell the team how to think and make decisions in the moment. All teams will encounter obstacles; with guiding principles, teams will know what is important, how to prioritize, and how to exercise judgment when those obstacles are encountered. For our team of mountain climbers, guiding principles will indicate whether they should optimize for time or safety. Without guiding principles, the climbers are likely to make decisions that are inconsistent with intent and inconsistent with

each other. This leads to chaos. The climbers will not only put themselves in harm's way, they will do so inconsistently—and ultimately fail to beat the world record.

This entire book is about the three guiding principles that our experience has shown are the most important to driving success in the digital world. Teach your teams to minimize time to value, solve to need, and excel at change. If they know these principles, they will consistently make the right decisions.

The final guardrail that an executive sponsor must provide is the guardrail of *example*. A leader must demonstrate through their actions that they are committed to what they say. They must make difficult choices, embrace tradeoffs, and demonstrate through the decisions they make that they are committed to the strategic direction and guiding principles. If the strategic direction and guiding principles are only spoken, not demonstrated, they will fail to become ingrained within the culture.

Putting these three guardrails in place will create an environment where culture can truly grow.

Another way to foster buy-in is to tap people who care about a certain topic or project as internal champions and go-to resources. One way we built buy-in to the Product Mindset at 3Pillar has been to have Product Mindset champions across the company—dedicated and passionate employees who train colleagues, sponsor activities, and tirelessly advocate for the Product Mindset with their clients. Their energy and commitment have helped the Product Mindset take hold inside 3Pillar and within our clients' organizations. These champions interact with and are among the troops on the ground on a daily basis. They motivate, inspire, and ensure adherence to these guiding principles.

An abundance of management books offer advice and tools for cultural development. The beauty of the Product Mindset is that it can harmonize with all of them. What's most important is that you recognize and use the tools you choose to promote a Product Mindset culture.

THREE KEY ELEMENTS

When your organization is challenging the status quo and trying to disrupt markets, you want people to have the freedom to exercise their creativity, the psychological safety to communicate openly, and the discipline to focus on

what's important. You want team members to experiment and be comfortable taking risks.

There are three elements of culture that motivate these behaviors and sustain the Product Mindset: empowerment, freedom, and communication. If you can integrate these components into your organization, you will be ready to shine in the digital economy.

A SENSE OF EMPOWERMENT

In his book *Leading Teams*, organizational psychologist Richard Hackman writes, "With many choices that the team has to make, choice of mountain is not among them." Hackman provides a simple picture of employee empowerment. Giving employees the mountain and letting them decide how to scale it empowers them. They'll know if they are making progress, standing still, or backsliding, and can change their path as they see fit.

Avoid micromanaging by telling them where to go and how to get there. However, you should offer guidelines—a structure within which those on your team can make their own decisions. You will know your employees feel empowered if most ideas and decisions come from the product team itself.

It may seem counterintuitive, but placing clear boundaries around employees can actually empower them. Research done with preschoolers shows this.[55] In the study, one group of kids enjoyed a normal recess within a fenced area that protected them from busy roads bordering the school. They ran around and explored. A second group was sent to recess in the same busy area, but without a fence in place. These kids stayed in the center of the playground, scared to play because they had no sense of boundaries. Without the fence, the children actually experienced less freedom. They were more cautious and less creative; they were safe, but not having much fun.

Setting clear boundaries empowers employees to be brave enough to push all the way to the edges. They know they won't get their hand slapped if they stay within their own "playground." Without boundaries, they may wonder what invisible restrictions might lead to arbitrary punishment.

THE FREEDOM TO WRESTLE WITH IDEAS

One of our cybersecurity clients wanted to create a new product and asked us to help vet the idea. Rapid research, prototyping, and testing showed the idea had

little chance of success. We recommended they shelve it. Instead, they built it. Management mandated that they become a multi-product company; they were more afraid of negative consequences being imposed by their bosses than by the marketplace.

CARFAX takes a different approach. Its unique culture embraces the “wisdom of crowds.” In this world, the best idea wins. The company thrives when ideas come in from all directions. Their culture gives employees extreme freedom to make decisions and suggest ideas. This has led to a positive culture, the adoption of a Product Mindset, and exponential corporate growth. Of course, as with any culture, freedom also has its downsides. Without guidelines, employees can become paralyzed; without a clear sense of direction, employees don’t always know how to succeed. For CARFAX, however, the benefits of open communication, robust collaboration, and an abundance of original ideas far outweigh the downsides.

Equinox has a unique spin on the Product Mindset culture. Its leaders give employees the freedom to wrestle with ideas, but in a focused manner. They provide a clear sense of direction and explain specific outcomes. Several years ago, one of 3Pillar’s Technical Leads, Deepak Aggarwal, proposed an alternative feature that he believed would add significant value to Equinox and its customers. Equinox quickly embraced the idea and prioritized its development.

The impact was profound. The enthusiastic adoption of the idea, and its tremendous success, spurred a flurry of ideas. Within a few months, more than 60 percent of the features introduced in Equinox’s next digital product release emanated from a small development team in India.

Equinox’s willingness to listen, prioritize, and act upon a good idea—one proposed by a consultant, not a direct employee—modeled an appreciation for fresh thinking and fueled further innovation. Because the company didn’t require the team to stay in their “development silo,” the team could help create the best product possible.

You can tell your organization confers a sense of psychological safety if employees at all levels across the organization regularly exchange ideas and debate their merits. A healthy team is one that trusts each other enough to share and dissect ideas. They may disagree passionately sometimes, but they don’t attack or criticize each other. Instead, they question ideas—even if those ideas

come from leadership. They are free to explore and experiment to find what works best.

OPEN COMMUNICATION

When organizations lack open communication, they miss out on the natural benefits of collaboration across teams. During the course of our work with a company that designed sensor algorithms, it became clear that the product team and the technology team had separate lists of features they wanted to build. The organization had fewer than twenty people in it, but the groups *still* resisted sharing information. They claimed it was hard to collaborate because the teams were in different cities. We pushed back, describing our work with teams who collaborate from multiple cities around the world. It didn't help that the CEO was reluctant to address this bad behavior, leaving it to 3Pillar to call it out.

Decision Lens, on the other hand, is the gold standard in open communications. The leadership team makes a point to go over roadmaps, explain goals, and share information. They invest time into making sure team members understand the direction of the company and they keep the door open for questions. They also provide a bridge between teams, so that everyone understands the larger context in which they are doing their jobs. Because of this, Decision Lens employees are able to minimize time to value, solve for need, and excel at change.

You can usually tell which organizations have a culture of open communication by their internal language and their group chat. They say "we" a lot. Bantering and jokes are the norm. Inside 3Pillar group chat, a dancing, brightly colored parrot—we call it the "party parrot"—is a favorite. It seems silly, but this quirky inside joke has inspired more positive and open communication.

Opening up communications can be especially challenging for large organizations with multiple departments, divisions, and teams. Leaders have to be proactive to ensure communication doesn't stall. You may need departments like legal or finance to operate as a balance for the entrepreneurial idea seekers. If these departments aren't on the same page, you will spend too much time managing conflict. As one example, GE brings in "innovation fixers" who understand the complex regulatory environment and compliance needs of the company. Leaders constantly promote open communication among this group and internal teams so that everyone moves forward quickly and as a united front.

Your organization's culture is not set in stone. It can be changed if you are

willing to do the work—every day and at every level.

---

50 Patty McCord with Bob Sutton. “Don’t Sugar Coat Your Culture.” eCorner Stanford. June 28, 2017. https://ecorner.stanford.edu/podcast/dont-sugar-coat-your-culture/.

51 Julie Rozovsky. “The five keys to a successful Google team.” Re:Work. November 17, 2015. https://rework.withgoogle.com/blog/five-keys-to-a-successful-google-team/.

52 Boris Groysberg, Jeremiah Lee, Jesse Price, and J. Yo-Jud Cheng. “The Leader’s Guide to Corporate Culture.” *Harvard Business Review,* https://hbr.org/2018/01/the-culture-factor.

53 “Netflix Culture.” https://jobs.netflix.com/culture.

54 http://fortune.com/2018/03/01/asana-best-companies-bay-area/.

55 “ASLA 2006 Student Awards.” https://www.asla.org/awards/2006/studentawards/282.html.

CHAPTER 11

THE PRODUCT MINDSET AND COMMON METHODOLOGIES

Jessica here. Sayantam Dey is one of the smartest technologists I've ever met. He's also one of the most humble and generous colleagues I've ever worked with. One day, Sayantam and I were discussing Agile and kicking around ideas about how to update our practices. He paused, and then said, "We don't need Agile as much as we need to learn how to work together."

As usual, Sayantam cut to the heart of the matter. We have loads of tools. We don't need more. We don't need "one tool to rule them all." Instead, we need to focus on getting the most and best out of people. That means helping them select the right tool for the job and showing them the best way to use it.

The Product Mindset informs how we think, how we make decisions, and what we value in our daily work. The way we work, however, is governed by methodologies. To successfully implement the Product Mindset in your organization, you must ensure that the way your team thinks and works are in harmony.

Software development has always been difficult. It's risky, resource-intensive, and not guaranteed to work. Passionate professionals have developed myriad methodologies to improve the development process. People from different functional areas—engineers, UX designers, and product managers—have gravitated toward methodologies that improve efficiency and collaboration. The tools often become part of their professional identity.

It's important for leaders to understand the values, benefits, and risks of these methodologies and how they are being used. This chapter will provide an overview for executives who are new to them.

The three most common methodologies—Agile, Design Thinking, and Lean Startup—are highly effective in solving many of the challenges of product development—but not all. Replacing these methodologies with a new master methodology would be unwieldy for the organization and frustrating for the practitioners. Instead, what's needed is something that brings them together and supports teamwork.

This is where the Product Mindset is most valuable: it aligns with these three methodologies. It offers a common vernacular and a way to work together, thereby multiplying the value of each methodology. The Product Mindset functions a bit like a pair of glasses: no matter where organizations are coming from, if they view things through the Product Mindset lens, their paths will look sharp and clear.

AGILE DEVELOPMENT

Agile development is the most ubiquitous methodology in the world of product development. Most of our clients have adopted some form of Agile development, and most companies understand the basic language around it.

Software development used to be similar to building a home: a series of linear steps had to be completed in sequence. First, the developer or homeowner tells the architect how they want things to look. Then plans are drawn up. Only then can structural work begin. Eventually things like HVAC, electrical, plumbing, paint, and final touches fall into place.

In software development, this approach is called "waterfall development." It works well when you understand and articulate what you really need—and that need doesn't change. Here's the problem: no one ever truly understands what they need when they set out to build software, and things always change. Those changes will affect time, budget, and risks—and someone has to decide what to do or not do about it.

In the 1990s, it took years for companies to release a product that ultimately might not work. So a group of thought leaders came together in Utah and created the "Agile Manifesto," which set forth four values to guide software development and offer a better way of working:[56]

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation

- Customer collaboration over contract negotiation
- Responding to change instead of following a plan

It seems like common sense, but Agile revolutionized how teams worked in several important ways:

Working with business stakeholders. Business stakeholders often gave engineers requirements or lists of needed features, and then the engineers would go off and build it. Months later, they'd realize it wasn't going to work. On an Agile team, engineers and stakeholders interact regularly as they try to understand needs and work through tradeoffs.

Breaking big ideas into small units of work. Agile teams take big ideas or feature requests and break them down into individual units of work called "user stories." Each user story is small, independent, and testable. This allows teams to prioritize and sequence them to minimize time to value.

Delivering working software regularly. The longer the lag between idea and execution, the greater the risk of wasted time and money. Agile teams aim to deliver working software to their clients in one- to two-week increments.

Reviewing product and team performance. Agile teams constantly review their effectiveness and make changes to the way they work. Organizations using Agile deliver continuous value and receive continuous feedback.

Responding to changing needs. Agile occupies the sweet spot between predictable and flexible. Teams that are skilled in Agile development can predict how long it will take to accomplish a task, with the flexibility to change priorities as needs change.

Although there are many variations of Agile development (SAFe®, Kanban, Scrum, XP), all share common mechanisms for delivering on each step in your product development. Most companies implement a version of Agile that best fits their culture and the unique needs of their business.

For example, 3Pillar worked with a major media company that loved Agile. We taught their teams to use value statements for each user story. This forced them to think about the need they were solving for and what value they were trying to create. During this engagement, engineers listened in to the 3Pillar team conducting user interviews. During one session, the observing engineer was

furiously scribbling down ideas and sketching in his notebook. It turned out that the team had been debating how to implement a feature request for weeks without resolution. Once the engineer understood the need, he designed a quick solution and got the rest of the team on board.

Not every company is so open to the Agile framework. The 3Pillar user experience team sometimes encounters resistance from Agile teams who are reluctant to do testing with customers. These teams are concerned that engaging with customers will slow them down and limit their ability to deliver all that has been promised. We remind them they're overlooking a major point: delivering something that customers don't want or can't use, even if it's "on time," has no value.

Other people—known as "Agilists"—sometimes demonstrate an unwavering allegiance to Agile methods, though they may not completely understand that it is a tool whose purpose is to drive outcomes. They often remain locked into the "doing" and miss the overarching objectives of the company, intending to deliver in an Agile way but actually working against a defined list of tasks. If you know exactly what you're going to do—and aren't open to change—you might as well stick to the waterfall method. The Product Mindset provides a reason and a method for looking up from the day-to-day work and evaluating whether—and what—value is being created.

The Product Mindset enhances Agile development and minimizes its risks. Both focus on breaking down complex ideas and plans into small batches of work. The goal is to minimize time to value through short cycles: we acknowledge what is valuable and what's not, and then change the next batch of work accordingly. Agile development provides sound mechanisms for keeping the cost of change low and making wise decisions about what should change and when. The Product Mindset minimizes the risks of Agile by focusing on solving for need and building for outcomes over making commitments and delivering volume.

The good news for Agilists is that major voices in business, such *as Harvard Business Review*, Boston Consulting Group, and McKinsey, now advocate for Agile. As more executives are exposed to and adopt it, Agile teams are better understood and supported.

SPEAKING AGILE

Agilists have a particular language, which sometimes makes it hard to integrate into the larger organization. Other business units aren't necessarily going to understand the activities that Agilists call "rituals" or "ceremonies." These include: *retrospective, grooming, and iteration planning*. These terms might seem incomprehensible to finance and procurement departments, for example, who are just trying to figure out why an Agile team can't promise exactly what you'll deliver, when, and for how much.

DESIGN THINKING

Designers have experimented with different ways of understanding the world and creating products for it for longer than we can remember. Someone designed the clothes we wear, the buildings we visit, and the cars we drive. The designer was often invisible, with a few notable exceptions.

In the 1960s, design began developing as a principled profession—something that could be taught, studied, and practiced. As the profession grew, it became clear that design was essentially a user-centered, problem-solving process—it held potential to go beyond the traditional bounds of designing a specific product. Design thinking arose and has been advanced by the design firm IDEO, Stanford d.school, and Roger Martin.

Design thinking is iterative. The design thinking culture values prototyping and soliciting feedback so the design can improve. Those who practice design thinking value the actual work, instead of just talking about work.

Design thinking has been particularly successful in certain verticals. Healthcare is a great example. Doctors' offices and insurance companies have been transformed by rethinking their space from the patient perspective. Design thinking is also helping physicians rethink the design of their systems and processes to better manage communication and improve the total experience of patients, families, and caregivers.

Years ago, 3Pillar did a *pro bono* project with St. Jude Children's Hospital, and we'll never forget the experience. We witnessed amazing examples of design thinking. Someone had obviously thought through every part of the experience

by stepping into the shoes of anxious, overwhelmed families desperate to get their children well. Upon arrival, children are presented with a red wagon, so parents can transport their child and have a more comfortable experience. At check-in, the counters are low so the children can see over them. There is a place for the patient, a place for siblings, and a place for parents. Nothing about being at a children's hospital is easy, but St. Jude's did everything it could to make a difficult experience as bearable and comfortable as possible. And it has made a huge difference to thousands of grateful patients and their families.

Design thinking works in a variety of settings. When Bank of America created a "keep the change" campaign to help customers round up and save on every purchase, it helped them save their customers money. By emphasizing photos on its website and app, Airbnb has used design thinking to refine their platform. The result? Customers stay longer and convert more often.

Today, you are likely to see design thinking encouraged at the beginning of a project, but later abandoned as the team moves into execution. The ideas generated from this "big bang" approach are not always feasible and often lead to waste and risk. For instance, the initial excitement around design thinking led to the creation of innovation labs—separate entities from a company's core business that work solely to bring fresh ideas back into the organization. It was an exciting idea. In practice, however, people discovered that design teams flying solo, without being keyed into the realities and relationships in the business, did not come up with ideas that integrated well into the overall workflow. Many innovation labs—including Coca-Cola, Unilever, Nordstrom, Target, and Ogilvy Labs—failed to deliver ROI and were shut down.[57]

DESIGN SPRINTS

A smaller design thinking effort spread across the life cycle of the product will yield better results for your company and for customers. 3Pillar has succeeded with a variant called "design sprints." Developed at GV (formerly Google Ventures), a design sprint is a one- or two-week exercise where a team will research and refine ideas until there is one that can be tested through a process. Designers, product managers, business stakeholders, and engineers work together to find a solution to a given problem: a new feature that isn't being used, common customer complaints, or an emerging need in the market. A typical sprint includes these steps:

- *Research*: Gaining insights about customers, defining the problem, and

exposing gaps in knowledge. This is done through interviews, observation, and studying metrics.
- *Understand*: Synthesizing the findings and agreeing on the problem and goals.
- *Ideate*: Generating as many solutions as possible to the problem, often by asking team members to sketch multiple solutions to parts of the problem in a fixed time period (*divergent thinking*).
- *Decide*: Reviewing and voting on which ideas have the most promise and planning how they will be prototyped and tested (*convergent thinking*).
- *Prototype*: Building a representation of the idea that customers can interact with.
- *Test and Learn*: Getting your prototype in the hands of current or prospective customers and learning if it meets their needs.
- *Detail*: Once the solution is validated or confirmed through feedback, the solution is detailed for the team implementing it.

Used wisely, design thinking is a fantastic tool that can work in concert with the Product Mindset. Both seek to solve customer problems. By combining the two approaches, you minimize the risks of Design Thinking by ensuring you're building for outcomes for the customer *and* the business, solving for needs that customers can choose, and minimizing time to value.

THE LEAN STARTUP

In 2011, Eric Ries published a book that caught the world's attention called *The Lean Startup*, but the idea of "lean" can be traced back to Toyota, which implemented lean manufacturing through continuous improvement and the reduction of waste in the 1970s. Ries brought the idea to the larger world of entrepreneurship. Here are a few of the key elements of the lean startup:

- Eliminating uncertainty
- Working smarter instead of harder
- Validated learning (using a "build, measure, learn" philosophy)
- Innovation accounting to quantify activities

Compared to design thinking, the lean startup is a more business-focused, scientific approach. Real-world use of the lean startup abounds in new enterprises, but it can also be found in larger, more mature companies.

The central tenet of the lean startup is the "minimum viable product (MVP)." A

minimum viable product might be a landing page, marketing collateral, a video, or a clickable set of images showing what it will look like. The most popular MVP we see is a version of the product with a much smaller feature set that is used for feedback.

Organizations often apply the concepts of the lean startup in ways that differ from the original intent of the methodology. They tend to build too much and take too long; the lean startup process encourages making small incremental bets —through sketches or prototypes—in order to prove something. Most organizations continue to talk about product releases on a strict timetable, instead of releasing something quickly to determine if it's worth more investment. Their "minimum viable products" are often jam-packed, so large that companies can't break them down to minimize time to value. Big companies behave this way because they worry that not having everything done perfectly will damage their reputation. The more likely outcome, however, is that they will launch something nobody wants or run out of money before shipping the product.

It's hard to accept that many potential ideas are not meant to be scalable, won't survive the test of time, or won't resemble the ideal technological solution for the future. Even those who use lean startup concepts still suffer from the stigma of "throwaway work." As a result, most companies still build high-quality products before knowing what they need. As with design thinking, lean startup concepts are often used initially but jettisoned midway through a project.

The Product Mindset aligns closely with the lean startup approach. Both focus on business outcomes. Both seek to get a product in the customers' hands quickly and aim for more than just revenue—also social capital, time, and attention. Finally, the Product Mindset enhances the lean startup when the organization embraces experimentation, monitors the results, and learns from their efforts. The Product Mindset counters any notion that these principles are limited to the startup phase—it focuses on experimentation and iteration throughout the entire life cycle of a product.

---

56 "Manifesto for Agile Software Development," http://agilemanifesto.org/.

57 "Innovation Labs are Failing." https://dminc.com/blog/innovation-labs-are-failing/.

CONCLUSION

Throughout the years, we've helped dozens of clients create and launch hundreds of products that added billions of dollars of value to the digital economy. Throughout this book, we have shared the discoveries we've made along the journey.

Surprisingly, our discoveries have little to do with the technical competencies that most people assume you need to thrive in the digital world. But they have everything to do with how you understand people and how you think about building these products.

To recap, the Product Mindset sets forth three characteristics that are unique to this particular type of software: they must self-fund, they must be chosen, and they are never done. It also lays out three principles that correspond with each characteristic: minimize time to value, solve for need, and excel at change.

We believe that the Product Mindset represents concepts that apply far beyond this moment in time. The Product Mindset is fundamental to how fast and how well the digital economy matures. Just as the concepts behind manufacturing shaped the industrial revolution, the concepts behind innovation will shape the digital revolution. The Product Mindset fuels innovation by focusing the mind on what matters most in the digital world—and providing practical tools for attaining success.

These are simple precepts. But when put into practice, they are game-changers.

The Product Mindset has literally changed the course of our lives. It has turned a labor of love into a global business. At 3Pillar, we are not writing code. We're fostering relationships. We're transforming business. We're advancing technology. We're improving lives.

We believe that the Product Mindset will do the same for you. If organizations that are confronting the inevitability of the digital economy embrace this way of thinking—and put it into practice company-wide—we are confident they will experience the same type of life-changing success.

Ultimately, the reality is this: in the not-too-distant future, *every* brand will have a digital business. The only question is, will you?

If you embrace the Product Mindset, we believe you will have one. And believe that your product, your company, and *you* will thrive beyond your wildest dreams.

ACKNOWLEDGMENTS

When I started 3Pillar back in 2006, I was an independent consultant with a dream of someday writing a book. I assumed it would be a technical handbook. I never could have guessed that this would be the first book that I published. But what would have been even more difficult to imagine would be the journey it took to get here—and all of the incredible people who have not only helped create a book, but have helped create an incredible business. And in doing so, they shaped me into the man that I am today.

First and foremost, I thank my co-author, Jessica S. Hall. You not only helped me write the book, you helped breathe life into this nebulous little concept I called the "Product Mindset." You made it real. You gave it wings. You brought it to life, nurtured it, and helped turn it into what it is today. You helped create more than a book. You strengthened the value proposition of our business and the very real value that we provide our clients. Without Jess, the Product Mindset would still be this thing I could feel—but not articulate. It would be something I could recognize but not teach or describe. Jess, thank you, from the bottom of my heart. I'm so proud of the work we have done together and so grateful for your partnership over these years. You are an incredibly gifted and unique talent.

To my wife, Teresa: thank you for putting up with my entrepreneurial spirit, passion for work, and workaholism for nearly twenty years. You deserve more credit for my success in life than anyone will ever fathom. You are a true helpmate. Your unwavering support means the world to me. When I decided to resign from my job, you didn't blink. When I decided to bet more than our entire life savings in order to chase a dream, you were my biggest cheerleader. And, when I decided to leave for a week to start writing this book, you didn't hesitate to say "Go!" But more importantly than all of this, you have done the lion's share of hard work raising our seven beautiful children. And you've done an incredible job. I love you and am so grateful for your partnership.

To my kids, Sarah, Joseph, Rebekah, Catherine, Jacob, Rosie, and Joshua: You are the joy of my life. I live to see you chase your dreams, do what you love, and live life to the fullest. I'm far from a perfect dad, but I pray that you will always know, without a shadow of a doubt, how much I love you, how much I want to be part of your life, and how I long to watch you live your dreams to the same

degree that I've been able to live mine.

To my mentor, Michael Hyatt: You have inspired me more than you will ever understand. You are my hero. The way you live in, but not of, the world is an example to so many. I am in awe of how you help others become better versions of themselves, how you provide an incredible environment for others to do their life's work, and the way you *live* your faith. Your actions speak even louder than your words, and I am so grateful for your friendship and willingness to invest in me. Thank you for encouraging me to write a book.

To Cheryl Nieder, I owe tremendous thanks. You're my assistant and the secret to my success. I may joke that you run the business, but in reality, you run my life. You make me ten times more productive than I could ever be on my own. Your servant's heart, unwavering support, and willingness to do whatever it takes for me to thrive are gifts for which I am so grateful.

To Wes Bright and Curtis Yates: I couldn't have done this without you. Wes, your input throughout this journey—first on the topic itself, and then throughout editing, has been invaluable. Your excitement about the content has kept me going through the tough times and your feedback has undoubtedly shaped the way it all came together. Curtis, your willingness to share your publishing expertise has helped me get "unstuck" more than once. Thank you for being willing to help me figure out the next step when it wasn't readily apparent.

To Heather Combs and Margaret Irons: thank you for pushing Jess and me forward, managing this process, and encouraging us to go faster and do better. Thank you for not only encouraging us to pull this off, but for spreading the word and elevating our brand. The Product Mindset would be a hidden gem with little impact without you.

And finally, I owe a debt of gratitude to all of those who took a bet on me during the early days and have been a key part of the 3Pillar journey. To Bobby Christian, Bob Foster, Brian Walsh, Patrick Savage, Blaine Hall, Paul Doman, Todd Bramblett, Catalin Steff, Ken Quaglio, Maria Izurieta, Tony Orlando, and Jonathan Rivers. Each of you, and so many others, have believed in what we were building and taught me a lot about business and life. Thank you for jumping on the bandwagon and being a part of the journey.

Five years ago I walked into 3Pillar with no manager, no job description, no

team, and very few ideas on how to build the business unit I was hired to create. It was the very best career decision I've ever made. I've learned from tremendous people, taken on huge professional challenges, and grown a lot.

First and foremost, I owe my thanks to my co-author and CEO, David. You created this great company, where I can be the mom and the professional I want to be. You've helped me learn and pushed me when I needed it. You let me take your baby and find a way to update and share it beyond what I thought was possible. When I was nervous about becoming a mom for the first (and second!) time, you helped me more than you know.

To my husband, Zeke, for many years you have been my best friend, biggest supporter, and a constant source of advice. You are always proud of me and encouraging me to take on that next challenge even when I'm not quite sure I can pull it off. I love you and our girls.

To my daughters, Maisy and Jocelyn, you two are my inspiration. I hope years from now to tell you how much of this book was written as I held you both in my arms, how I pushed through challenges and found my voice. More than anything I hope you remember what Oma always says: "Make them tell you no."

To my mom and dad, Janet and Cliff, you showed me where determination, creativity, and craftiness can take you. You've been there the whole way—bad grades, sports, graduations, and all of my jobs. Your care of the girls makes it possible for me and Zeke to continue chasing our professional goals. Dad, you were a great editor of this book.

To all of the 3Pillar team members who have contributed their knowledge and experience to this effort, including Bogdan Muresan, Lindsay Kloepping, Daniel Markovits, Jeff Nielsen, Dan Greene, Sayantam Dey, Derek Tiffany, Alin Stefan Baicoci, Ovidiu Silaghi, Ovidiu Moga, Deepak Aggarwal, Jonathan Rivers, Scott Varho, Chirag Chandani, Don Hiles, Michael Rabjohns, Kenal Shah, Sanjay Thakur, Vikas Hajela, Cassian Lup, Cindy Halim, Calin Botea, Paul Axente, Alex Camilar, George Serediuc, Smriti Sharma, Kathryn Rosaaen, and so many others: thank you for sharing your insights and experience. This is truly the result of a one-team effort.

To the team at Scribe Media and Shannon Last: when people say that writing a book is hard and a lot of work, they ain't lying. Thank you for sharing your

expertise and for being patient with us. Not only have you made this book possible but your pushing has made these ideas deeper and more clear to us so we can help our colleagues and clients.

ABOUT THE AUTHORS

DAVID H. DEWOLF is the Founder and CEO of 3Pillar Global, a company that builds digital products for CARFAX, Equinox, National Geographic, and many other industry-leading clients. He's a columnist for *Fortune* and *Inc*. magazines; has been featured in *Fast Company*, *Forbes*, and *Entrepreneur*, among others; and has received dozens of honors and awards in little over a decade in business.

JESSICA S. HALL is Vice President of Product Strategy and Design for 3Pillar Global. Her work has been recognized by the Web Marketing Association, the American Association of Museums, the Webby Awards, *Time*, *Graphic Design USA*, *Forbes*, and the *Washington Post*.