BECOME GREAT AT
MAKING PRODUCTS
PEOPLE WILL BUY

when
coffee
& kale
compete

ALAN KLEMENT

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This book will help you become better at creating and selling products that people will buy. Your joy at work will grow. You will know how to help companies increase profits, reduce waste, remain competitive, and make innovation far more predictable and profitable. In doing so, you will help economies prosper and help provide stable jobs for employees and the families who depend on them.

  I struggled with innovation for many years. I finally made progress when I focused on two things: (1) the customers' struggle to make life better and (2) how customers imagine their lives being better when they have the right solution. This understanding has helped me become a better innovator. I believe it will do the same for you.

  Everyone benefits from healthy entrepreneurship and innovation—yet challenges stand in our way. This chapter introduces these challenges. The rest of this book will equip you with the understanding of how your focus on the customer's struggle as a Job to be Done (JTBD) will help you overcome these challenges.

CHALLENGES

Creative destruction is accelerating. The average time a company spends on the S&P 500 continues to drop. In 1960, it was fifty-five years; in 2015, it was about twenty (Figure 1). This happened for numerous reasons. A big one is that it has never been easier to create a product and get it to customers. This increases the pace at which new innovations disrupt the sales of incumbent ones and then go on to replace them. This process is known as *creative destruction*.[1]

  When one innovation wins, another loses. Why? Because a day has only so many minutes, and a customer can use only one product at a time. For example, every day I used to get an espresso from a coffee shop down the street. Two months ago, I bought a Nespresso machine. Now I make my own espressos. The coffee shop has lost my business.
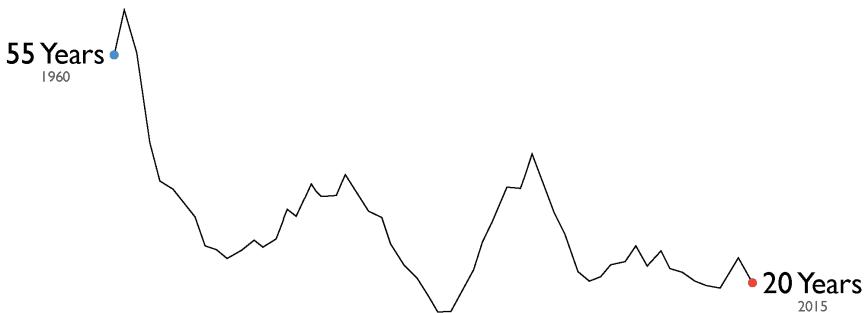
FIGURE 1. CREATIVE DESTRUCTION IN ACTION. THE AVERAGE COMPANY LIFESPAN ON S&P INDEX HAS DECLINED OVER TIME (ROLLING SEVEN-YEAR AVERAGE).

JTBD helps us understand the creative destruction around us by helping us understand that even though solutions and technologies come and go, human motivation changes very slowly. In some cases, human motivation hasn't changed at all. The focus on customer motivation is the key to successful, ongoing innovation and business. This provides stable jobs for people who support the families who depend on them.

"Sunk costs" keep us from creating new products. In 1975, a Kodak engineer invented the digital camera. What was management's response? They shelved it. Management argued that Kodak "could" sell a digital camera, but why would they? They made billions of dollars selling photographic film. A digital camera would cannibalize their film sales. In the end, Kodak's management decided that the company would skip digital and focus on selling photographic film.[2]

In 2012, Kodak filed for bankruptcy. What happened? Customers no longer needed film for their cameras—they had switched to digital cameras. Kodak's downfall was due to management's unwillingness to adapt to a world with digital cameras—something they had invented forty years earlier.

Very often, it's not legacy technology that stops companies from changing but being tied to a legacy business model. And when change is proposed to management, they have unlimited excuses to avoid it: "We make billions of dollars with our current products—why risk it by selling something different?" "We've spent a hundred years perfecting what we do and building the company we have today—why should we change?" Excuses like these make it hard for businesses to change—but change will always happen. JTBD gives you the confidence to break away from legacy business models and create the products of tomorrow.[3]

It's a mistake to focus on our customers' physical characteristics. My father-in-law is sixty-five years old, is from the Bronx, and has never used a computer in his life. I'm thirty-five years old, I'm from Florida, and I wrote my first computer

program at fifteen. Our behaviors, physical characteristics, life goals, and personal histories couldn't be more different. Nevertheless, we both own the same model of smartphone. We even use it in almost the same way. Will a study of who we are and how we behave explain why? Are these data information or misinformation?[4]

Why did Alan buy the Snickers?
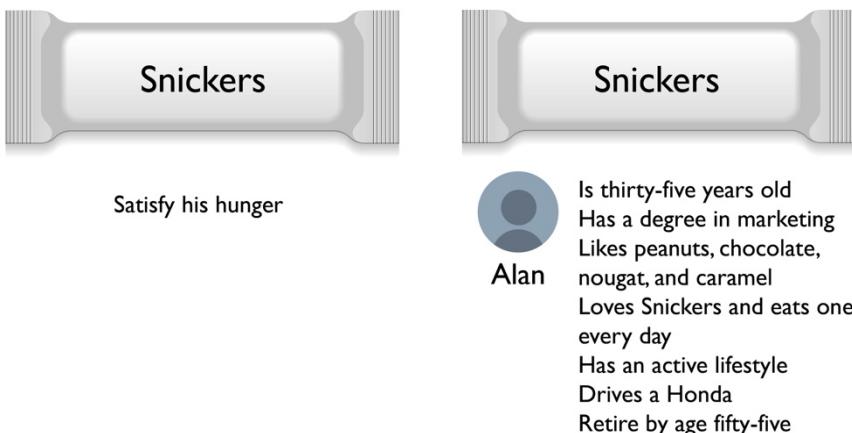
FIGURE 2. ARE YOU BEING FED MISINFORMATION AND DON'T KNOW IT?

JTBD helps you become better at knowing the difference between good data and bad data. This helps you focus on making changes to your product that bring profits instead of only increasing costs of production.

We don't take into consideration how customers see competition. In 2006, Indian manufacturer Godrej collaborated with Harvard Business School Professor Dr. Clayton Christensen to create the chotuKool—a low-cost, feature-minimal refrigerator. It was hailed as a "disruptive innovation" that would create a new market of refrigerators and create what Christensen calls "inclusive growth" for millions of low-income Indians. Unfortunately, the chotuKool was a costly flop. What happened?

Chapter 9 reviews the various mistakes made in planning the chotuKool. However, the biggest mistake was the assumption that the chotuKool competed only with other refrigerators. As it turned out, customers had a different idea of what did and didn't count as competition. From their point of view, the chotuKool didn't compete with conventional refrigerators; rather, it competed with clay pots, Styrofoam coolers, boiling milk, and buying vegetables every day.

For far too long, academics and analysis – who have no personal experience with innovation – have created and sold pseudoscientific theories about markets

to innovators. Unfortunately, these theories often mislead innovators. The resulting product failures exact terrible costs upon our economies. This happens because most, and perhaps all, of these theories don't take consideration how customers view competition. Do PCs compete with mainframes because they're both "computers," or do PCs compete with typewriters, video game systems, and accountants? Do hard drives compete only with other hard drives, or do they also compete with tape storage, CDs, DVDs, floppy disks, flash drives, and cloud storage?

JTBD helps you avoid mistakes like the chotuKool and falling victim to invalid theories of markets by giving you the knowledge to create an accurate model of competition *before* you create a product. It does this by helping you learn how to gain the customer's perspective on what does and doesn't count as competition for a JTBD.

We myopically study and improve upon customers' "needs" and expectations of today; instead we should study and improve the systems to which customers belong. In the 1860s, the Pony Express was created to help customers get letters and messages across the United States as fast as possible. It lasted only nineteen months. What happened? Western Union established the transcontinental telegraph. While the Pony Express was trying to solve the "needs" associated with using physical mail, Western Union thought, "What if we could communicate without using physical messages?"[5]

Very often, innovators think they are studying customers' needs when in fact they are studying how customers currently solve their problems, or what customers currently expect from a product. For many years, manufacturers such as Nokia, Palm, Research in Motion (RIM), and Motorola worked hard to satisfy customers' stated needs and expectations: make a low-price smartphone with a physical keyboard. Today, those expectations have been reversed. Customers don't mind shelling out several hundred dollars for a smartphone, and physical keyboards have almost completely disappeared.

We can't build the products of tomorrow by limiting ourselves to the needs and expectations associated with the products of today. Instead, we should focus on what never changes for customers—that is, their struggle to make progress. When we focus on delivering customers' progress—instead of what customers say they want—we are free to imagine a world where many needs and expectations have been replaced with new ones. JTBD helps us ask, "Customers keep asking for smartphones with keyboards, but couldn't we help customers so much more once we take it away?" Chapters 10 to 14 show you the power of prioritizing customer progress over everything else.

We may think only about the upsides of product changes, ignore the downsides, and fail to embrace new ways of solving customers' problems. In the early 1980s, the Coca-Cola Company was losing market share to Pepsi. In response, Coca-Cola's management decided to change the formula for Coke, believing that the change would increase market share. They were wrong. Loyal customers went up in arms over it; three months later, Coca-Cola's original formula was restored. Over time, the company was able to regain its market share, but it was lucky. It had the money and resources to recover from the mistake.

JTBD helps you know when it does and doesn't make sense to change your product. Your product might be fine the way it is. Any further investment might only increase your costs of production. JTBD also helps you understand the opportunity costs: What happens when you don't invest in new products, even if it means cannibalizing existing offerings? Kodak knows the cost of not embracing a new way of solving customers' problems: bankruptcy.

Our decision making can be misled when we manage by visible figures only, and don't appreciate the context surrounding them. Customer satisfaction score (CSAT) is a figure that seems straight forward enough. Ask customers to self-report their satisfaction with your product and record their responses. If the CSAT is high, you're doing a good job. Easy right? Yet, such data and figures are incomplete at best, and misinformation at worst. In chapter 14 you'll learn about Spirit Airlines. Customers have consistently rated it as the worst airline in America. Nevertheless, it continues to be the fastest-growing and most profitable airline in America. If customers hate it so much, why do they keep buying it?

Figures can not only be misleading; they can be misused. We see this today with the number of monthly active users (MAU) for Twitter. It has experienced explosive growth over the last five years –annual revenue was $106 million in 2011 and $2.2 billion in 2015. Yet, analysts and journalists continue to write articles titled *The End of Twitter* and *A Eulogy for Twitter*. Why? The most common criticism is that growth of Twitter's MAUs has stalled at "only" 313 million. Is it any surprise when management's priority then becomes "how can we make MAUs go up" instead of "how can we continue to make Twitter valuable to users so they won't leave?" Yes, adding new features might push up visible figures such as MAU in the short term, but constant changes might upset and drive away loyal users. Instead, we should congratulate Twitter's employees for their hard work and gently remind them of grandmother's advice: "when you try and please everyone, you end up pleasing no one".[6]

Many innovators and managers have been influenced by ideas such as "if you can't measure it, you can't manage it" and "what gets measured gets improved". However, such opinions do not take into consideration that:[7]

> All models are wrong, but some are useful.

> The most important figures are unknown or unknowable, but successful management and innovation must nevertheless take account of them.

> If you torture the data long enough, they will tell what whatever you want.

These statements were made by some of the most important mathematicians and systems thinkers of the 20th century. They are warnings for those who subscribe to the idea of being "data driven" and figure focused. Yes, data and figures can be helpful and are often necessary. We have payroll to meet and should strive to increase long term profits. But we can let data and figures deceive us.

We must remember that data are only proxies for *some* results of a system. Moreover, the most important figures are unknown and unknowable. What figures or data would have told Apple to remove floppy drives from PCs, keyboards from their smartphones, or to create smartphone Apps sold through an App Store? At the time, many dismissed or criticized these ideas. Journalists claimed Apple's management had lost their minds. Now we regard Apple's decisions as obvious. And what about Twitter's MAUs? The number of users who might want a product like Twitter is a figure that is unknown and unknowable. Twitter's 313 million MAU might represent one hundred percent of the market. Analysts, journalists, and even Twitter's own shareholders might be punishing the company even as it achieves market dominance.

There are a variety of consequences that arise when we abandon intuition and risk taking in favor of management by visible figures only. Perhaps the worst are the unfounded beliefs that a product will last forever and that products and companies can continuously grow revenue and attract more customers. The reality is that growth for *every* product will slow and stop. Nothing lasts forever.

Unfortunately, many managers either don't know or accept this. Instead they become worried when growth slows. They start making changes to their product in the hope of attracting more customers and increasing revenue. However, the effect is often the opposite. Management ends up making the product worse for existing customers. With some luck, a competitor won't notice.[8]
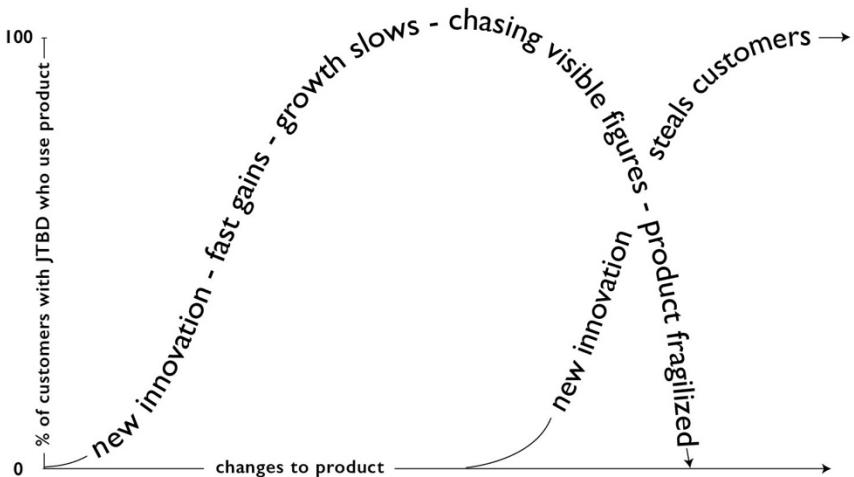
FIGURE 3. A TALE OF CREATIVE DESTRUCTION. CHASING VISIBLE FIGURES OFTEN LEADS TO POOR DECISIONS ABOUT YOUR PROUCT.

But luck will eventually run out. Another innovation will enter the market with a product that customers find more valuable. Why? Because the entrant's innovation cuts off all the baggage the incumbent added during management's frantic attempt to push up all those visible figures. This is when customers begin to switch from the incumbent to the new comer. So goes the cycle of creative destruction.

Innovation is hard, risky, and nerve-racking. Just ask anyone who has successfully done it. But JTBD can help. With a JTBD point of view, we can see how visible figures tell us about individual parts of a system only. Once we understand that, we can apply JTBD thinking and understand the relationships around the data. This gives us the ability to assign the proper weight to these figures – or even dismiss them. This helps us become better at knowing if we continue to improve an existing product, or take a risk and develop a new one.

HOPE

JTBD and this book offer you hope whether you are a struggling innovator or just want to become better at understanding innovation. JTBD gives you a collection of principles for understanding customer motivation. This singular attention to customer motivation—instead of what customers say they want, their demographics, or what they do—is what distinguishes JTBD from other theories. This book offers an explanation of JTBD that is reliable, consistent, and complete.

At the time of this writing, no comprehensive book about JTBD existed. This is the first. Many others have written interpretations of some JTBD principles, but almost all of them have created more confusion about JTBD than clarity.

This book stands out from other writings about JTBD because its contributors—including me—are all innovators and entrepreneurs in their own right. They've applied JTBD to their own businesses and products, rather than merely study and preach the theory.

I developed this book and the principles of JTBD as if I were creating a product. For JTBD to be successful, it must deliver progress to those who plan on using it. Any theory of JTBD must take into account how successful JTBD practitioners apply it. This is why I interviewed sixty-three innovators about their struggles with innovation and how they used JTBD. I extracted numerous case studies and insights from these interviews. The most comprehensive and useful ones are featured in this book.

I had to combine my experiences with those of these innovators to learn what JTBD should and shouldn't be. I learned something from every JTBD practitioner I talked with. I am in their debt. Of course, you benefit the most from my struggles with innovation and JTBD and from those of the innovators featured in this book. With it, you add the accumulated experience of many others to your own. This collective knowledge will help you become better at creating and selling products that customers buy and at creating sustainable businesses.

JTBD makes you better at making and selling what customers want, because innovators created it. Innovators created JTBD for themselves. We didn't create JTBD to sell books, collect speaking fees, sell MBA diplomas, or get a PhD from a business school. We created JTBD because we needed help building a successful business that could support our families. We've faced the countless trade-offs involved in developing a business strategy, crafting advertising, designing, and engineering, from which questions like these arise:

> We can't attack every market. Which ones should we focus on?
>
> Our video ad has to connect with customers in just five seconds. How can we do that?
>
> Which shade of white will help customers experience luxurious but not sterile?
>
> Which alloy should the suspension be made of to give customers the "feel the road" experience?

You can know which data should be gathered from customers only after you've gone through the experience of needing answers to questions like these.

JTBD is a theory evolved over time. JTBD's principles draw on studies in statistical theory, economics, systems thinking, and psychology. Its principles have slowly evolved over time—at least seventy-five years. JTBD is by no means a flavor of the month.

As a theory, JTBD persists because it is completely decoupled from describing how to solve a customer's problem. Instead, it is purely focused on understanding customer motivation. You need such a theory to help you become better at innovation.

ABOUT ME

I recommend JTBD because I've applied its principles as an entrepreneur, product manager, designer, engineer, and salesperson. I've applied it to my own businesses and on products whose success I was directly responsible for. I believe it's wrong to preach a theory unless you've applied it yourself and were exposed to the risks in the event the theory failed.

JTBD has helped me. I struggled with innovation for many years. I started my first business in 2003. It offered photographic services, image retouching, and a software platform where customers could create their own websites to showcase their artwork. It was a success. At the time, I didn't understand why it was successful. But now I do. It was because I offered a collection of products that worked together—as a system—to help customers make progress. What progress did those customers want? "Help me promote myself and my work."

As my business grew, I saw myself transition from maker to manager. I didn't like it. So, I sold the business and went back to making things. I started another business called Vizipres. It failed. Why? I made a product no one wanted. I lost money, but that didn't bother me. What did bother me was lost time.

I thought that perhaps I needed to learn from other entrepreneurs. I began working for others as an engineer and designer. Later, I began leading innovation efforts at various companies. Experience was teaching me some things but not enough.

Things changed for me when I met Bob Moesta. He had already successfully applied JTBD principles to several of his own businesses and had helped a great many other companies innovate using JTBD principles. I learned several important principles of JTBD through Bob's mentorship. I even worked with his consulting company. This is also when I met Chris Spiek and Ervin Fowlkes, who shared with me their experiences with applying JTBD.

Inspired by all this knowledge, I began a third business. It was an advertising marketplace for mortgage brokers and real estate agents, and it was a success.

As I had done before, I passed the business to a cofounder. I learned long ago that I'm a maker, not a manager.

That's also when I realized that JTBD, at the time, was incomplete. Many of the principles and suggested theory of the time were inconsistent and often contradictory. I decided to unpack, refine, and expand the principles of JTBD to help others and myself.

HOW TO BE SUCCESSFUL WITH JTBD AND THIS BOOK

I don't believe there is any one "right" way to innovate. Life has too many unknown and unknowable variables. This is why successful entrepreneur Steve Blank says, "No business plan survives first contact with a customer."[9]

JTBD prepares us for whatever curveballs are thrown at us because it equips us with principles instead of methods. Why? Methods come and go, whereas principles stick around. In fact, when you're armed with the right principles, you can plug in any appropriate methods and mental models. You might even create some new ones! And while this idea may cause you some anxiety, over time you will find it empowering. The study and application of principles, instead of methods, is what gives you the confidence to act in a complex world.

This attention to principles first and only is why this book makes a distinction between principles and practices. Part I unpacks what JTBD is and walks you through the most important principles of JTBD. Part II and Part III demonstrate those principles in action though various case studies. These chapters also give you ideas on how you can apply those principles today. I recommend everyone read Parts I to III.

Part IV is where the practices and methods begin. These practices and methods are by no means perfect or even the best. I offer them to you so you can have a foundation to get started. Adjust them to make them work for you. Read Part IV only if you plan on doing JTBD research yourself.

Last, I have used subsections and bolded type to help you skim the book and quickly find answers to your questions. These also give an idea of what comes next. In fact, after you read this chapter, I encourage you to take a few minutes and skim the whole book. Look at the chapters, subheads, and bolded type to get a sense of how this book works and how concepts will unfold for you.

ABANDON EVERY MBA, ALL YOU WHO ENTER

I invite you to explore JTBD with me. I also ask that you—at least for the time being—put aside any preconceived notions of competition, markets, customer

motivation, and even JTBD. You can pick them up again when the book is finished, or you may decide you no longer need them.

Part I
The Job to be Done

Our journey begins with an introduction to Jobs to be Done (JTBD). This section will equip you with a strong foundation to understand what it means to study customer motivation and why it is a vital part of innovation.

2. What Is JTBD?

Where does JTBD come from?
What is a Job? What makes it Done?
What isn't a JTBD?

As a theory, JTBD is a collection of principles that help you understand customer motivation.

JTBD is a struggle someone has to make life better. Someone has a JTBD when he or she wants to make an improvement but doesn't know how. When that person finds and can use a solution to make that hoped-for improvement, there is no longer a JTBD.

What's JTBD thinking like? Charles Revson—who founded Revlon—knew what his business sold and why customers kept buying from it. He described Revlon's business: "In the factories, we make cosmetics; in the drug stores, we sell hope." Susan Prescott, Apple vice president, said, "[Apple is] dedicated to building products that make people's lives better, often in ways that we couldn't have even imagined, enabling them to do things that they have never done before."[10]

This is JTBD thinking. Prescott knows Apple's goal isn't to sell products but to "make people's lives better." Revson also knew that his customers didn't want the cosmetics his company sold or care how they work. Rather, customers wanted the hope for a better life. That is what they paid for.

How is JTBD different? JTBD's single intent is to understand how and why customers struggle. It tells you about the way things are, not what you should do about it. It is descriptive, not prescriptive.

This is in contrast to many—perhaps all—other approaches to design and innovation. Other approaches either describe customer motivation in terms of the things customers do (e.g., people buy cars so they can get from point A to point B), or they tell you what to do (e.g., you should create a low-end car to target the bottom of the market). Neither of these approaches helps you understand the "hope" that Charles Revson alluded to.

WHERE DOES JTBD COME FROM?

The greatest—and most helpful—ideas and theories are not created by one person but are the result of many people over a long period. This is certainly the case with JTBD. Its principles have emerged from the work of a long lineage of researchers and innovators. Here are the most notable:

Joseph Schumpeter and creative destruction. The roots of JTBD go back at least seventy-five years to Joseph Schumpeter and his introduction of creative destruction. Schumpeter observed that new innovations steal customers from incumbent offerings and then eventually go on to replace them. At one time, horses and ships were our primary methods of personal transportation. Eventually, trains replaced horses, but then cars and airplanes replaced those trains and ships.

JTBD incorporates Schumpeter's insights as it seeks to understand why customers pick one way of doing things over another. Yes, innovators create new solutions, but the wheels of creative destruction turn only through the interaction between customers and innovators.

JTBD also incorporates another one of Schumpeter's brilliant insights that is almost always overlooked. Schumpeter argued that competition should not be measured only among products of the same "type." He insisted that competition can come from anywhere. You might think you're alone in a market or have market superiority, but some competitor unknown to you could be stealing away your customers. Your only sign that something is wrong is decreasing sales. In chapter 8, we take a close look at JTBD, creative destruction, and competition.

W. Edwards Deming and systems thinking. Schumpeter's influence on JTBD is restricted mostly to factors of market dynamics and competition. However, Dr. W. Edwards Deming has influenced JTBD the most. Those who are familiar with his nearly sixty years of contribution to theories of management and innovation will recognize his fingerprints throughout this book.

However, his most notable influence comes from his development of systems thinking, which I discuss in chapter 13. Throughout Deming's career, he frequently reminded businesses that:

> "The customer and producer must work together as a system."

> "The consumer is the most important part of the production line."

> "A dissatisfied customer does not complain; he just switches."

Deming also often challenged companies to remember creative destruction, and he impressed on business leadership that simply making a product better and better wasn't enough. Eventually, someone invents new ways of solving customers' problems. He would tell businesses, "Makers of vacuum tubes improved year by year the power of vacuum tubes. Customers were happy. But then transistor radios came along. Happy customers of vacuum tubes deserted vacuum tubes and ran for the pocket radio."

Deming understood that satisfying your current customers wasn't enough: "We must keep asking, what product or service would help our customers more? What will we be making five years from now? Ten years from now?" For Deming, innovation should never stop.[11]

Psychology. On the psychology front, you'll run into influences from Gary Klein, Amos Tversky, Daniel Kahneman, George Loewenstein, and Ann Graybiel. These are psychologists and scientists whose work form foundations of behavioral economics and naturalistic decision-making (NDM). Their work helps us understand how and why customers don't make rational decisions when buying and using products, are inconsistent in their opinions of products, and don't always act in their best interest. JTBD understands that if you want to make a great product and to develop a message that connects with customers, you have to understand the emotional forces that shape their motivation.

Bringing it all together. Then, you arrive at Bob Moesta and his colleagues John B. Palmer and Rick Pied. Years ago, Bob told me, "If you were to call me the father of JTBD, then John would be the grandfather." In the late 1980s and early 1990s, they worked together to combine their respective experiences into the first JTBD principles. They are the ones who came up with the idea and language that customers have "jobs" that they are trying to get "done."

Influencers	Jobs to be Done
Joseph Schumpeter Creative Destruction	New innovations displace incumbent ones Customers only use one solution at a time for a JTBD Competition can come from anywhere
W. Edwards Deming System of Profound Knowledge	Study of interdependence and interactions Understanding customer motivation through synthesis Innovation should never stop Special case vs normal variation Correlation is not causation
George Loewenstein	Anxieties of choice and action
Ann Graybiel	Customers fall back onto their Habits
Amos Tversky, Daniel Kahneman Cumulative Prospect Theory	Preference is context-dependent Customers overvalue losses, and undervalue gains Customers have a limit on what they value
Gary Klein Naturalistic Decision Making	Mental simulation of making progress with a product Customers have a "Job" they want "Done"
John Palmer, Bob Moesta, Richard Pedi & the JTBD community	Customers don't want the product- they want help making their life better Customers want progress

FIGURE 4. GENEALOGY OF JTBD

Bob was at the ailing Ford Motor Company as W. Edwards Deming turned it around by reshaping its design and manufacturing operations during the 1980s.

John's contribution was to bring his own experience of quality functional deployment (QFD), experience with systems thinking, and behavioral economics to JTBD.

Then, you get to this book and me. Bob's influence on me cannot be understated. I've also been influenced by other notable JTBD practitioners such as Chris Spiek and Ervin Fowlkes. Last, but certainly not least, the entire JTBD community who exists today has had a tremendous influence on this book and JTBD. Without their application of and experience with JTBD, this book would not have been possible.

WHAT IS A JOB? WHAT MAKES IT DONE?

All consumers struggle when there's a mismatch between how their lives are now and how they'd like things to be. This creates a Job. This Job is Done when a customer has a solution that takes him or her from the struggle to that better life he or she imagines.

Don't let the language trip you up. The phrase "Job to be Done" is just how we describe the struggle of a customer. Saying that a customer has a JTBD is like saying a customer has a problem to solve. Let's unpack the Job and Done parts.

Unpacking JTBD's two parts. The two parts of JTBD can be defined as follows:

> A Job is one's emotional struggle to make life better.

> It's Done when one finds the right solution to overcome that struggle and make that better life happen.

A Job is an emotional struggle to make life better. Let's illustrate the concept of a Job. Imagine you create and sell cars. You might think that people want cars because, well, they buy cars. But is that right? Do people want the car itself? A car is just a bunch of glass, metal, rubber, and plastic put together. Moreover, that hunk of glass, metal, rubber, and plastic is expensive to buy and maintain. Do people really want that?

Unsatisfied, you decide to go deeper. You go out and watch people use cars. You determine that people want cars that so they can get from point A to point B. That works, but only for a while. The longer you observe people buying and using cars, you develop lingering questions:

> If it's about getting from point A to point B, why do some people use busses, motorcycles, bikes, roller skates, airplanes, trains, subways, taxis, or carpools? Why do some walk? All those modes of transportation get us from point A to point B. Why choose one over the other?

What about people who buy cars but don't drive them? Instead, they take these cars to car shows. Even odder, they don't drive the cars to the shows! They put them in trucks to take them there.

Next, you think that if you study who customers are, then you will understand why they buy cars. But then you start noticing that people who share widely different physical attributes are buying and using the same cars. For example, the Ford Mustang—a classic American muscle car—is a popular sports car among both men and women.[12]

This is when you come to three conclusions:

1. People don't want the car itself—it's just a bunch of materials.

2. Car ownership isn't about getting from point A to point B— that just describes what (most) customers do with their cars.

3. People don't buy products because of who they are. For example, people who have wildly different physical attributes often buy the same product.

Unsatisfied, you take a different approach. You decide to ask these car owners some questions: "How did you come to realize you needed a car instead of some other form of transportation? How does owning a car make your life better?"

You get some interesting answers, such as, "I want the independence and freedom to go to the places I want without having to work around someone else's schedule."

But you also notice something else. Customers aren't talking about cars, what they do, or how they work. They're talking about themselves. Cars are about making their lives better. You decide to call that a Job.

A Job is Done when you're able to use a solution to make a better life happen. The *to-be-Done* is an important part of JTBD. It's meant to impress on us that customers have a picture in their mind of how they want their life to be. They will be satisfied only when they get there. This happens when the struggle you were wrestling with before has disappeared. A balance has been created. You are now free to focus on making life better in other ways. You're making progress. Your Job is Done.

For example, I have a picture in my mind of a big family get-together where lots of people show up, have fun, and spend all day together. To make this picture in my mind a reality, I decide that I should get an outdoor grill so I can throw a BBQ in my backyard. Now, the grill itself or how it functions doesn't

really matter to me – what matters to me is "can this grill help *me* make my BBQ a success?" A top of the line, feature loaded grill is worthless to me if I can't use it to make my party a success.

FIGURE 5. SAMUEL HULICK (WWW.USERONBOARD.COM) ILLUSTRATES THAT IT'S NOT ABOUT YOUR PRODUCT OR WHAT IT DOES. IT'S ABOUT WHAT CUSTOMERS CAN DO ONCE THEY USE YOUR PRODUCT TO MAKE PROGRESS.

WHAT ISN'T A JTBD?

I knew I had prejudices about JTBD when I started this book. But just because my approach to JTBD works for me, it doesn't mean it'll work for everyone else. My hedge against this bias was to interview as many JTBD practitioners as I could. What did or didn't they find helpful about JTBD? How did the most successful innovators use JTBD? This section focuses on the concepts that commonly distract innovators when they apply JTBD. This will help you avoid making common mistakes.

We've already explored how JTBD is about customer motivation. But what about activities, tasks, behaviors, or functionality? Does JTBD include them? To test this out, let's consider two small case studies: something that happened over at Notre Dame Stadium, and how some homeowners of Southern California reacted to a drought.

Strange things are afoot at Notre Dame Stadium. The University of Notre Dame has a very popular American football team. The school spends a great deal of time and money on maintaining the stadium's grass field. One activity, maintain the grass, is made up of numerous tasks such as cutting, watering, and fertilizing. Notre Dame pays both in-house employees and outside businesses to help with these and other activities and tasks.

You might be tempted to believe that cutting, watering, fertilizing, and maintaining the grass all represent needs or Jobs. You figure that if the university pays for these services and engages in these tasks, then it must want to do them, right?

In 2014, Notre Dame athletic director Jack Swarbrick did what many fans considered sacrilegious: he decided that the stadium would switch from natural grass to FieldTurf.

When interviewed about the switch, Jack said, "[A combination of reasons] led me to conclude that we would continue to struggle to maintain a grass field that meets the expectations of our student athletes and fans as it relates to appearance, performance, and safety." How should we interpret this? Before taking a closer look, let's consider something similar over in California.[13]

Meet the frustrated homeowners of California. For many years, residents of California enjoyed their lush, green lawns. That all changed in 2015 when a severe drought began killing off homeowners' lawns. On the plus side, residents no longer had to pay for traditional lawn-care services. Other residents were spared needing to water, fertilize, seed, and cut their grass themselves. On the negative side, residents such as Margarita Odelberg described how she "got sick and tired of looking at what looked like a pile of hay." What could people like Margarita do? Here are some of the solutions these customers considered:

> Buy lawn-painting products such as Lawn Life, and then spray the yards themselves
>
> Hire someone else to paint their lawns
>
> Plant drought-resistant plants that don't need to be maintained
>
> Replace their grass with mulch
>
> Install artificial grass

Even more curious is how some residents chose to paint only their front lawns. Homeowner Carol Chait explained why she did so: "The front lawn—it's your face to your neighbors and people driving down the street." How should we think about all this?[14]

It's not the JTBD. If your business had focused only on serving the needs of owning a live, grass field, then you've just lost customers such as Notre Dame and the drought-stricken homeowners of California. Why? Many needs associated with owning a live, grass field have disappeared. In their place, many new needs have appeared. For example, homeowners are now concerned about the environmental impact of the dye, conserving water, and what will happen to

the dye when rain does fall. Ms. Odelberg commented that lawn paint helps "a dead lawn look alive—without wasting all that water!" Ms. Chait reasoned that it was OK to use lawn paint because "[if] you would put it on your face, you'd put it on your lawn."

Numerous questions arise when we compare and contrast all these solutions. Did these customers ever *want* a grass field? Do any needs—such as cutting the grass, water-resistant dye, being environmentally friendly, and conserving water—belong to the customer, or are those just the consequences of using a particular solution for a JTBD? You use solutions such as FieldTurf and drought-resistant plants explicitly to avoid having to do tasks associated with maintaining grass.

There's only one way to make sense of all this, and it requires that you not focus on the solutions (grass field versus FieldTurf) or on activities, functions, or tasks associated with those solutions (cutting the grass or washing FieldTurf). Instead, understand the motivation that's behind choosing a grass field and how owning one makes people's lives better.

Functionality, activities, behaviors, goals, and tasks can all change when the solution changes.

An activity or a function doesn't define a JTBD. Of all the innovators I talked with, the most successful don't let functionality creep into their JTBD thinking – that is, they don't believe in the idea of a functional Job. Instead, they think of a JTBD as the motivation that causes customers to act. Why keep them separate? A JTBD describes why (motivation), not how (functionality).
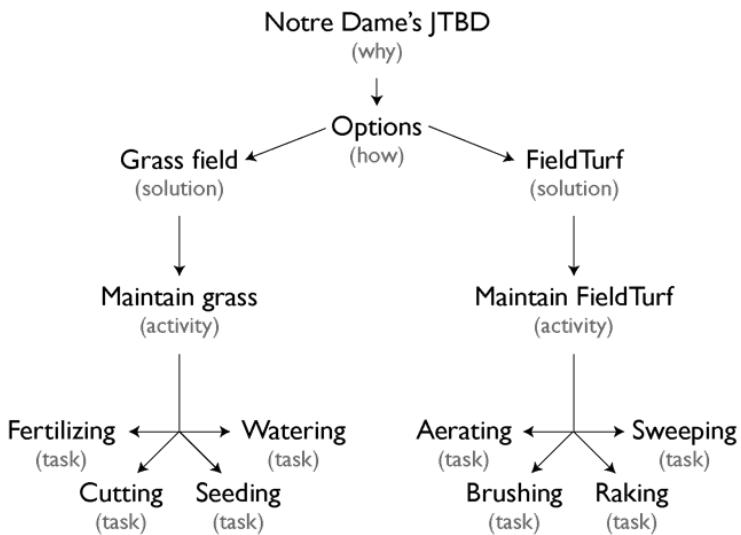
FIGURE 6. FUNCTIONALITY, TASKS, AND ACTIVITIES DESCRIBE SOLUTIONS FOR A JTBD - NOT THE JTBD ITSELF.

You are stuck in the world of today when you focus on functionality, activities, and tasks. Before AstroTurf came along, everyone assumed that people would always need to cut, water, and seed their lawns and footballs fields. But then the inventors of AstroTurf thought, "What if we created something that served the same JTBD as grass but also freed customers from needing to cut, water, or fertilize it?" Breakthrough innovations are realized when you reimagine or eliminate activities and functionality, not when you design for it.

If you are in doubt whether someone is describing a JTBD, ask these questions:

Does this describe an action?

Can I visualize someone doing this?

Does this describe a "how" or "what" and not a "why"?

If you answer yes to these questions, you're probably describing a solution for a JTBD and not a JTBD itself. Remember, customer motivation can't be seen or can described in terms of an actions. You can see someone maintaining their lawn, but you can't see why they do it. Perhaps cutting the grass has nothing to do with "cutting the grass", but is about getting physical activity and being outside. That is why they do it themselves instead of paying someone else to do it.

As you'll see over and over again through the case studies, customers considered wildly different solutions as competition for solving the same JTBD—solutions that have zero functionality in common.

I admit, I sometimes slip into describing a JTBD as an activity or task. I suspect it happens because this is the easiest thing to do. You watch what people do, and you assume that they want to do those things. In fact, this is an example of a well-documented psychological phenomenon called *attribute substitution*. Psychologist Daniel Kahneman described it by saying that "people are not accustomed to thinking hard and are often content to trust a plausible judgment that quickly comes to mind." In other words, when we see someone using a drill to make holes, we think, "Oh, the customer must want holes." It never occurs to us that we're describing only what the product does, and not why people use it.[15]

I avoid biases such as attribute substitution by doing my best to make sure a JTBD is describing a motivation to make life better. I highly recommend you do the same. You may think you're in the lawn-care business; then, one day, Notre Dame Stadium switches from a grass field to FieldTurf. You may think you're in the business of making and selling lawn mowers; then, one day, someone develops a GMO grass that doesn't need to be cut.[16]

Should we care about functionality, activities, and tasks? At some point, you will understand the customers' JTBD, and you will have to create a solution for it. This is when you'll have to start thinking about functionality, activities, and tasks. This is also where JTBD ends. That is perfectly fine.

There are already well-established fields of research that help you design for tasks and activities. Examples include activity theory; activity-centered design; service design; task analysis; human-computer interaction (HCI); and customer-outcomes, objectives, activities, resources (COAR). Why duplicate them? Besides, we want to understand the motivation that comes *before* customers engage in any task, activity, behavior, or use functionality. We don't want to study customer goals; we want to know how goals are created.

What about different types of Jobs? It is tempting to classify Jobs into different types. I've had discussions where people make arguments for Jobs that are sexual, social, personal, spiritual, religious, parental, spousal, safety related, physiological, artistic…the list goes on and on. I find that all they're doing is describing the various of emotions that work together to form one JTBD.

I would recommend classifying types of Jobs only if it is helpful to innovators. But I always see it as a distraction. Innovators and teams end up wasting their time trying to deal with inconsistent overlaps. Isn't a social Job just a type of

emotional Job? If we call it a social Job, does that mean it's not an emotional Job? If a Job is both social and emotional, does that count as one or two Jobs? What are the rules we use to determine when an emotional Job becomes a social Job? Where does one end and the other begin? They get so wrapped up in dissecting how a social Job is different from an emotional Job that they lose track of the big picture.

Don't worry if this feels overwhelming right now. You have the rest of the book and will see plenty of real-world examples to help you unpack and understand all this. Just keep in mind two points:

1. A JTBD is purely emotional. Tasks, activities, or functionality describe solutions for jobs.

2. Keep it simple. All Jobs are emotional.

3. What Are the Principles of JTBD?

JTBD principles

Here are a few JTBD principles that you will see demonstrated repeatedly throughout this book. There are others, but the principles below are perhaps the most useful and commonly used in the JTBD community.

JTBD PRINCIPLES

Customers don't want your product or what it does; they want help making their lives better (i.e. they want progress). Charles Revson knew that customers didn't want cosmetics, which are just colored oils. He also knew that customers didn't want what those cosmetics do, which is simply coloring skin. He understood that his customers wanted hope. This understanding of customer motivation has helped keep Revlon in business for eighty-four years. In 2015, its revenue topped $1.9 billion. It seems that selling hope is a profitable business.[17]

Focusing on the product itself, what it does, or how customers use it closes your mind to innovation opportunities. For example, if you sold drills, you might be tempted to think that people buy drills and bits because they want holes. But then 3M comes along and develops an entire line of damage-free hanging products that are designed specifically to eliminate the need for a drill or for making any holes. Another manufacturer, Erard, also avoided the "customers want holes" trap. It promotes a collection of TV mounts with a simple description: "The first TV wall-mount bracket with no drilling of the wall required." While you were convinced customers wanted holes, your competitors understood that customers wanted help improving their lives.[18]

JTBD is laser focused on describing customer motivation. John Palmer describes JTBD as such: "Jobs were never intended to explain what the *product* must do. They stand for what the *customer* must do."

And what must customers do? They must overcome their struggles and make their lives better.

People have Jobs; things don't. It doesn't make sense to ask, "What Job is your product doing?" or say, "The Job of the phone is…" or "The Job of the watch is…" Phones, watches, and dry cleaning services don't have Jobs. They are only examples of solutions for Jobs.

Products don't have lives to make better. They also don't have motivations, aspirations, or struggles. However, people do struggle. They do have lives they want to improve. This is why people—not products—have a JTBD.

Competition is defined in the minds of customers, and they use progress as their criteria. Imagine an entrepreneur who wants to be advised and inspired by someone whom she respects. She has a variety of options to choose from to achieve this. Examples include reading books, watching videos, attending conferences, or giving advisor shares in exchange for mentorship.

The struggling entrepreneur cares little about how she gets advised and inspired. The concern is about making progress. "Are things better for me today than yesterday? Am I getting closer to that picture in my mind of how I want my life to be?" These are some of the criteria customers use to judge which products compete against each other to overcome a struggle. Customers don't define or restrict competition based on the functionality or physical appearance of a product. Instead, they use whatever helps them make progress against a JTBD.

When customers start using a solution for a JTBD, they stop using something else. Many solo entrepreneurs struggle with feelings of isolation. They want help being motivated and inspired. To get this Job Done, some choose to create local get-togethers through Meetup.com and encourage other solo entrepreneurs to join. If that doesn't work, they may try getting people together in an online chat group. If that doesn't work, they may decide to join an existing online community, such as Product People Club. If Product People Club, as a solution, is something that works to make their lives better, they stop searching for new solutions. Their Job is Done.

These entrepreneurs were jumping from one solution to another. This makes competition for a JTBD a zero-sum game. For somebody to win, somebody else has got to lose. Just as only one puzzle piece can fit into an empty slot, a customer prefers only one solution at a time for a JTBD.

Innovation opportunities exist when customers exhibit compensatory behaviors. Baking soda was originally advertised as a baking agent. Over time, customers started using it as a cleaner and deodorizer. Arm & Hammer picked up on this. It now sells a variety of baking-soda-based products specialized for various cleaning and deodorizing purposes.[19]

The Segway was meant to revolutionize personal transportation for the masses. It failed. However, it did find success among members of law enforcement who began using it for their patrols. Tour companies also began using Segways as the ultimate gimmick to attract tourists and for family activities.[20]

Baking soda and the Segway are examples of customers using products in ways for which they weren't originally intended. Such situations represent opportunities to innovate a new product or to refit an existing one.

Solutions come and go, while Jobs stay largely the same. JTBD is about understanding human motivation as a problem to be solved. Human motivation changes slowly. Therefore, Jobs change slowly. How long have people wanted to be mentored and advised by someone they admire? How long have parents wanted to teach their children life's lessons? The answer is the same: a long time.

Solutions, on the other hand, constantly change because technology enables better ways of creating solutions that solve our Jobs. This is why we focus on the JTBD and not the product itself or what the product does.

Favor progress over outcomes and goals. Customer goals and outcomes are only the results of an action. The ball went into the net; that is a goal. Did you win the game? Are you becoming better at making goals? No one knows.

Measure progress instead. Making a goal today isn't as important as becoming better at making goals in the future. This philosophy is the same for your customers. They don't wait until after they've finished using a product to determine whether they like it. They measure progress along the way. Do people wait until they lose ten pounds before judging whether a gym membership is successful?

Customers need to feel successful at every touch point between themselves and your business, not just at the very end when the outcome of an action is realized. Design your product to deliver customers an ongoing feeling of progress. Over time, you will notice that you need to change the outcomes and goals you deliver to customers. Why? A successful product and business will continually improve customers' lives. As customers use your product to make their lives better, they will face new challenges and desire new goals and outcomes.

Progress defines value; contrast reveals value. See how easily you can answer this question: "Which food do you most prefer, steak or pizza?" Many people find this difficult to answer. An easier question might be, "When do you prefer steak, and when do you prefer pizza?"[21]

A customer may find it difficult to compare two foods without any context. The last question is easier because the person being asked is thinking about food and context together.

Products have no value in and of themselves. They have value only when customers use them to make progress in context. The value of steak is easier to

assess when it's matched with a fancy restaurant and a nice bottle of wine. But things can get wacky in that scenario if we swap a slice of pizza for the steak.

The same effect, of course, also applies to pizza. A pizza birthday party for an eight-year-old makes perfect sense, but a steak birthday party for kids doesn't seem quite right. The kids would probably be upset and the party a disaster.

The same steak has more value at the fancy restaurant than at a kid's birthday party. The steak doesn't change, but its value does. Why? A steak at a fancy restaurant helps you have a better restaurant experience. It delivers progress. A steak at a child's birthday party does not make the party better. It does not deliver progress.

This is why we say progress defines value, and contrast reveals it. You understand the value customers place on a product when you compare and contrast the progress it delivers against the progress other products can deliver. A steak makes a fancy dinner better but a kid's birthday party worse. A pizza makes a fancy dinner worse but a kid's birthday party better.

Solutions for Jobs deliver value beyond the moment of use. Imagine you own a car. When it's sitting in your garage, is it still delivering value? Doesn't the satisfaction of owning a car extend beyond when you're actively using it? What's more valuable, getting transported from point A to point B or having the peace of mind that you have the ability to go where you want to go, whenever you like?

Our lives are dynamic. They can't be measured well in static terms. Yes, a solution can provide functionality only in the moment, but its value to the customer is realized in contexts beyond that moment. A product should be designed with an understanding of how it improves customers' lives, not just how it offers value in the moment.

Solutions and Jobs should be thought of as parts of a system that work together to deliver progress to customers. What is a system? A system is a collection of parts that work together to achieve a desired effect. The value is not in any one particular part of the system but in how those parts work together.

A car is an example of a system. Imagine I give you a box that contains all the parts of a car. What I gave you would likely be worthless to you. The parts are valuable to you only when they are assembled in a particular fashion, when they work together in a particular way, and when you can use them to make progress. You help customers better not by studying the individual parts of the car but by studying how those parts work together to help customers make progress.

This same is true for a JTBD and innovation. You need to understand how several parts must work together to deliver progress to customers. Such a study

will also help you understand why and how customers don't make progress. The study of a JTBD is the study of a system, and solutions for Jobs can be thought of as parts of that system.

Grill manufacturer Weber understands the idea of products as part of a system. Weber doesn't sell only grills. It offers educational materials, recipes, party-planning guides, grilling accessories, and even a free phone hotline for grilling advice. Weber offers all these additional products because it understands that the customers' JTBD isn't about owning a grill that functions to cook things; it's about being someone who can use a grill to make tasty food and becoming a better griller. For many grillers, the JTBD is also about entertaining friends and family with cooking theater, as well as tasty food. In this case, it's about becoming a better host and entertainer. Weber understands that no matter how well its grills function, if customers can't use them to make progress against their JTBD, the grills are worthless.

The understanding that customers are buying a better version of themselves is why Weber delivers a constellation of products that work together—as a system—to help customers make progress. This is why Weber has been a successful, profitable company since 1893.

Part II
Demand and Competition

JTBD thinking encourages you to understand how demand for a product is generated and how customers view competition. The first three chapters in this part feature case studies of innovators who developed this understanding, and they describe how it helped them create and sell products. Use these to create a mental catalog of examples of what it is like to apply JTBD to innovation efforts. This will help you absorb the concepts in this book and become better at applying JTBD to your own innovation efforts.

   After these case studies, we'll dig deeper into the forces that shape customer demand, why JTBD practitioners claim that Jobs remain while solutions come and go, and what it is like when an innovation effort fails to account for the forces of progress and how customers see competition.

4. Case Study: Dan and Clarity

What's the JTBD?
Put it to work

I didn't know who Dan Martell was when I started writing this book. Another JTBD practitioner told me about Dan's success as a serial entrepreneur, angel investor, and JTBD practitioner. When I did catch up with him, I learned that he had applied JTBD principles while building a company called Clarity. JTBD thinking helped him improve his research efforts, understand the company's profit potential, understand how Clarity could stand out to customers, find marketing messages that resonate with customers, and know which features his team should—and shouldn't—add to his product so more customers would use it.

Founded in 2012, Clarity is a marketplace that connects entrepreneurs with experts who can advise, motivate, and inspire. Dan created Clarity to ensure that entrepreneurs get the advice they need to grow their businesses. It helps them find the right experts and then schedules and hosts calls with them. (Three years later, Dan sold it to Fundable, which is a platform entrepreneurs can use to raise money.)

Dan first heard about JTBD from Eoghan McCabe during Clarity's early years. Eoghan is CEO of Intercom, one of the companies Dan invests in. Dan, intrigued by Eoghan's recommendation, believed JTBD could help him grow Clarity faster: "Once I decided I wanted to learn more about JTBD, the first thing I did was to search Clarity's marketplace. I found some [JTBD] experts and did a few calls. It was really helpful to get real-world experience and advice on how to approach it."

How can JTBD help you do better research? Dan had already been a strong proponent of customer interviews, even before getting into JTBD. Every week, he would call six customers or so and ask questions such as, "How would you feel if you could no longer use this?" or, "How can we improve Clarity?" But Dan knows that such interviews have limitations. In particular, he understands the difficulties inherent in talking with customers about their habits and that people often want to feel as if they are giving the "correct" answers. "I feel like customers have this really bad habit of lying sometimes," he said. "They'll say, 'Yeah. I love your product. I use it all the time.' Then, you look at the logs, and

you realize they haven't logged in once since signing up—so you know it's not true."

Calls with JTBD practitioners helped Dan realize the benefits of framing an interview around what Jobs customers are trying to get done. He did this by changing his questions. Instead of "How would you feel if you could no longer use this?" he asked customers, "Can you tell me about the other solutions you've tried? What did or didn't you like about each one?" In other words, he shifted from asking broad, individual questions to asking questions aimed at understanding customers' journeys as they struggled to find solutions that fit their JTBD. He would then investigate if other customers had similar journeys.

Dan said, "What I love about JTBD is that it really helped me to build a framework for those interviews. Before I became familiar with JTBD, I studied interview questions, extracted pain points, customer language, and all these other things. But when you frame it around the question, 'What is the job your customer is hiring you to do?' then it really puts a lot of things into perspective and helps you uncover key insights."

What do consumers consider as competition? How do you understand what customers do and don't value in a solution? Dan's new approach to interviewing customers encouraged him to learn about other ways they had tried to get advice. He also wanted to learn if getting expert advice was really what customers were looking for. "Getting expert advice" is just an activity—a solution for a Job. What was the Job itself? What was the emotional motivation to make the customers' lives better? Answering these questions would help him continue to improve and promote Clarity.

To help guide him through these interviews, Dan kept asking himself a few simple but powerful questions:

> What do customers see as competition to Clarity?
>
> What would they spend their money on if they didn't spend it on Clarity?
>
> Have customers set aside a budget for using Clarity or some other solution?

He then asked customers questions such as the following:

> What other solutions did you try before deciding on Clarity?
>
> What did and didn't you like about other solutions you had tried?
>
> If you could no longer use Clarity, what would you use instead?

These questions helped Dan learn what his customers considered as competition to Clarity. He learned that, before ending up with Clarity, customers had tried solutions such as joining entrepreneur groups, hiring individual advisors (who take equity), using LinkedIn, and attending conferences. "Understanding how people thought about our product and its competition helped us position it to be different," Dan said. "A lot of people had tried LinkedIn before coming to Clarity. Whereas LinkedIn connects people, it doesn't let them call in real time. It was also interesting to hear that customers considered Clarity as an alternative to attending a conference."

How do you learn what pushes customers to make a change? Dan began to learn two important observations as he talked with customers about the solutions they had used: what his customers did and didn't value in a solution, and what was pushing them to make a change. He found these data by comparing and contrasting all the solutions they had used and asking himself, "What do these solutions have (or what do they not have) in common?" Dan realized that the solutions "use LinkedIn," "hire an advisor," and "attend a conference" had an important aspect in common: entrepreneurs were trying to make a connection with a specific person.

Dan and his team saw that entrepreneurs seeking advice valued the messenger, often more than the message. When it comes to getting advice, it's not just about the content. It has a lot to do with who's delivering it. Dan said, "There's real value in going after that person who is going to motivate you to make a change. It's not just having someone tell you, 'Go get ten sales tomorrow.' It is having billionaire entrepreneur Mark Cuban tell you, 'Go get ten sales tomorrow.'"

Dan now knew what was pushing customers to seek a solution: entrepreneurs who were in a slump wanted inspiration from a particular person. Getting advice is just an activity. If the seekers merely wanted advice, they could have read a book or watched a video. They wanted more. They were hoping that someone else's success would rub off on them. This is why they wanted someone they respected to inspire and motivate them to get out of an entrepreneurial slump. That was their emotional motivation to make a change. Making progress with this Job is more valuable to these customers than getting advice.

Dan said, "I've got a list of competitors that tried to build competing solutions. Their marketing and positioning was all about, 'Oh, if you want to talk to this type of person, we have them.' But it was never about a person having the knowledge. It was what [you knew] the person you talked with had accomplished."

How can understanding the customer's moment of struggle help you market a solution? These insights helped Dan and his team make two changes to how they advertised Clarity. Each change would differentiate their solution from what customers considered its competition and help customers realize that Clarity was better. The first change was to emphasize that Clarity would serve its customers on demand. As Dan put it,

> We started saying Clarity gave "on-demand business advice." It was adding the words *on demand* that differentiated us from LinkedIn—which is an e-mail exchange from which you may or may not get a response. It also differentiated us from attending a conference—you didn't have to wait until the next one came up. We mentioned all that in the copywriting.

The second change was to highlight the fact that using Clarity was cheaper than attending a conference. Dan said, "Understanding what customers considered as competition also helped us position Clarity against the cost of going to a conference. Why invest thousands of dollars in expenses and the cost of a ticket if you can just talk to the speaker today?"

How did the product attract more users and customers? Clarity is a marketplace for connecting buyers (entrepreneurs looking for advice) with sellers (those offering advice). This means that Clarity needed to attract two different groups of people—each with its own motivation for using Clarity.

The motivation for advisors is simple: they want to make money by helping people. The entrepreneurs who use Clarity, however, are different. They want to be motivated and inspired, usually by a particular person. This meant that for its marketplace function to work, Clarity had to find experts whom customers recognized and respected. Dan said,

> Understanding what customers were trying to achieve with LinkedIn and conferences helped us with the supply side of the marketplace. We said to ourselves, 'OK. If we recruit experts, we need to recruit a certain type of expert.' One of the creative solutions that we came up with was to source experts from SlideShare (a website where conference speakers share their presentations with the public). If you think about it, people who are regarded as inspiring and motivational are those who give creative presentations at conferences. When we wanted to add topics or categories for Clarity, we would source experts who had presentations on SlideShare.

How did Clarity realize its revenue potential? It was Dan's understanding of what customers considered as Clarity's competition that also helped him realize Clarity's revenue potential. "We learned from customers that their budget for Clarity wasn't coming from the IPO, or from a monthly membership, or from a training budget. It was coming from spending money to go to an event to meet people and to learn." Dan realized that Clarity wasn't taking money away only from lower-cost alternatives, such as LinkedIn, or from the price of a conference ticket. He learned that Clarity was tapping into the budgets for big-ticket items, such as hiring advisors and consultants, as well as entire budgets for attending conferences, which include airfare, hotels, and meals. This explained why his customers were willing to spend thousands of dollars on calls. This insight helped him understand how valuable his product was to customers. It also helped him understand Clarity's true value in case it was acquired, which it eventually was.

Clarity discovered a silent competitor: anxiety. Nobody comes to Clarity when he or she is having a great day. Dan and his team learned that entrepreneurs were hoping they could get inspired by someone they respected. Without this inspiration, these entrepreneurs would struggle to put into action any advice they were given. This generated demand for the product. But were there any forces that blocked this demand? Dan said, "The biggest competition for us is when a customer chooses to do nothing. I think that's true for a lot of innovations. In Clarity's case, entrepreneurs and innovators continue struggling in the dark. They wouldn't choose to become a self-educator and solve their problem."

Dan began to learn about the anxiety that blocks people from using the product or keeps them from using it more, even when they do decide to reach out to an expert on Clarity:

One of the questions that I would ask, which was about Clarity as a solution and not their JTBD, was, "What can we change to better meet your needs?" We found a bunch of anxieties around using Clarity. A majority of them were, "What if the expert doesn't answer my question? What's your guarantee? Is the call going to be recorded? What should I do to prep?" That last was one that really threw me off. Both the seekers and experts themselves felt we should teach them how to prepare for a good call.

Dan and his team had taken it for granted that people would be prepared for a call. He assumed that both parties would set up the topic and then have a conversation. This was partly true. Customers had specific questions, but they didn't know how to organize them or what made a question good or bad. Both sides wanted to prep, but they didn't know how.

Another anxiety that both parties shared was the fear of sounding stupid or not putting their best foot forward. What if an expert doesn't have a good answer for a question? What if he or she temporarily forgets the best answer? What if I get nervous and forget my follow-up questions? These anxieties prevented both groups—entrepreneurs and experts—from using Clarity more.

How can you reduce the anxiety customers face when using or buying your product? To fix the problem, Dan and his team added some prep questions and guidelines to the e-mail templates they sent out to notify both parties of a call. They also provided notes that outlined what a great call looks like and what expectations the parties should have going into the call. Dan said, "Discovering anxieties like those—that is the interesting part. What I love is thinking, 'Here is the problem, and here is the anxiety point. How do we solve it in a way that's elegant, simple, and doesn't confuse the interface?' That was always the fun part for me."

How can JTBD be used to research new features? As Dan became more familiar with JTBD, he began to develop his own tools and processes that would help him apply JTBD principles to improve Clarity. One such process was aimed at helping his team quickly validate ideas for new features.

Before committing to developing a feature, the Clarity team wanted to make sure the problem they intended to solve was actually one that customers had. The best way to learn this was to find out if customers had tried to solve the problem before. Dan said, "An interview about how customers had tried to solve a problem in the past was more like a feature-usage timeline than a purchase decision."

An example of a feature the Clarity team chose not to build was one that saved search results when users looked for experts on Clarity's marketplace.

> We asked customers questions like, "Have you ever tried to save results when you searched for an expert?" If they said no, then we'd move on. We then asked, "Do you have a browser bookmarklet? Which ones?" Then, they would say, "Evernote, Buffer…" It would provide so much context outside of the feature. It was more about how the customer had tried to solve their problems in the past.

So, Dan's team decided not to build the browser bookmarklet. They didn't think it delivered enough value because the problem it solved wasn't one their customers had struggled with. Dan said,

A lot of people—especially if they're committed or already invested in a solution—are looking for that confirmation bias that it's something they should do. It's a different question to ask customers how they solved the problem in the past. I could ask them, "Hey, what do you think of this?" They might say, "Oh, it's prettier. It works great." But that's not really answering the question we're asking. We want to know, "Are you going to use it? Are you struggling to make progress? Have you tried to solve this in the past? Do you want to hire someone or something to solve this Job to be Done?" If the answer is no, then cool. We write that down and move on.

How does JTBD help innovators? Dan appreciates the focus JTBD puts on exploring customer motivation. He also wishes more companies would do that rather than "spy" on customers.

I think the biggest thing which Jobs [JTBD] encourages people to do, which I'm a big fan of, is to stop spying on customers and start talking with customers. I feel that way especially with software, because we have the analytics and the geeks who are building the software; they're all about tracking and logging and all these data…I always give the analogy of being a retail shop owner and hiding in the back room and trying to learn from your customers by watching the closed-circuit television.

You could watch [customers] come in, walk around your store, pick up things, put them down, try things on…or you could just walk out and ask them, "Hey, what brought you in here today? What are you looking for? What other places did you try in the past?" Talking to customers about their motivations is where you're going to learn the most.

WHAT'S THE JTBD?

From the data Dan has given us, I'd say that the struggle for progress is:

More about: getting out of a rut, making a connection with someone whose accomplishments I respect, being inspired, being motivated to act, feeling like I'm on the right path, having confidence in what I'm doing, having success rub off onto me, on demand

Less about: getting expert advice, talking with an expert, giving away equity, having a video chat with a mentor, emailing a mentor, mentoring, meeting other entrepreneurs, seeing a mentor live

Here are some possible descriptions of the one or more Jobs to be Done Clarity is hired for:

Help me get out of an innovation slump with inspirational advice from someone whom I respect.

Give me the motivation to act with a kick in the butt from someone I respect.

Take away the anxiety of making a big decision with assurance from someone else whose has been in a similar position.

These work for me because they don't describe an activity or task. They describe the motivation that comes before engaging in an activity (i.e. using a solution). Also, notice how these descriptions can be used to describe the other solutions customers had tried in the past (e.g. attending a conference, giving away advisory shares, and using LinkedIn). This is important because a JTBD either doesn't change, or does so slowly. If a description of a JTBD works for solutions from one hundred years ago, it'll probably work for solutions one hundred years into the future.

PUT IT TO WORK

Dan's case study is a great introduction to JTBD. Here are some suggestions to help you get started today with applying JTBD thinking.

Ask customers about what they've done, not just what they want. Confirm it if you can. Customers will often tell us what we want to hear, even if it's partially (or completely) untrue. Customers may tell you that they use your product "all the time," but they really use it only intermittently. Also, people build easy-to-remember narratives between themselves and the products they use. Phenomena like this are why it's tricky to ask customers, "What do you want?" and "How can we make things better?"[22]

The answer for these problems is to talk with customers about what they actually did, not just about what they say they want. What were their revealed preferences, not just their stated preferences? Even the answers about actual action taken won't be 100 percent accurate, but they will be a great deal more reliable than their answers to what-if questions.

Understanding how customers have solved problems is a crucial part of understanding their JTBD. Not only does it help you understand what customers expect from a product, it also helps you design features for new products.

Ask the right questions to learn how your customers view competition. Accurate models of competition can come only from customers. Any model of competition that doesn't come from them is invalid. One way of getting the information you need to build a correct model of competition is through customer interviews and surveys. Ask them questions such as the following:

> What other solutions did you consider before trying the product?

> What other solutions have you actually used?

> If the product wasn't available to you, what would you have done instead?

> What solutions have the people you know tried or used?

How to do interviews is discussed in part IV of this book.

Learn what kind of progress customers are seeking. What's their emotional motivation (JTBD)? Use that to segment competition. Dan learned that Clarity's customers saw its competition as attending conferences, using LinkedIn, and hiring advisors. These solutions have vastly different functionality and qualities. However, from the customers' point of view, they appeal to the same struggle: "Get me out of an entrepreneurial slump with motivational advice from someone whom I respect."

Discover your customers' motivation through comparing and contrasting the solutions that they consider as competition:

> What do the various solutions have in common? What is different about them?

> What did or didn't the customers like about each solution?

> What would customers do if they couldn't use their existing solution for their JTBD? What would the consequences be?

> How are they expecting life to be better once they have the right solution for a JTBD?

These types of questions help you understand two things: what customers are struggling with now, and how they hope life will be better when they have the right solution. Put these two together, and you'll have their JTBD.

Ask yourself, "From which budget will my product take away money?" Also ask, "When customers start using my product, what will they stop using?" Dan

learned that his customers were willing to spend thousands of dollars on Clarity calls. This number didn't come from looking at how much other "talk to an expert" products cost. He learned this by understanding that his product—from the customers' point of view—was replacing the entire budge of going to a conference.

I've noted that when it comes to solutions for a JTBD, customers can use only one at a time. When they start using one solution, they have to stop using something else. This helps you understand what the competition is. It also helps you gauge how to price your product properly and figure your revenue potential. Should you charge less or more? You have two big factors to consider: the amount customers are already accustomed to spending on a solution for a JTBD, and the intensity of their struggle. The more they struggle, the more they are willing to pay.

Create better marketing material by speaking to your customers' JTBD. Dan Martell described Clarity as "on-demand business advice." He also featured access to experts whom customers would recognize. He also positioned Clarity as an alternative to going to a conference: Why spend the time and money going to a conference? Talk with the speaker today! Both of these messages spoke to customers' motivations and distinguished Clarity as unique.

Talk with customers to learn what messages connect with them. It can be as simple as asking them to describe why they like your product. Sometimes, you have to probe deeper and ask them questions such as, "Before you bought our product, how did you know it was right for you?" The best promotional material, however, comes from speaking directly to their struggle.

Focus on delivering emotional progress (getting a Job Done). Don't focus solely on functionality. Dan mentioned a list of people who had tried to create solutions similar to Clarity. They failed—and Clarity won, because Dan designed and marketed it in a way that spoke to customers' emotional motivation. The Clarity clones thought of themselves as "talk to an expert" products; they were focusing on functionality, activities, and tasks. But Dan focused on the emotional quality—that is, customers' JTBD. He knew that customers wanted to be motivated and inspired by someone whom they respect. This made Clarity stand out, and it's why Fundable acquired it. Clarity's former competitors, however, have already been forgotten.

Your guiding star in understanding your customers' JTBD is their motivation to better their lives. Focus on that. Focusing on functionality will distract you.

5. Case Study: Anthony and Form Theatricals

What's the JTBD?
Put it to work

What Job might someone use theater for? I had never asked this question before, but Anthony Francavilla had. For the past few years, Anthony has been applying JTBD principles to figure out the answers to that question. Theater has been around for thousands of years. Shouldn't we know the reasons that people attend the theater? Maybe. But maybe not.

Anthony has managed and produced theater for ten years. In 2012, he cofounded Form Theatricals, whose mission is to help productions grow and be successful. This is particularly challenging in the theater world. Many productions are run by actors or writers who often don't have much business experience. They also have little to no experience innovating around customer motivation. This is where Anthony and Form Theatricals come in.

JTBD has helped Anthony figure out how to learn what really matters to theatergoers; what customers do and don't consider as competition to theater; and how a theater production could improve its shows for patrons, increase profits from ticket sales, develop new types of theater products, and reduce the cost of operating a show.

Why look into JTBD? Anthony knew that interviewing theater patrons was the key to improving a show. But what's the best way to interview people about a show they've just seen? To find out, he sought advice from someone who specializes in interviewing customers. Anthony said,

> I got together with this guy, Boris, who specializes in ethnographic interviewing. I said to him, "I have this problem with a client. People don't like the show, but it's selling well. I want to interview customers, but I don't know what I should be asking them about." He said I could talk to them and try to find out what Job these patrons are trying to get Done. He asked me if I had heard about JTBD. I told him I hadn't. He explained it to me. Then, he told me about some sources online where I could learn more. I also signed up for the JTBD Meetup that's run here in New York.

After looking into JTBD a bit more and learning about some of the tools associated with the principles, it didn't take long for Anthony to start gathering powerful insights.

Studying what customers consider as competition helps you reveal what pushes them to change. It also helps reveal their JTBD. Anthony applied some JTBD thinking to his next client: a children's theater company. To begin, he interviewed parents who had taken their children to the company's show. He wanted to know why they chose this particular show. Did they consider any other activities for their children besides attending the theater? He told me, "We interviewed a bunch of parents. We learned that the options they had considered [as alternatives to attending the theater] ranged from going to *The LEGO Movie* and buying the LEGO video game to signing their children up to clubs—like the Girl Scouts."

This was a story Anthony kept hearing. Parents were considering a wide array of options as alternatives to taking their children to this particular theater show. Or, in JTBD terms, he learned exactly what parents considered as competition for their JTBD. These customers surely used the theater for other Jobs in other circumstances. But in this case, what Job were they hoping to get Done by bringing their children to this show?

To help him answer this question, Anthony applied JTBD's idea of "contrast reveals value." He talked with these parents about what they did or didn't like about the other options they had considered. What can the theater do for them that an alternative solution—such as the Girl Scouts—can't? He also asked these parents about what they did immediately after the shows. Did they have family discussions about them? What were those discussions like? After talking with numerous parents, he began to see a distinct pattern. "We found out that part of the Job these parents are trying to get done—when it comes to entertainment and activities for their kids—was that they wanted help teaching their kids how to be independent…while also reinforcing that they are a member of a team."

How do you go about making product changes when you understand the customers' struggle? Anthony brought these insights to his client. Together, they decided to rewrite parts of the play. They kept most of the content the same, but they added a story arc wherein the hero works with the characters around him to solve a problem. This would give parents a talking point with their children about the importance of working with others. Anthony said,

> It's interesting to me because helping writers understand what
> Job parents are using their play for is more powerful than saying
> to them, "Write a movie, or write a play that a nine-year-old will

like." When we know that parents have a Job that involves their
struggle to teach their children life lessons in an entertaining
way, we can work with our clients to help them craft their
content better. When we present it as a Job to Be Done, the
artist has a lot of leeway around what the story should do.

For Anthony's client to sell more tickets to these parents, the performances had to help parents make progress against their JTBD, which included their aspiration to be responsible parents, as well as becoming better at teaching life lessons to their children. This needed to be done in a way that their kids would enjoy. The performance also had to do this better than what parents considered as competition—namely, other plays, movies, video games, and clubs.

Anthony wouldn't have gotten the same depth of insight had he interviewed parents only about what they did and didn't like about the play. Had he done that, he would have ended up getting a lot of feedback about how to make the play better—but only in comparison with other plays. With a JTBD approach to understanding competition, he was now learning how theater compared with other solutions customers had tried.

What do we gain from digging deeper into the JTBD? Anthony wasn't satisfied with just the one insight that these parents wanted help teaching their children life lessons. He wanted to dig deeper into their motivation. Were there other ways they were hoping that theater would make their lives better? He said,

One of the things we figured out was that parents want to have
shared experiences with their kids. That's not necessarily
understood by the producers of theater and movies. On the
surface, it doesn't seem like a shared experience. Theater
productions often see the dynamic of a play as, "Let's just go sit
in a dark room and watch this together." What we learned—and
what a lot people don't realize—is that the shared experience
actually happens after the show. It's when everyone goes out for
dinner and they talk about the movie or the play they just saw.

This insight about shared experiences prompted Anthony to ask parents other questions. What were other shared experiences they engaged in with their children? How did theater fit into those?

I interviewed this father about how he, his wife, and his child
would pick what they were going to watch on TV. They were
basically engaged in rhetoric; they would each debate what they

wanted to watch. They'd go back and forth, to the point that
sometimes the debate would end with them all deciding to just
go their separate ways and reading their own books. They
wanted to have a shared experience—to the point that the
debate itself became the shared experience—and they didn't
end up watching anything on TV.

By comparing and contrasting how families had and felt about shared experiences, Anthony could begin to understand what customers did and didn't like about each solution. What made discussion about what to watch on TV so successful? What things didn't families like about it? What were family discussions like after the family saw a play together? Were these discussions about life lessons or about other things, such as the performances of the actors? How could a theater show promote better conversations at home?

Answers to these questions helped Anthony understand that these parents wanted to make family life better through engaging and educational discussions with their children. These conversations were a bonding experience. This was exactly the kind of direction his client needed. It helped the children's theater company make script adjustments so its plays could act as vehicles for family conversations.

How many Jobs might an innovation be used for? Anthony's interviews with families had been successful. Understanding what Jobs they were using theater for helped him provide guidance for his client. He decided to continue JTBD research with his other clients.

The next few shows he worked on were drama pieces with more serious subject matter—definitely not for kids. Patrons were usually individuals or small groups of friends. What Job might these people be using theater for? Anthony said,

We interviewed a banker who went to a show by himself. He
said, "I love these weird off-off-Broadway plays." As we dove
deeper into what that meant, we began to realize that an
important part of the theater experience was who else is in the
audience. That's what one group of customers was looking for.
They would say, "I want to hang out with artists more." Others
would say, "It's just amazing. I don't normally sit in a room and
have an experience with a group of diverse people like that."

This is how Anthony began to discover another Job that people use theater for: it was about being a part of, or dipping their toes into, a different community.

Very often, these customers had careers that weren't arts related, such as banking or law. He would hear comments such as "I like these productions that are a bit out there," "I like going because there are artists in the audience. They're talking about art," or "I don't have a job in the arts, but I love the arts. I want to be involved in that kind of scene." For many of these patrons, going to these shows was their only opportunity to engage with a diverse group of people. They liked the arts. They wanted to be involved in that community. Anthony said,

> That was a very impactful insight. A lot of times, the theater will try to sell you the idea that it's like a movie—but on stage. You can't compete with that. Theater is more expensive. It's sometimes super inconvenient to attend a show. I have Netflix. If I want to watch a movie, I can hit a button, and there is a movie.

> Figuring out what Job live entertainment solves for people in the twenty-first century is exciting. We've learned that, yes, it is entertainment, but it's also about this idea of community. It's something that you're going to enjoy with other people. Maybe there will also be drinks, food, a lively atmosphere—all that kind of stuff. That's something that a theater can take and use to build up a new business model for the twenty-first century—as opposed to this idea that there's going to be a celebrity in the show. Tickets for those shows are two hundred and fifty dollars. There's a very limited audience for that.

How can JTBD help you reimagine existing products? With these new insights, Anthony and his clients were able to create a new type of theater experience: a theater-subscription product. When people buy these subscriptions, each person is put into a specific cohort of customers. Shows are picked out for these customers. Over several months, this same group of people sees the same shows and engages in social events around the show. Anthony said,

> These patrons valued this idea of inclusiveness. It is important for us to help theater productions understand that patrons are looking for an inclusive experience. This meant making the subscription affordable. It's easier for a banker to pay five hundred dollars for a few shows than it is for many artists. We solved this problem by offering multiple payment options. You

could spread the price over months or pay for the whole subscription up front.

How can JTBD help you avoid wasting resources by building features that customers don't care about? Anthony didn't help his clients only by suggesting to them what they should add to a show. He also made suggestions on what to take out of it.

One of Anthony's clients had a production that featured an after-the-show tour of the stage for anyone who attended. It was something the producers of the show were proud of. But did patrons enjoy it? As he interviewed patrons after the show, he learned that most of them hadn't known about the tour when they bought their tickets. They had simply chosen the show because tickets were being sold at a discount. He said,

> The majority of these patrons learned about the show and the discount on the day of the show. For some of them, it had been a last-minute decision. They'd be discussing with friends what to do for the evening. Should they just go to a bar? A comedy club? But when they noticed the discounted theater tickets, they then chose to buy tickets. It could be an hour or two before the show started.

Of all the people he interviewed, only one or two knew that the set tour was going to happen. Anthony's client had assumed that theater patrons were interested in access to the actors and seeing how the show worked. As it happened, almost no one who bought a ticket knew about the tour. The tour hadn't been part of these patrons' purchase criteria, so it didn't help explain why they were hiring the show. Anthony said,

> We learned that people were not hiring the show to get access to the actors and set after the show. Finding that piece of information was very valuable. The after-show tour was expensive to maintain, and it wasn't something patrons were particularly interested in. The Job for those patrons was about entertainment and having a shared experience with their friends and significant others.

In this case, the producers had overengineered the show. They had designed the show based on what they valued—a tour of the set—instead of what their customers valued—having a shared, fun experience with their friends. After gaining these insights, Anthony worked with the producers to discontinue the

set tours. While experimentation is good, it has to be within the constraints of the Job that customers are hiring the show for. The new thinking freed up the show's designers to focus on what they were doing right and make that better.

How does anxiety stop customers from buying your product? Is there really such a thing as an "impulse purchase"? Similar to tickets for airplanes, sporting events, and movies, theater tickets are worthless after the event starts. Seats are perishable inventory. This posed an interesting challenge for Anthony and his clients. To help him figure out how his clients could sell more tickets, he began interviewing customers to learn more about the key events that sped up or slowed down a decision to buy a ticket. Were there any anxieties about attending a particular show? If so, how could a theater production solve this problem? Anthony said,

> For each customer, we mapped out a timeline of the events that led up to their ticket purchase. We began to hear the same things over and over again. Things like, a husband reads a magazine with his friends at work—that's where he'll first find out about a play. He'll e-mail his wife about it. She'll respond with a comment like, "Seems interesting. I like that it's a horror-themed play set in Spanish. I like horror." But when bad reviews for it come out, they start to doubt if they'll like it. But they still keep an eye on the show. Then, maybe a week later, they'll learn about the discount. At that minute, they're pushed over the edge and buy the tickets.

Anthony discovered two insights here: some anxieties prevent customers from buying tickets to a show, and tickets that seem to be impulse purchases sometimes aren't.

The majority of customers who bought a ticket through a discount did so on the day of the show, but that doesn't mean these were impulse purchases. In the backs of their minds, these customers already had specific shows they wanted to see. But what was holding them back from buying the tickets? Anxiety. They'd first be excited about a show's concept, but if reviews weren't positive, they'd hold off. The discount, however, could compress the purchase timeline. It eased anxiety and caused potential patrons to buy.

Can JTBD gather new insights about a medium that is thousands of years old? As the competition for theater changes with the advance of technology, it's important to focus on the Jobs that customers hire theater for. Many parents use it as a way to help them have the types of conversations they want with their

children and to help them teach life lessons. For those who want to expand and bring diversity to their social circles, community and diversity are critical.

Anthony's application of JTBD principles and focusing on customer motivation have enabled him to innovate within a medium that is thousands of years old.

WHAT'S THE JTBD?

This case study reveals different directions of progress that people hope to make using theater. This would explain why there are so many different types of theater shows. Some big themes associated with Jobs to be Done I heard include: using shared experiences to create or strengthen bonds with family and friends, parents teaching their children life lessons, and adding excitement to into your social life by getting myself involved with people that you normally wouldn't interact with.

The clearest JTBD I heard was related to parents' struggles. They wanted to teach their children how to be independent, while also understanding how to work with others. This works for solutions such as video games, movies, clubs like the Girl Scouts, and attending the theater.

This case study had some great data about customer motivation; however, I still have questions about these parents' motivations:

> What are some of the consequences of not teaching their children life lessons?
>
> Is there something in these parents' lives that is pushing them to make a change now, or are they deciding to be proactive and avoid feeling guilty in the future?
>
> Does having conversations about life lessons relate to anything else going in the lives of these parents or children? What about school or interactions with their friends?
>
> What other solutions do parents couple with theater to make progress?
>
> How will parents know their Job is Done? I.e. When do they know they are making progress and things are getting better?

I would have a to better idea of what progress parents are trying to make once I had answers to questions such as these.

PUT IT TO WORK

How do you convince teammates or management to change a product? Frame design challenges as a JTBD. Innovators like to solve problems; we don't like being told what to do. I find it's best to motivate a team by presenting them with problems to solve in the form of a customer's JTBD.

Dig deeper when you tap into a struggle or aspiration. How have customers tried to solve it before? Anthony discovered that parents had a desire for shared experiences with their kids. But what does *shared experiences* mean? It turns out that a shared experience is most important *after* the show. This insight gave Anthony the idea to talk with other patrons about their shared experiences. What made a shared experience successful? How had the patrons tried to have shared experiences?

When customers describe a struggle or aspiration, don't make assumptions about what they mean; rather, unpack what they're saying. Ask for specific examples. If they describe a struggle, how do they imagine life being better once they solve it? If they describe an aspiration, what are the consequences if they can't achieve it? The answers will help you make design, marketing, and business decisions.

Discover what customers value. Learn their expectations at the moment of purchase and/or first use, and avoid overengineering solutions. Anthony had a client who offered a costly after-the-show tour of the set. However, he learned that almost no patrons were aware that the tour was being offered, so it didn't affect their purchase decisions. This made it safe to remove tours from the show. This reduced costs of production, and it increased profits.

A great deal of waste happens when solutions are developed with features that customers don't value. Customers value the progress a feature may deliver, not the feature itself.

If you have an existing product, engage in an audit to determine which features don't help customers make progress toward their JTBD. If you're about to create a new feature, make sure it delivers progress and, more importantly, helps you increase profits. You might learn just as one of Anthony's clients did—namely, that you're spending money to support features that customers don't find valuable.

Determine if anxiety is a competitor. If it is, find ways of reducing it. You should attack the anxieties in choosing and using a product with the same fervor as attacking a competing product. If customers have anxiety over the cost-value relationship of your product, offer a discount. If customers experience anxiety in

using your product, find a way to make your product less intimidating. Anthony attacked the former by offering discounts on the day of the show. He attacked the latter by offering drinks as "liquid courage" for theater patrons to feel more comfortable mingling with each other.

Be suspicious of the "impulse purchase" concept. No purchase is random. Anthony discovered that many customers purchased tickets on the day of—or even an hour or two before—the shows. But that doesn't mean that these were impulse purchases. Many patrons had already decided they wanted to see a show; they had reservations about paying full price for a show that had received mixed reviews. A lowered price helped ease their anxiety about paying for a show that might not be very good.

Talk with customers about how they came to choose your product for their JTBD. They might claim that their purchase of a USB charging cable was "just an impulse purchase while I was waiting in line." However, when you dig deeper, you might learn that they were about to go on a trip and wanted to take an inexpensive charging cable with them in case it got lost during their travels.

6. Case Study: Morgan and YourGrocer

What's the JTBD?
Put it to work

Morgan Ranieri was fed up. Getting home from work at seven o'clock at night meant he couldn't get the groceries he wanted, for the stores he wanted to shop at were closed by then. Instead, he had to settle for the supermarket chains around Melbourne, Australia, where Morgan lives. I say "settle" because the food quality at these supermarkets isn't very good. Shopping there also meant he wasn't supporting family businesses, which was something he liked to do.

Sensing that he shared this struggle with other people, he teamed up with his colleague, Bandith, and created YourGrocer. The concept for YourGrocer was simple: have your groceries delivered to you from local, high-quality food shops.

Over the next few months, Morgan and Bandith did some tests to see if the YourGrocer concept could work. They investigated what the competition might be, what logistics would need to be in place, and how many local shops were interested in partnering with them, and they even did some preliminary testing with a few customers to get feedback.

Their tests told them that an opportunity did exist. However, to grow their business, Morgan and Bandith needed someone with more technical expertise to join the team. Morgan met Francisco (Frankie) Trindade at a local Meetup. Morgan said, "Over the next month or so, we began speed dating, in a sense— getting to know each other before deciding to work together."

In this case study, we learn how JTBD helped Morgan build a consensus among team members, what customers did and didn't value in a solution, find the right marketing messages, how it helped first-time customers switch to Morgan's product, and how he could reduce churn.

JTBD helps you convince others that an opportunity exists. Frankie wanted to make sure an opportunity existed before he joined YourGrocer as its third cofounder. This is when Frankie introduced Morgan to JTBD. Frankie told Morgan that he wanted to spend more time learning what Job(s) customers would use YourGrocer for. He especially wanted to do this before writing any of the software that would power the business. Morgan said,

> It was Frankie who introduced me and Bandith to Jobs (JTBD).
> Actually, the first thing Frankie did when he joined YourGrocer
> was to make sure we all understood the principles of Jobs to be

Done. We spent a week learning about it and figuring out how we would interview customers. All of us learning about JTBD, and then interviewing twenty customers together, was a great way to induct him as YourGrocer's third cofounder.

How does your team benefit from doing JTBD research together? The newly formed YourGrocer team gained an unexpected benefit of doing JTBD research together. As Morgan said,

This shared learning experience really helped bring us together. We developed a shared understanding of what the business needed to be—which was missing in the beginning. At the start, we all had very different ideas about what customers were struggling with and how we should solve it. I was the typical visionary cofounder who has the next five years planned out in my head—which is very dangerous. But Frankie didn't make many assumptions. He wanted to take it one step at a time. His middle name should be "Pragmatic": Frankie Pragmatic.

Interviewing about twenty customers got me, as a business cofounder, and Frankie, as a new technical cofounder, on to the same page.

Are data about "types" of people information or misinformation? The first JTBD aha moment for the YourGrocer team was when they realized that their customers didn't match the assumed demographic. Morgan said,

We had an assumption about what our customer demographic was—or the idea of who our target customer was. The reality turned out to be quite different. We thought we were creating a business for young professionals who wanted to buy groceries online. It turns out, almost every single one of our customers was a young family—typically a young mom with a couple of kids at home.

At first, the YourGrocer team created the business out of their own need—that is, a way for busy young professionals to buy groceries online. But because most of the company's customers were young families, the team needed to adjust. "It just turned out that the type of customer we were targeting at first [young professionals] didn't really work too well for our product, but this other group of customers [parents] was ripe for it."

How do struggling moments arise? What is it like to be pushed to change? Morgan and his team had now picked up on a group of struggling customers. The next step was to learn how and why these people were struggling. What was the struggling moment? This meant that Morgan first needed to talk with these customers about the different ways they had purchased groceries before. Morgan began to uncover the triggering events that would push these customers from one solution to another.

> The push that eventually led our customers to YourGrocer often began a couple of years in the past. They'd start off shopping at the shops they liked—then they'd have their first child. Getting around to these shops with one kid was difficult, but they could deal with it. But once they had their second child—that would really change things. Having a second kid made it almost impossible to get to the local shops they wanted. That's when they switched from their local shops to buying at the two big suppliers here.

As a customer's family grew, more of his or her time was dedicated to caregiving. It also made traveling to multiple food shops difficult. This would lead these families to consider other ways of getting their groceries, such as at supermarkets.

Discovering these triggering events helped Morgan understand how demand was being generated and how it pushed these parents to seek a solution. This helped him get an idea of how these parents were trying to make their lives better—that is, what Job they were trying to get Done.

What is it like to learn what customers do and don't like about solutions they've tried? Next, Morgan had to learn how these parents had already tried to solve their problem—namely, how to get groceries when they had children to take care of. Comparing and contrasting these solutions would help him understand what these customers did and didn't value in a solution. In particular, these parents complained about cost, poor-quality food, and not being able to choose foods they wanted.

> The big supermarkets do fresh produce really badly. The other local delivery suppliers that do fresh produce well are expensive. Some of them even have these subscription models where you get a preselected assortment of groceries. Customers can't pick and choose what they want, when they want it. Our customers didn't like that. They were getting a bunch of stuff they didn't

want, not using it, having it all go bad, and getting frustrated by
that. Often, all these issues with other services had been going
on for some time. They were just putting up with it. Then, we
came along. It was just what they had been waiting for.

What are examples of things customers value? Before starting YourGrocer,
Morgan and his team already had a pretty good idea of what the business would
be: home delivery from the quality shops his customers loved. Now they were
filling in any blanks and confirming their assumptions of the value that
YourGrocer should deliver. Here's what they were learning:

Convenience had become these customers' top priority. They
used to value food quality the most, but traveling with their kids
to multiple stores proved too difficult for them. This pushed
them to trade food quality for convenience.[23]

*After convenience, they wanted to be able to choose foods they
wanted.* This ruled out services that delivered to the home but
didn't allow buyers to choose their own food options.

Quality got pushed to the bottom. Ultimately, these customers
ended up choosing food from supermarkets. While supermarkets
offered the lowest-quality foods, they ranked the highest on
convenience and selection.

How does JTBD help you create a message that connects with customers? The
YourGrocer team members were confident that they now understood what the
customers valued and that the team could deliver this value. The next step was
to figure out a message that would connect with customers. Once again,
customer interviews helped Morgan and his team figure this out.

In the beginning, we didn't know which messages would stick
with customers. We would say, "It's good to shop locally,
because it's good for the environment. It's better food. It's better
priced. It's convenient. It's local shops. It's good for your
community." We were throwing out half a dozen different
messages out there without knowing which ones would persuade
customers to try us.

Morgan solved this problem by asking his customers JTBD-style questions, such
as "What stood out to you about us?" As he did so, he began to gain rich details
about customers' motivations.

> One thing we really like about JTBD is that you want to learn
> from customers what they've done in the past. You're not just
> asking customers their opinion at the time you're talking with
> them or through a survey. We would ask them, "What did you
> tell your friends about YourGrocer?" Or, better yet, "Can you
> show me the text in your phone that you sent your friend about
> us?'"

Morgan's customers had no problem pulling out their phones and showing him the text messages they had sent to others about YourGrocer, as well as any Facebook posts they had made about shopping with it. In those messages, Morgan saw customers express what they felt was valuable about YourGrocer. He learned that the messages they sent to other people were about getting groceries from a particular store.

We knew that customers wanted quality foods. But just saying we offered quality wasn't enough. We learned that customers only trusted our message of quality because of the local stores we featured on our site and advertisements. Other messages didn't stick with them—being good for the environment, our competitive pricing, the ease of use when compared to other delivery services. All that kind of stuff wasn't really standing out to our customers. It turned out, they were buying from us because they recognized the stores that we featured on our website.

This is when the YourGrocer team honed their advertising message. It combined convenience, variety, and quality into one statement: "Online grocery shopping and same-day home delivery from the local shops you love."

What anxieties do first-time customers experience? What might prevent customers from using your product? So far, Morgan has learned about how important convenience is to his customers. Just how important this became even more salient when he talked with customers about the first time they tried to use YourGrocer for delivery. He said,

> We learned about this one anxiety: a lot of people came to the
> site and had trouble trying to figure out how YourGrocer would
> fit into their lives. We kept hearing comments such as, "I just
> don't know when my groceries are going to get delivered." This
> struck us as odd, because we give really flexible delivery options.

This anxiety didn't make sense to Morgan and his team. They offered flexible delivery hours, so why were customers commenting about not knowing when their groceries would be delivered? The answer lay in customers' shopping

habits and expectations. Morgan said, "It turns out that customers had this obstacle in their buying path. They decided what groceries to buy only after they'd figure out when they'd get the delivery. We had it reversed: you would pick your groceries first and then decide when to have them delivered."

> First-time customers coming to the site already had an idea of how YourGrocer was going to work. They had a habit or expectation of coming to a site, finding out how soon they could get a delivery, and then deciding what to buy. When this expectation was violated, they became frustrated and anxious. At this point, they would abandon trying out YourGrocer.[24]

To fix this problem, YourGrocer adjusted it checkout process. It asked customers to pick a delivery window first and then walked them through the grocery-selection process. "That helped," Morgan said. "We saw conversions go up after that."

What habits prevent customers from making progress? Can customers' habits be competition? Anxiety wasn't the only emotional force the YourGrocer team members would face. They also had to navigate customers' existing habits. Morgan said,

> Dealing with customers' existing habits was definitely a challenge with repeat-purchase customers. They had this habit around being able to duck down to the local store when they ran out of a key ingredient while cooking. Then, while they were at the store, they'd pick up extra groceries. In this case, they wouldn't need to come back to us for another two weeks. Sometimes they'd fall out of the buying cycle, and we'd lose them as customers. Habits like these are our biggest competition.

If Morgan wanted to keep customers coming back, he needed to make sure that customers developed new habits around using YourGrocer. He couldn't focus on only the outcomes customers were looking for. He had to think holistically about the customers' JTBD. Customers didn't just want their groceries delivered; they wanted a solution they could use to make their lives better.

So, how did Morgan and his team solve it? They focused on helping customers become more successful at using their product.

We get people to set up regular orders with us. We set up e-mail triggers to help remind them that they might need something. The first one goes out three days after getting your first delivery. We send you an e-mail saying, "Hey, do you

need a top-up on anything? Here's a free delivery of any size so that you can top up with us." Seven days after your last purchase, we e-mail you again and ask, "Do you know how easy it is to repeat last week's order? You can just click this button and get everything delivered again."

These e-mails are part of YourGrocer's efforts to help customers become better meal planners. This is important to note, because customers aren't consciously joining YourGrocer to become better meal planners. It wasn't an outcome that customers were seeking. However, meal planning is what customers have to be able to do if they want to use YourGrocer for their JTBD.

What progress are customers trying to make? Morgan and his team came to understand their customers' JTBD by combining their own intuition with what they learned though customer interviews.

An important part of our customers' Job to be Done is, "Give me a way to provide quality food for my family without the stress of running around." The phrase "YourGrocer does the running around for me" came up quite a bit during the interviews. Before YourGrocer was available to them, if they wanted to go to these local shops, they had to be willing to deal with running around to these different stores—and deal with the hassle of having their kids in tow.

Morgan had the first part of the JTBD: his customers were struggling to get quality groceries without all the stress. Next, it was time for him to understand how customers were expecting their lives to be better when they had the right solution. What would it be like when this Job was Done?

YourGrocer helps families get back their Saturday mornings and weekends. With us, they can now buy good food for their family without having to sacrifice their Saturday mornings or weekends visiting all these different stores. That's the trade-off they were struggling with before. If they wanted quality food for their family, they'd have to give up some family time so they could go shopping. If they didn't want to give up family time, then they'd have to deal with poor-quality food from the supermarkets.

How can you beat the competition? Eliminate the need for the customer to make a trade-off. YourGrocer wins because it does what every great innovation does—that is, it helps customers break a constraint. Using YourGrocer means no longer choosing between quality food for the family and quality time with the family. Morgan said,

> Once the convenience trade-off was equalized—YourGrocer
> makes local shopping just as convenient as using a
> supermarket—then other trade-offs, such as quality and
> supporting the community, became the differentiators. That's

what sets us above the supermarkets. That's the real progress that people are able to make with us.

WHAT'S THE JTBD?

From the data Morgan has given us, I'd say that the struggle for progress is:

> *More about*: My family having quality food, taking away the stress from grocery shopping, more family time, convenience

> *Less about*: Grocery shopping online / supermarket / local shop, supporting the local community

Again, any kind of task or activity associated with grocery shopping is just a solution for a JTBD—it's not part of the JTBD itself. I know people who employ housemaids to keep the household fridge stocked with food and groceries. That entails no shopping at all—you pay someone else to take care of it. For those who can't afford or don't like that solution, grocery delivery service is a nice alternative.

The progression of solutions in this case study helps us understand what customers do and don't value. In the beginning, parents were fine visiting multiple shops. They were willing to trade convenience for food quality. But when their family grew, saving time and reducing stress became more important to them. This is how we know that their struggle, their JTBD, is heavily related to finding a way to solve that stress and to save time.

This case study also demonstrates how customer needs or wants change over time, and don't belong to the customer. We may think we're measuring a need, but we're really just measuring what a customer does or doesn't like about a particular solution. We must keep in mind that a "need" is represents an interaction between the customer, their struggle, and whatever product they've hired for their JTBD. If one of those parts changes, then customers' needs will change along with it.

PUT IT TO WORK

Don't depend on demographics. At first, Morgan thought he was making a product for young, urban professionals. This demographic certainly did represent some of his customers. However, it turned out that his most dedicated customers were families. Not only that, they almost always had two or more young children.

We can learn from this that demographic thinking can be misleading. It was the customers' situation—not personal characteristics—that determined why they bought. Sometimes, you do have to collect and use demographic data. They can help you when you buy ads and develop promotional material. If you need to develop an ad for video or print, you'll have to cast actors and set a scene. That means making concrete decisions on what those people should look like, what they do, and where they are. However, these data shouldn't be used as a basis for product and marketing decisions. They are corollary data, not causal data. Use demographic data only as a guide or hint to help you find JTBD data.

Know the difference between customers who switch because they are unhappy with your solution and those who switch because changing life circumstances prompt a redefinition of progress. In Morgan's case study, the local food shops may or may not have known why their customers stopped shopping with them. Was it because supermarkets offered more selection? Was it about quality? Was it about price? As it happens, none of these applied. These customers switched because they needed more convenience.

Let's slow down and think about this. Notice something important and subtle here. By only observing customers, these businesses would have deduced that some switched to supermarkets. In response, these shops might have been tempted to change their businesses to be more like supermarkets. A butcher shop might think it should offer a wider selection of foods or lower its prices. Yet these things were not why the shops were losing customers. It was about convenience.

Next, imagine that these shops did learn that they were losing customers because of convenience. What should they do about it? This is a turning point where many businesses go terribly wrong. The knee-jerk reaction for many businesses in this position would be to figure out ways to offer more convenience themselves. They might be tempted to develop their own delivery services. This could be risky; delivery might just add to their costs without a significant return in profit. Instead, the way to win back customers and keep existing customers was to coordinate with YourGrocer—a partner who would deliver groceries on their behalf. They didn't have to change their product at all.

Too often, businesses try to increase revenue by developing new products and features that are beyond their expertise. While they may capture more revenue, the endeavor ends up being a drain on time and money. This results in increased costs, minimal revenue gain, and likely a decrease in profits. Avoid this scenario by understanding why customers are switching away from your product. It could

be that you can win back customers with little or no change to your product, as these small grocery stores did.

Create better advertising and promotional material by speaking to what customers value. Talk with customers to learn what messages connect with them. Don't simply show them a bunch of ads and ask what they like. Instead, learn what made them think that one solution was better than another. How did they describe using a product to their friends and family?

Morgan learned that just using the word *quality* didn't convey quality to customers. He needed to show pictures of the shops where the food came from. The shop logos did convey quality to customers.

Teams become more motivated, build consensus, and share a vision when they do JTBD research together. Morgan's third cofounder, Frankie "Pragmatic," wanted to do JTBD research before joining YourGrocer. He also wanted to do it before he built anything. The benefits of this approach cannot be understated. First, the YourGrocer team immediately built consensus about what kind of product they needed to offer. Second, the team got the design of YourGrocer pretty spot-on the first time. They made a few adjustments along the way but never needed to make any significant pivots to the business model or how the company was going to solve its customers' JTBD.

7. The Forces of Progress

Forces that oppose each other
Unpacking demand generation
Push and pull shape the JTBD
Unpacking demand reduction
Put it to work

The last few case studies made frequent references to pushes, pulls, habits, and anxieties. These four forces work together to generate and shape customer demand. This singular focus on customer motivation, and how forces shape customer demand, is what distinguishes JTBD from theories of innovation and design processes.

This chapter will you introduce you to JTBD thinking by unpacking the forces of progress. Understanding these forces will make you better at communicating customer motivation within your organization, understanding why customers are or are not attracted to your product, helping more customers buy your product, and creating advertising that connects with customers.

FORCES THAT OPPOSE EACH OTHER

The forces of progress are the emotional forces that generate and shape customers' demand for a product. They can be used to describe a high-level demand for any solution for the customers' JTBD or the demand for a specific product.

Two groups of forces work against each other to shape customer demand. The first group is push and pull, or the forces that work together to generate demand. The other group is habit and anxiety, or the forces that work together to reduce demand. In the middle, you have the customer, who experience all these emotions at once.
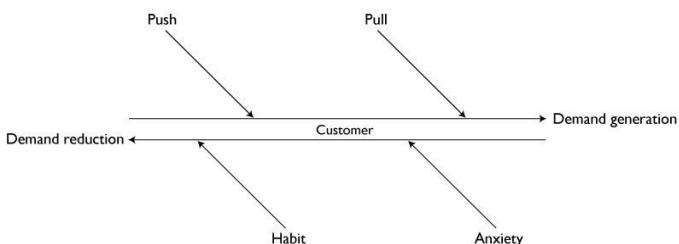
FIGURE 7. TWO GROUPS OF FORCES THAT OPPOSE EACH OTHER.

Customers experience some combination of these forces before they buy a product, as they search for and choose a product, when they use a product, and when they use that product to make their lives better.

Most innovators focus on the top two forces. They want to know "what customers want" and how demand is generated. They overlook the bottom two forces—that is, the forces that reduce and block that demand.

The innovators featured in this book are successful because they think about all four of these forces. Moreover, they think about how the forces contribute to the larger system that includes customers, producers, demand, and products. We'll study this larger system later in the book. For now, we'll unpack the four forces and understand how they generate and reduce demand.

UNPACKING DEMAND GENERATION

Demand isn't spontaneously generated. No one wakes up in the morning and suddenly thinks, "Today, I'm going to buy a new car." Some combination of events always comes together to generate that demand. We call those forces *push* and *pull*.

Push. People won't change when they are happy with the way things are. Why would they? People change only when circumstances push them to be unhappy with the way things are. These pushes can be external or internal.

External pushes. Morgan learned that parents had no problem shopping at multiple food shops with one child. But when they had two or more children to haul around to all these food shops, you can imagine all the stress and effort involved in that (or you may have experienced it yourself). Each child has to be put into and taken out of a car seat, parents need to navigate shops with strollers and shopping carts, and they need to carry all their groceries back to their car with their children in tow. Finally, they have to do all this all over again at the next shop they visit.

Having a second child who makes grocery shopping unbearable is an example of a push. These parents have realized that their lives have changed, and the old way of solving their problems needs to change along with that.

Internal pushes. The Clarity and Form Theatricals case studies show examples of internal pushes. Clarity's customers were entrepreneurs who thought they were in a slump and struggled with motivation. Form Theatricals discovered various internal motivations that pushed customers to seek a solution for their struggle. These pushes ranged from frustration with the homogeneity of a peer group to parents who wanted experiences for their children that would teach life lessons.

In these examples, the outside world wasn't forcing customers to change. Rather, they experienced a combination of circumstances that made them think, "I don't like how things are; I want to make a change."

Pull. If a push is the engine that powers customer motivation, the pull is the steering wheel that directs motivation. Customers experience two kinds of pulls: (1) an idea of a better life and (2) a preference for a particular product.

The pull for a better life. People don't buy products just to have or use them; they buy products to help make their lives better (i.e., make progress). When they have the right product for their problem, they are able to do things they couldn't before. The idea of this better life is what pulls them to take action.

It's important to be able to answer the question "How will customers' lives improve when they have the right solution for their struggle?" One way of thinking about this type of pull is to see what happens when customers don't recognize how life can be better (or refuse to take action to improve it).

For example, Dan described how some entrepreneurs would sit in the dark and choose not to self-educate. It is important to note that these customers are aware of their struggle but choose to do nothing about it.

People choose not to improve their lives for many reasons. Psychologist Gary Klein posits that customers have to engage in various mental simulations before they take any kind of action. They need to make sense of their struggle, and they need to create expectations of how life will be better when their struggle is resolved. A customer who fails to do either of those mental simulations will not be motivated to make a change.

For example, an entrepreneur who struggles with running her business might simply assume that such a struggle is an unavoidable aspect of entrepreneurship. She thinks, "That's just the way things are." Another entrepreneur might recognize that the struggle is due to his inability to create a proper business model and assume that creating a business model is inherently hard.

The pull toward a solution. The pull for a better life is what motivates customers to begin searching for and using a solution against their struggle. But what about their motivation to choose one solution over another? Dan learned that Clarity's customers thought about and evaluated solutions such as using LinkedIn, giving away advisor shares, and attending a conference. Why choose one over another?

There are many known and unknown factors to consider about why customers choose one solution over another. However, when we focus on the forces that generate demand, we see that the context of the customer's push shapes his or her struggle. This affects the criteria used to choose one solution over another.

For example, attending a conference and using Clarity each compete for the same JTBD; however, one is not universally better than the other. If Clarity was universally better than attending a conference, then no one would attend conferences.

The reason that many options coexist is that the pushes that shape a struggle contain many variations. Someone may want advice from successful entrepreneur Mark Cuban; however, that person may not be in a rush or may not even be sure exactly what his problem is. For these reasons, this person is willing to wait for the next time Mark Cuban speaks at a conference. Conversely, another entrepreneur might urgently need help with a specific problem that she knows Mark Cuban has solved and so is willing to pay a premium to have Cuban talk directly with her.

Variations in the pushes that customers experience also explain why the same customer might go back and forth between different products for the same JTBD. Sometimes, Clarity might be better; sometimes, attending a conference might be better. It all depends on the context of the struggle.
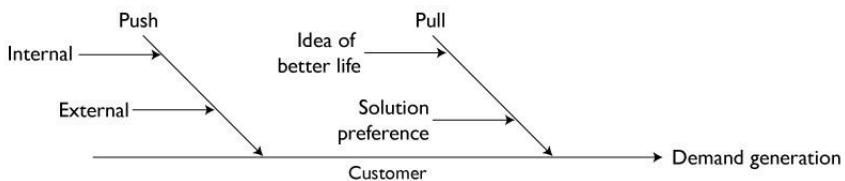
FIGURE 8. A BREAKDOWN OF FORCES THAT GENERATE DEMAND.

PUSH AND PULL SHAPE THE JTBD

There is no demand—and therefore no JTBD—unless push and pull work together. A powerful step in understanding customer motivation is to study and appreciate the interdependencies between push and pull. They need each other. I might be attracted to the idea of owning an electric car from Tesla, but I won't buy one unless I need a car. I have no push. Likewise, unless an electric car comes along that is attractive to me—it generates pull—I will accept that owning a car with an internal combustion engine is "just the way things are."

Generating demand. Appreciating the interdependency between push and pull is why Elon Musk decided that Tesla's first electric car would be a premium, high-end model. Musk believed he needed first to persuade customers that an electric car could be attractive, perform well, and be practical. He knew he needed to create pull to begin changing people's minds. Once he did that, he could begin producing less expensive cars with the manufacturing know-how

gained through production experience while maintaining the company with the profits from selling high-margin cars. How's it working out? In 2016, about thirteen years after the company started, Tesla introduced its first low-end electric car. In the first week, it received an unprecedented 325,000 preorders for a car that customers had neither driven nor seen in person.[25]

Failing to generate demand. When you fail to appreciate the forces of progress generation and the interdependencies between them, you get an innovation like the Tata Nano. In 2008, Tata Motors believed it could offer a low-end, feature-minimal car that would shake up the automobile market. Various Harvard professors wrote books and case studies about its success, claiming that it was "a runaway bestseller", a "disruptive innovation", and that it "may disrupt the entire automobile distribution system in India."[26]

However, the reality proved quite different. Nano sales have been abysmal. After six years of production, annual sales in 2015 were only 18,531. In the end, Tata spent $400 million developing a flop. The blunder has forced Tata Motors to lay off workers and engage in costly redesigns.[27]

Why did the Nano fail? It didn't have enough pull. In its cost-cutting frenzy, Tata didn't offer a stereo and air conditioning—features that customers expected from a car. Poor design made it roll over easily and prone to fire, and its weak engine made it underpowered for mountain driving. As a result, many customers decided to stick with their motorcycles or to spend the same amount of money on a used car that offered more features.[28]

As of 2016, Tata has abandoned the idea of finding profit at the low-end of the market. Instead, the company is trying to find profit by marching up market with the redesigned Nano GenX. The company is adding more pull to the Nano so it competes with traditional cars from other manufacturers, such as Smart.[29]

If your product doesn't help customers make progress, price doesn't matter. Both Tesla and Tata understood the push(es) to own a car, but only Tesla appreciated the role pull played.

As you'll learn in a later chapter, it's naive to assume that customers will buy a product just because it's a low-cost, feature-minimal version of an existing product. If that were true, netbooks would have displaced PCs and laptops, and everything inside the dollar store would be stealing away customers from the high-end products they copy.

My colleague Ryan D. Hatch once said, "High price may actually draw in customers rather than push them away. It implies quality." He's absolutely right. Lower price as a differentiator sounds nice in a PowerPoint presentation, in an MBA program, or on a spreadsheet, but innovators know better. They

understand that customers value progress above everything else. What good is low price if the product cannot help you get the Job Done?

UNPACKING DEMAND REDUCTION

Demand-reduction forces are just as important to understand as demand-generating forces. Most innovators and businesses focus on the latter and ignore the former. They shouldn't. Forces that reduce or block demand should be investigated and managed with the same enthusiasm as is demand generation. Why? These forces are just as much competitors as any product produced by a competing business.

For example, a struggling customer may be willing to buy your product but doesn't because he fears that it's too hard to use. Instead, he sticks to an old way of doing things, even though he's unhappy with it. In this example, the result for you is the same, regardless of whether the customer stays with the current way of solving problems or buys a competitor's solution. You miss out on a paying customer.

Two examples of demand-reducing forces are *anxiety* and *habit*.

Anxiety. In 2001, a collection of researchers lead by George Loewenstein identified two types of emotions that create anxiety: *anticipatory emotions* and *anticipated emotions*. The former are the feelings experienced only at the moment of decision, while the latter are what we expect to feel in the future. Within the context of JTBD and the forces of progress, I respectively call them *anxiety-in-choice* and *anxiety-in-use*.[30]

Anxiety-in-choice. We experience anxiety-in-choice when we don't know if a product can help us get a Job Done. It exists only when we've never used a particular product before. For example, "I've never taken the bus to work. Is it ever on time? Where do I buy a ticket?" We do our best to simulate mentally how things will be when we match a particular solution with a JTBD; however, the more unknowns we face, the more worried we become. Some examples of anxiety-in-choice from our case studies include the following:

> If I use Clarity, will I sound stupid? Is the call going to be recorded? How is payment handled?

> This show seems interesting, but it got bad reviews. Maybe it's not worth getting tickets for.

> How does YourGrocer work? Are there flexible delivery options? Can I get my order today?

These anxiety-induced unknowns are associated with how—or if—a particular product can deliver progress. These are the anxieties that drive away first-time customers.

Anxiety-in-use. After customers use a product for a JTBD, the anxiety-in-choice largely disappears. Now their concerns are related to anxiety-in-use. For example, "I've taken the bus to work several times. But sometimes it's late, and other times it's early. I wish I knew its arrival time in advance." In this case, we know a product can deliver progress, but certain qualities about it make us nervous about using it.

Dan also discovered anxiety-in-use among his customers. He learned that customers wanted to use Clarity more but were held back because they were not sure how to prep for calls. They know a Clarity call *can* deliver them progress, but *will* they be satisfied with the next call? These are the anxieties that drive away repeat customers.

Habit. Just as customers experience different types of anxieties, customers experience different types of habits: *habits-in-choice* and *habits-in-use*. Understanding customers' habits plays an important part in your ability to offer innovations.

Habits-in-choice. These are the forces that exist at the moment of decision and prevent a customer from switching from one product to another. My favorite example of this is how the spreadsheet software Excel finally overtook its competitor Lotus 1-2-3. In the 1980s, Lotus 1-2-3 was the go-to choice for spreadsheet software. Then, Excel came on the scene. At first, many people wanted to use it. But because they already had all their data stored in Lotus 1-2-3 files, they couldn't switch. Microsoft solved this problem by giving Excel the ability to import *and* export Lotus 1-2-3 files. This eliminated the force that was holding customers back from switching to Excel.

Habits-in-use. When Morgan and his YourGrocer team started their research, they didn't explicitly search for problems around habit. But they quickly discovered a behavioral pattern: customers switched from using YourGrocer regularly to using it irregularly. This transition was an early indicator that a customer was about to fall out of the online-grocery buying cycle and switch back to shopping at the supermarket.

What was going on? Morgan learned that these disruptions in buying patterns were the consequences of a habit. Many customers had developed the habit of not planning for future grocery needs. They got it because they had been shopping at supermarkets—that is, their previous solution for their JTBD. Having

a supermarket less than five minutes away meant that customers didn't need to plan their meals very much. They had gotten used to this and so formed a habit.

Morgan had discovered an instance where a habit-in-use reduced customer demand for his product. We know that these customers wanted to use YourGrocer, because if they hadn't, they wouldn't have used it in the first place. However, old habits-in-use were blocking them from continuing to use YourGrocer. Over time, they would regress to using a previous solution. They regressed not because the other solution was better but because customers found that keeping their old habits was easier. If Morgan wanted to keep as many of his customers as possible, he needed to help them drop old habits-in-use and develop new ones.
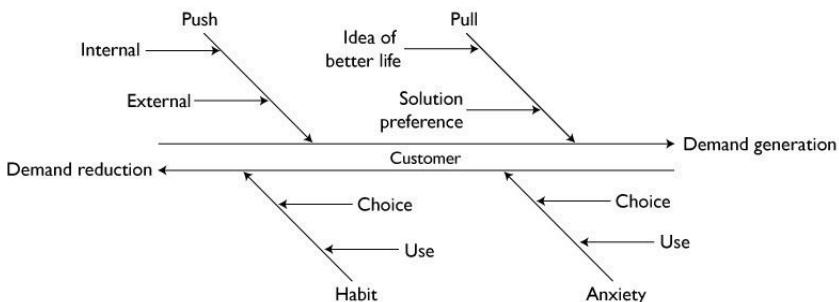
FIGURE 9. A BREAKDOWN OF THE FORCES OF PROGRESS.

Habit and anxiety are your silent competitors. At its core, innovation is about helping customers make progress. Get them to that better version of life that they aspire to. It's not just about helping customers break constraints by pulling them with flashy, new features. A lot of not-so-sexy work is involved. YourGrocer is an example of these forces at work. If Morgan wanted to maintain his customers, he had to help them become better at planning their meals and grocery needs.

Samuel Hulick once told me that designing an innovation was similar to conducting an organ transplant. It's a wonderful analogy. The customer wants your product and hopes it will make life better, but for some reason, the switch doesn't happen. Customers get hung up on one little thing that blocks them from using your solution for their JTBD.

I ferociously attack habits as I would any competing product. I recommend you do the same. You can lose revenue because you haven't accounted for people's habits, or you can lose revenue because your product is inferior to a competing one. In both cases, the result is the same: you lose revenue.

Solving for customers' habits is often an easy win. Your prospective customer already knows about your product and wants to buy it but can't switch because of some small habit holding him back. All you have to do is figure out what's holding your customer back and solve for it.

PUT IT TO WORK

First, study the push and pull. The easiest way to begin gathering data about the forces of progress is to identify pushes and pulls. These forces are largely experienced outside any particular product. You should check off these forces first and then dig into the exploration of any particular product. Push and pull help you understand how demand is generated and help you set some boundaries when exploring customer motivation.

Find pushes by first asking about the solutions that customers have used. At what point did they realize that their particular solution wasn't working anymore? What was going on in their lives?

Find pulls by asking about their opinions about other products they investigated. Why did they choose product X or product Y? What was wrong with product Y? What did X have that Y didn't?

Dig into habit and anxiety after identifying push and pull. After you understand the forces that generate demand, study the demand-reducing forces. These arise when customer demand meets a product. They can also describe demand reduction for any given product.

For example, customers who hire *attending a conference* experience a different set of demand-reducing forces (i.e., habits and anxieties) compared with if they choose Clarity. A customer who is shy may choose attending a conference because the idea of talking directly to an expert makes him nervous.

Fight anxiety and generate pull by helping customers visualize the progress they will make by using your product. Show them how their lives will be better. You could show customers how your company's outdoor grill is made of the latest and greatest advances in cooking technology. Or you could show customers how great of a cook they will become—and how their family and friends will be impressed—when they use your outdoor grill.

Earlier, we introduced the idea that customers engage in various mental processes: they make sense of their current problem, they try to envision how life will be better when they overcome that problem, and they simulate what it is like to use a product and its effect on their struggle. This process takes a lot of work on the customers' part.[31]

Do customers a favor: help them visualize making progress. Create marketing and advertising materials that tell customers that you understand their struggle, that help them visualize how life will be better when they have the right solution, and that explain why your product is the right solution.

Reduce anxiety-in-choice with trials, refunds, and discounts. "Buy one, get one free!" "Lifetime guarantee!" "Free shipping!" "Thirty-day refund!" These are probably the most obvious and widely practiced techniques of managing cost/value expectation. We're all familiar with them and have heard enough about discounts in Anthony's case study on theater tickets. We don't need to go into the subject further.

Identify any habits-in-use that keep customers from using your product. Adjust your product to help them along. Morgan learned that after using YourGrocer, many customers reverted to shopping at supermarkets, even though they preferred the food from YourGrocer. How did he help them? You'll remember that he created automated e-mail notifications encouraging customers to "reorder an entire box with one click" and asking, "Need anything? Get a free refill." The idea was to help these customers think ahead and make it easier for them to plan meals.

Comparing the habits of your best customers with the habits of those who recently quit is a great way to figure out how to turn switchers (i.e. those who have stopped using your product and started using another) into loyal customers. The first group have adapted and developed the necessary skills to get their Jobs Done. Learn from them, and use those data to help customers who are struggling get their Jobs Done.

8. Jobs Remain while Solutions Come and Go

Apple destroys its number-one product
New innovations replace old ones
Create and destroy. Hire and fire.
Put it to work

Every product is born with an expiration date. Why? The world is constantly changing. There are countless examples of this: environmental concerns push people to consider eco-friendly products, new technologies offer new ways to solve people's problems, trends in fashion and human behavior bring products in and out of favor, and so on. The fact that all products can expire is unsettling for innovators until they realize that they don't have to let change come to them. They can be proactive and be instruments of change.

JTBD equips you with the knowledge you need to be proactive in a changing world by helping you understand that customer motivation itself rarely changes, but how customers satisfy their motivations always does. In other words, solutions come and go, but Jobs stay largely the same. This forms the core of JTBD thinking, and this chapter unpacks it for you. You'll have fresh insights into the nature of competition and the knowledge necessary to plan for a changing world.

Let's go back a few years to an episode you are probably familiar with. We'll revisit the day when Apple killed off its best-selling product.

APPLE DESTROYS ITS NUMBER-ONE PRODUCT

On January 9, 2007, Apple announced the death of its best seller, the iPod. However, you may not remember it that way. You probably remember it as the day the iPhone was announced. It's important to realize just how tremendously successful the iPod was if we are to understand the gravity of what Apple did that day—and why it did this.

The success of the iPod. In 2002, Apple sold 376,000 iPods. Sales grew ferociously every year after that. By 2008, iPod sales peaked at a staggering nearly 55 million units. The iPod was one of the most successful, fastest-selling products of all time.[32]

Of course, someone had to be on the losing side of this equation. Music labels, such as Sony Music, took a hit, mostly because customers switched from buying entire albums to buying individual songs. But it was retail music stores who were

hit the hardest. Take Tower Records, for example. Over the course of forty years, it had grown slowly and steadily, eventually becoming a chain of multinational retail music stores. But just four years after the introduction of the iPod, Tower Records went bankrupt. Why did it fall so hard, so fast? Customers switched from buying music at retail stores to buying it online.

This is the iPod story that most people know. The other story—the one that currently interests us—is about how Apple planned for and set into motion the destruction of the iPod.

Apple hatches its plan. The year was 2004, and iPod sales were starting to take off. By the end of the year, Apple would sell 4.4 million iPods; the following year, almost 22.5 million. There was no reason to think that sales would slow down. Nevertheless, in 2004, Apple decided that it would itself create a new device that would kill off the iPod. The agent of destruction was the iPhone.[33]

This isn't speculation. Apple admitted to the whole plan. In 2009, Apple CFO Peter Oppenheimer confirmed the intentional cannibalization: "This is one of the original reasons [that] we developed the iPhone and the iPod Touch. We expected our traditional MP3 players to decline over time as we cannibalize ourselves with the iPod Touch and the iPhone."[34]
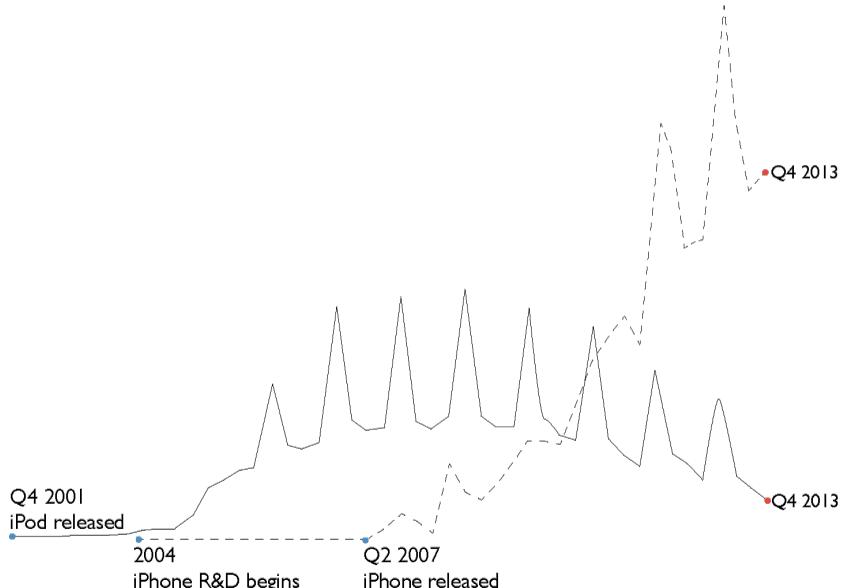
FIGURE 10. IPOD AND IPHONE SALES IN MILLIONS OF UNITS SOLD PER FISCAL QUARTER.

Something else is very interesting here. When Apple began development of the iPhone in 2004, iPod sales were well over four million. Sales wouldn't peak

until four years later, when almost 55 million units sold. This means that Apple didn't create the iPhone as a response to declining iPod sales—to the contrary. Apple began development of the iPhone four years *before* sales of the iPod were their highest.

For many businesses, this type of thinking is unheard of, even counterintuitive. Why would Apple pour a tremendous amount of money into researching and developing a new product that would kill its top seller? Even more interesting, Apple had never made a phone before. It would have to develop new technology, new intellectual property, and new manufacturing processes— completely from scratch! Had Apple's management lost its mind?

There was reason to this madness. And JTBD helps us understand why it worked it. So, if we really want to grasp what went on here—if we really want to take our skills as innovators and JTBD practitioners to the next level—we need to jump back in time about seventy years to the origins of JTBD thinking.

NEW INNOVATIONS REPLACE OLD ONES

In 1942, armed conflict extended from Asia to Africa and Europe. Amid the turmoil, Joseph Schumpeter published *Capitalism, Socialism, and Democracy*. In it, he introduces various observations and theories about the dynamics of economics and politics and their effects on society. About 99 percent of the book, while interesting, isn't relevant to your understanding of JTBD. The part that we do care about is his explanation of the phenomenon he named *creative destruction*.

Creative destruction (the JTBD parts). We're not going to spend much time on Schumpeter and his concept. Instead, we'll focus on the three things most helpful to you: (1) a question he wanted to answer, (2) his answer, and (3) its implications for you and JTBD.

Schumpeter's question and something consumers don't think about very much. We consumers don't think a whole lot about how we replace old ways of doing things with new ways. Consider our shift from using film cameras and sharing printed photos to using the cameras in our smartphones and sharing digital photos via SMS, e-mail, and online social networks. When we consider this change, we shrug and think, "So what? One was better than the other." But there's another part of the story that we as consumers don't often think about: When these shifts happen, which companies win, and which lose?

When consumers shifted from film photography to digital photography, smartphone manufacturers gained at the expense of photographic film manufacturers, such as Kodak. Kodak also lost when customers stopped buying

photographic prints and started sharing photos via products like Facebook and Instagram.

Kodak lost big, and fast. Over the course of a hundred years, it had developed a near monopoly on the US photographic film industry. As a testament to its dominance, Kodak had profits of $2.5 billion in 1999. However, it took only ten years for Kodak to go from record-breaking profits to bankruptcy. What happened? It let smartphones and social networks come on to its turf and snatch away its customers.[35]

A rise and fall like Kodak's is not atypical. More than a century ago, economists, such as Joseph Schumpeter, were seeing the same story play out over and over again. This prompted them to ask, "Why are industry giants often forced off their own turf by small, young companies or industry outsiders?"

In 1942, Schumpeter offered an answer. In doing so, he also sowed the seeds of JTBD.

Schumpeter's answer. Many industry giants—like Kodak and Tower Records—enjoy market dominance because the barrier of entry into those markets is high. In fact, these barriers are so high that it's almost impossible for anyone new to get in. But once a company has become an industry giant, three things often happen.

First, it becomes ever more complacent and narrow minded when it comes to innovation. Why? It relies on high barriers to industry entry to protect it from competition. Kodak felt safe because it knew that no one in the United States could produce film and photographic paper cheaper or better. So, it stuck to those two products. Tower Records knew it would be hard for anyone to open as many brick-and-mortar music stores as it had. So, it focused on making existing stores better and opening as many locations around the world as it could.

Second, with high barriers of entry in place, new entrants and industry outsiders realize they only have one move: to solve customers' problems in a way that is significantly better and radically different. In other words, these innovators find ways around industry barriers. If an innovation is introduced to the market and customers switch to it, the market dominance of industry giants is disrupted.

Third, when sales decline – as they always will – incumbent firms are forced to make a difficult decision: either to abandon the innovations that gave them market dominance in the first place, or to reinvent them. If they choose neither option, the new entrants eventually put them out of business. Schumpeter called phenomena like this *creative destruction*.

Schumpeter's theory still holds. At its core, creative destruction is the process where new ways of doing things replace old ways of doing things. It can play out in numerous ways; the above example is just one way. In fact, creative destruction happens all around us, all the time. As I write this, the taxi and rental-car industries are having their respective market dominance disrupted by Uber. Fitting in with Schumpeter's theory, Uber isn't competing with taxis and car-rental businesses by getting a fleet of vehicles (at least, not at the time of this writing). That barrier to entry is too high. Instead, Uber goes around it with a combination of software, mobile apps, and the Internet to enable individuals to offer up their own cars for hire.

Netflix is another contemporary example of creative destruction in action. For many years, Blockbuster dominated movie-rental products in the United States. But then Netflix came in and rendered them obsolete. How? While Blockbuster was focused on its near monopoly of brick-and-mortar movie-rental stores, Netflix offered movie rentals by mail. It then followed that by offering movies via the Internet. Once again, an industry outsider or young company beat an industry giant on its own turf. It did this by solving customers' problems in a way that was both significantly better and radically different.[36]

Creative destruction and sowing the seeds of JTBD. What does all this have to do with JTBD? Well, in answering his question—"Why is it that industry giants are often forced off their own turf by a small, young company or industry outsider?"—Schumpeter offers a crucial insight about the nature of competition. Here's an example from his book that makes his point:[37]

> In the case of retail shops, the competition that matters arises not from additional shops of the same type, but from the department store, the chain store, the mail-order house and the supermarket, which are bound to destroy [businesses that define competition by type] sooner or later.

Here, Schumpeter is telling everyone about the dangers of restricting their definition of competition to products that look or function similarly—that is, of the same "type." He argues that competition can come from anywhere. Not even monopolies or industries with high barriers of entry are safe. In fact, the profits that monopolies generate act as lures that attract entrepreneurs. They think, "How can I capture and render obsolete any high barriers of entry into an industry?" Monopolies and the profits they generate are tempting goals for the aggressive entrepreneur.[38]

This is the thinking that planted the seeds of JTBD. How? When Schumpeter tells us we should reject the restriction of competition to products of the same type, he forces us to ask another question: "How should we define competition?"

Schumpeter never offered an answer to this. However, we can answer it if we apply JTBD thinking. We can say, "We should define which products compete against each other by whatever solutions customers believe they can use to get a Job Done."

What business are you in? Earlier, I introduced Deming's challenge to management: "What business are you in?" He understood how necessary it is for management to create a "constancy of purpose" to solve customers' problems. This constancy of purpose involves continually thinking about new ways to solve customers' problems, and not just to grow profits in the short term and sell whatever product they currently make. Here's how Deming put it in his 1994 book, *The New Economics*:[39]

> It is good to introduce, by innovation, a new product that will do the job better.
>
> Where today are the makers of carburetors? There was a time when every automobile had a carburetor, at least one. How could an automobile run without a carburetor? The makers of carburetors improved their product year by year. Customers were happy, loyal.
>
> What happened? Came the fuel injector, which does the job of a carburetor, and a lot more.
>
> In time, the fuel injector will be displaced. New ways to inject fuel and air into the combustion chamber, and a new type of engine, will come forth and render obsolete the fuel injector.
>
> The makers of carburetors made good carburetors, better and better. They were in the business of making carburetors. Innovation on the part of someone else led to the fuel injector and to hard times for the makers of carburetors.

Here, Deming is describing how firms and innovators get stuck on creating one type of innovation – or being hung up on solving a static set of "needs". Instead, they improve the same innovation year after year, without venturing to think about completely new ways to solve problems. Twenty-five years later, we are see Deming's carburetor-fuel injector prediction playing out. He said "In time,

the fuel injector will be displaced"—and he was right! Today, the shift to electric cars is rendering fuel injectors obsolete and removing the need to mix fuel and air.

Creative destruction helps us understand why Deming was right. Industry giants such as Kodak let their sales and profits be taken from them because their constancy of purpose was to sell a specific product, not to solve customers' problems as best as they can. Had they done the latter, they would have acknowledged that no solution for a JTBD is permanent.[40]

You'll find it easier to understand customer motivation and competition when you stop defining competition as products of the same type. If you think the JTBD way, you won't be surprised when Dan from Clarity tells you that his customers saw Clarity as an alternative to going to a conference, when Anthony tells you that parents consider organized clubs as competition for going to the theater, or when Morgan tells you that customers see the online ordering of groceries as competition for visiting local shops and going to the supermarket.

But how we should think about competition isn't the only connection between JTBD and creative destruction. There's more.

CREATE AND DESTROY. HIRE AND FIRE.

If it's not already clear, creative destruction is called what it is because competition between innovations is zero sum. For somebody to win, somebody else has to lose. This is why we have the JTBD principle that when customers start using one solution for a JTBD, they stop using something else. When customers started using the cameras in their smartphones, they stopped buying and using film cameras. When customers started buying and streaming music digitally, they stopped buying music on physical media. In every case, when customers adopt a new innovation, it destroys an existing one.[41]

This zero-sum aspect is also why JTBD is called "Jobs to be Done." The words *job*, *hire*, and *fire* are meant to remind you that just as a business has a job for/from which it hires and fires employees, customers have Jobs for/from which they hire and fire products. When customers hired their smartphones to take pictures, they fired their film cameras.

The connection doesn't stop there. Competition as zero sum is also why we have the JTBD principle that *solutions come and go, while Jobs stay largely the same.* The fact that a Job describes a human motivation—instead of the tasks or attributes of a particular solution—is why Jobs are timeless or only slowly evolving. The motivation that pushed humans to create cave paintings thousands of years ago is no doubt similar to what motivates us today to take

pictures with our smartphones and post them to social networks. Over the years, humankind has continually engaged in the creative destruction of innovations for a JTBD. When a new solution gets the Job Done better than the old one, we have hired the former and fired the latter.

JTBD reveals silent risks. The last insight that JTBD pulls from Schumpeter is how new innovations can simultaneously affect businesses across industries. Schumpeter described how businesses and innovators can "feel the pressures of competition even if they are alone in their field."

Does this remind you of any case studies you've read so far? It describes what Dan learned about Clarity's effect across various industries. He described how many customers would spend their company's entire budget for attending a conference on Clarity calls. These budgets weren't just for the prices of conference tickets but included the costs of meals, car rental, air travel, and hotels. Clarity took away revenue from all these industries.

Now, it's doubtful that managers at hotels and restaurants lost sleep because of Clarity. However, large-scale, trans-industry disruptions do happen. Currently, the most accessible example is probably the effect smartphones have had across many industries. Customers are using smartphones instead of buying separate gaming devices, navigation devices, fitness trackers, calculators, flashlights, scanners, bar-code scanners, video cameras, alarm clocks…the list goes on.

Apple planned to have customers *fire* their iPods and *hire* an iPhone. Apple planned for iPod to obsolesce years before the iPod reached its peak. Apple knew that some innovation, at some point, would replace the iPod. Why? It goes back to the centuries-old ideas of increasing, diminishing, and negative marginal returns. For us, this means that an innovation can be pushed only so far. The Pony Express proved the fastest you can transport a letter across the United States by horse is ten days. A propeller-driven aircraft can go only up to about 528 mph (850 km/h) before the machinery starts to rip itself apart. And vacuum tubes, while offering superior-quality sound over transistors, will always be bulky and fragile. Try as you might to improve these innovations, they can be pushed only so far.[42]

In Apple's case, it knew that a portable MP3 player can deliver customers only so much progress. So, instead of waiting around for creative destruction to come to the company, Apple took control of it. The company replaced the iPod with the iPhone and the iPod touch (which is just an iPhone minus mobile data). It's as if Apple thought, "Instead of adding more to the iPod, what if we created something new and added the iPod to that?"

Technology has reached its limit.
Further investment will not yield return.

Returns are now decreasing

Returns are now negative and getting worse

Payoff from investment in technology: f(x)

Returns are increasing

Gains slow and then stop

You start losing money.
Pouring money into a
product or technology
that has already hit a ceiling
is a waste.

Fast
gains

Easy gains

Investment in technology: x

Continued investment
leads to ruin

Changes here help customers become
better at getting a Job Done.

At some point, a technology or product
cannot deliver more progress to customers.
Further "improvements" won't help
customers realize more value. Only a
completely new way of getting a Job Done
will deliver more value - e.g. a, new technology
or innovation.

FIGURE 11. EVERY TECHNOLOGY AND INNOVATION HAS A LIMIT AS TO HOW MUCH PROGRESS IT CAN DELIVER CUSTOMERS.

This all ties in to JTBD because it encourages solution-agnostic thinking. You unlock your imagination as an innovator when you focus on why customers are trying to improve their lives. The focus on why also helps you avoid binding your success to one solution for a JTBD and finding yourself on the destruction side of creative destruction.

PUT IT TO WORK

You've learned a lot in this chapter. Here are some insights that will help you get the Job Done of becoming better at staying ahead of your competition by understanding why solutions for a JTBD come and go.

Create a *constancy of purpose to innovate* for your organization. Pledge to solve a customer's JTBD, not just to sell more of whatever product you currently make. As you'll hear more about later on, the most successful and longest-lasting companies are those that focus on improving customers' lives—that is, those

that commit to helping customers with their JTBD. Don't sell customers cosmetics; sell them hope. Don't sell outdoor grills; sell a way to become awesome at making food delicious and entertaining. Don't sell people drills; sell them ways to become better at making home repairs or to become construction professionals.

Is it hard to create a constancy of purpose to solve customers' problems instead of just selling the product you've made? Yes! I've been there. As you'll learn later in the book, I was put into a position where I had no choice but to discontinue development of a product and disband the team. It is gut wrenching, but that's how innovation and entrepreneurship work. Innovation is creative destruction. The day your product hits shelfs, lands in an app store, or comes online, the clock to its demise is already ticking. This is a fundamental fact that forms the bedrock of JTBD. Either you can pretend that your product will last forever, or you can embrace the fact that it won't. Either you can be like Kodak and torpedo the digital camera, or you can be like Apple, who focused on the JTBD and then encouraged its customers to switch from one solution to the next (e.g., sell them an iPod and then convince them to switch their iPod for an iPhone). The key to this strategy is a focus on helping customers with their JTBD.

Discover the customers' JTBD by focusing on what doesn't change. Solutions for a JTBD, as well as the tasks and activities associated with them, are affected by creative destruction. Jobs, however, largely exist outside the process. This is why when Notre Dame switched its stadium from grass to FieldTurf, activities such as cutting, fertilizing, and maintaining the grass were eliminated; other activities dramatically changed. The same thing happened when customers switched from film cameras and prints to smartphones and digital sharing. The latter made obsolete such tasks as loading film into cameras, dropping film off at the local photo printer, processing film, and printing photos.

It is important to focus on customers' struggle and their motivation to make their lives better (their JTBD) and distinguish it from struggles surrounding the use of a particular solution. This is what makes comparing and contrasting customers' past solutions so successful. As you investigate their journey from one product to the next, ask yourself, "What changed and what didn't? Are the customers describing a struggle to make their lives better or a struggle in using their chosen solution?"

Before you make anything, have a clear picture in your mind of what customers will stop doing. Before I created Aim—an ad network for the real estate market—I knew I had to have a clear picture of what mortgage bankers and brokers would stop doing when they started using my product. I got one by

talking with mortgage brokers and bankers about how they currently advertised themselves and how they acquired leads. (A "lead" is someone who wants a loan to buy a house.) I learned about all the different ways these bankers and brokers went about this. Options ranged from making contacts at industry events, sending newsletters to industry contacts, buying leads over the Internet, and attending open houses. I knew that if I wanted to get them to switch from those solutions to my solution, I had to offer them something that was significantly better.

If you're looking to create a new product, keep in mind the process of creative destruction, and ask yourself, "Whose profits are going to go down when my profits go up? From whom am I stealing customers or users? What are customers going to stop using when they start using my product for their JTBD?" You should have solid answers for these questions before you even think about starting any innovation process.

9. When You Define Competition Wrong

Too "kool" for school?
Why did the chotuKool flop?
The mainframe versus the PC
Don't be fooled by randomness
Put it to work

The forces of progress we spoke of earlier can help you understand how demand is generated and reduced. Creative destruction helps you understand the zero-sum nature of competition and how the definition of competition should not be restricted to products that look or function similarly.

But what happens when you ignore the forces of progress, creative destruction, and a constancy of purpose to solve a customer's JTBD? What happens when you insist on selling a particular type of product? What happens when you blindly apply a theory to innovation?

This chapter will answer those questions. With this knowledge, you can avoid the costly mistakes that others have made.

Too "kool" for school?

In 2006, Indian manufacturer Godrej believed it had found a vast, untapped market for household appliances: the hundreds of millions of low-income Indians. Could Godrej create a suitably affordable appliance? Godrej believed that it could succeed in a market that other companies overlooked.

But there were unanswered questions: Did an innovation opportunity really exist? What kind of product should the company create? How should it design the product? How would the product be sold? Godrej decided that it needed some help.

A Harvard professor's theory. Godrej hired economist and Harvard Business School Professor Dr. Clayton Christensen and his consulting firm, Innosight. At Godrej's headquarters, Christensen presented some of his innovation theories to its management teams, and they discussed the market opportunity that millions of low-income Indians represented. Christensen agreed that it was a great opportunity, and he suggested that Godrej begin with a low-cost, feature-minimal refrigerator. It would be—as Christensen calls it—a "disruptive innovation." Godrej took Clayton's advice and hired his consulting firm to aid them in creating what would become the chotuKool.[43]

About a year later, in 2008, the chotuKool was publicly released, to great fanfare. George Menezes, COO of Godrej Appliances, said, "In three years [we will sell] probably millions." It even won the Edison Award for Social Impact. Harvard and other business schools wrote case studies praising its innovation success and benefits to society. Dr. Clayton Christensen even created a video describing how the chotuKool would create "inclusive growth" that would improve India's economy and standards of living. Godrej exuberantly planned a platform of similar products, such as the chotuWash washing machine and a low-cost water purifier.[44]

FIGURE 12. THE ORIGINAL CHOTUKOOL AS A "DISRUPTIVE INNOVATION".

However, reality was quite different. Using a test market of about 114.2 million people, Godrej had sold only fifteen thousand units after two years. The chotuKool was an utter disaster. Godrej quietly abandoned plans for the chotuWash as well as any plans to create further "disruptive innovations".[45]

Redesign, reposition, and relaunch. Recognizing it was a flop, Godrej engaged in a costly redesign of the chotuKool. As of 2016, it's still being sold—but it's no longer targeted at low-income Indians. Instead, it's being advertised to middle-class Indians as a high-end, feature-rich portable cooler. Navroze Godrej, director of innovation and strategy, described the new chotuKool as "a lifestyle product that people use in cars." G. Sunderraman, a Godrej vice president, commented on the repositioning: "How can you expect poor consumers with a minimum sustenance to be your pot of gold?" He also said, "We are now targeting a midlevel buyer."[46]

To add insult to injury, this new strategy is directly opposite from the one Godrej had started with. It had wanted a disruptive innovation that offered millions of Indians an inexpensive alternative to the household refrigerator, but

the company now makes a luxury alternative to the inexpensive Styrofoam cooler.

FIGURE 13. GODREJ PIVOTED THE CHOTUKOOL TO SERVE A "MIDLEVEL BUYER".

WHY DID THE CHOTUKOOL FLOP?

Godrej made numerous mistakes leading up to the chotuKool. We can learn a lot about JTBD and innovation when we compare and contrast its approach to a JTBD approach.

   Godrej began with a solution instead of a JTBD. The first thing Godrej and Christensen did was to consider which solution to make. Oddly, they came to the decision to create a refrigerator before talking with any potential customers. They jumped to this conclusion because they were following the theory of disruptive innovation, which restricts innovation efforts to a group of specific solutions and technologies. Godrej and Christensen assumed that consumers wanted a low-cost refrigerator and that this would make the chotuKool successful.

   JTBD rejects solution-first approaches and rejects the idea that products of only the same type can be competitors. JTBD argues that you must begin by understanding the customers' JTBD and how they see competition. Remember the forces of progress: What is pushing and pulling customers to make a change? Don't assume that customers will buy a particular product just because it's a cheaper version of another or that they are unhappy with whatever solution they are currently using for a JTBD.

   Godrej followed its own prejudices and discounted customer motivation. The company did a great deal of research before it designed the chotuKool. Its

research team visited people's homes, observed how they lived, and conducted interviews. Here are some excerpts from them:

> "I don't feel the need for a refrigerator. I use an earthen pot to cool water. I buy vegetables for immediate consumption and boil milk to avoid it from getting spoilt."

> "In India, a refrigerator costs around eight thousand to ten thousand rupees. In addition, it has a running expense, which will upset my monthly budget. I don't have the space to keep it in my tiny house."

> "To me, a refrigerator should cost around twenty-five hundred rupees, and running it should be affordable. How will I service it if needed? My neighbor had to shell out twenty-five hundred rupees for servicing it and an additional three hundred rupees to transport it to a service center. I face load-shedding of six to eight hours every day. How will the product work?"

Godrej actually got valuable information about customer motivation, but it seems that it chose to ignore the most important parts. Instead of digging deeper into "I don't feel the need for a refrigerator," it focused on "a refrigerator should cost around twenty-five hundred rupees, and running it should be affordable."

Why did Godrej do this? Well, it had already decided to create a low-end refrigerator, so it listened to data that confirmed only its prejudices and ignored all the warning signs that consumers had little or no interest in any kind of electric refrigerator.

What was the biggest mistake that Christensen and Godrej made? Christensen and Godrej created the chotuKool based upon the theory of disruptive innovation. This theory has critical flaws. The biggest? It relies on an oversimplified model of competition that does not take into account how customers see competition. In this case, the theory limits the competition for electric refrigerators to *only* other electric refrigerators. This is why Christensen and Godrej completely misunderstood the competitive landscape. They did not consider Schumpeter's warning that competition should not be restricted to products of the same type. Competition can come from anywhere.

JTBD invalidates many theories – like disruptive innovation – that try to model and predict the dynamics of a market. Here are a few reasons why: [47]

> *They oversimplify the competitive landscape.* JTBD shows us that competition can rarely be restricted to just one type of

technology or innovation. Think about all the different types innovations that compete with Clarity, theater, or YourGrocer.

These theories don't take into consideration that customers often combine multiple products together to form one solution for a JTBD. This is something we'll see shortly.

They don't take into consideration how customers view competition. People who create these models rarely, if ever, talk with customers and learn how they see competition. A competitive model that doesn't come from customers will be invalid. The chotuKool is such an example.

These theories assume that the competitive landscape won't change in the future. Competition for a product changes continually. Moreover, often what renders an innovation obsolete is isn't a cheaper or simpler version of itself; rather, it's when the system around an innovation changes so much that it doesn't fit anymore. Apple's iPod wasn't made obsolete by another type of MP3 player, it was made obsolete by an app on a smartphone. While the fuel-injector made the carburetor obsolete, what will obsolete the fuel-injector won't be a new way of mixing gas and air – it will be electric cars who don't even use engines or gas!

When we acknowledge the complex nature of competition for a JTBD, we can see why rural Indians in Godrej's target market saw competition to an electric refrigerator as:[47]

Buying vegetables every day for immediate consumption

Boiling milk to prevent it from spoiling

Keeping water in clay pots at home

Using a more than three-thousand-year-old innovation called a pot-in-pot to keep food and water cold

Using other clay-based cooling innovations, such as the MittiCool

Godrej's own research had revealed that customers were already hiring these solutions for their JTBD. However, because Godrej had a bias to follow the theory of disruptive innovation, the company chose to ignore these data.

Godrej believed in an idea called "nonconsumption" or "nonusers." Navroze Godrej describes how "Clayton and the Innosight team were insistent on

focusing on nonusers." In other words, the company was led to believe these Indians lacked the money or skill to buy and use any product for their JTBD. That's what Clayton and his team meant by "nonusers" or that "nonconsumption" was taking place. What do you think? Would you consider these Indians as nonconsumers or nonusers? Unfortunately for Godrej, the company learned the answer to this question the hard way: these Indians were consumers, but they just weren't consumers of electric refrigerators.[48]

JTBD rejects the idea of nonusers or nonconsumption. Just because consumers aren't using your product, or another product of same type, doesn't mean they are nonusers. This is another big difference between JTBD and other approaches to markets and innovation. JTBD insists that if consumers have a JTBD, they must be using *something* for it.

Here's the twist: that "something" that consumers use for their JTBD doesn't include products that one can only buy. It includes any compensatory behavior, paying someone else for help, making one's own solution, or combining solutions. Each counts as a solution for a JTBD.

We actually heard about this in Godrej's own research. One interviewee claimed that she would "buy vegetables for immediate consumption and boil milk to avoid it from getting spoilt." Combined, those two actions count as a solution for a JTBD. In the customer's mind, they are competition to the chotuKool.

If Godrej wanted consumers to buy a chotuKool, Godrej needed to offer its target buyers a solution that would persuade them to give up the solutions they were currently hiring for their JTBD. Sadly, the people leading this project didn't think about that.

Godrej didn't understand that the chotuKool had little to no profit potential. The company assessed chotuKool's potential by applying the theory of disruptive innovation. Instead, it should have applied some simple math. If it had, any plans to create the chotuKool would have been immediately abandoned. Unfortunately, it took the failure of the chotuKool for Godrej to realize that it had been a mistake to create any type of "low-end" innovation for low-income consumers. Recall what Godrej Vice President G. Sunderraman said: "How can you expect poor consumers with a minimum sustenance to be your pot of gold?"

The chotuKool was never going to make much money targeting low-income Indians. Why? In our discussion of creative destruction and profits, we pointed out that competition is a zero-sum game. Profits have to come from somewhere. Which profits was the chotuKool going to steal? Its target customers were people who lived on only a few dollars a day. How were they going to afford a sixty-

dollar to seventy-dollar chotuKool? This price point would have made sense if consumers were spending that kind of money on comparable solutions. Or perhaps they would consider saving up their money if the chotuKool improved their lives dramatically. Neither of these conditions, however, were remotely true. Again, think about the forces of progress. It would have taken a great deal of push and pull to persuade customers to switch from using a free solution for their JTBD to using one they have to pay for. For these consumers, using a clay pot and buying vegetables daily was a good-enough solution for their JTBD.

THE MAINFRAME VERSUS THE PC

Innovation is hard and unpredictable. I've had my share of innovation mishaps. And admittedly, if I had been in Godrej's place, I might have made some of the same mistakes. It's easy to stand on the sidelines and critique what someone else does wrong. But there are two mistakes I sure as heck wouldn't have made:

> Limiting my definition of competition to products that look and function similarly

> Not making sure a real struggle was taking place and that customers were willing—and able—to pay for a solution

These are common mistakes when you don't apply a JTBD view to competition. But they aren't the only ones.

A less common mistake—but just as dangerous—is to believe that products are competitors when they are not. One example of this is the widespread belief that PCs and mainframes are (or were) competitors. Was that ever true? Were or are PCs just a cheaper, simpler version of mainframes? Did the introduction of PCs have any effect on the market for mainframes? Did the PC create a new market or tap into existing ones?

Understanding the story behind the PC versus the mainframe will help you learn how to think about competition, become better at identifying real threats to your business, create better messaging that properly speaks to what customers consider as competition, and know how you should and shouldn't design a solution.

Here's the common narrative about PCs versus mainframes. Mainframe computers are large hardware devices that have been used since the mid-twentieth century for massive calculations. Businesses and universities have used them for tasks such as accounting, payroll, and processing scientific data. Governments have used them for tasks such as processing census, tax, and military data (e.g., predicting the effects of atomic bombs).

Companies such as IBM sold to these customers, which were the only ones that could afford mainframes and had the skills to operate them. For many years, mainframes were very profitable. To continue grabbing as much profit as possible, makers produced more complicated machines that therefore sold at ever-increasing margins.

Then, in the late 1970s and early 1980s, PCs appeared. They were nowhere nearly as powerful as mainframes, but they did appeal to customers who couldn't afford a mainframe or didn't need so much computing power. PCs created a new market by appealing to these less demanding customers. Mainframe manufacturers were happy to give up the low-end market because the margins in it were so small.

Unfortunately for the mainframe manufacturers, however, the PC got better and better. Eventually, they were just as good or better than mainframes for doing many computational tasks. As a result, the PC created a huge new market and ultimately eliminated the existing mainframe industry.[49]

The innovator's – false – dilemma. That's certainly an interesting story. Yet it's totally wrong.

Before we apply a JTBD perspective here, let's consider some numbers. Here's what Toni Sacconaghi of Bernstein Research recently said about IBM: "The mainframe is a hugely profitable business for IBM. Only around 4 percent of the firm's revenues come from mainframe sales. But once additional hardware, storage, software, and all kinds of related services have been factored in, the mainframe accounts for a quarter of IBM's revenue and *nearly half of profits*." It seems that the mainframe business is alive and kicking.[50]

In fact, in 2012, IBM announced the newest addition to its line of mainframe computers: the z12. It cost $1 billion to develop and had a starting price of around $1 million. The plan worked well: today, approximately 96 percent of the world's top one hundred banks, 92 percent of the twenty-five top US retailers, and nine of ten of the world's largest insurance companies run IBM's System z mainframes. In 2013, IBM's revenue was $99.8 billion. Building on the z12's success, it launched the z13 in 2015. So, what's going on? The PC had supposedly disrupted the mainframe business. Let's put a JTBD lens on this story and see what we can find.[51]

To make sense of it all, we need to ask again if mainframes and PCs were ever in competition with each other. And if you recall, if we want to get an accurate model of competition for JTBD, we have to understand how customers see competition. So, let's take a look at who buys PCs and mainframes, what they are used for, and what each replaced.

Why mainframes? Mainframes have always provided a level and type of computing power that has appealed only to a few. They were first used for intensive mathematical calculations, such as predicting the effects of the first atomic bomb and processing census data. For scientific or government computations, the alternative was to hire scores of mathematicians (who were usually women in the first decades of computing; they themselves were referred to as "computers") to do the calculations by hand. For businesses, the alternative to a mainframe was scores of secretaries and clerks who either did payroll and sales data by hand or operated cumbersome, electromechanical calculating machines such as the Friden Electro-Mechanical Calculator.[52]

FIGURE 14. CREATIVE DESTRUCTION IN ACTION. A MAINFRAME REPLACED SCORES OF "COMPUTERS", THE MACHINES THEY WORKED ON, AND THE PEOPLE WHO SUPERVISED THEM (TOP). THE BOTTOM IMAGE IS A 1953 PICTURE OF "COMPUTER" MATHEMATICIANS FROM WHAT WOULD BECOME NASA'S JET PROPULSION LABORATORY.

Today, many of the same entities use mainframes for tasks similar to those of sixty years ago. In fact, today, they are used in an ever-increasing number contexts. A mainframe most likely processes ATM transactions at any major bank. Global logistics firms such as DHL run mainframe systems to support their core business processes.[53]

The progress that mainframes deliver today is incredibly similar to what they delivered sixty years ago—namely, the confidence that comes with having a computing competitive advantage, and the peace of mind that you can securely run mission-critical processes.

Are PCs competition for mainframes? Here are the real questions: Did purchases of PCs have any impact on the sales of mainframes? Did mainframe manufacturers miss out on a budding market? Is there any relationship between the two types of computer at all?

Today, it is safe to say that there is no competitive relationship between PCs and mainframes. Does anyone ever think, "Hmm, do I buy a mainframe, or do I buy a PC?" Has a company ever replaced a mainframe with a PC? Of course not. Remember, you can claim that two products are competitors *only* if you can find a customer who has switched from one to the other.

But what about PCs versus mainframes thirty years ago – when PCs first became popular? Well, in 1984 *PC Magazine* interviewed Dr. Norm Agin of Martin Marietta Data Systems about the company's recent PC purchases. When asked about PCs replacing mainframes, Agin "scoffs at the notion that putting in PCs reduces the load on the company mainframe." Agin said, "We picked IBM PCs for compatibility with [our existing IBM] mainframes" and that employees using a PC represented a switch from "having a calculator and typewriter on [their] desk."

Agin's comments begs important questions such as: (1) How can PCs and mainframes be competitors if customers use them together? (2) Are these PCs competing with costly mainframes or cheap calculators and typewriters?[54]

Agin dismissing the competitive relationship between mainframes and PCs is far from unique. We can get a good idea of how consumers in the 1970s and 1980s saw PCs by turning to YouTube's nearly endless supply of old PC commercials:[55]

> IBM's 5100 PC, released in 1977, promises to help real estate investors "manage all the difficult decisions." Avionic designers could "save time and money" by calculating flight expenses in the office.

> A 1980 ad has actor William Shatner ask viewers, "Why just buy a video game from Atari? Invest in the wonder computer of the 1980s: the Commodore Vic-20." You can even play "Gorf, the wonder arcade game" with your new Commodore.

> The Apple IIe promises to "teach your children well" and helps baseball managers "manage player stats." The Apple IIc is also featured an alternative to the IBM PC Junior.

> The Tandy 1000, released in 1984, would remove all the clutter from your desk by "changing the way you work" with "DeskMate software for easy-to-use word processing, filing, worksheets, scheduling, and communications."

One thing is clear while watching these TV ads: not once is anyone making any reference whatsoever to mainframes. Moreover, these commercials don't make any mention of the high-throughput, transactional integrity tasks for which mainframes are used. Instead, we see PCs helping individuals and small businesses become more productive. Even I remember my first PC. It didn't replace a mainframe; it replaced my (less expensive and simpler to use) Atari game system. In the minds of customers, PCs and mainframes have no association whatsoever.

What was the PC's competition? Did PCs create a new market? These old TV commercials also make it perfectly clear that the competition for PCs was—and still is, in some cases—typewriters, word-processing machines, personal assistants, calculators, files and file cabinets, interoffice messaging services, graphic design and layout by hand, accounting services or accounting by hand, game systems (e.g., Atari), and tabletop games (e.g., Dungeons & Dragons).

The above alternatives represent solutions whose growth and profits were disrupted by PCs. Think back to our lessons from Schumpeter, competition, and creative destruction. When people began buying and using PCs, what did they stop buying and using? It wasn't mainframes. They stopped buying and using the various solutions above.

In addition, the invention of the PC represented a new market if you define markets only by products that look or function similarly. However, from a JTBD point of view, PCs didn't create a new market. Rather, PCs simply added an alternative to the existing markets that the solutions above constituted.

Was the PC really cheaper and simpler? The other point to notice is that the PC didn't necessarily represent a cheaper alternative to the solutions it replaced. This invalidates the idea that the PC was any kind of low-end, "disruptive" product. If you had an accounting firm, you could give one of your accountants a PC, and she would be able to do the work of ten accountants. That is certainly cheaper. However, a PC is neither simpler nor cheaper than a board game, a typewriter, or an Atari game system.

What do mainframes compete against today? Fifty years ago, mainframes competed against hiring scores of mathematicians and clerks, but what do mainframes compete against today? Once again, we have to find evidence of a switch if we want to answer that question. Luckily, such an example comes from Johnson & Johnson (J&J)—an American company that makes medical devices, pharmaceuticals, and consumer packaged goods (CPGs).

In 2015, J&J shut down its last mainframe. In place of owning mainframes, it switched to using a combination of cloud services from Amazon.com Inc., Microsoft Corp., and NTT Communications Corp. Stuart McGuigan, J&J's chief information officer, commented about the switch: "[It was not] something I was sure I'd see in my lifetime: A Fortune 100 company with absolutely no mainframe footprint." Why did they switch? J&J needed more computing power, and using cloud services allows J&J to lower its infrastructure costs. In other words, J&J wanted more for less.[56]

What are the reasons for the mistaken correlation? So, why have people made this mistaken correlation between mainframes and PCs? I can think of two big reasons.

> *Correlation in physical appearance.* If you don't know anything about mainframes or PCs, you'd be tempted to think the latter is simply a smaller version of the former and that they belong to the same market. Just because they are both computers, doesn't mean they are used for the same Jobs.

> *A misunderstanding of how variation works.* Because mainframes are very expensive, customers don't buy them often. This means mainframes have a sales cycle that can last a decade or more. If you were to focus on sales of mainframes in the middle of their sales cycle, you might think that demand had utterly vanished.

People who believe that PCs disrupted mainframe sales are making two common statistical errors. First, they mistake common-cause variation for special-cause variation – something discussed in chapter 19. There was no special decline in mainframe sales in response to the availability of PCs. Rather, mainframes have a very up-and-down sales cycle that is normal for them (Figure 15). Second, such people conflate correlation and causation. Just because PC sales were going up at a time when mainframe sales were going down doesn't mean one caused the other.

To this day, IBM continues to make a tremendous amount of money selling both mainframes and supporting services. In 2014, IBM had revenue of $92.8

billion, with $21 billon in operating pretax income. The company has been around for more than one hundred years. It maintains success by continually producing high-margin products for customers who have an insatiable demand for more features and more quality.[57]
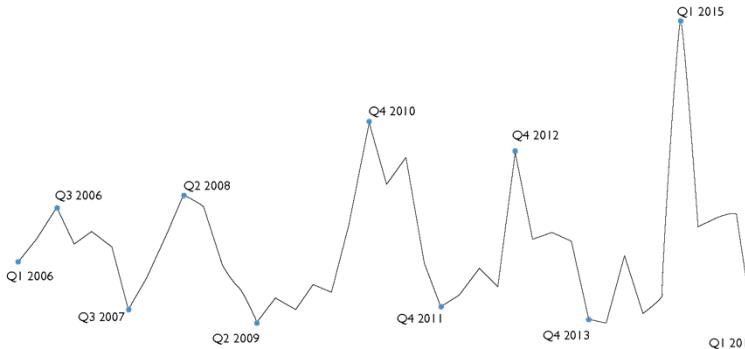
FIGURE 15. CHANGES IN REVENUE FROM SALES OF IBM'S MAINFRAMES. DRAMATIC DROPS AND SUBSEQUENT PEAKS IN REVENUE ARE DUE TO PRODUCT INTRODUCTIONS AND CUSTOMER BUYING PATTERNS, NOT FROM CUSTOMERS SWITCHING TO A COMPETITOR.

Moreover, keeping in line with the strategy to sell to only the high end of the market, IBM sold off its PC business to Lenovo in 2004. This was a good move. In a twist of irony, it seems that mainframes may outlast PCs. Over the years, margins on PCs have steadily decreased. In 2016, the average profit for a Windows PC is only $14.87. Perhaps IBM, which first popularized the PC business, knows that the future lies in selling high-end, premium computing. The company was wise to let other manufacturers fight over the scraps of low-margin products.[58]

Lastly, real competition to mainframes has only recently emerged in the form of cloud competing. From the customers' point of view, competition for the mainframe isn't owning any kind of computer, but outsourcing everything to someone else.

DON'T BE FOOLED BY RANDOMNESS

You will become a better innovator when you recognize that innovation is hard, there are no recipes for success, and there's no "one right way" to make products and build businesses. It's why Steve Blank says, "No business plan survives first contact with customers." Why is this so? Because life is full of unknown and unknowable variation. Just because a product or business strategy worked once, doesn't mean it work will again.[59]

Unfortunately, that doesn't stop people from trying to sell you recipes for success. The early 20th century saw Frederick Winslow Taylor sell "scientific management". Over the last thirty years, countless consultants and academics – who have never innovated themselves – have presumed to tell innovators about the right and wrong ways to innovate. Examples include *In Search of Excellence*, *Built to Last*, *Good to Great*, and *The Innovator's Dilemma*.[60]

However, history shows that such recipes for innovation and business success fail to live up to their promises. Here are some criticisms of these management and innovation theories, as well as their overall approach to research: [61]

> *The Halo Effect* by Phil Rosenzweig criticizes such formulas and theories as pseudoscientific and falling victim to what he called the "nine delusions". For example, picking a successful company and making attributions about its culture, leadership, values – without offering any objective, experimental data to support it.
>
> *Thinking, Fast and Slow* by Nobel prize winning Psychologist Dr. Kahneman explains that we're drawn to these theories because they are done through entertaining storytelling that is "simple," "concrete rather than abstract," and "focus on a few striking events" instead of the myriad, smaller events that did happen."
>
> Bongo playin', Nobel prize winnin' physicist Richard Feynman gave warning of what he called "cargo cult science" and decried these people as selling "science that isn't science". He pointed out that too often, people who are good story tellers can fool those of us who aren't experienced in scientific rigor or statistics. However, many of us who do have these skills recognize that these management and innovation gurus fall victim to what is called "selecting the dependent variable". For example, suppose I have a theory that wearing red shorts causes shark attacks. To "prove" this theory, I research shark attacks that happen where the victim wore red shorts. Every time I find an instance where that happens, I pat myself on the back and tell everyone how smart I am. However, such an approach ignores instances where someone wore red shorts, and was <u>not</u> attacked by a shark. Such data would invalidate my theory; however, I never find it because I never look for it.

Innovation and entrepreneurship is hard, full of self-doubt, and riddles us with anxiety about the future. I know, I've been there. Nevertheless, when we do find ourselves struggling, we must do our best to not be taken advantage of by these recipe peddlers and modern day fortune-tellers – no matter how confidently they claim to understand the behavior of markets or where their MBAs come

from. If I can't convince you of the heavy costs these people exact upon our economies, perhaps disaster stories such as the chotuKool and the $400-million-dollar flop of Tata's Nano can.

JTBD frees us from recipe peddlers. JTBD excites me because it doesn't try to sell me any plug-in-and-play plan for success. It respects the fact that innovation will always require critical thinking and hard work. That's what makes its message fundamentally different from what recipe peddlers sell. JTBD doesn't tell me what kind of innovation I should make or how to build it. Instead, its restricts itself to: (1) what customers are struggling with, (2) how they imagine their life being better when they have the right solution, and (3) what they do and don't value in a solution. Such an approach helps innovators like me find innovation opportunities and to navigate a world that is filled with the unknown and unknowable. I find this knowledge empowering. It's also why I've applied it to my own businesses and products. I believe it will help you become a better innovator as well.

PUT IT TO WORK

This chapter is a cautionary tale of what can happen when the principles of JTBD are ignored or unknown. Here are a few things you can do to help you avoid making the same mistakes.

Don't restrict competition to products with similar functionality or physical characteristics. Don't assume two products are competitors because they look or function similarly. There are two related mistakes people make about what is and isn't competition for a product.

> *Thinking that two solutions compete against each other because they share similar characteristics.* Even though PCs and mainframes are both computers, they don't compete in the slightest.

> *Restricting the definition of competition to products with similar characteristics.* Godrej and Christensen believed that the only competition for their electric refrigerator was other electric refrigerators. They also believed they were creating a new market of refrigerator alternatives. Unfortunately for Godrej, neither of those opinions were true. Consumers were already using several refrigerator alternatives.

Keep your mind open to what counts as competition. I recently talked with a woman who told me about switching from her morning coffee to a kale smoothie

with a shot of wheatgrass. Who would've thought a cup of coffee and a kale smoothie could be competitors?

Every innovator, whether creating a new innovation or improving an existing one, should have a clear idea of how his or her customers see competition. When you're creating a new innovation, you need to answer the question, "What are customers going to stop buying when they start buying our solution?" And if you're creating a new feature for an existing product, you need to ask, "What behaviors or other products is this feature going to replace?"

Talk with your customers! Your competitive model can come only from them. Models of competition and markets that don't come from customers are almost guaranteed to be wrong.

Don't study the relationships between customers, products, and competition just from afar. You must actually talk with the customers who use these products. Ask them what else they've tried to get the Job Done. Were there other options they wanted to try but didn't or couldn't? Did they combine solutions because no single solution worked well? Through questions like these, you can triangulate what customers do or don't consider as competition.

Confirm that competition exists between products by finding customers who switched. At the time of this writing, PC sales have dropped to historic lows; they've been on a decline for quite some time. Some people claim that this drop in PC sales is due to the smartphone. But is that true?[62]

Remember, correlation does not equal causation. There's only one sure way to prove a causal link between smartphone sales and PC sales: find people who stopped using their PCs and started using smartphones. Unless you can find evidence of a switch, the suggestion that any competitive relationship exists between the two is pure conjecture. Yes, some people may have entirely stopped using a PC in favor of a smartphone, but a lot of people own and use both. How would you interpret that?

Do you think you're creating a new market? Think again. For too long, businesses have created, and been encouraged to create, their own definitions of markets—that is, which products do and do not compete against each other. JTBD offers us a way to rethink how we define markets.

If you think you're creating a new market, then you probably haven't done enough research. Have you explored all the options that customers consider as competition for a JTBD solution? Perhaps customers are solving their problems in ways that don't require the purchase of a physical product. For example, a lot of people in New York City don't own a laundry machine. Instead, they drop off their laundry at laundromats for other people to clean and fold.

Another consideration is how customers often use a combination of solutions for a JTBD; for example, combining (1) boiling milk to make it last, (2) using a pot-in-pot (3) buying highly perishable foods only when they can be eaten right away.

If you don't have a clear picture of what customers are going to give up when they start using your product, either you haven't done enough research, or no JTBD exists and you're creating a solution that no one will buy.

Know what budget you're taking away from. When commenting on the chotuKool's initial failure, Godrej Vice President G. Sunderraman said that "poor consumers with a minimum sustenance" were probably not a "pot of gold." He was absolutely correct. The chotuKool had been conceived without a clear picture of what budget it was going to take from.

Dan Martell avoided this problem because he did acquire a clear picture. He knew that Clarity was taking money away from budgets for attending conferences, paying for LinkedIn, hiring consultants, and giving away advisory shares.

Having a clear picture of what budget you're going take money away from helps you figure out what the revenue potential for an innovation is—if there's any at all—and how much money to invest in creating and selling an innovation.

Continually refresh the competitive landscape with ongoing feedback from customers. What customers count as competition for a JTBD is always changing. Don't assume that it remains static. Somewhere, unknown to you, your customers might have come across a new way of getting the Job Done. This is why you need to interact with your customers continually.

Your best bet is to talk with your customers regularly and keep interviewing new ones. Learn the stories behind their purchases. What solutions have they tried? What other solutions did they consider before buying yours? For existing customers, learn if they've heard about or tried other solutions. For customers who've stopped using your product, ask them why. Have they switched to a new solution, or does the JTBD no longer exist for them?

Remember that not every JTBD needs to be solved with a product that customers buy. Perhaps the most common reason that an innovation fails is that no one wants it. A great many innovators and entrepreneurs get excited about solving people's problems. This is a good thing. The downside is that most consumers are fine with good-enough solutions for a JTBD, and many of those don't require a purchase. As Des Traynor, cofounder of Intercom, says, "The popularity of product-first businesses has led to short-sightedness around what's necessary to create a sustainable business. Some problems persist because they're quite simply not worth solving."[63]

The chotuKool case study offers many perfect examples of customers who had good-enough solutions for a JTBD. Rural Indians might like the idea of a small refrigerator, but they were fine using clay pots and shopping for food every day. The chotuKool was a luxury item that didn't deliver much more progress than their current solutions.

Part III
The System of Progress

As I've noted, a study of a customer's JTBD is fundamentally a study of a system. We are interested in how the system's parts work together to help customers make progress.

In our next case study, we'll see how Omer Yariv was able to discover a JTBD and create a product for it by focusing on the energy behind customers' struggling moments. Justin Jackson's and Ash Maurya's case studies will help you understand better what "customers want progress" and "a JTBD is part of a system" mean. Last, we'll look at the system of progress and how the study of it helps create sustainable businesses that make products that customers will buy.

10. Case Study: Omer and Transcendent Endeavors

What's the JTBD?
Put it to work

I met Omer Yariv at the JTBD Meetup I run here in NYC. At the time, he was vice president of engineering and product at a start-up called Simplist—its product helps you search for specific people within your social network. I particularly enjoy talking with Omer. We share a background in writing, engineering, and, of course, JTBD.

Omer joined Transcendent Endeavors (TE) in 2014 and is senior product manager now. Many of TE's products are about facilitating communication between nurses, doctors, and patients. Omer is in charge of a new-product initiative for helping hospitals improve patient care. He shared with me how he's using JTBD principles to create a product from scratch.

Omer knew which customers he needed to talk with, how to unpack their struggle, and how to figure out what kind of solution would or wouldn't help them make progress.

How JTBD helped Omer get started. Omer's first task at TE was to develop a solution to prevent adverse events at hospitals—that is, circumstances in which someone's condition declines because of something other than what brought him or her in for care. Examples are falls, infections, and bedsores.

When he started, Omer didn't know very much about the health care industry, but that didn't concern him much. He was confident that he could create a successful product; all he had to do was find a group of people who were struggling to get a Job Done. Who struggled the most with adverse events? He looked for answers. Who had the most to lose when adverse events happened? Who had the most to gain by preventing them? Who was putting the most energy—the most effort—into finding a solution that helped prevent adverse events?

Omer believes that finding this energy is imperative to discovering a JTBD:

> When I interview potential customers, I look for evidence of a
> struggle. I'm looking for an energy to tap into. That's how I know
> a struggling moment exists and that there's an opportunity to

create something. If a group of people is not struggling—if I can't feel that energy—then there's probably no opportunity there.

How does JTBD help you create a product that people actually want to use? At this point, Omer didn't have very much to go on. All he knew was that adverse events happen at hospitals and that nobody wants them to happen. He said,

Hospitals don't want adverse events. It costs them money. It costs them time. It costs them reputation. Patients don't want adverse events. Who wants to get sicker? Nurses don't want adverse events, because they're there to take care of patients. Nobody in the system wants adverse events to happen. How come they still happen? Where's the gap there? What's missing?

Omer was wrestling with a tough question. Why do adverse events happen, even though so many people don't want them to? The fact that so many people were affected by adverse events made it hard to know where to start. Omer knew he couldn't build a solution for everyone. Not only would it be expensive and difficult, but there was no guarantee that all the people would actually use it.

Omer's experience as an innovator had taught him an important lesson: many products fail simply because no one wants them. Of course, he wanted to make something people would actually use. He narrowed his focus on one group of people who struggled the most (who suffered the greatest consequences at any adverse event) and those who were in a position to prevent adverse events.

How do you figure out who struggles the most? Omer needed to find out who had the most emotional motivation to prevent adverse events, for they would most likely use whatever product he created. He began by casting a wide net:

> I wanted to interview potential users [those who will use it] and potential customers [those who will pay for it]. But I had to find the right ones to interview. I wanted to talk with those who had the most energy—who had the most motivation to solve the problem. So, I started creating surveys for the different people involved in adverse events, such as nurses and medical-office managers.

Omer asked such employees how long they had worked in the field, how often they saw (and managed) adverse events, and whether they thought adverse events were preventable. He began to see who might be best to interview in more depth:

> We learned that we needed to talk with nurses who had a lot of patients—and who had to deal with high turnover of those patients. These two conditions ruled out intensive care units [ICU] and oncology [cancer treatment]. In ICU, you only have one or two patients to watch over. There is also a high turnover of those patients. You're dealing with a limited number of patients, and you're not in charge of them for very long. In oncology, you might have ten patients, but you work with them over a long period of time. You get to know them. But with nurses involved in med/surg [medical-surgical], there seemed to be an opportunity there.

Nurses in med/surg face a different challenge compared with other nurses. Med/surg nurses watch over at least four or five patients at a time, and these turn over within a few days. It's a tough situation; patients constantly come and go. Nurses learn about their patients' conditions and needs and care for them for a few days. But just as nurses get to know patients better, new patients take their place. These working conditions are why nurses in med/surg deal with the most adverse events. Omer concluded that med/surg nurses struggled the most here and would be the most likely to use whatever product his team ended up creating.

Omer's next step was to dive into the struggle this particular group of nurses faced. In interviews, he would ask what the struggle was like. Were the nurses trying to prevent adverse events? If so, how?

Discover a customer's JTBD through an interview by looking for the energy of a struggle. Learn how the customer wants life to be. Omer's first interviews asked broad questions:

> Does your hospital talk about adverse events?

> Are there incentives if the number of adverse events goes up or down?

> How would you describe your daily life as a nurse? What are your routines?

> What is it like when adverse events happen on your watch?

But grabbing just any old data from interviews can make things worse instead of better. To avoid that, Omer looked for signs that these nurses were struggling to make progress:

All through those questions, I'm always looking for energy. If they describe their struggle using a particular solution, or if they describe having any emotional motivation to make things better, I would know that I needed to dig into it more. I was always looking for energy.

Omer kept looking for "energy" around a struggle. Was there any change in body language or how the nurses talked while describing dealing with adverse events? Did some express frustration with procedures or products they used that left them feeling powerless? What was giving them the most anxiety and stress? What were the forces of progress (i.e., push, pull, anxiety, and habit)?

Sure enough, Omer's persistent search for energy paid off:

> I finally started to get an idea of the struggle they faced as a nurse—and in particular when dealing with adverse events. For example, I had no idea that nurses don't always get along; they don't always like each other. The situation the hospital puts them in leads them to feel that they're alone against everybody.

The "situation" Omer refers to is how hospitals decide who is liable when an adverse event happens. Nurses generally suffer any consequences, even when an event is not their fault. For example, if a doctor prescribes the wrong medication and the nurse administers it, the nurse is liable, although he or she was not the source of the problem. Such an adverse event goes on a nurse's permanent record, and he or she could lose a job, lose a license, or be sued. All this can happen because of someone else's mistake.

If all that stress isn't enough, there's the social stigma that nurses can face when an adverse event happens on their watch. Omer said, "There's a very strong feeling of 'I don't want to be that nurse that all the other nurses are talking about.' That's another very big motivation to make a change. All of these struggles create a lot of energy to change things for the better. It's a JTBD."

You found a struggle. Now what? Learn how customers imagine their lives being better. Omer had found a struggle: nurses were afraid of being held liable for adverse events happening on their watch. But he wanted to learn more. How did these nurses want things to be? What would their lives be like if this struggle were resolved? He said,

Even with all this struggle they face, you kind of wonder, why do they want to be a nurse? The answer they gave was always the same: they're there because they feel like they can make a change. They feel like they're helping people. That's the thing that keeps them going—the feeling that you're helping someone.

These nurses want to help people, and that's why they became nurses in the first place. This was an important piece of their JTBD puzzle.

Armed with these two insights— (1) the struggle and consequences nurses face regarding adverse events and (2) nurses' desire to feel as if they are helping other people—Omer now had a pretty good idea of what Job these customers were struggling with and what their lives would be like when it got Done.

Omer now needed to learn what these nurses valued in a solution. This would help guide his team in designing one to fit the JTBD.

How do you learn what customers want in a solution for a JTBD? Even though Omer had a pretty good idea of these nurses' JTBD, he didn't know what they would expect in a solution. A JTBD describes the customer's problem and only hints at what a solution should be. Omer needed to learn the following:

> How nurses currently handled adverse events

> What solutions they had tried

> What they did and didn't value in each solution

> Whether they were expressing compensatory behaviors

> Whether they were using a combination of solutions because no single solution was good enough

The answers proved fruitful:

> The story here is that nurses have a lot of things to remember. They want to get them right. There's a lot at stake if a mistake is made. Nurses take care of people, they run around, they get interrupted, and then they have to put everything into the documentation later.

> They currently handle all this in two ways. One is memory. Some of them say, 'Yeah, I remember.' Other nurses take notes. It can be a little bit on their notes app on their iPhone, or sometimes they just jot down notes on their clipboard and put them in their pockets. But they make notes all the time. They make notes, and then they update the notes. They cross them out and make more notes. In a few cases, we heard about a product called Rover. It's an iPhone app that connects to the hospital's documentation system.

The diversity of these solutions—and how the nurses used them differently— gave Omer an idea of what the nurses wanted in a solution. But his biggest

breakthrough came when he interviewed one nurse who had created her own solution.

One nurse I talked with—she started by taking notes on her hand. She would write everything on her hand with a pen, then she would wash her hands, and the notes would go away. So, then she started writing notes on a pad. But as she wrote down more notes, it became hard to keep track of them all.

Then, she came up with her own solution. She created worksheets that used a grid system to track all the beds and patients. She would use that to write what she needs to do. Even more interesting was that the other nurses saw this and liked it. So, she started creating photocopies and giving them to other nurses. That was her evolution of a solution for her Job to be Done. That was great to hear.

Learning about other solutions gave him valuable information about what these nurses did and didn't like in one. First, he learned about critical pain points that made a nurse realize that the way he or she was doing things wasn't working. Next, he learned about what would attract nurses to one solution versus another. Last, he learned how nurses innovated on their own.

It was time to create a solution. Omer first broke down the key moments that would prompt nurses to reach for a solution for their JTBD. He wrote short stories to encapsulate such struggling moments. For example:

> When I get my handoff and I need to remember what I need to do, I want to assign beds and interventions quickly so I can get back to work and not get bogged down.

> When I'm done with an emergency and I've forgotten what I was last doing, I want to catch up with my scheduled interventions so I can pick up on what I missed and not worry about skipping any patients.

> When I finish an intervention, I want to mark it as done quickly so I can make sure I don't double-administer treatments.

Omer described how he got these Job stories and how they helped him innovate: "These struggling moments came after I interviewed nurses and when I started working on a prototype. I wanted those situations documented so that I could make sure I was focusing on the right thing."

Where's the project now? At the time of this writing, Omer's team is still in production. They've developed prototypes and are now testing, shooting for a 2016 release date.

WHAT'S THE JTBD?

Omer described some great data about a JTBD these nurses faced. The struggles for progress these nurses faced seemed to be:

> *More about*: avoiding adverse events, not being the nurse everyone talks about, losing my nursing license, protecting myself from liability, being unfairly blamed, feeling like I'm helping people, pride in my work as a nurse

> *Less about*: protecting the hospital, protecting other nurses

Based upon what Omer told us, I would describe the progress, the JTBD, these nurses expressed as:

> Arm me with what I need to manage my interventions, so I can focus on helping my patients.

There are a few reason why I like this:

> This JTBD can be solved with a change in hospital procedures and processes. Nurses don't have to be buying their own solutions for it. This demonstrates the idea that competition for a JTBD can come from anywhere.

> It shows how these "needs" are not intrinsic to these nurses. Rather they are a product of the health care system these nurses interact with. These nurses wouldn't face this struggle if management had designed better processes in the first place.

> I get a good sense of what life is like when these nurses' Job is Done.

PUT IT TO WORK

Begin by identifying a struggle. Start wide, and get progressively narrow. The first thing Omer did in creating a new product from scratch was to identify a struggling moment. He started by casting a wide net as he sent surveys to doctors, nurses, and hospital administrators. As he learned more, he focused more. Eventually, he ended up doing one-on-one interviews with nurses who worked within a particular department (med/surg). These were the people who were struggling the most. These were his potential customers.

Understanding the struggling moment is a crucial part of JTBD. In a previous chapter, we saw how the creators of the chotuKool didn't focus on a struggling moment. They also jumped to a solution—perhaps because they believed they understood their struggling customers. Don't do what they did. Instead, emulate

Omer: start with an open mind and resolve to stop discovery only after you uncover a customer's struggling moment.

Find innovation opportunities when customers exhibit compensatory behaviors. Omer discovered a nurse who shifted between various solutions for her JTBD. She moved from writing on her hand to writing notes on a pad, and then she created her own worksheet system. It was so helpful that other nurses had asked her to make copies of it so they could use it as well.

Innovation opportunities exist when customers exhibit compensatory behaviors. The edge cases in which customers use your product might also represent innovation opportunities.

Always keep an eye out for customers who use a product in novel ways, combine products into solutions, or create their own solutions for a JTBD. They have all the trade-offs, necessities, struggles, and ways to progress in their minds. Why not take advantage when they choose to express them?

11. Case Study: Justin and Product People Club

What's the JTBD?
Put it to work

Justin Jackson is an entrepreneur from Canada. At one time, his Twitter bio simply read: "Professional burrito maker." In that case, his over ten thousand Twitter followers may have made him the most popular burrito maker ever. Never mind his prowess with a burrito tortilla for now. We want to learn more about his experience as a nonstop innovator. The numerous products he has made over the years include the following:

> *Text Me, Slacker.* An app that helps users engage existing customers and acquire new ones through SMS messages
>
> *Marketing for Developers*. A guidebook for marketing software, apps, and digital products
>
> *Jolt*. A guide that helps users come up with new marketing tactics
>
> *ProductPress*. A plug-in that turns a regular WordPress site into a membership site
>
> *Product People Club*. An online community where innovators and entrepreneurs can share their progress, give each other feedback, and track revenue goals

In fact, Justin enjoys innovation so much that he tirelessly encourages others to innovate as well. At the end of 2015, he created the Maker Challenge—a call for others to join him in creating a hundred new products.

I first heard about Justin when I saw his short video about the Jobs for which he hires coffee—you'll read about that shortly. I contacted Justin to chat about his take on JTBD. How was he using it? Was it helpful to him? Justin told me how he had applied JTBD thinking toward Product People Club and also his book, *Marketing for Developers*.

In this case study, you'll learn how Justin uncovered a struggling moment that his prospective customers faced, as well as how he created a solution for it to help them make their lives better. You'll learn how he grew his business—not by only adding more features to an existing product, but by creating new products that extend the progress his customers want.

Justin learned about JTBD from Ryan Singer and Jason Fried, product designer and cofounder, respectively, of the software company Basecamp. He said, "I saw

that they were doing a JTBD seminar at their office. I remember thinking, 'Oh, that's weird. They haven't done seminars like that before.' That was the first time I heard about Jobs [JTBD].

Although Justin didn't actually attend the seminar, it did put JTBD on his radar. He said,

> After that, I began noticing Ryan and Jason tweeting about JTBD. Then, during an interview with Ryan, I heard him say something like, "At 37signals [the former name of Basecamp], we've been thinking more about why people hire our product—or what people are hiring our product to do." I remember at the time thinking, "Man, I've never thought about it like that before."
>
> Their product, Basecamp, is a great example of JTBD thinking. It's a project-management tool. In place of that, you could hire an assistant to manage all your projects for you. Both could do the same Job.

JTBD differentiates emotional from functional. Justin once thought of JTBD as an exploration of functionality—as a lot of people do: "At first, I was just thinking about Jobs as, literally, utilitarian jobs. For example, I've hired people to trim my trees. I've hired people to fix my plumbing. I'm hiring this product to manage my schedule. I'm hiring this product to make sure that I don't miss any more meetings."

The more he continued digging into JTBD, however, the better he understood the emotional aspect of Jobs. Jobs as emotional struggles are something that stuck out to him. This interested him so much that he created that coffee video. "I love that emotional aspect [of JTBD]. When people go to a coffee shop, they aren't just buying caffeinated liquid. They're going for all these other reasons." Some of his own motivations for going to coffee shops include getting out of the office to clear his head, feeling cool and creative hanging out there, experiencing the ritual of drinking coffee made the way he likes it, and feeling as if he's part of a community.

This focus on emotional motivation and struggle helps Justin create successful products. In particular, it helped him create Product People Club.

How do you find a struggling moment when you don't even have an idea for a product? The inspiration for Justin to create what would become Product People Club came from a moment of frustration: "I was consulting as a product marketing manager at a software company. Things were moving slowly with the team I was working with. I came home one day and wanted a distraction. I

[thought], 'You know what? I'm going to create a new product.'" But at that moment, he neither had a concept nor knew what struggle he wanted to solve. However, he did have a few ideas of where to start looking.

For years, he had been active in entrepreneur and innovation communities. He had a successful blog, newsletter, and podcast on the topic of entrepreneurship. His experience of interacting with his community told him that a lot of people were putting a lot of energy into solving a struggle about getting started as an entrepreneur. To begin, Justin simply started observing.

> I decided to take a closer look at the patterns I had been noticing within my audience. I've been blogging, sending newsletters, and podcasting for a while. People would frequently write to me with questions or asking for help and advice. I had all this qualitative information, so I began looking through it. Could I find any reoccurring struggling moments that people were experiencing?

Justin was looking for recurring behaviors that signaled that people were struggling and that they were looking for a better way. All the while, he asked himself questions: "What do people—unprompted—complain about on Twitter?" "What questions do entrepreneurs and innovators keep asking me over and over again?" "What topics are talked about during Meetups about entrepreneurship?"

He said,

> There were two patterns I noticed. One is that people were lonely. People who are working on products and building apps are usually doing it in their spare time. They're doing it in their basement, by themselves.

> The other struggling moment I found was this frustration people had when they were just consuming lots of content. They were listening to all these great interviews on my podcast, listening to other people who are building and launching their own products, but they weren't doing anything themselves.

Justin was seeing patterns and getting questions seeking advice on two main struggles: (1) loneliness and (2) how to sustain the motivation to finish building a product.

The people he was observing were solo entrepreneurs who were passionate about creating something but hit these two barriers. Some were in small towns where they couldn't talk with anyone else about their struggles. Some exhibited

concerns about being seen (or even seeing themselves) as poseurs. These barriers slowed—or stopped—their progress. A lot energy was pent up in these strugles, and something to release it was needed to get them unstuck. Justin said, "They just, they wanted to just fucking do it. They wanted to go out and build their own thing, but they were getting stuck. That's where I got the idea for Product People Club."

Justin had found a struggle. Next, he wanted to test how many people were struggling and how intense their struggle was.

How do you test if an innovation opportunity exists for a struggling moment? Justin believed he had tapped into an emotional struggle. Next, he wanted to come up with a way of measuring it. Was there an opportunity to create a product? As a test, he created a simple product: a chat room, capped at twelve people, that cost ten dollars a month to join. He put up a simple promotional web page that spoke to the frustrations and struggles of solo entrepreneurship and procrastination. The ad copy for the Product People Club stresses these struggling moments:

> Want to earn an independent living from your own products? It's
> hard work. At some point, all of us solopreneurs struggle with the
> following:
>
> - Keeping your motivation up and feeling isolated
>
> - Building something people want
>
> - Finding new customers
>
> Product People Club is a group of people who came together
> because we realized that in order to build something, we need to
> quit thinking about it and actually do it. We realized we can't do
> this in isolation.

Justin's simple web page had tapped into the two aspects of a JTBD: (1) the emotional motivation to better your life and (2) how life is better when you have a solution for your Job—that is, what it is like when the Job is Done. How did it work? He told me, "I posted the website to Hacker News, an online discussion group. Thirty minutes later, the product sold out. By the end of the week, I had a waiting list of almost four hundred people. It was clear: I had hit a nerve."

How do you dig deeper into a struggling moment? Justin had confirmed that an opportunity existed. Now it was time to figure out how to make Product People Club (PPC) more successful. He began interviewing his customers to learn

more about their struggle: "I started asking my customers questions in a very deliberate way. I talked to people about why they joined."

Justin asked customers questions such as the following:

> How did you first hear about PPC?
>
> When did you first think about getting involved with PPC?
>
> Did you do any research before joining?
>
> What was going on in your life when you signed up?

Justin was uncovering specific moments of struggle and getting a better idea of what exactly his customers' struggle was like.

> That last question—"What was going on in your life when you signed up?"—is gold. The last customer I interviewed, when I was asking him about what was going on in his life when he signed up, he told me, "Well, I had just quit my job. I had decided I was going to start building products and consulting full time." He then talked about being alone in his house all day, with no one to talk to. His wife would leave for work, and he felt isolated, which is really tough when you're working to start a business. He was also worried and scared about his future.

This is how Justin began to unpack the first part of a JTBD: the push—the struggling moment. The struggle for these entrepreneurs was "I want help managing the feelings of isolation as I start my business." Through his interviews, Justin was able to qualify what it meant to feel isolated. He learned that these entrepreneurs wanted to interact with other people who shared the same struggle. Talking with their spouses or neighbors wasn't helpful. In fact, talking with someone who couldn't relate to their struggle could make them feel more isolated.

As Justin unpacked their struggle with loneliness, he began to tap into the second part of their JTBD: how life was better when they had a solution for their Job.

> I learned that, when they joined the club, they would have this feeling of "Oh, finally! These are my people! These are people I can talk to about what it is like to have prelaunch stress!" Having the right people to talk with helped eased their anxiety and raised their confidence. It's that sense of community, friendship, relationship, and human connectedness.

Now Justin had two important parts of a JTBD: (1) a struggling moment—help me manage feelings of isolation as I start my business—and (2) how things will be better—I'll have the confidence to persist in being an entrepreneur.

His next step was to learn more about what these customers had already tried. This would give him more information about their struggle. His exploration of why they moved from one solution to another would also help him understand what customers did—and didn't—value in a solution.

Studying past customer solutions tells you about the JTBD. Justin continued gathering data about his customers through observation, interviews, surveys, and customer e-mails. This uncovered solutions his customers had already tried.

Some examples of what he discovered as competition to Product People Club included the following:

MicroConf. A conference geared toward self-funded start-ups

30×500. An online course that guides entrepreneurs from product research through launch

Communities formed using an online chat application called Slack

Creating a Meetup or attending one created by someone else

One-on-one coaching from other entrepreneurs

Clarity (which we featured in another case study)

Learning about what customers did and didn't like about the other solutions they had tried helped Justin understand what progress he needed to deliver. In particular, he started to pick up on another struggle taking place:

[I also learned that] a lot of people in the community have revenue goals for their business. For example, they would say, "I want to do fifty thousand dollars in iOS sales this year." As I dug down into those things, I began seeing trends. One was a desire to have independent income. The other solutions they tried don't help with that goal. I felt that Product People Club could help some customers know how to replace, for example, a hundred thousand dollars in income.

Justin's exploration of other solutions customers had tried gave him ideas on how Product People Club could distinguish itself. This helped him know where to take his product next:

What if we help you track that income you're trying to get to? Maybe you are closer than you think, or maybe you're a lot farther and you should not quit your

existing job. Right now, we're working on a feature that will help people track their goals. That's one thing I think about: how to help people measure their success as they strive to have completely independent income, only from creating and launching products.

Can more exploration of the customers' struggle reveal other innovation opportunities? Justin's awareness of his customers' struggle for progress led him to uncover related Jobs and therefore more innovation opportunities. For example, what new struggles do customers face once they overcome loneliness? What happens when they have the motivation and confidence to launch their start-up? Justin has some ideas:

> In terms of what's next for Product People Club, I keep thinking
> about how we can help more people build and launch successful
> products. A lot of people are looking for help promoting their
> product after they finally launch it. They have no idea how to get
> it out to people. That's an opportunity for another product that
> I'm exploring right now.

Justin is doing something interesting here; he's exploring struggles related to the one he started with. He started by developing a product that helps people overcome the isolation of solo entrepreneurship by giving them the support and confidence they need to build their own products. Once his customers have a solution for that problem—once they are able to get that Job Done—they need help launching and promoting their new businesses.

Creating a product for related Jobs. Justin knew that his existing Product People Club customers would eventually encounter the struggle of marketing their new products. Could he have something ready for them when the time came? He decided on a combination of instructional and interview videos, a book, worksheets, handbooks, and templates. This combination product is called *Marketing for Developers*.

Justin delivers his customers progress. Justin is the most prolific innovator I know. Who else challenges others with, "I'm going to try to make a hundred things this year. Want to join me?"

Many factors contribute to his success. I believe that one of them is his ability to tap into people's JTBD. He can sense a customer's struggling moment, qualify it, and discover how he or she imagines life will be better once a solution is in hand.

I also admire Justin's skill in understanding the idea of delivering ongoing progress to customers. He looks ahead and anticipates the struggles his

customers will face. He thought, "After I help customers maintain their motivation to launch their businesses, what will they struggle with next?" This is what it is like to think about delivering progress to customers.

What is even more impressive is that he understood how *not* to go about solving this downstream struggle. When he decided to offer a solution for customers to promote new businesses, he didn't fall into the trap of simply packing more features into Product People Club. Instead, he created an entirely new product. Why? He knew these solutions each solved a different JTBD. Had he done things the other way, he would have risked losing Product People Club's focus on the Job it should be used for.

WHAT'S THE JTBD?

Here are two quotes from Justin that I find most helpful when trying to understand customers' JTBD:

> "Having the right people to talk with helped eased their anxiety and raised their confidence. It's that sense of community, friendship, relationship, and human connectedness."

> "Oh, finally! These are my people! These are people I can talk to about what it is like to have prelaunch stress!"

Justin describes some good JTBD data: he focuses on these solopreneurs' struggles, and he describes how things will be better when they have the right solution. And when I take quotes like these and match them with the rest of the data Justin gave us, I see the struggle for progress as:

> *More about*: Loneliness and isolation of solopreneurship, sense of community and human connectedness, keeping your motivation up, not feeling like or being perceived as a poseur, "just do it", I'll have the confidence to persist in being an entrepreneur

> *Less about*: attending a conference, taking a class on entrepreneurship, talking with a mentor

With these data and the success of Justin's Product People Club, I'd phrase one JTBD as:

> Help me overcome the isolation and stress of solopreneurship, so I can have the motivation to finish my product.

Put it to work

Justin's case study is a brilliant example of discovering an innovation opportunity through sniffing out a struggling moment. Let's see how it reinforces some other important JTBD lessons.

Innovation opportunities are found through looking for specific data. Justin realized he had a treasure trove of data only after he began to investigate innovation opportunities. However, he needed an effective way to filter it. He did this by asking himself questions: "What do people—unprompted—complain about?" "What questions do entrepreneurs and innovators keep asking me over and over again?" "What topics are talked about during Meetups about entrepreneurship?"

Investigate your data for variations due to special causes. For instance, why are customers using a product other than intended? Or if customers have never complained about it before now, what's going on? These are the types of questions that help you find innovation opportunities.

Know the difference between a struggling customer and a merely inconvenienced customer. Don't look for evidence of just a casual struggle; rather, look for people who were putting a lot of energy into finding a solution. In Justin's case, the community he was tapped into was reaching out to him and each other for help. These people were actively looking for a solution to a problem.

Perhaps the biggest challenge for an innovator is knowing how to determine if an innovation opportunity exists. It is critical to know the difference between a struggling customer and one who is merely inconvenienced. Aspiring entrepreneurs and innovators often move too quickly from observing a problem to hypothesizing a solution. Instead, be rigorous and look for true struggle. With the chotuKool, Godrej, Christensen, and Innosight jumped to a solution too quickly. Instead, they should have spent some time investigating if customers were really struggling and how intensely. But it turned out that there wasn't enough of a struggle for customers to buy a low-end refrigerator.

We'll look further at researching customer Jobs in part IV of this book.

Great advertising comes from speaking to the customers' struggling moment. The promotional page that Justin created for Product People Club was simple. It didn't need lots of bells and whistles. All it had to do was to speak to the customers' struggle and show them how things would be better once they found a solution for it—that is, once they were able to get the Job Done. Justin met

these targets so well that he sold out his product in thirty minutes. By the end of the week, had a waiting list of four hundred people.

Digging deep into customer motivation reveals innovation opportunities. Don't be satisfied with superficial facts about the customers' struggle. Dig deep until you understand the struggle, its context(s), and how customers hope life will be better when they have a solution for their JTBD. As you'll see as you read on, a better understanding of the context of a struggle helps you understand how to grow your product.

Justin didn't stop when he believed he had solved a struggle. Even when he had Product People Club up and running, he wanted to learn more about the struggle. As we've seen, he did this by asking a number of specific questions, and that helped him develop new features and grow his business through offering additional products.

You can deliver progress to your customers' JTBD by offering a set of products that work together as a system. Perhaps the most powerful JTBD principle is that the study of the customers' JTBD is the study of a system. We'll look into that more later, but for now, notice two things that Justin did: (1) he created a product (*Marketing for Developers*) that customers would buy after using a different product (Product People Club), and (2) he designed *Marketing for Developers* as a collection of videos, reading material, worksheets, and audio material. Justin's combination of products works together to deliver customer progress. This is an important distinction of JTBD theory: it avoids the problem of unfocused "Swiss Army" products that try to solve too many Jobs.

12. Case Study: Ash and Lean Stack

What's the JTBD?
Put it to work

I met Ash Maurya at the 2013 Lean Startup Conference in San Francisco. As a presentation was about to start, I took a seat near the front of the room. Ash soon sat next to me, and we chatted a bit.

  I learned a bit about his experience as an engineer and entrepreneur. In 2002, he had started WiredReach—a software product that simplified file sharing over the Internet. Eight years later, he sold it. He began blogging about his experiences starting and running a company, and he came across early writing from lean-start-up pioneers. This philosophy suggests that innovations should be designed in small, low-risk steps that are tested along the way. It struck a chord with Ash, because a lot of its ideas about innovation matched his own experiences. Inspired, he self-published his first book, *Running Lean* (later republished by O'Reilly Media).

  Now he's building another company: Spark 59. It offers a collection of books and tools for entrepreneurs. In June 2014, on a podcast, I heard him share his thoughts on JTBD and how he had been combining it with lean business principles. I wanted to know more about Ash's thoughts on JTBD and if he had applied its principles to his most successful product, the Lean Canvas.

  Ash used JTBD to help him learn about why customers were churning from his product, about how he could deliver customers more value with new products and services, and about the benefits of interviewing customers who use his product in novel ways.

  What is Ash's latest product for getting a Job Done? Most recently, Ash has focused on helping entrepreneurs get started on the right track and avoid what he calls "the innovator's bias." He said,

> It's when people get hit with an idea and then get carried away
> with it. They lock themselves up, and they start building the
> solution. They feel like they need to get it all out. They tend to be
> perfectionists. They spend a long time building a product,
> exhausting all their resources—and then end up building
> something no one wants.

  Ash is describing a scenario that happens all too often: innovators think they have a brilliant idea for a product, they spend time and money building it, but

when they release it, no one buys it. At this point, they either give up or scramble to recover. Ash said, "Because [innovation is] such a long and hard process, many people also spend time trying to find the investors, or the stakeholders, that will give them the resources to continue building their product."

Ash helps innovators be more successful by helping them avoid the pitfalls associated with the innovator's bias. A popular tool he has developed for this Job is the Lean Canvas. It's a diagram you use instead of writing a long-winded business plan—most of which is speculative anyway. Instead, the Lean Canvas asks innovators to answer a set of important questions about how their businesses will deliver value to customers. They then go on to build the first version of their products.

Another problem that the Lean Canvas helps with is building consensus and a shared understanding around the business model for a product or company. But what about other struggles? Has Ash found them all?

Can studying atypical customers reveal other innovation opportunities? Even though Ash had known about JTBD for a few years, he had never thought about applying any of its concepts to his own product, the Lean Canvas. This changed when he got an e-mail from Franco, a salmon fisher from Chile, who was having trouble using his site. Ash said, "We have the Lean Canvas as an online product. Every day, there are lots of people coming to the site and using it. When I read that e-mail from the salmon fisher, my first reaction was, 'How the heck did he find us?'"

Most of the customers who use the Lean Canvas come from the lean-start-up community. Ash knew the product's audience had been broadening, but a salmon fisher from Chile was a dramatic outlier. This is the moment when Ash thought that a JTBD approach could be helpful to him. Ash set up a call with Franco, asking him to describe what made navigating the Lean Canvas website difficult for him.

> He was lost. At the time, the website assumed customers knew about the lean-start-up community. He didn't know anything about that. Instead, he told me that he had been at a networking event a few nights before. He was talking about wanting to get a loan from the bank for his business. He thought he had to put together a business plan for the bank. The person he was taking with said, "Don't bother writing a whole business plan. Instead, go to leancanvas.com and create a one-page version of it."

Ash began to understand Franco's struggle: Franco wasn't sure how to convince the bank that his business would be profitable and that it was safe for the bank to invest in him. This proved to be a tremendous insight for Ash and his team—but not the way you might think. The value wasn't so much in that Ash had discovered a new Job; rather, it made him revisit a question that had lingered in the back of his mind: "Are we sure we know why people are coming to our web site and trying out the Lean Canvas?"

You can gather JTBD data from customers who stop using your product. Ash and his team decided to do a new round of customer interviews to discover what Jobs customers were using the Lean Canvas for. They would talk with those who had recently signed up and those who had canceled their subscriptions.

They wanted to know the emotional motivations and expectations of the first group, and the second group's answers would help the team learn how, or if, the Lean Canvas was failing to make customers' lives better in the way they expected it to.

Ash crafted two e-mails. One was a thank-you to new subscribers, and it also conveyed that Ash's team wanted to hear more about what they hoped to achieve with the Lean Canvas. The message to those who had canceled offered an Amazon.com gift card in exchange for a conversation about why they had canceled. Though Ash got valuable information from both groups, the most useful was from those who had canceled:

> One unexpected thing that we learned was that customers weren't leaving because we were doing a bad job. They were actually leaving because they felt like they had been satisfied. They had created their initial business model. They had, in some cases, invalidated it and moved on. They didn't really see any other purpose to stick around and continue using the Lean Canvas.

It appeared that the Lean Canvas was, in a way, a victim of its own success. Innovators would sign up to use the Lean Canvas, get a lot of value from it, and then move on. But that wasn't how Ash had envisioned the product. The Lean Canvas had been designed for a long-term use, but clearly, many customers saw it as a short-term product. What should Ash and his team do? Should they accept a moderate churn rate for customers?

You may discover that your product is being used for very different Jobs. If Ash and his team wanted to keep their customers, they needed a better picture

of what Job, or Jobs, they were hiring the Lean Canvas for. More interviews brought insight.

One group of customers took the Lean Canvas as a starting point and then began integrating it into their own product-development processes, altering the Lean Canvas to connect to things like bug-tracking systems and company documentation. Ash found this particularly interesting. He had designed the Lean Canvas as a tool for entrepreneurs to develop business models for start-ups. Yet these particular customers were using the Lean Canvas to help them design features for an existing product.

Ash and his team were at a turning point. Which opportunity would they pursue? Should they address the high churn among the original audience (entrepreneurs)? Or should they extend the Lean Canvas to include customers who were using the Lean Canvas in novel ways?

Narrowing what Job(s) your product should be used for has benefits. After some discussion with this team, Ash decided to focus on their core audience: innovators who needed help creating and iterating on a business model.

> Our audience was already broadening on one end [more entrepreneurs were using the Lean Canvas], and if we went down that path of extending the Lean Canvas in all these ways [supporting corporations], we'd be catering to smaller segments. That is the point where you have to decide where your product starts and stops. For us, we said, "That's out of scope. If they want to do those kinds of things, there are many other options." We're not going to bloat our software with extra features. Instead, we decided to focus on what we do best.

Ash is doing something important here. Instead of trying to grow revenue by serving many different Jobs, he's choosing to focus on the few Jobs that he and his team can deliver the most value for. Instead of turning the Lean Canvas into a Swiss Army knife—a tool that does a lot of things OK but not any one thing great—he was going to evolve it into a scalpel—a specialized tool that is invaluable for a select group of people.

The decision was made. Now it was time to figure out exactly how to grow the business.

How does thinking about delivering progress help you discover innovation opportunities? To figure out where to take his business next, Ash asked a simple but powerful question:

> To help us figure out what path to take, we asked ourselves, "What comes after that initial canvas?" Our answer was to develop two additional boards that would be used with the Lean Canvas. We wanted to extend the customer's story in a way that emphasized more than just capturing your idea for a start-up. It's really about creating a valid business model through experimentation and research.

Once again, Ash is doing something very smart here. His team had a question: "How can we increase revenue by getting customers to use the Lean Canvas longer (i.e., reduce churn)?" Many innovators in this position would be tempted to make changes to their existing product, usually by adding more features. But Ash didn't do that. The Lean Canvas was great the way it was. Changing it would waste time and money in overengineering a solution and risk upsetting the habits of existing customers.

Instead, he made his original product more valuable to customers—not by changing it but by developing new, complementary products. This is when he developed two more boards: an Experiment Report and a Validation Plan. In this new vision, entrepreneurs would first hypothesize and document their business models using the Lean Canvas. Next, they would formulate a strategy for validating their hypotheses, using Ash's Validation Plan to structure and document that. Then, they could run experiments that would either validate or invalidate parts of that business model; the results of these experiments would be documented on the Experiment Report. Finally, they would update the Lean Canvas and form new hypotheses as needed.

Ash both helped his customers be more successful and kept them using his products longer by extending his business with additional products. Customers stopped seeing the Lean Canvas as an end but rather as an ongoing companion.

Shift from selling one product to selling a combination of products that work together as a system. Now that Ash had added complementary products, he decided to rebrand his business. The Lean Canvas became the Lean Stack. This change represented the extended value that Ash's business now offered.

In the beginning, there was the Lean Canvas and the various Jobs that people hired it for, such as the following:

> Cofounders starting companies use the Lean Canvas's structured approach to help them overcome doubt and uncertainty.

> Entrepreneurs use it to avoid the mistake of wasting time and money building a product no one wants.

Some entrepreneurs, like Franco the salmon fisher, want help "selling" themselves and their businesses as investment opportunities.

The Lean Canvas is brilliant at these Jobs. The downside is that not a lot of people experience them, and there is a lot of competition among solutions for these Jobs. This means that the Lean Canvas, by itself, had limited growth potential. But Ash extended his business by serving up a collection of products that work together, as a system, to help customers make progress. This was how he was able to activate much more revenue potential. He said,

> Going back to the salmon fisher, yes, he will create a canvas, but what if he wants to raise money afterward? We could help him down a particular path. We might actually show him how to pitch the canvas to investors. There could be additional products that tie him together with people who can look at his pitch and maybe help him raise money. We're even developing features that help entrepreneurs run effective board and advisor meetings.

Ash's switch from the Lean Canvas to the Lean Stack puts him in a better position to help his customers with a larger JTBD: *Help me become a better and more successful entrepreneur*.

What is the future of Lean Stack? Ash continues to help entrepreneurs become successful. He is in the process of releasing his next book, *Scaling Lean*—a follow-up to *Running Lean*. He's also just released his BOOTSTART Manifesto—a rallying call for entrepreneurs, reminding them that there has never been a better time to start one's own business.

For the Lean Stack itself, Ash is looking at more Jobs that entrepreneurs struggle with:

> We've learned about many different struggles that people face: starting projects, big companies sustaining innovation, and even release management. As a result, we've discovered many different Jobs. We want to continue to learn more about those Jobs and decide which ones that we'd like to help customers accomplish.

WHAT'S THE JTBD?

Ash's case study doesn't offer much data about one JTBD. Instead it offers a lot of data about delivering progress for a higher level struggle. You become better

at seeing the big picture when you understanding the high level progress your customers are struggling to make. In Ash's case, his customers are struggling to become successful entrepreneurs. Along the way, however, they run into various challenges. A good example comes from the salmon fisher who wanted help persuading bankers that his business was worth investing in. Once he secured financing, he could get back to growing his business.

Ash's case study is also interesting because he understood that his Lean Canvas was great at helping people get their Jobs Done. So, instead of trying to make it better – which would most likely only make it worse – he focused on future products. He chose to offer progress with a collection of products that work together as a system:

> *Tools*. Lean Canvas, Validation Plan, Experiment Report
>
> *Books*. Running Lean, Scaling Lean
>
> *Training*. Online Courses, Workshops, Bootcamps

Each product is serving one or more Jobs to be Done. Collectively they work together to help people become better entrepreneurs.

PUT IT TO WORK

Ash's Lean Canvas (now Lean Stack) is a great finale for our case studies on applying JTBD theory. Let's review some specific lessons.

Grow your business, reduce churn, and capture more profits by delivering progress to customers. Nowhere is the JTBD principle of favoring progress over outcomes and goals clearer than in this case study. Ash began his business by delivering well-defined, static outcomes: better business plans and/or consensus among founders. The Lean Canvas does these tasks beautifully—so well, in fact, that some customers don't need to use the Lean Canvas for long. In this way, the Lean Canvas was a victim of its own success.

Ash fixed his high-churn problem by changing his business from one that delivered a static outcome to one that delivers progress. Instead of solely focusing on helping customers create better business plans, he also began helping them become better entrepreneurs. This strategy creates more touch points between his business and his customers' lives, making it more relevant and valuable to them.

When you design a product for a specific outcome, customers leave when the outcome is realized. However, improving a customer's life never ends. As long as Ash helps customers become better entrepreneurs, he'll retain them.

Avoid overengineering your product; develop complementary products. If you sell a software product, offer different versions of it that tailor to different vectors of progress. Ash made a brilliant move that far too few innovators do: he made the Lean Canvas more valuable to customers not by changing the product but by adding complementary ones. Ash knew that the Lean Canvas was great the way it was, so changing it would neither make it more valuable to customers nor bring any new ones to his business. At best, nothing would improve; at worst, time and money would be lost in development, and the changes would upset existing customers.

As I keep pointing out (it's important), adding features to a product doesn't mean customers will realize more value from it. Remember when we discussed that a technology and innovation can be pushed only so far and deliver customers a finite amount of progress. This is because customers realize value *only when they make progress with your product.* Unless you can directly connect a change to your product with how it helps make customers' lives better, you're likely overengineering your product and wasting money.

Unlock your innovation creativity by asking, "What comes after?" This is a question every innovator should ask about his or her innovations. After your customers use your product, then what? Do any new challenges arise when customers successfully incorporate your innovation into their lives? Learning these things from your customers will keep your innovation efforts relevant and profitable.

13. The System of Progress

As I've noted, a customer's JTBD is part of a system. We call it the system of progress. Customers themselves, the products they buy, and the producers who create the products are all parts of this system. Understanding this is very important. It will help you find out what customers want, why they want changes, the relationship between customer motivation and the solutions they choose, and how demand is generated.

WHY STUDY SYSTEMS AND THE SYSTEM OF PROGRESS?

Systems thinking empowered the managers, designers, and engineers of Japan to create successful products that transformed the country from economic ruin to a global powerhouse. In the 1980s, equivalent teams at Ford Motor Company adopted systems thinking, thereby reviving the company, and created one of the most successful cars of all time: the Ford Taurus. Anyone who views innovation and customer motivation through the lens of systems thinking will gain a better understanding of how great products are created and sold.[64]

Interdependence defines a system. An important principle of systems is the idea that many, and perhaps all, parts have some degree of connectedness with each other. Something happening over "here" affects something way over "there." This connectedness is called *interdependence*.

An example of interdependence is what happened when farmers within the United States began spraying DDT—an insecticide—on their crops. Unknown at the time, DDT would get washed off crops and into rivers, fish would swallow it, birds ate the fish, the chemical caused these birds to lay eggs with weak shells, and weak shells prevented baby birds from hatching. The result was a decline in the populations of bald eagles, peregrine falcons, and brown pelicans.[65]

Studying interdependencies is an important part of innovation and JTBD. For example, Dan Martell recognized that Clarity was taking away profits from

hotels, restaurants, and airlines. Anthony Francavilla realized that a theater production could increase profits by selectively offering discounts. Morgan Ranieri realized that he could reduce churn not by changing how his grocery-delivery service worked but by helping customers become better meal planners.

The system of progress is a way to understand the interdependencies between customers, their JTBD, and the producer. Once innovators understand the interdependencies that exist between the various parts of a system of progress, they can inform the producer—who may also be the innovator—how to create and sell solutions for today's demand and to predict future demand.

You do not help customers make progress by optimizing parts of the system of progress individually. You improve the system by optimizing how those parts work together. For example, a mediocre product that customers know about, can buy, and can use will beat out a perfect product that customers don't know about, can't buy, or can't use.

INTERDEPENDENCIES BETWEEN CUSTOMERS AND PRODUCERS

The two most important interdependencies within the system of progress are between customer demand and the producer.
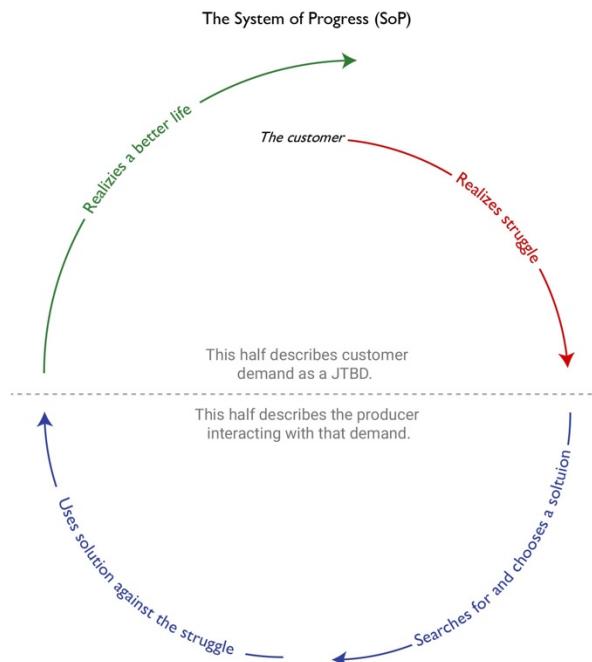
FIGURE 16. THE SYSTEM OF PROGRESS.

The first thing to notice in this diagram is that the system is split into hemispheres. The two parts in the top hemisphere describe customer demand as a JTBD, whereas the two parts in the bottom one describe the producer interacting with that demand.

The top parts of the system exist in the mind of the customer, who is the only person who can define the struggle and what his or her idea of a better life is and isn't. Yes, the producer can influence these two parts (as I'll discuss later in the chapter), but innovators cannot define the JTBD. Innovators may introduce new ways of living to customers, but it doesn't mean customers will accept them.

The bottom parts of the system describe the interdependencies between the customer and the producer. Yes, customers take action when they search for, choose, and use a product, but these actions are possible only when producers are able to meet demand and take customers from their struggles to the better lives they imagine.

THE SYSTEM'S FOUR MAIN PARTS

Here are the four parts broken down a bit more.

The customer realizes there's a struggle. It all begins with the struggling moment—the job part of the JTBD. First, customers work to understand their struggle. Then, they imagine how things will be better when they overcome it. In terms of the forces of progress, these are respectively the push and pull forces. The JTBD arises when customers realize they don't have what it takes to overcome their struggle.

Your responsibility as an innovator, advertiser, or marketer is to understand this struggle. How, when, and why did customers realize that they needed to change? Why are they struggling today but weren't last month? Was there a change in what they valued? Was there a change in lifestyle? What was wrong with the solution they had been using up to that point?

The customer searches for and chooses a solution. After customers realize there is a struggle, they need to search for and choose a solution for their JTBD. This is where producers—businesses that make and sell products—first make contact with prospective customers.

This part of the system is also where the richest data about customers' JTBD are found. Why? (1) Customers have their struggles at the top of mind, (2) they are working hard to imagine how life will be better when they can find the correct solution, (3) they visualize themselves using various solutions, and (4) they calculate how or if a particular solution will carry them from their struggle to those better lives they want.

For innovators, data at this part reveal what customers value in a solution and the priority of their values. For example, are parents willing to accept lower-quality food if it makes shopping more convenient? For advertisers and marketers, these data help them know when, where, and how the producer should connect with customers. Then, advertisers and marketers are responsible for helping customers become aware of and choose the product.

Your goal regarding this part of the system should be to understand why customers are searching for and buying a solution now instead of a month ago. How did customers find and choose (hire) a solution for their struggle? What were their hiring criteria? What trade-offs are they willing to make—that is, what are they willing to give up, and what are they not willing to give up? Did they try anything else besides the solution they ended up with? Why didn't those other solutions work?[66]

The customer uses a solution against the struggle. Customers have realized the struggle and found and chose a solution. Now it is time to think about how customers use the solution for their JTBD.

This is the part were engineers and designers take over from advertisers and marketers and create product(s) for customers to use. They must apply their understanding of the customers' struggle, what customers value in a solution, and how customers expect to make their lives better once they incorporate that product into their lives. After a solution is created, the producer should continue to monitor—and possibly improve—that solution by studying how customers use it.

Gather data at this stage. How do customers use the solution they've chosen (even if it's a solution created by another producer)? Are they using all of it or just parts of it? Are they using it in ways other than what it was designed for? Do they need to combine it with other solutions to get the effect they want?

The customer realizes a better life. Last, customers realize the better lives they've imagined all this time—or they don't. When they do, their Job is Done. If those better lives don't happen, they continue to struggle. They might be forced to combine your product with others to gain the desired effect, or they might put up with your product until something better comes along.

Gather more data. How did customers make their lives better? Did they get the results they wanted? Did they want more effect or less effect? When they started, they had a picture in their minds of how their lives would improve; how close are they to that picture? Was there a change in how they expected their lives to improve? Going forward, what will they be able to do that they couldn't do before?

THE FORCES OF PROGRESS THAT POWER THE SYSTEM OF PROGRESS

Another interdependency part to the system of progress consists of the forces of progress that customers experience as they move through the systems they belong to. These forces are the engine that speed up—or slow down—customers as they move through the system of progress. They are represented by the dotted lines in our diagram:
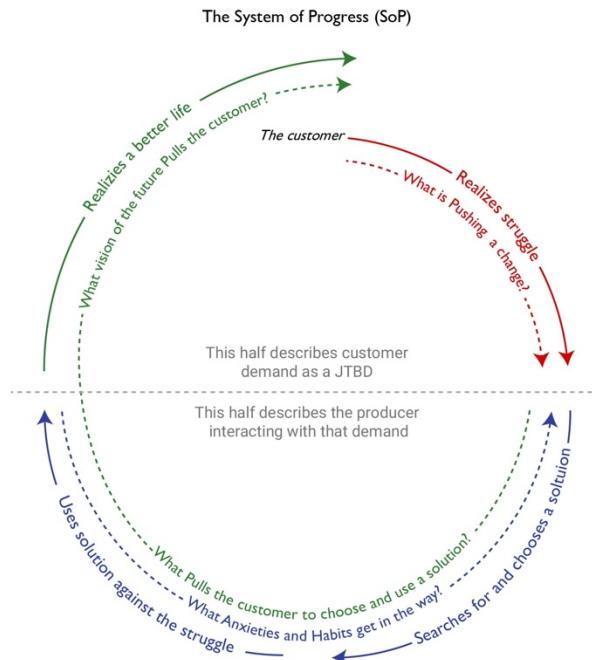
FIGURE 17. THE FORCES OF PROGRESS INCREASE OR DECREASE HOW QUICKLY THE CUSTOMER MOVES THROUGH THE SYSTEM.

THE SYSTEM OF PROGRESS IS CONTINUOUS

There's one last part to mention: how the cycle starts again (Figure 18). It deserves special attention.

  Customers' ability to take on new struggles depends on how successful they were at overcoming previous struggles and improving their lives. Have you ever used a solution to improve your life, only to realize that you face new struggles? The following are some examples:

> You buy your first car and enjoy your newfound independence. But now you want some help planning road trips, choosing car insurance, and finding a mechanic whom you can trust.

You buy professional pans and enjoy your increased cooking control. But now you're curious about new techniques and recipes. You also need to figure out where to store those new pans and how to clean them properly.

You've finally switched from a film camera and physical photo prints to a smartphone. Now you're curious about sharing your photos on social networks. And you're taking so many pictures that you need a better way to store and organize them.

As we can see, improvement in one part of life often has effects elsewhere. More often than not, when customers overcome a struggle, new ones arise.
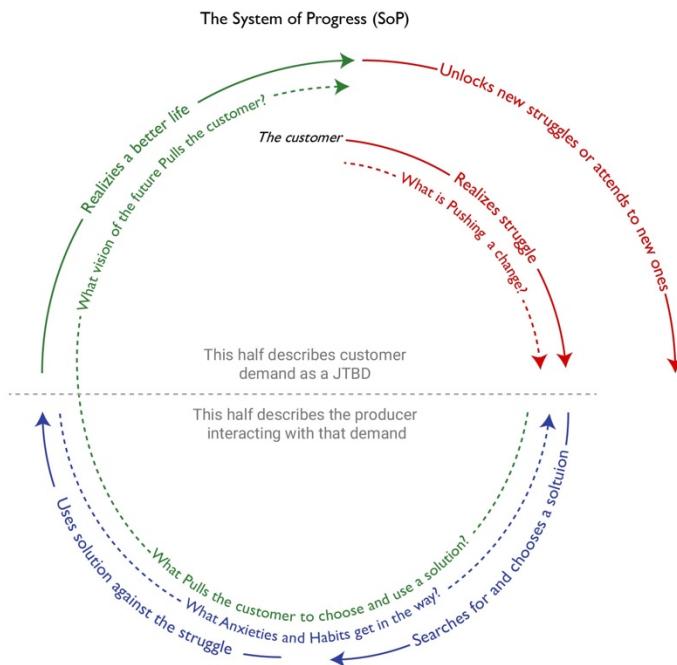
FIGURE 18. WHEN CUSTOMERS MAKE PROGRESS AGAINST A PARTICULAR STRUGGLE (GET A JOB DONE), NEW STRUGGLES ARE OFTEN REVEALED.

There are two groups of new struggles. New struggles could be related to ensuring that your chosen solution continues to deliver you value—for example, choosing the best insurance for your first car. Or the struggles could be related to new aspirations that have been unlocked. Let's say your newfound independence enables you to make weekend road trips. How will you plan them?

Dealing with the first set of struggles—those around your solution—will help you design a better solution, but it doesn't help you understand the customers' JTBD. These struggles are related to the particular solution, not necessarily the customers' original JTBD. For example, when someone buys her first car, she'll encounter challenges related to driving, parking, buying gas, and getting insurance. But if she hires a driver instead, the driver may have these problems, whereas the person hiring the driver does not.

The second set of struggles is what interests us. These struggles are not related to the solution itself; rather, they get unlocked when the customer uses a solution to make progress. Regardless of whether someone hires a driver or buys a car, both can unlock the struggle of wanting help in planning weekend road trips.

The system of progress allows customers to evolve. When we add this idea of an evolving customer who continues to want and make progress, we end up with a helical structure like in Figure 18 (imagine that the spiral builds up on itself).

Demand generation

Customer makes progress

Producer meets demand
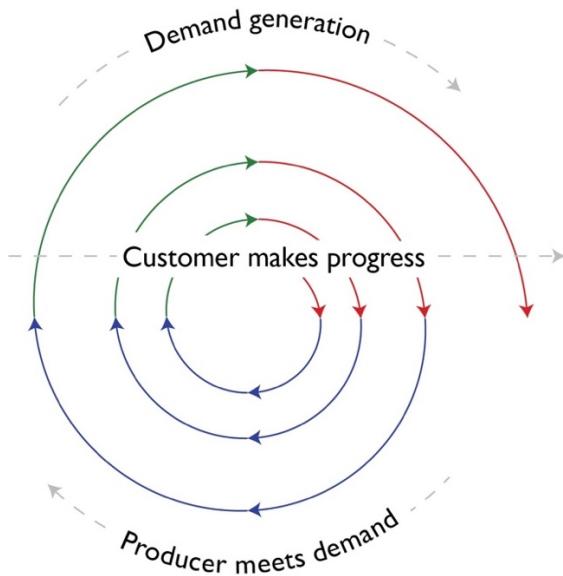
FIGURE 19. THE CYCLE DOES NOT ITERATE UPON ITSELF WHEN THE CUSTOMER MAKES PROGRESS. INSTEAD, IT CHANGES AS THE CUSTOMER MAKES PROGRESS.

The top part of the diagram illustrates how the forces of progress perpetually generate demand. The bottom part represents the interdependencies between producers and customers. Through these interdependencies, customers can make progress. The degree of success that customers make depends on how well the producer meets their demands.

The expanding radius of the spiral movement represents the customers making progress. This system demonstrates how one or more solutions can work together, or in sequence, to deliver ongoing progress to customers. The following is an example:

> A customer aspires to become a successful entrepreneur but struggles to get started. He turns to Product People Club to jump-start motivation.
>
> Product People Club is helpful, but the customer has some doubts about the validity of his business model. He turns to Clarity for some advice from someone whom he respects.
>
> The advice obtained through Clarity gives a motivation boost and helps the entrepreneur realize that his business model is questionable. This is when he turns to the Lean Stack, using the Lean Canvas to retool the business model, increase his confidence in the business, and develop a shared vision with a new cofounder.
>
> Next, it is time to release the new product. But how can the entrepreneur make sure it's a successful launch? This is when he turns to Justin Jackson's *Marketing for Developers* book.
>
> Justin's book helps this entrepreneur become a better marketer. Now he wants help with improving the company's product with little waste. This is when he puts to use the Lean Stack's Validation Plan and Experiment Report.
>
> And so on.
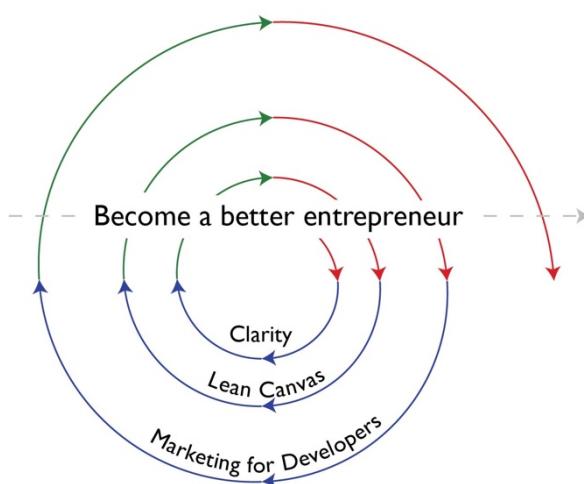
FIGURE 20. SOMEONE BECOMING A BETTER ENTREPRENEUR.

Our example shows how someone who strives to become a successful entrepreneur evolves because he exists within a system that perpetually propels customers forward.

New Jobs arise as customers make progress. They will use some combination of different products so they can continue making progress.

The system of progress also illustrates why some customers experience demand differently from others. For example, some entrepreneurs may struggle with motivation but not with marketing newly created solutions. Conversely, an aspiring entrepreneur who fails to create a product because he cannot sustain motivation will never face the struggle of how to market it.

Another example of an evolving customer comes from BananaDesk founder Tim Zenderman. His product offers a complete Front Desk Solution (PMS + CMS + more) built for hostels. Over time, he has learned how the progress customers want changes as they move through the system. He told me, "At a high level, we found that hostels go through four stages of growth. The stages can take six months or five years. If some hostels don't make progress, they'll only stay at a certain level." Tim identified these stages as follows:

> *Survive*. This is the initial stage a recently launched hostel finds itself in. Owners need to drive enough guests to survive, and there are many ways (or hires) for resolving this Job. Some owners put posters up in the bus terminal, build a direct marketing strategy, or make alliances with hostels in other cities. Eventually though, most owners find that posting simple photos and availabilities—by hand—on hostel booking websites, gets them the traction they are looking for, and makes it the most effective hire for this JTBD (Survive).

> *Control: Reservations*. Once hostels start receiving reservations and managing the front desk more frequently, new problems arise. In particular, overbooking becomes a problem. This is when owners need basic reservation management. This is also when BananaDesk first starts becoming relevant to them.

> *Control: Finance*. Once reservation management is under control, they are able to handle a steady stream of customers. They're making good money. Owners now face new problems. How much cash is at the front desk? How much money did they make last month?

> *Scale*. The business is humming along without much intervention. The owners have good reviews and a good occupancy. But how can they sell better? Revenue management, launching a

franchise, or developing a direct marketing strategy (to lower customer acquisition costs) are all good potential hires for this new JTBD (Scale).

If we were to put these struggles into a system, it could look like this:
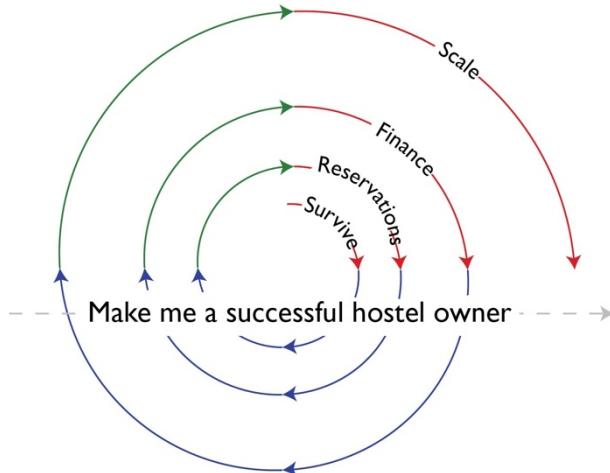
FIGURE 21. NEW CHALLENGES ARE REVEALED AS A HOSTEL OWEENER MAKES PROGRESS.

Tim also told me how the same product might be a bad fit for one stage of progress, but then becomes relevant at a later time when the customers does make progress. He told me:

> At the survive stage, hiring a direct marketing strategy is a bad fit because it takes a lot of time to correctly position a business. Moreover, the benefits from a direct marketing strategy take a long time. The hostel might be out of business before it realizes any gains.

> However, a direct marketing strategy is a great hire for the scale stage. The owners have the flexibility and time to invest in a longer term strategy. This is also when improving margins starts to become relevant and is part of that new JTBD - something that isn't wasn't important during the survive stage.

> The same is true for promoting their business on hostel booking websites. Such promotions are a good hire for survive, not necessarily for scale. If you look at just the functional need of these two stages, they seem pretty similar: "I need to sell beds".

But in both cases, that context around that "need" is quite different. what determines the best hires for the Job.

IS THE SYSTEM OF PROGRESS NEW?

As novel as this cycle and helix concept may seem, it's not. In 1939, Walter A. Shewhart introduced the idea that the production of products should be seen as a system and that the aim is to improve that system continually. In 1951, Dr. W. Edwards Deming modified it and coined it the "Shewhart cycle" when he taught it to the Japanese. Over the next fifty years, Deming evolved the Shewhart cycle to describe the improvement of any system, from health services to management to innovation. The PDSA and Shewhart cycle were the genesis for improvement processes such as the Toyota production system, Lean Manufacturing, Six Sigma, and the Lean Startup (build-measure-learn).[67]
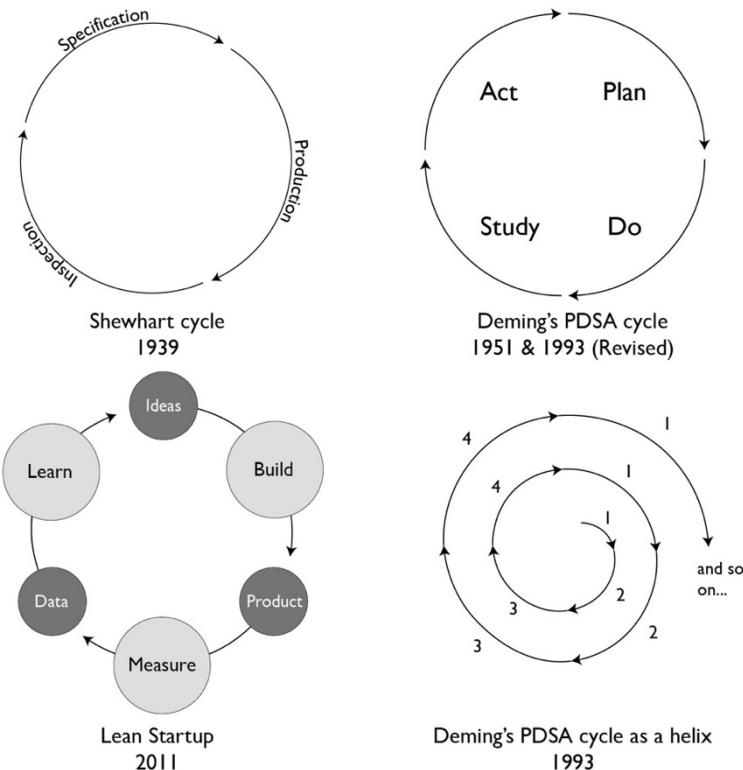

FIGURE 22. DIFFERENT APPROACHES TO HOW A SYSTEM EVOLVES.

People mostly remember Deming's introduction of the PDSA cycle. What is often overlooked is Deming's introduction of the PDSA cycle as a helix. He

wanted to emphasize that the ultimate intent is to improve the system continually with the intent of evolving it.

What is the difference between Shewhart's and Deming's PDSA cycle and the system of progress? Shewhart and Deming studied a system that continually improves product quality through increasing knowledge of the process, materials, labor, and so on. We study a system that continually improves customers' lives through an increase in knowledge of their struggles, how they find solutions, how they use solutions, and how they make their lives better.

PUT IT TO WORK

Studying the system of progress—which includes the customers' JTBD—helps you understand that your business needs to account for the interdependencies between the parts of the system. Here are some ways to think about applying the system of progress.

Grow your business by unlocking new struggles and offering products for them. Justin Jackson's and Ash Maurya's case studies provide examples of innovators recognizing the new struggles that their customers unlock when they make progress. Justin's Product People Club helps entrepreneurs overcome the struggle of maintaining their motivation long enough to ship their product. After that, they face a new challenge—promoting their newly released product. This is when Justin's book, *Marketing for Developers*, becomes relevant for them.

Ash's Lean Canvas helps entrepreneurs become more successful by giving them a way to create a business model that is flexible and adaptable. After that, they face a new challenge: how to iterate on, validate, and improve the business model. This is when Ash's Validation Plan and Experiment Report become relevant.

Get ahead of your customers. When they make progress, how will their interactions with the system of progress change? What new challenges will they face? Maybe you create a new product that meets the new demand. Maybe you add an extension that helps integrate your product with other innovators' products. Adding a hole at the end of your pan's handle does not help customers cook better, but it does help them hang your pan on a rack made by you or someone else. Either way, customers will realize more value in your product.

Think of your business as delivering a combination of products that work together to forward the system of progress. Your products are touch points between your business and customers. The iPhone is one of the most successful products of all time, but it didn't do it alone. Many people don't realize that the iPhone took off only after the App Store was introduced. The App Store and

iPhone are separate products (units of output). But when they operate together, they help propel the customer through the system of progress.[68]

Moreover, as Apple's hardware sales slow down—because sales for every product will eventually slow—Apple shifts to offering complementary products that build on the progress that the iPhone has unlocked. Apple CEO Tim Cook said in 2016, "In the last twelve months our [revenue from products other than the iPhone] is up almost $4 billion year-on-year to $23.1 billion, and we expect it to be the size of a Fortune 100 company next year."[69]

Another example is DeWalt—a company that makes tools such as laser specs, compressors, generators, myriad power tools, and contractor-training products. All these work together as a system to help DeWalt's contractor customers maintain successful careers.

FIGURE 23. NEW CHALLENGES WILL ARISE AS SOMEONE WORKS TO MAKE A LIVING AS A CONTRACTOR.

Remember that the system of progress represents the interdependencies between the producer and customer demand. Innovation success comes from studying those interdependencies and understanding how they work together to help customers realize progress.

Identify parts of the system that your business hasn't considered or is overvaluing. Fill in missing gaps with data from the system of progress. Almost every off-the-shelf innovation or design process focuses on only one or a few parts of the system of progress. That isn't necessarily a problem, but it does create two risks: (1) innovators and producers are not aware that they are omitting necessary data, and (2) innovators and producers overvalue and overanalyze the data they do have access to.

For example, a company that has a customer- or user-centric process tries to fill knowledge gaps with ever-increasing data about customers. This is why, over time, innovation efforts have created ever-larger reports that contain a great deal of irrelevant data about customers—reports that no one ends up reading.

Here's another example: a company that focuses on goals or desired outcomes tries to fill knowledge gaps by identifying an ever-increasing number of them. Yesterday, the innovator needed to identify a few goals or outcomes; today, the innovator believes it needs to identify dozens or even hundreds.

But you don't need to throw out your current design or innovation process just because it doesn't fit with the system of progress. Instead, learn to appreciate what data you are or are not missing and what you may be overvaluing. Make adjustments as needed. You might learn that the data you used to think were important aren't. (Chapter 19, titled "Data You Can (and Can't) Trust," goes into more detail on this subject.)

Find product opportunities by looking forward and backward on the system of progress. You can also deliver solutions for the system segments before or after any given segment. Most people focus on only one segment; we saw some examples of this in our first batch of case studies. Moving forward a segment is what Justin's and Ash's case studies show. They did that when they asked, "What comes next?" From my own experience, I'll give a simple and brief example of moving back a segment.

Before I created Aim—my advertising marketplace for real estate brokers and bankers—my cofounder and I had worked on another business. It would have been based on a product for mortgage bankers to process applications. Our initial investigation went very well, but during discovery, we learned of a bigger struggle that mortgage bankers face: to find people who were looking for loans. Mortgage bankers first have to find those who need loans before they can process an application.

In fact, this struggle is so great that some bankers spend hundreds of thousands of dollars trying to find people who are looking for loans. Our new information prompted us to change our business model and discontinue developing a solution for processing mortgages. As you know, we then focused on helping brokers remove the time and stress involved in finding leads so they can spend more time closing deals.

Here, my cofounder and I did the inverse of what Justin and Ash did. Instead of asking, "What comes after?" we asked, "What comes before?" It turned out that there was a much greater profit potential in solving for the latter struggle.

14. Innovation and the System of Progress

The customer does not understand the system
Improving interdependencies within the system
When a system's interdependencies change
JTBD empowers us to innovate
Put it to work

An innovator's responsibility is to study and improve the system. Appreciating the system helps you find innovation opportunities and gives you the right mindset to understand whether, when, where, and how to improve it.

This chapter will give you an understanding of what it is like to innovate for the system as a whole instead of innovating for only one part of it.

THE CUSTOMER DOES NOT UNDERSTAND THE SYSTEM

Spirit Airlines is the fastest-growing, most profitable airline in America. Its 2016 Q1 profit margin was a staggering 21.3 percent. Its net income grew 315 percent between 2011 and 2015. How did it achieve such explosive growth and profit? It combines rock-bottom prices with a terrible customer experience. Since it began, customers have ranked Spirt Airlines as the most hated airline in the United States. If customers hate it so much, why do they keep buying it?[70]

Another airline, Ryanair, is similar. Customers also rank it as one of worst airlines in the world. It has even been ranked as the second-worst brand in the world. Nevertheless, its growth and profits are consistently staggering. In 2011, its net profit after taxes was €374.6 million; in 2015, it was €866.7 million. Which voice of the customer should we listen to—what customers say, or what customers do?[71]

When Apple announced the iPhone in 2007, Microsoft CEO Steve Ballmer famously dismissed it. Here's how he described the "problem" with the iPhone: "Five hundred dollars! Fully subsidized! That is the most expensive phone in the world! And it doesn't appeal to business customers because it doesn't have a keyboard—which makes it not a very good e-mail machine."[72]

Many criticize Mr. Ballmer as being out of touch with what customers wanted, but they are wrong to do so. At that moment, Mr. Ballmer knew exactly what customers wanted; they valued low cost and a physical keyboard. Mr. Ballmer was doing what he thought innovators were supposed to do: empathize with customers, and then design solutions that serve their needs, wants, goals, and

desired outcomes. And what was the result of Mr. Ballmer's empathy? Since making that comment, Microsoft's smartphone market share went from 12 percent to less than 1 percent in 2016.[73]

Then, consider Steve Jobs of Apple, a "monk without empathy." He changed the world with three massively successful innovations: the Macintosh, the iPod, and the iPhone. He also revived Apple from near bankruptcy to the most valuable company in the world. What was his opinion of customers? He said, "It isn't the consumer's job to know what they want." He also said, "A lot of times, people don't know what they want until you show it to them."[74]

Steve Jobs was notorious for being dismissive of customer input—and he was not the only one. Dr. Deming said, "The customer is the one who supports us." But he also said, "The customer invents nothing. The customer does not contribute to the design of the product. He takes what he gets. Customer expectations? Nonsense."[75]

Why would Steve Jobs and Dr. Deming—two of the most important innovators of our time—make these comments about innovation, customer input, and expectations? What did they understand that people like Steve Ballmer don't?

Customers know only what the system tells them. How does a doctor best serve a patient? When a patient tells a doctor she has a fever and stomachache, does the doctor automatically treat the fever and stomachache separately? Will he offer the patient an Advil for the headache and Pepto-Bismol for the stomachache? How about empathy? Will a doctor know how to help a patient once he imagines what it is like to have a fever and stomachache?

Or does the doctor best serve the patient by understanding that the fever and stomachache are not the patient's problem but only symptoms of the problem? The doctor studies the body as a system and recognizes that the patient's problem is an intestinal infection. An antibiotic should be administered to kill the bacteria, eliminating the infection. The body will heal, and then the fever and stomachache will go away.

Doctors are able to treat patients successfully because they understand that the pains and discomforts that patients express are not the problem; they represent the patients' interactions with their own bodies. Similarly, the needs, wants, and desired outcomes that customers express do not represent their problem; they represent the interactions between the customer and the system of progress. This is why customers' stated preferences are unreliable and why customers' "needs" and "wants" keep changing.

The customers of Spirit Airlines and Ryanair do not understand why management chooses to offer terrible customer service. They think, "Every other

airline gives me free sodas. Why won't Spirit Airlines?" Customers of 2007 expected a ninety-nine-dollar smartphone with a keyboard. They were shocked by and did not understand the idea of a five-hundred-dollar keyboard-less smartphone. But fast-forward ten years, and that same customer accepts a five-hundred-dollar keyboard-less smartphone as "just the way things are."

If Spirit Airlines empathized with customers' needs, it might be tempted to increase legroom, add reclining seats, offer free drinks, fly to more convenient airports, or stop charging customers ten dollars to print their boarding passes. However, such changes would increase costs of production, and Spirit Airlines could no longer offer rock-bottom prices. Likewise, if Apple had listened to customers' insistence on a cheaper, low-end smartphone, it would have missed the opportunity to create a high-end smartphone that delivered progress in a way customers never imagined.

The needs, wants, and desired outcomes that customers express will change when the system changes. And there are countless ways a system can change. Keep in mind the dynamic of interdependence: a change over here can affect something way over there. The homeowners of California were perfectly happy with their lush, green lawns until a drought came along. Although the JTBD they were hiring their lawn probably didn't change, a change in the system the JTBD belonged to precipitated a preference reversal in what they did and didn't value in a solution.

When you study customers' stated preferences—wants, needs, or desired outcomes—you are studying the interactions between customers and the system only at that moment. All those wants, needs, and desired outcomes will change when the systems that customers belong to change. Yesterday, customers wanted gaslight mantles that wouldn't set their houses on fire, cheap meat, and somewhere to get their film developed. Today, those same customers want environmentally friendly CFL lights, organic kale salads, and accumulating likes on Instagram. Why did those needs change? The systems that customers belong to had changed.[76]

These complex and ever-changing interdependencies within systems are why Steve Jobs said, "It isn't the consumer's job to know what they want." It's what Deming meant when he said, "All customer expectations are only what you and your competitor have led him to expect."[77]

Innovators must understand what the customer does and doesn't know. We must abandon the idea that customers have needs or wants. We need to replace it with the idea that all customers have only one need: *to make progress within the systems they belong to*. Any discomfort or frustrations they experience in

making that progress should not be thought of as needs but rather descriptions of interactions between customers, their JTBD, and the product they've currently hired for their JTBD. For example, a car owner might claim that he "needs" more parking options in New York City. But is that really the problem? Or is the problem an expectation that it's a good idea to own and drive a car in a population dense area? Perhaps the best way to help this person make progress isn't to solve the "needs" associated with owning a car; rather, it's to make car ownership *obsolete*. At the time of this writing, this is the progress that products such as Uber and Lyft are trying to make happen.

Customers can tell you of their struggles, how they expect life to be better, and how they interact with the products they use. But they cannot tell you what to do about it. This isn't because customers aren't smart enough. It's because they don't have access to the appropriate knowledge and theory. Customers do not understand marketing, design, sales, engineering, costs of production, systems thinking, psychology, and statistics all at once. They cannot anticipate all the ways in which their lives will change when they overcome one group of struggles and then face another. They do not understand the system of progress or why they can or cannot move through it.

In other words, customers know only what the system tells them. This is something the customer does not understand, but you must.

IMPROVING INTERDEPENDENCIES WITHIN THE SYSTEM

It is the innovator's responsibility to study and understand the interdependencies within the system of progress. The system should be studied as a whole, and improvements to the parts should be done with the intent of making the whole better. Far too often, innovators believe that they can improve the system by studying one part—for example, the customer's stated preferences—and then making a corollary change to the product. Unfortunately, they often end up only increasing costs of production with no improvement of the system. The result is diminished profits.

I'll give you some brief examples of innovators who increased profits not by studying customers' stated preferences but by improving how the product interacted with the system it belonged to.

Joanna Wiebe: increase profits with new copywriting. Beachway Therapy Center offers a product that helps people overcome addiction. The center knows its customers' JTBD, and it has a great product for it. However, it was not happy with its sales. What could be done? Joanna made several copying writing changes. One was a new headline for the company website: "If you think you

need rehab, you do." Another was changing the call-to-action button from "Sign up today" to "Does my insurance cover this?" The result was 26 percent more leads, each valued at $20,000 per month.[78]
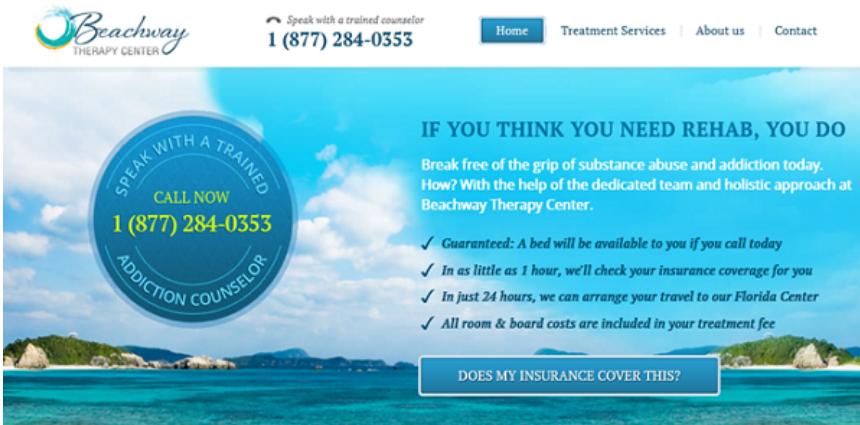
FIGURE 24. JOANNA INCREASED PROFITS BY HELPING CUSTOMERS FIND AND CHOOSE A SOLUTION FOR A JTBD.

Joanna improved the interaction between Beachway's clinic and the system of progress by creating promotional copy that helped customers recognize that the clinic's product represented an appropriate solution for their JTBD. The new headline spoke directly to a lingering question that many people with addiction struggle with. The new call-to-action button was directly aimed at reducing customers' anxieties.

Me: helping new customers use a product. For a long time, FDT—a software program for engineers—had low adoption among some customers. I learned that these customers weren't accustomed to such a feature-rich, high-end product. What did we do? My team and I didn't change the core product. Instead, we created a video-training platform and integrated it at various touch points between customers and us. This was meant to help reduce the anxiety and habit forces that blocked customers from switching to the product. Sales increased.

Even though no customers asked for this video platform, they instantly loved it. In this case, we improved our product's interaction with the system of progress by minimizing the demand-reducing forces—that is, anxiety and habit—that some customers faced when first using the product. This was done without changing the core product at all; rather, we created additional

products—a training platform—that would help customers move through the system of progress.

Bob Moesta: increase profits by designing for the system, not for customers' stated preferences. Bob led marketing and sales at a business that designed, built, and sold homes. The business wanted to offer a home that would appeal to empty nesters—parents who wanted to downsize their home after their children had grown and moved away. Two stated preferences from prospective customers were (1) a smaller dining room because they no longer had big family meals and (2) an expanded second bedroom so their children could visit. Bob's company delivered on what customers wanted. The result? Tepid sales.

Bob figured out the problem. These empty nesters were willing to change almost everything to accommodate living in a smaller home—except for getting rid of their existing, family-sized dining room table. It had tremendous sentimental value because it reminded them of countless family meals. When it came time to get rid of it so they could move into one of Bob's homes, they couldn't do it. At a result, many ended up not moving at all.

To fix this, Bob did the opposite of what his customers claimed they wanted: he shrunk the second bedroom and expanded the dining room so it could accommodate their existing family-sized dining room table. Moreover, Bob added a big, old-looking dining room table to the demonstration home, for it would help customers visualize themselves living in this unit. The result? A 23 percent increase in sales.

These empty nesters thought that a small dining room and larger second bedroom would be best for them, but they were wrong. Why? They did not anticipate how hard it would be to give away their dining room table. How could they? Customers cannot see into the future. They cannot know all the ways in which their lives will change as they move through the system of progress.

Bob won because he understood that customers' stated preferences are unreliable and that customers' needs will change as they move through the system of progress. Instead, he studied interactions within the system as customers moved through it, and he made a change with the intent of improving the system as a whole instead of focusing on just one part of it.

WHEN A SYSTEM'S INTERDEPENDENCIES CHANGE

All systems change. Some change slowly; others change quickly. How much and how fast the system changes depends on which interdependencies change and how many. A producer might be able to respond to changes within the system by making a small change of its own—for example, adding a new feature to its

product. Sometimes, a big change requires the producer to respond with a bigger change, such as creating a brand-new product. Let's look at these responses in more detail.

Adapting an existing product to match a change in the system. For many years, customers used the FDT software I mentioned above to create games that were played on websites. Customers were happy with it because a healthy sync existed between our solution and our customers' JTBD. The system of progress operated smoothly.

Then, smartphones came along. This affected the system of progress that our customers and our product belonged to. Now customers wanted help with publishing their games on smartphones, but our product couldn't help them do that. This frustrated them—and us! Our product could not deliver the progress that they now desired. If we didn't act quickly, a competitor would take advantage of this opportunity and steal our customers.

Fortunately, my team was able to adjust our product to meet this change in the system and fit our customers' JTBD. The system once again operated smoothly.

When customers can't get their preferred solution for a JTBD. You'll remember that a cofounder and I created Aim in 2013. But our product was relevant to our customers only because of what had happened three years earlier.

For many years, real estate agents and mortgage bankers had worked closely together to sell houses. The real estate broker would find people who wanted mortgages and send them to a mortgage banker whom the broker knew personally. This was how mortgage bankers used to get their leads.

But in 2010, US federal law made the traditional relationship between real estate brokers and mortgage bankers illegal. Just like that, the solution that mortgage bankers preferred for their JTBD was gone. That's why my cofounder and I created our Aim online advertising platform, which was similar to Google's AdSense. It allowed real estate brokers to pass leads to mortgage bankers legally. At first, our prospective customers were apprehensive about using our product because it was very different from what they were used to. However, when they were confronted with either engaging in potentially illegal relationships or using previous solutions they didn't like, we began to win customers over.

In this example, a disruption arose in the system of progress, and it prevented customers from making progress. They were sent back to the beginning, had to reevaluate their struggle, and had to begin searching for and choosing a solution for their JTBD.

The System of Progress (SoP)
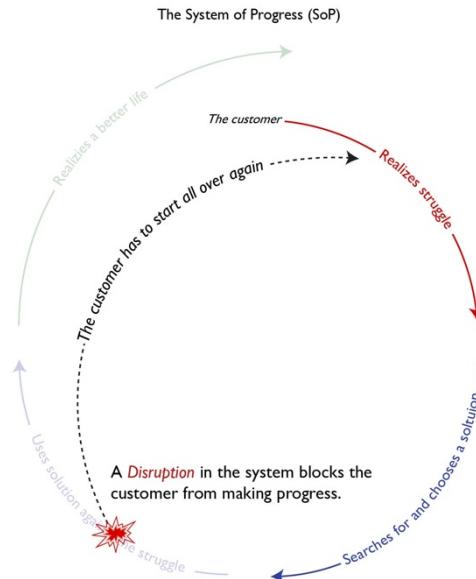
FIGURE 25. A DISRUPTION IN THE SYSTEM OF PROGRESS CAN FORCE THE CUSTOMER TO START ALL OVER AGAIN.

FRAGILE INTERDEPENDENCIES AND CASCADE EFFECTS

We've looked at examples of innovators generating profits not by changing the product based on customers' stated preferences but by improving the system that the product belonged to. We've also seen examples of responding to changes within the system. Now let's look at two characteristics of systems that make products vulnerable to creative destruction: (1) fragile interdependencies and (2) cascade effects. Understanding these will help you plan and adapt for changes in the system.

   Space travel makes for fragile interdependencies and cascade effects. The plot for the movie *Gravity* kicks off when a missile destroys a satellite. The debris from that satellite then destroys other satellites, whose debris goes on to destroy still more satellites. This cascade effect continues, eventually destroying the transportation that the main character had relied on to get home. If the main character is unable to adapt to all the changes, she will die.

   In this example, the main character has fragile interdependency with the system she is a part of. In addition, a cascade effect dramatically changes her relationship with the system. In fact, the system changes so much and her vulnerability is so high that her chances of survival are almost zero.

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What happens in *Gravity* can happen to products. A product's exposure to creative destruction goes up when it has fragile interdependencies with the system it is a part of or when innovators are unable or unwilling to respond to cascade effects within the system.

Some fragile interdependencies expose system parts to creative destruction. Every system is unique. Moreover each systems has countless, unique interdependencies. Some interdependencies are robust; some are fragile. For example, if you were to remove a strand of hair from my head, the rest of my body is barely affected. But if you were to remove my arm, heart, or brain, the rest of my body would be severely affected.

This idea of interdependencies and fragility also applies to the system of progress. In 2012, I left my job as FDT's product manager and once again became an entrepreneur. However, my departure wasn't hasty. Several months earlier, I had recommended to the CEO that the team be downsized and shifted to other products, that FDT be sold as a subscription instead of through major releases, and that advertising costs be eliminated or reduced. When I got the cost of production down as much as I could, I made one more cost-cutting decision: I fired myself.

Why did I do that? I understood that no matter what my team did, future demand for our product would diminish, causing a decline in revenue. And my job was to make sure that the product continued to deliver profits in spite of the decline in revenue. For that to work, costs had to be reduced.

How did I know that revenue would decline? I understood that the product had a fragile interdependency that would drag down future demand: it had a tight coupling with a technology called Adobe Flash. Any changes to Adobe Flash also affected our product. When demand for Flash engineers went up, more of our product sold. When demand for Flash engineers went down, we sold less. This is why when I saw that the demand for Flash engineers was on an irreversible decline and would eventually extinguish, I knew demand for the product would disappear as well. In other words, a fragile interdependency made our product more vulnerable to creative destruction.

Another example of a fragile interdependency is when smartphone makers use the Android operating system. At first, smartphone makers jumped at the idea that they wouldn't have to create their own operating system; they could just use Android. However, when they did this, they bound their smartphone's success to Android. This can cause big problems. Just recently (August 9, 2016), a critical flaw was found in the Android operating system, affecting 900 million

phones! This means that these smartphone makers and all their customers have to wait until someone, somewhere, fixes the problem.[79]

On the other hand, consider how Apple approaches the relationship between its smartphones and operating system (iOS). In this case, Apple has total control over both. If a bug is discovered in iOS, Apple can immediately fix it and push out the update to customers in as fast as one day. Apple has reduced its product's fragility by taking an integrated approach with its product—controlling both hardware and software—whereas smartphone makers that use Android have a fragile interdependency because they take a more modular approach. Now, which approach do you think customers prefer, modular or integrated? If you're not sure, think about whether the customers of those 900 million smartphones will buy another Android smartphone.

Cascade effects can affect the system. A cascade effect within a system is when one change in a system causes another change, triggering still others—and so on. A cascade effect contributes to the main character of *Gravity* being stranded in space. It's also important to note that the magnitude (and speed) of these effects is often nonlinear. They start out small, but over time, they gain momentum.

How Kodak succumbed to creative destruction is an example of how a business was at first unwilling—and then unable—to respond to a cascade effect. Kodak's decline wasn't just because of the shift from film to digital cameras; it was also because of all the downstream effects in the system of progress: (1) digital cameras began replacing film cameras for people's JTBD; (2) customers switched from stand-alone digital cameras to the cameras in smartphones; (3) digital cameras began to affect others solutions for other jobs—for instance, people switched from using physical prints and snail mail to using digital images, e-mail, text messaging, and online social networks; and (4) a decline in the cost of mobile data, matched with changes in online social networks, encouraged many people to switch from sharing images to sharing video.

Another example of a significant cascade effect is smartphones. Smartphones didn't affect only those systems that included phones as a solution; they affected systems that included gaming devices, navigation devices, fitness trackers, calculators, flashlights, scanners, bar-code scanners, video cameras, alarm clocks, and so on.

The introduction of smartphones created a cascade effect that affected how customers made progress across many different systems. At the time of this writing, smartphones are having a tremendous effect across multiple systems of progress in India. Because so many Indians live on only a few dollars a day, they

are forced to make trade-offs on the things they buy. Lakshmi Kumari, who earns one hundred dollars a month washing kitchenware in rich homes, says, "[I've stopped buying hair-conditioner sachets.] It was an added expense. Shampoo works just fine. I can do without conditioner. But I can't do anything without my phone. I can't hear songs, I can't surf the net, and I can't chat with friends." Venkatesh Kini, the president of Coca-Cola in India and southwest Asia, says, "We are competing for the consumer's wallet not just with beverages and other impulse categories, but also with data services on smartphones."[80]

Admittedly, cascade effects are not always that dramatic. We saw a small one happen with Clarity. When customers switched from attending a conference to Clarity, downstream products such as airlines, hotels, and restaurants lost customers as well. Yes, the effect on those particular products is barely noticeable; however, it demonstrates the complexity of systems. A change in a seemingly distant part of the system can affect the whole.

Big things have small beginnings. Thinking about the fragile interdependencies within a system helps me become a better innovator. It even helps me as a customer. Should I buy a new speaker system that I plug my smartphone into? What happens when the smartphone manufacturer changes its inputs? Will I have to get an adapter?

Cascade effects are impossible to predict. You can predict a first-order effect. For example, when cars appeared, you might have been able to predict that nearly everyone would use one. But could you also have predicted nth-order effects, such as urban sprawl, Walmart, and car collecting? Probably not. In fact, I would have bet you couldn't.

JTBD EMPOWERS US TO INNOVATE

JTBD empowers us to innovate in world filled with variation and complexity. It does this not by offering us strategies on what our innovation should or shouldn't do but through equipping us with language and principles of customer motivation so we can become better at creating our own strategies for innovation success. The following are some example scenarios:

> Sometimes, success comes from continual improvement of existing high-margin products that serve the most demanding customers, such as IBM and the mainframe over the past seventy years. Or maybe you go the other way and create a feature-minimal product that offers rock-bottom prices and a terrible user experience, akin to what Spirit Airlines does.

Sometimes, an innovation simultaneously replaces products that cost considerably more and those that cost less. An accounting firm saves a great deal of money when it buys a PC to do the work of five accountants. At the same time, a PC is considerably more expensive than a typewriter or an Atari game system.

Sometimes, all it takes is a few tweaks that help customers use a product, such as what I did with FDT. And sometimes the product is fine the way it is, and all that is needed is to help customers find and choose it, such as what Joanna Wiebe did.

Perhaps the best thing to do, though, is to develop new products that help customers overcome struggles you know they will face, such as what Ash Maurya and Justin Jackson did.

It all comes down to four points: (1) all customers want to make progress within the systems they belong to; (2) customers, producers, innovators, and products are all parts of a system; (3) understanding the system comes from studying the interdependencies between the parts, not from studying the parts; and (4) each system is complex and one of a kind, so solutions that improve them must also be one of a kind.

Let's go forth and become great at creating and selling products that people will buy.

PUT IT TO WORK

Here are some points that may help you apply systems thinking to JTBD.

Persuade customers to reject their current products by changing their JTBD. A great salesperson understands that customer "wants" come from the system, not the customer. So, if you want to change "what customers want," all you have to do is convince them of a Job that is worth getting Done.

Imagine you make outdoor grills. You want to persuade customers to upgrade from small grills to larger, more expensive ones. How do you do that? Well, you won't have much success if you just pepper customers with messages about how great your larger grill is or try to convince them that an existing grill is inferior. Why? These customers are fine with the way things are. A healthy sync exists between their JTBD and the small grill they've hired for it. Customers are making the kind of progress they want.

However, you *will* have a shot at selling a larger grill if you can convince customers how rewarding it is to host a large party and grill food for everyone. If customers agree to that idea of progress, they realize that their current grills can't get them there.

In that moment, you've changed the customers' JTBD and changed the system of progress they interact with. If they want to restore sync to the system, then they need a new solution. That's when you pull the curtain back on the larger grill and casually point out that they can cook food for twenty people.

Bring focus to which system of progress you're solving for by splitting up products that deliver different types of progress. For many years, DeWalt made radial arm saws that woodworkers used to customize shapes. In 1960, Black and Decker (B&D), the tool company that invented the portable electric drill, acquired DeWalt. In the early 1990s, B&D decided that its DeWalt division would serve a different system of progress.

B&D would continue to focus on giving homeowners the power to do small-scale home maintenance and fabrication work without the need for professionals. B&D's products include items for lawn care, preselected power-tool kits, and DIY books. Conversely, DeWalt focuses on helping professional construction contractors have successful careers. Its line includes laser specs, compressors, generators, robust drills, and myriad other power tools and contractor-training products.

When done correctly, splitting up products—or sometimes companies—to address different systems of progress is a good answer to the question "Which jobs should our product or business focus on?" Remember that a product that tries to solve many Jobs at once ends up not being able to solve any one Job well. When this happens, your innovation exposure goes up, and your business becomes vulnerable to creative destruction.

15. Get Started Today

Influencing others
Learning JTBD from others
jtbd.info
JTBD Meetups
Contacting me

How you apply JTBD depends on your situation. How much influence do you wield in your team or organization? Are you a designer who needs to persuade a product manager? Are you an entrepreneur or CEO who wields influence over employees? Are you a venture capitalist who wants to make better investments on behalf of your limited partners? How are your leadership and persuasion skills? Do you have access to customers? Do you have a product now, or are your creating a new one from scratch?

Each of these circumstances requires a different approach. Without knowing your JTBD—and why you hired this book—it would be wrong of me to tell you what to do next.

What I can do is arm you with ideas on possible courses of action. I can tell you how other people have solved something and what problems might arise for you as you engage in a particular course of action.

Regardless of what you do next, remember that everyone has struggles and desires progress, even you. Understand that first, and then figure out the best way to make that progress happen.

Lastly, this can be your last chapter if you intended to learn just the theory of JTBD. If you want to apply JTBD to discover innovation opportunities, please read on.

INFLUENCING OTHERS: JTBD TOP DOWN

I've introduced JTBD thinking to teammates as a founder and as a product manager. Dan Martell from Clarity introduced JTBD thinking to his team. Morgan Ranieri's cofounder at YourGrocer insisted on applying JTBD thinking before getting started. Here are some recommendations for you if you want to build JTBD into your endeavor.

Be a practitioner first. Then, tell everyone about the benefits and some practices. Dan from Clarity began by first being a practitioner himself. He introduced JTBD to his employees only after he had successfully interviewed

customers and understood their JTBD. When he was ready to involve everyone else, he explained the high-level concept to them, he gave them tools and techniques on how to interview customers, and then all of them interviewed customers together.

Are you being asked to start a company? Insist on JTBD research. When Morgan invited Frankie Trindade to join YourGrocer as technical cofounder, Frankie insisted that they understand their customers' JTBD before moving ahead with anything. Frankie wanted to make sure an opportunity existed before he left his current job and would be spending his time building the right product, since he would be engineering it. Not only did this approach bring the team members together, it helped them get started on the right foot.

Just do it. But separate the data from your synthesis of them. When I was product manager for FDT, I was responsible only to the CEO. He supported whatever I did as long as I got results. I didn't ask for permission to apply JTBD thinking; I just did it. I interviewed customers and gathered data, distilled their JTBD, discovered Job Stories (discussed in chapter 17), and presented my data and insights to the rest of the team.

The catch is that I made sure not to commingle my data with my synthesis (discussed in chapter 21) of them. This gave the team the opportunity to debate my findings and offer their own interpretations of those data. I also never explicitly claimed that I was applying JTBD principles. I just used the language when presenting the data. Everyone felt involved, and they caught on. They applied JTBD theory without knowing it.

INFLUENCING OTHERS: JTBD BOTTOM UP

Other JTBD practitioners have kindly shared their experiences in influencing coworkers about JTBD thinking.

Create a JTBD theme Meetup, by David Wu.

> I first applied JTBD theory and practices while leading product management at Meetup. Meetup is a product you can use to organize a local group or find one that you can join. I began applying JTBD principles in my own work and then introduced it to the rest of my team. Once we had made a few successes, we introduced our results in a presentation with the rest of the company.
>
> I began by interviewing customers myself. Our company had a usability lab that brought in customers almost every day of the

week for tests. It wasn't hard for me to talk with customers after they had completed a usability test.

I would talk with them about the first time they had used our product, the last time they used it, and what other products they had used in the past before using Meetup. Once I was comfortable running interviews, I began inviting members of my team to join me. They immediately began seeing the value in talking with customers about their struggles and how they were expecting [their lives] to be better with Meetup. We were getting data about specific moments of struggle that would help us design new features and find the right messaging that would connect with customers.

My team and I had found value in applying JTBD principles to our work. We wanted to introduce it to the rest of the company, but we had to do it in a way that wouldn't put people off. We decided to give a short presentation, at lunchtime, about what we had learned about our customers' struggles.

I created a catchy title for the presentation: *Why People Fire Meetup*. The presentation focused on customers who had churned. I showed pictures of customers who had stopped using our product. Next to those pictures, I displayed quotes about the anxieties they had experienced while using our product. Most of the quotes were related to attending a Meetup for the first time or organizers not knowing how to plan a successful Meetup.

Showing the picture of [the customers] who had churned, along with a quote from them about their struggle, had a big impact. Right away, people in the audience started volunteering ideas on how we could fix these problems. There was a lot of positive energy in the room. When the time was right, I explained that I had gathered these data through applying some JTBD principles and practices. This got the JTBD ball rolling at our company.

JTBD thinking starts with ideas you can test, by Dan Ritzenthaler.

Great designers will want to understand their customer's struggle before they design a solution for it. Unfortunately, getting this directly from the customer can be hard. You're eager to go out and talk with customers about their struggles. Your

teammates, on the other hand, might try to legitimize design decisions through their own intuition and anecdotal data. This puts you in a tough spot.

People are averse to change. You're more likely to put people off—instead of winning their support—if you try to directly sell them on a new way of doing things. Instead, let them explore their prejudices, anecdotal guesses, and intuition. Then, reframe and massage their stories into a format that everyone can verify.

Here is a way you can put your teammates' hypothesis into a format that you can all test: (1) How are customers currently struggling? (2) What is pushing customers to need a new solution? (3) Without describing the feature, how will the customer's life be better once the feature exists? (4) What is preventing customers from adopting a new solution?

Now you have something that your team can verify. You'll be in a better position to ask your teammates, "Can I go check this out with a few customers?" Perhaps you can get some customers on to a quick phone call or send a survey.

It's easier to sell "consumer research" as due diligence and verification of existing assumptions. It's hard to sell a new process framework. Plus, for people who haven't yet discovered the value of research, it's less likely to seem like wasted energy.

Over time, your teammates will see the value in understanding the customer's struggle. Then, you're in a stronger position to request JTBD-style interviews before flushing out a potential feature.

LEARNING JTBD FROM OTHERS

You may want to learn more about JTBD theory from others and about how others have applied it. This is good, but it has challenges.

JTBD has been around for a while, but it's currently fragmented. JTBD began with Bob Moesta, John Palmer, and Richard Pedi. For many years, it was only a nascent theory with rough edges. These men evolved it as they applied it, and they taught parts of it to clients, friends, coworkers, and academics. The spread

of JTBD has been similar to the spread of information in the telephone game.; every time JTBD passed from one person to another, it changed a little bit.

This is a trade-off when a message is spread quickly, but the result is frustrating for newcomers who want to know which version is "right" or "the best." Even Moesta's and Palmer's ideas on JTBD have diverged. Today, you might think they are talking about completely different things.

I, myself, don't have an allegiance to any single "correct" version of JTBD. I don't want JTBD; I want the progress JTBD can deliver me. My advice is not to worry about which way is the correct one to apply JTBD thinking. Pick and choose whatever parts help you. However, I do stick very close to the principles and theory outlined in this book. They have been proved, through practice, to be reliable. I recommend you do the same.

JTBD.INFO

I maintain a collection of JTBD-related articles at jtbd.info. I invite you to read them. I also encourage you, the reader, to submit articles for publication. How have you applied JTBD? Have you created and JTBD tools that might help others? Do you have a story to tell? Do you have an idea on how to improve JTBD theory? You can submit an article via jtbd.info by clicking the e-mail or Twitter icons on the front page.

My rules for publishing are pretty straightforward. First, the content must be mostly original. It doesn't help anyone to rephrase what someone else has already said elsewhere. Second, contrary opinions are welcome and encouraged but need to be well formed and supported. Perhaps you disagree with the theory I suggest in this book. That's great! Just make sure your argument is solid and backed up.

JTBD MEETUPS

A JTBD Meetup (meetup.com) is a great place to discuss JTBD principles and practices and to share stories. David Wu began the JTBD Meetup in New York City, and now I cohost it with him.

Running a Meetup. A great way to run a Meetup is to introduce JTBD briefly to anyone new. Then, introduce a product and invite everyone to think about what Job(s) it might be used for—that is, what struggles it resolves and how it makes people's lives better.

A JTBD Meetup will be most successful when you have at least four attendees. Or, before starting a JTBD Meetup in your area, you may want to have informal get-togethers in your community. The following are some possible ideas.

Begin as an advocate within your company. Perhaps you can convince a few coworkers to meet after work or during lunch to talk about applying JTBD principles to your business. When you become comfortable with this, invite people from other companies to join in. Exchange ideas and challenges.

Meet other entrepreneurs and innovators at other Meetups. Talk with them about JTBD. If you can drum up interest, ask if they'd be interested in getting together for a Meetup specifically about JTBD.

CONTACTING ME

I try to help anyone I can, however I can. As time permits, I enjoying doing calls and sharing e-mails with entrepreneurs and innovators. I encourage you to contact me via my website with your questions or comments or if you want help. If I can't help you, I'm sure I know someone who can.

I also enjoy learning how others apply JTBD. If you have a story or insight to share, feel free to contact me. The best ways to contact me are through my website, alanklement.com; Twitter, @alanklement; or the jtbd.info site.

Part IV
Practices for JTBD

This is where we transition from theory to practice. If your intent was to learn only the theory of JTBD, you don't need to read further. Continue reading only if you plan on researching, understanding, and innovating for customers' JTBD.

   These methods are not gospel. Adapt and change these methods to suit your needs. They may even inspire you to create your own methods!

16. How Do We Describe a JTBD?

Try it yourself
Describing a JTBD

The JTBD is the big picture. It encapsulates why customers buy your product(s). Here are two ways this big-picture approach helps me.

It's portable throughout an organization. Everyone from marketing to design to engineering can use it. It helps them work together, as a system, to contribute toward the success of the product and the company.

It's a good balance between high and low levels. It's abstract enough to give room for creativity while also offering boundaries to understand where a product starts and stops.

This section describes how I like to put into words someone's JTBD. It's not the "right" way because I don't believe there is one "right" way. All that matters are three questions: (1) Does it help you and your team work together? (2) Does it describe the customer's motivation? (3) Does it help you avoid describing using a product or what a product does?

TRY IT YOURSELF

If you want to know how I like to phrase a JTBD, jump to the next section. However, I recommend you try to describe one yourself. In this section, I'll offer you some data I gathered from an investigation I did on why people were buying products from Honest, which is a company that sells products ranging from household cleaners to baby supplies. As you read through it, think about how you would describe these customers' JTBD. The hint I'd like to offer you is to think about the two parts of the JTBD—that is, the struggling moments and how customers imagine their lives when they have the right solution.

Honest's products. Honest offers a massive, complete range of all-natural household and childcare products, including soaps and detergents, moisturizers, sanitizer sprays, cleaners, diapers, baby wipes, baby food, and vitamin supplements, to name just a few. Collectively, they are marketed as giving a family what they need to create a safe, clean, nutritious, toxin-free environment for their children.

Besides the products, Honest also offers their products through a by-mail subscription. However, their version is different. The customer chooses

subscriptions to specific product bundles ranging from "diapers and wipes" to an "essentials" bundle that includes cleaners and bathing products.

Discovering a struggle. Next, it's time to focus on the forces of progress that pushed and pulled customers toward buying these products. In this investigation, I found two groups of customers who were struggling the most: (1) parents who had recently had their first child and (2) parents who have children with various environmental sensitivities.

Both groups described this struggle: the search for child-safe products left them feeling overwhelmed, tired, and scared. They'd ask for advice from their own parents, friends, doctors, community support groups, and the Internet. To them, it seemed that the more they "learned," the more confused they were. Their own parents would say one thing, the doctor would say another, and the Internet…well, the Internet says that everything is both fine and dangerous. Everyone had his or her own opinions. There were disagreements and arguments aplenty.

These groups of customers also described similar struggling moments. Here are a few:

> Are there any chemicals in this baby formula that will harm my child? Is my child getting all the necessary nutrients for healthy brain development?

> Does my floor cleaner have chemicals in it that will give my baby a rash? This cleaner looks like it's OK, but it doesn't specifically say it's safe for babies.

> I finally found a safe household cleaner, but what about soap, shampoo, and baby wipes?

> My baby touches everything and puts everything in his/her mouth. What germs and chemicals do I need to worry about?

> I see hives and redness on my child. Is the sunscreen not working, or is this an allergic reaction? My information sources all give different answers.

Discovering how life will be better. As I talked with parents who were struggling, I also asked them how they imagined life being better once they did find the right solution. The data were consistent and generally fell into two categories.

> *Some parents felt as if the joy of parenthood were being taken away or reduced.* They imagined that if they found the right solution for their struggle, they would have the energy to enjoy

being parents and experience the picture of parenthood they had had in their minds when they first decided to have children.

Parents felt they would get along better with their spouses. Some couples argued over which products were safe and which issues mattered. Did they need special soaps and shampoos? Wasn't it good enough that their multipurpose household cleaner was labeled "organic"? Preventing disagreements like these would enable parents to enjoy parenting together instead of them working against each other.

What was fired? The last piece of the puzzle is to learn what customers stopped doing when they started using Honest products. The results were fairly consistent. These parents where combining multiple solutions together:

Competing brands ranged from Huggies to Earth's Best to Seventh Generation.

If they could, they bought multiple products from one manufacturer.

They spent less time—and sometimes stopped—asking advice and input from family, friends, doctors, parent communities, and the Internet.

On the basis of these data, how would you describe this JTBD? Do you think there are more than one JTBD?

DESCRIBING A JTBD

Here is how I described one JTBD that I discovered:

Free me from the stress I deal with when figuring out what products won't harm my children so I can have more time to enjoy being a parent.

When I put people's JTBD into words, I prefer to keep it simple. I create a statement that combines the forces that generate demand (push and pull) with the Job and when it's Done.

FIGURE 26. A POSSIBLE DESCRIPTION FOR A JTBD. NOTE THE TWO PARTS: (1) THE JOB (2) WHEN THE JOB IS DONE.

In this Honest example, you can see the two parts: (1) free me from the stress I deal with when figuring out what products won't harm my children, and (2) I can have more time to enjoy being a parent.

The emphasis on a struggle for progress is why this JTBD model often makes use of phrases such as g*ive me*, *help me*, *make the*, *take away*, *free me*, or *equip me*. These phrases remind us that success comes from the customers using the product to make progress. It also helps you think about how your product fits in between where they are now and where they want to be.

Variations of wording. I've used two other wordings. When you describe a JTBD, try a few different ways to say something, and use whichever you and your team prefer.

> Reverse it: "Help me have more time to enjoy being a parent by taking away the stress I deal with when figuring out what products won't harm my children."

> Put it in third person: "Free parents from the stress they deal with when figuring out what products won't harm their children so they can have more time to enjoy being parents."

Testing the JTBD. The most important test of wording a JTBD is whether it also describes the solution(s) it replaced. Remember our lessons on creative destruction and JTBD principles: *when customers start using a solution for a JTBD, they stop using something else.* When applying this principle, we see that this description works.

When parents started buying multiple products from Honest, they stopped behaviors such as asking friends, family, doctors, and the Internet. The only time when they would go back to any of these previous solutions was when their expectations were violated. For example, one parent described how she bought a sunscreen from Honest without considering any other options. However, her daughter broke out in hives when the sunscreen was applied. This prompted the parent to go search the Internet and talk with people about what sunscreen(s) weren't safe. She also talked with her doctor to figure out if her daughter had an unknown allergy.

A JTBD to note. I chose to share this JTBD because it presents an interesting situation: I believe that many parents are hiring Honest—the brand—more than any individual product. When parents realized they needed a sunblock, they automatically bought one from Honest. This is important because it shows how fatigued parents were in their decision-making process. It also explains why the bundles are a great idea. With these bundles, Honest is telling parents that they don't need to think about what they need; Honest will take care of it. This

delivery service also helps customers develop and maintain a habit of using Honest products.

I also like how Honest is offering a collection of products that work together—as a system—to deliver customers progress. These products act as touch points between Honest and various parenting struggles. It's as though Honest is a software product that customers subscribe to, and each product is an individual feature.

Lastly, this example shows a high-level JTBD. How high or low a target you choose as a JTBD to solve is a design and business decision. I recommend going with a high-level JTBD and then contextualizing the struggle with Job Stories (discussed in the next chapter). Each product would represent one or more Job Story; then, all the Job Stories together would add up to the high-level JTBD. Again, we say that this JTBD is high level because, in Honest's case, customers were hiring the brand more than any of Honest's individual products.

How you describe a JTBD is a competitive advantage. As mentioned before, I don't believe that there's any "right" way to phrase a JTBD. Such a claim would mean that there is no creativity in innovation—that we can just outsource our thinking to some model created by someone else. Every system is one of a kind, and every effort to improve a system should likewise be one of a kind.

17. Job Stories

Job Stories connect customers to their JTBD
A Job Story
A Job Story in action
Job Stories describe how Jobs are shaped
How to use a Job Story diagram

Let's look a little deeper into the nature of a JTBD. We might ask the following questions:

> How does all the energy that makes up a JTBD accumulate?
>
> What are the specific moments of struggle that constitute a JTBD?
>
> If the JTBD explains why someone bought a product, how do we describe how the product fits into someone's life?
>
> How, specifically, do we define the relationship between the customer and his or her JTBD?
>
> Once we understand the JTBD, how do we go about solving for it?

You will be able to answer these questions when you understand Job Stories.

JOB STORIES CONNECT CUSTOMERS TO THEIR JTBD

The previous chapter offered a way to describe a JTBD as a major part of the system of progress. The Job Story, on the other hand, is a tool for understanding a specific struggling moment. We can think of Job Stories as microstruggles or microjobs. These are the individual situations that prompt a customer to seek a solution for a JTBD.

Job Stories help in various ways. In a previous case study, Omer Yariv described how Job Stories were helpful to him. For me, they help me create marketing copy, unpack the context around the higher-level JTBD, design features for products, and communicate with other members of a team.

Two helpful formats for a Job Story are:

> When _____, I want to _____, so I can _____.
>
> When _____, I want _____, so that _____.

Job Stories answer questions. I find it helpful to think of Job Stories as addressing three questions:

1. The customer goes about life as usual, and then a problem arises. What is the trigger or situation?[81]

2. Customers create mental pictures of effects that the solution should and shouldn't have as they use it. What are these effects?

3. Once customers do find a solution and use it, how has life changed for the better? What can they do now that they couldn't do before?

Where do Job Stories come from? Before designing a feature or new product, you must talk with real people and uncover all the anxieties and contexts that were in play when they used your product or a competitor's product. Then, you write your Job Story.

A JOB STORY IN ACTION

Tor Løvskogen Bollingmo is an experienced innovator, designer, and JTBD practitioner. Here's a Job Story that he wrote:

> When I'm presenting my visual design and I'm worried that people will reject its merits, I want something objective to back it up so that people will see and discuss the design with less subjective bias.

When we break down the Job Story, we see that it offers answers for the three important questions:

> Q: The customer goes about life as usual, and then a problem arises. What is the trigger or situation?
>
> A: "When I'm presenting my visual design and I'm worried that people will reject its merits…"
>
> Q: Customers create mental pictures of the effects that the solution should and shouldn't have as they use it. What are these effects?
>
> A: "I want something objective to back it up."
>
> Q: Once customers do find a solution and use it, how has life changed for the better? What can they do now that they couldn't do before?

A: "So that people will see and discuss the design with less subjective bias."

I find that the best way to think about and write Job Stories is to look for answers to the three questions.

Different customers, same Job Story. There's something else that Tor learned during his research for this Job Story: at least two different groups of customers experienced it.

The first group of struggling customers often consists of visual designers. A designer might have created a new design for a software product or website. She believes she has a great design, but her teammates either doubt it or find it hard to decide whether it is effective. The struggling designer would be able to sell her teammates on her redesign if they had some objective, outside opinion of it. Not only would the designer feel as if she's proving her worth to her team, but she'd also help keep the team from becoming bogged down in debate.

The other group of people who face this struggling moment consists of managers who are presenting a new design of a software product or website to either their bosses or to a client.

Situations and context—not demographics, tasks, activities, or solutions. Did you notice how different Tor's two customer types are? One group is designers; the other is managers. Undoubtedly, we could use countless other attributes to describe these customers; however, describing who the customers are and their various attributes won't tell you why they struggle. As I've mentioned, customers don't have to share demographic features or attributes to experience the same struggles.

The other thing to notice is how this Job Story does not describe a task, activity, or solution. There's no action taking place. In fact, I haven't yet introduced the product that Tor wrote this Job Story for. This is because the Job Story doesn't describe a solution. It describes a situation that arises in a customer's life and shapes his or her motivation.

Figure 27 is an example of Tor's Job Story realized in a feature and in advertising. It is a piece of promotional material from the software product EyeQuant. It combines various technologies to analyze and predict how people will react to using a particular website or software product. After the software analyzes a website or product, it creates a report that helps answer questions such as the following: "Will visitors notice the checkout button?" "Is the design on the web page too distracting?" "Will visitors have any trouble reading the copy on the website?"

FIGURE 27. A JOB STORY REALIZED IN A FEATURE AND IN AN ADVERTISEMENT

This is a great example of applying a Job Story to both product design and advertising. In the picture above, you can see the Job Story and the solution for it unfolding right in front of you. In the picture, you can see that two people are looking at a design on tablets. The paper, pens, and part of a cup of coffee at the left suggest that they're in a meeting. The dialogue overlaid on the image reads "As you all see from the results, this new design will be more effective."

This is great. The ad sets a relevant scene, but even better, it helps customers visualize how life will be better with EyeQuant. The customer thinks, "When I sign up for EyeQuant, I don't have to guess anymore. I'll speak with confidence and certainty. Instead of saying, 'I think there's a ninety percent chance this will improve,' I can say, 'This new design will be more effective.' That will help me win the client over and improve my business."

## JOB STORIES DESCRIBE HOW JOBS ARE SHAPED

The theory part of this book gets you thinking about JTBD as part of a system of progress. Improvement of the system is achieved only through understanding the interactions between its parts.

This same idea applies to the JTBD and Job Stories. We gain a better understanding of an even larger system—the JTBD, the system of progress, and Job Stories—when we study the interdependencies between them.

Job Stories contextualize the JTBD. Job Stories are context that help make the JTBD more concrete. The JTBD—as an abstract construct—is helpful because it's easy to share with people inside and outside your organization. But at some point, you'll need to design an advertising campaign, a product, or a feature for

your product. These are the moments when you need concrete data to guide your creativity.

I use an Ishikawa diagram to visualize the relationship between Job Stories and the JTBD, as well as how the former shapes the latter. This diagram, adjusted and annotated for JTBD, looks like this:
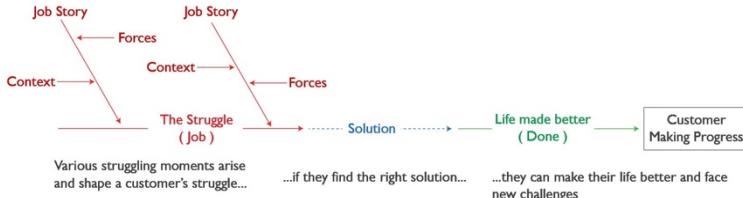
FIGURE 28. JOB STORIES HELP CONTEXTUALIZE THE STRUGGLE.

I use the diagram to qualify and define the relationships between a customer's JTBD and the possible situations that may precipitate it (i.e., as described by Job Stories). I also like to qualify those situations with more context by adding the forces of progress: What's pushing customers to seek a solution? Do they have any habits or anxieties that are influencing them? They have an idea of what progress looks like. What is it? These are the forces that shape the situations in which customers find themselves.

What's an example of a Job Story diagram (Job enumeration)? Let's look at how I used a Job Story diagram to consider the JTBD of Honest's customers. From various parents, I collected data on all the situations that prompted them to choose either an Honest product or a competitor's product. I aggregated those situations and put a few of them into the diagram in Figure 29.

The spine of the diagram describes the JTBD. Each branch represents a deconstructed Job Story. The twigs of the branches represent various contextual forces. The idea is that different forces of progress work together to create and shape a situation (a Job Story). Various situations work together to shape the nature of the customers' Job (i.e., their struggle). If they are able to use the right solution(s), they can get that Job Done and make progress.

HOW TO USE A JOB STORY DIAGRAM

The diagram is a tool for communication and investigation, and you use it to demonstrate relationships. It's not a specification tool. You would never draw up a chart like this, hand it to someone, and say, "Go build this."

You could use a diagram like this to help stakeholders at a company develop a shared vision of what Jobs they are solving for customers. You can also use it to

demonstrate all the possible touch points between your product(s) and your customers and how you propel them through the system of progress.
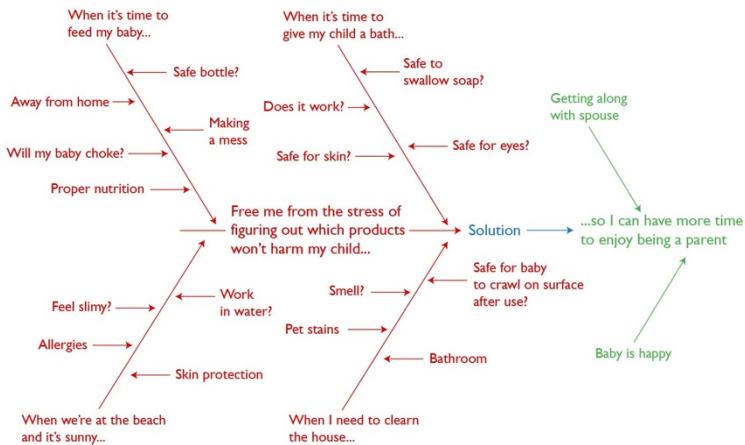
FIGURE 29. ADDING MULTIPLE JOB STORIES CAN HELP UNPACK A JTBD. QUALIFYING THE PROGRESS – WHEN JOB IS DONE – CAN ALSO HELP.

Keep in mind that the Job Story diagram isn't meant to describe which situations a product or company should solve. It also doesn't mean every customer will experience all the Job Stories listed. Rather, the intent is to describe the situations that various customers have faced and that others *might* face.

For example, some parents take their children to the beach, which is why concerns related to sun protection arise for them. Other parents may never have visited the beach, but that doesn't mean they don't also have sun-protection concerns. And parents who haven't visited the beach yet may do so sometime in the future.

Interdependencies and context. I pointed out that the Job Story diagram is meant to help you visualize how various qualities of context can work together to shape the customers' struggle. The focus on interdependencies and context is why you don't see any mention of products, what products do, or how customers use them.

18. Hiring Criteria

Hiring Criteria connect struggles and solutions
An example of JTBD hiring criteria
Hiring criteria and the system of progress

We've investigated how to describe a higher-level JTBD and how you can use Job Stories to describe the struggling moments that shape that JTBD. People involved in marketing might think that what they get from working through these are enough data for creating successful advertising.

However, those involved in innovation are likely to want more data. That's how I feel. If I'm going to create or improve products, I need more help. Specifically, I want to understand the interdependencies between Job Stories and the JTBD and how those interdependencies shape a solution that customers choose. I want to know the following:

How does the context of the customers' struggle shape what attributes they look for in a solution?

Why do some customers choose one solution over another for a JTBD?

Why do different customers use different solutions for the same JTBD?

To answer these questions, we need tools that help us understand how customers make the connection between their struggle (Job) and the solution attributes they think will help them get that Job Done. One such tool is a set of Hiring Criteria.

HIRING CRITERIA CONNECT STRUGGLES AND SOLUTIONS

To wrap your head around the concept of hiring criteria, remember why we use the "Job" metaphor in JTBD. Just as employers use certain criteria to filter their job candidates, customers use criteria to filter solutions they might hire for their JTBD. In both scenarios, some criteria are optional, some are mandatory, and some are more important than others.

A set of Hiring Criteria is also where trade-offs happen. An ideal product would do A, B, C, and D. You can't find one that does all four, but there's one that does A, B, and D and another that does B, C, and D. Which product the customers choose depends on how their JTBD has been shaped.

Hiring Criteria solve the puzzle of why a customer chooses one solution over another. In Clarity's case study, Dan Martell understood that his customers wanted help getting out of an innovation slump with inspirational advice from

someone whom they respected. Dan also learned that many of his customers saw Clarity as an alternative to attending a conference.

These facts raise a few questions. Why do some customers prefer Clarity over attending a conference, while others don't? If one solution does the Job better than the other, how can they coexist? Wouldn't everyone switch from one to the other? Are both solutions even being used for the same Job? These are tough questions to answer until you apply the concept of hiring criteria.

Attending a conference and Clarity are both successful solutions for the same JTBD. We can prove that they both serve the same JTBD because customers told us that they stopped using the first when they started using the second. This is also how we know they are competitors.

After establishing that given solutions do compete for the same JTBD, we need to explain why some customers switch and why others don't. Well, because customers' JTBD is shaped by the context of their struggle, then variations in context will generate variations in JTBD. These small variations add up to create a customer's hiring criteria.

AN EXAMPLE OF JTBD HIRING CRITERIA

At Clarity, Dan learned that many of his customers preferred his product over attending a conference because it was "on demand." In fact, this quality was so important to them that Dan added "on demand" to Clarity's slogan. Another quality important to Clarity customers is "personalized advice." Both are important distinctions between attending a conference and using Clarity. When you use Clarity, you get a one-on-one conversation. When you attend a conference, you could sit in a room with a hundred other people but never talk with anyone—including the expert who is presenting.

Solution	Hiring Criteria it Fulfills	How
Attending a conference	Around other entrepreneurs, seeing mentor live	Networking events, attending a live presentation
LinkedIn	On demand, personalized advice	E-mail, messaging
Clarity	On demand, personalized advice	Video call

"On demand" and "personalized advice" are hiring criteria. They are the qualities that customers expect a solution to fulfill. They're not struggles, and they're not product attributes. Let's compare and contrast hiring criteria for three different solutions for the same JTBD.

Hiring Criteria help explain why customers choose different solutions for the same JTBD. We can see now why some customers do prefer attending a conference over Clarity: they may have different hiring criteria. Perhaps it is more important to them to be around other, similar people; it might inspire them and enhance the whole experience. Perhaps an important part of being inspired by those they respect is to see them in person. If these hiring criteria have a higher priority over "on demand" or "personalized," then some customers will be fine with attending a conference over using Clarity.
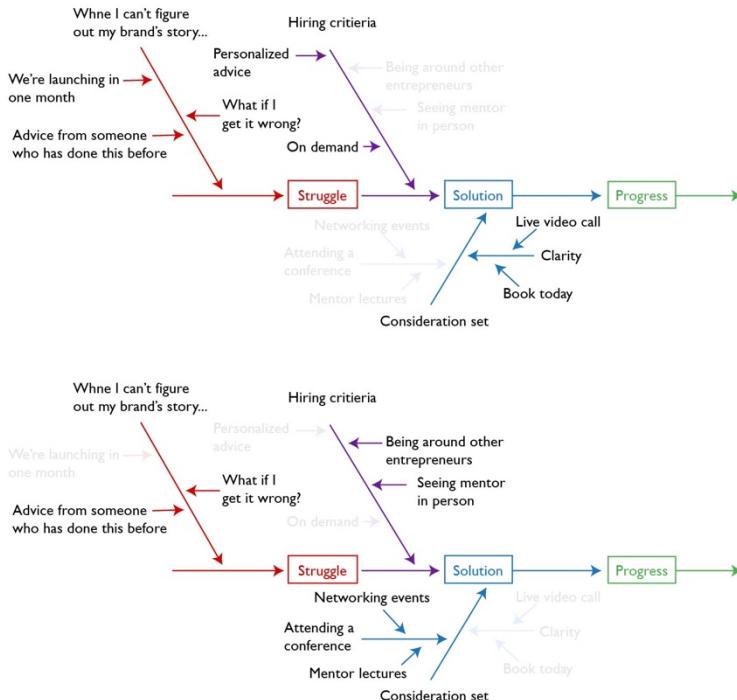
FIGURE 30. SUBTLE CHANGES IN THE CONTEXT OF A STRUGGLE AFFECT THE PROGRESS DESIRED. THIS ALSO AFFECTS THE TRADEOFFS (QUALITIES ASSOCIATED WITH THE PRODUCT) CUSTOMERS ARE WILLING TO MAKE.

The above diagram shows how various interdependencies and contexts work together to cause some customers to favor using Clarity over attending a conference for the same JTBD. The hiring criteria that this customer chose

(personalized advice and on demand) were born from the context of the customer's struggle (advice from someone who has done this before and launching in one month).

This diagram shows why a customer might choose attending a conference over Clarity for the same JTBD. Again, notice how when the context of the struggle changes, it affects the customer's hiring criteria.

The second diagram shows a customer experiencing a similar—but different—Job Story from that of the customer in the previous example. (Or it could be the same customer experiencing two different Job Stories at different times.)

How are Hiring Criteria different than "needs"? The concept of a customer "need" denotes a static quality. Hiring Criteria, on the other hand, are dynamic; they are where customers make tradeoffs. A good example comes from Spirit Airlines. Are reclining seats, conveniently located airports, and free drinks "needs"? Nope. But they are Hiring Criteria. Some customers are willing to trade a higher price ticket so they don't give up those Hiring Criteria; whereas other other customers – as Spirit Airlines has shown – are willing to trade those Hiring Criteria for a lower priced ticked.

HIRING CRITERIA AND THE SYSTEM OF PROGRESS

Another way of thinking about the interdependencies between hiring criteria, struggles, and solutions is to imagine hiring criteria as the connective tissue between the solutions customers use and their struggle. In our diagram of the system of progress (SoP), you can see how hiring criteria are like a bridge between customers' struggle and the solutions they may, or may not, choose.
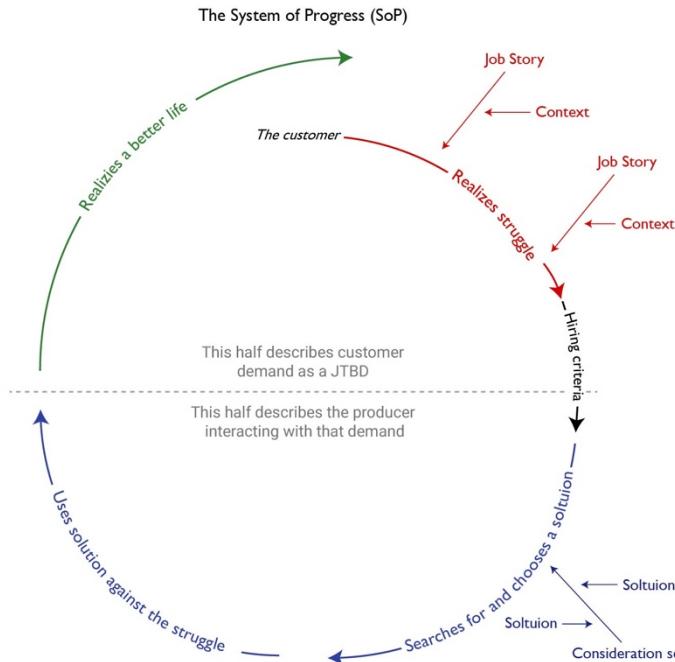
FIGURE 31. HIRING CRITERIA ARE CONNECTIVE TISSUE BETWEEN THE STRUGGLE AND HOW CUSTOMERS SEARCH FOR AND CHOOSE A SOLUTION FOR A JTBD.

While innovators use Hiring Criteria to uncover customers' motivation, customers use hiring criteria to help them visualize what it is like to use a solution for their JTBD. Their process runs along these lines:

Customers experience various situations that shape a struggle.

The shape of the struggle qualifies the nature of the progress that customers seek and what hiring criteria they think a product should fulfill.

Customers mentally assemble a collection of solutions that might help get their Job Done (we call this collection a consideration set).

They mentally simulate each product in action and guess how well its attributes fit their hiring criteria.

When a product fits customers' hiring criteria—or is close enough—and if customers are willing and able to use the product, they hire it.

Customers' satisfaction depends on how much progress they are able to make with their chosen solution.

19. Data You Can (and Can't) Trust

Misplaced confidence
Mo' data, mo' problems
Special cause versus common cause
Use fewer but higher-quality investigative methods
Conduct investigations only with just cause
Be selective about which customers you investigate
What data should you gather from customers?
Familiar advice for some, new for others

You need to know the difference between good data and bad data before you collect, analyze, and synthesize your JTBD data. Not knowing this will corrupt your data model and increase your chances of coming to false conclusions.

Here, I introduce some basic concepts on gathering data and distinguishing good from bad. You'll be better at picking your research methods, avoid being fooled by invalid theories about markets and innovation, and be more confident in knowing when to make product or business changes—and when not to.

MISPLACED CONFIDENCE

Earlier, we touched on Coca-Cola's mistake of changing the formula for Coke in the 1980s. Its then chairman Roberto Goizueta claimed that the decision was "one of the easiest we have ever made." We know how the story turned out. But what interests us here is why its management was so confident in its decision.[82]

Coca-Cola's confidence was due to two factors: (1) the company had done research with a sample of over two hundred thousand customers, and (2) Coca-Cola's researchers had triangulated the validity of their data with a mixed-method approach, using focus groups, various surveys, and ethnographic interviews. In 1984, Coca-Cola spent $4 million—$9.2 million in 2016 dollars—on the most expensive consumer-research project ever done. Both the management and research teams believed that a large sample size, coupled with data and research triangulation, would give them good data. They were wrong. It did the opposite; their large sample size gave them lots of useless data. Triangulation, which was supposed to safeguard the research, did the opposite. It convinced the company that useless data were useful.

Mo' data, mo' problems

Our brains are lazy. We jump to conclusions when we're confronted with something we don't understand. This especially happens in consumer research and statistics. Few people understand the relationship between useless data and useful data or can differentiate a valid data-collection process from an invalid one. This is why many people fall into the trap of assuming that more data are always better.[83]

The belief that *more data are better* works when we investigate the natural world. If we want to understand well what a maple leaf looks like now and be able to predict how one will look in the future, then the more maple leaves we look at, the better. This works because nature has already set limits on what a maple leaf can be. You'll never suddenly find a maple tree with purple leaves that glow in the dark. Nature limits the amount of variables we can test for, and it also limits how those variables interact. Variance is small and bounded. In this context, it is safe to attribute any large deviations to special cases or errors in measurement.[84]

Customer motivation, on the other hand, is not a natural system. Nature puts no limits on how customer motivation can be measured, interpreted, or affected. Nothing limits the amount of variables we can test for or defines how those variables interact. Such a system contains vastly more useless data about your customers than useful data. This means that as you gather more and different types of data about your customers, the more likely you are to misunderstand them.
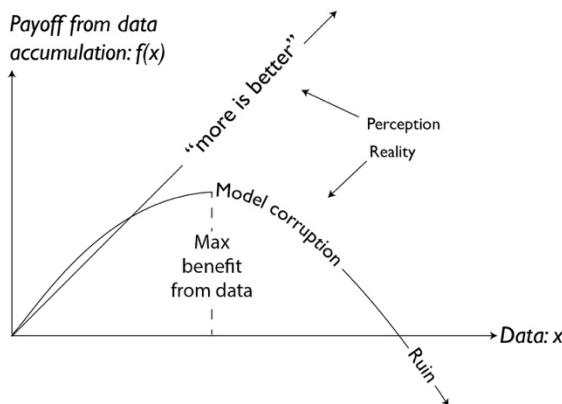
FIGURE 32. DATA ARE LIKE WINE; "MORE IS BETTER," BUT ONLY TO A POINT. KEEP DRINKING (COLLECTING DATA), AND YOU'LL GO FROM FEELING GOOD TO FEELING SICK (YOUR DATA MODEL BECOMES WRONG).

Put more technically, in an unnatural system, variance is essentially unbounded. You cannot know or measure all the interactions that exist between the variables you choose. As a result, as your data set grows, variance grows nonlinearly compared with the valid data. As variance increases, deviations grow larger and happen more frequently. Spurious relationships grow much faster than authentic ones. The noise becomes the signal.

We want to change the system, not just study it as it is. Here is another reason that the "more data are better" approach does not suit innovation: innovation is about changing the system, not just studying it as it is. Someone investigating maple leaves is concerned only with what the maple tree of today will produce tomorrow—in other words, what the system of today will produce tomorrow. Innovators do not seek this. The innovator wants to change the system of today to produce something different tomorrow. Ash Maurya's case study offers a brilliant example of this. He wanted to reduce churn. Therefore, he collected only the data relevant to the churn cause system.

The solution for this conundrum seems contradictory; our chief concern should be data specification (better models), not data accumulation (getting as much data as we can). In other words, less is more. The rest of this chapter will offer some suggestions and concepts to help you improve how you gather and interpret systems data.[85]

SPECIAL CAUSE VERSUS COMMON CAUSE

Life is variation. Every investigation you do will discover variation. Understanding the basics of variation—as it relates to systems and innovation—will help you better understand the data you gather and help you know how you should react to them.

Variations due to common causes versus special causes. Dr. Deming identified two types of variations within a system: (1) common cause and (2) special cause. To explain these, he gave an example based on a chart of school bus arrival times (Figure 33). His example contains variations of two types: (1) day-to-day variation due to common causes that are natural to the system and (2) special-cause variation due to two events from outside the school bus system that affected the system's performance. [86]

We treat variations of different types differently. If you want to improve the day-to-day variation of the bus's arrival time, you might investigate possible new routes. If you want to reduce the likelihood of variation due to new bus drivers or defective equipment, each cause would require a different investigation and different solution.

However, it might actually be best to do nothing. The system is stable. Variations in pickup times are within acceptable ranges. Trying to improve the bus route might just cost a lot of money and shave off only a minute or two— and that's if the new route doesn't end up making things worse. If you try to develop countermeasures for variation due to new drivers or equipment breakdowns, again, you might end up increasing costs without realizing any gain. It might be best to accept that new drivers will need some time to get used to the route and that equipment failures happen.

FIGURE 33. SPECIAL VERSUS COMMON VARIATION. THE SCHOOL BUS ARRIVES AT ALMOST THE SAME TIME EVERY DAY (COMMON-CAUSE VARIATION). ON TWO OCCASIONS, THE BUS WAS LATE (SPECIAL-CAUSE VARATION).

The system of progress has variation. You will find variation within every part of the system of progress. There will be variation among customers, their struggles, how customers find and choose a product, how they use it, and how they imagine their lives being better.

The average person does not appreciate the distinction between the two types of variation, but you must. It will help you distinguish bad data from good data and help you know when to act and when not to act.

What is an example of data models that don't differentiate common and special variation? Paul Adams shares a story about working at Google and Facebook. At Google, he created what we call "personas"—fictitious models of customer archetypes. Personas contain aggregated data in the form of key goals, behaviors, attitudes, physical characteristics, and additional fictitious characteristics to "bring them to life." Paul "created dozens if not hundreds of personas across many projects." But when he moved to Facebook, he was confronted with a great deal of actual data about how consumers used the product—people who were vastly different and lived all over the world. He saw

that, despite the vast differences among customers, they used the product in similar ways. He said,

> One of the striking things about [the data that described how people used Facebook] was how similar people's behavior was. Personas had led me to believe that people are really different, with really different goals. But the similarities were far greater than the differences, and across everything you can imagine— race, age, gender, and so on. [87]

Paul is describing the moment when he realized how misleading personas are. Personas include data such as race, age, and gender; however, these data represent only the natural, common variation among the people who use the product. But common variation doesn't help you understand customers' JTBD.

For example, a persona may describe a customer who likes to use the product on weekends. Now, is that important to the design, or is it a distraction? Is it real, or was it fabricated to "bring the user to life"? How many customers said they use it on weekends? One? Ten? One hundred? When invalid data are comingled with valid data, how can you tell the difference? Personas do not distinguish variation due to either common or special causes. The layman who does not understand statistics will believe any variation within a system is due to special cause.

Just like what happened to Coca-Cola, Paul was receiving misinformation while thinking it was information. Luckily for Paul, he recognized the problem and stopped using personas.

How does this concept help innovation? Poorly designed products happen when innovators respond to common variation as if it were special variation, and vice versa. In these cases, innovators keep piling on more and more features and changes to the product, making it bloated and fragile. This makes both the product and the business vulnerable to creative destruction.

An example of recognizing special-cause variation. Over my many years of making products, I frequently had customers make this threat: "If you don't add this feature, we'll cancel our subscription!" I'd thank them for their input, but I almost never made any change. Why? I understood that this customer's struggle was unique to his use of the product; it did not represent my customers as a whole. It was a special cause of variation within the use of my product, just like the "new driver" and "door closer out of order" in Deming's example. I would have made my products bloated and fragile had I responded to such requests.

An example of mistaking common-cause for special-cause variation. Earlier, we saw that many people claim that PCs had a disruptive effect on the sales of mainframes. These people do not understand statistical theory. The rise in PC sales and the drop in mainframes sales were coincidental. Moreover, the drastic increases and then decreases in sales are common to the mainframe sales cycle.

USE FEWER BUT HIGHER-QUALITY INVESTIGATIVE METHODS

Understanding the different types of variation in data is crucial. Now it is time to consider how to investigate.

As we've seen, the Coca-Cola research team used multiple research methods (mixed-method triangulation). They did all kinds of focus groups, taste testing, ethnographic interviews, diary studies, and more. We know now that using more research methods actually encouraged the company to think that useless data were useful.

Restrict yourself to a few investigative methods. Moreover, they should be similar in their validity and reliability. Remember that the ratio of bad data to good data is tremendous. Customer motivation has vastly more useless data than useful data. The more methods you use, the more likely it is that false data will contradict valid data, such as when personas fed Paul Adams data that looked relevant but weren't.

CONDUCT INVESTIGATIONS ONLY WITH JUST CAUSE

Do you go spend money to see the doctor when you're doing fine? You might do an annual checkup, but that is to monitor your body, making sure the system is operating as it should. The only time it makes sense to see the doctor is when we detect some variation in our health that makes us think that something is wrong. Even people who see cosmetic surgeons go there because they think something is wrong—for example, "I need to fix my receding hairline" or "I need calf implants."

Just as we don't pay to see a doctor for no reason, we should also avoid researching the system of progress for no reason. In 1942, Dr. Deming wrote,

> Data are not taken for museum purposes; they are taken as a
> basis for doing something. If nothing is to be done with the data,
> then there is no use in collecting any. The ultimate purpose of
> taking data is to provide a basis for action or a recommendation
> for action. The step intermediate between the collection of data
> and the action is prediction.[88]

With Deming's words in your mind, think about how Coca-Cola approached its research. Did it have just cause to investigate its eroding market share? Yes, for its sales at food stores were declining. Did they have just cause to investigate a change in their formula? No.

The investigation to change the formula had been precipitated by a controlled, blind taste test. There's a big problem with this research method; it's a contrived circumstance that customers would never be in outside a lab.[89]

Profit is the most important metric. There are only two reasons to collect data: (1) to make sure the system is operating as it should and (2) to make a change that you think will increase profits.

We do not collect data for fun or because we think we should. It is dangerous to collect data without having a clear idea of how they might help you increase profits. When you don't have a clear picture of how your change will increase profits, you might end up making a change to the system that makes things worse, as what happened to Coca-Cola.

Avoid these risks. Justify the costs of research and development by engaging in investigation only when there is just cause to do so. Here are some examples of just causes.

> *You don't know what Job(s) customers are using an existing product for*. This point is self-explanatory.

> *You truly need to develop a new product*. Omer Yariv's case study offers a great example of when a company researches for a new product. And Dan Martell needed to know what Job(s) customers were trying to get Done, what his competitors' solutions were, and what his customers thought of them.

> *Customers stop using your product*. Ash Maurya's customers were abandoning Lean Canvas, so he needed to find out why (and the answer was surprising).

> *You want to create a new, complementary product.* For Ash, growing revenue meant figuring out how to deliver progress to customers in an ongoing way. And Justin Jackson thought about the system of progress and anticipated what customers would need. After the customers used Product People Club, they would need *Marketing for Developers*.

> *You want to understand disruptions in usage patterns*. Morgan Ranieri and the YourGrocer team discovered disruptions in buying patterns, which hinted that some customers were struggling and about to switch to a competing solution. His investigation helped him make changes to prevent that behavior.

You suspect that your product might be an inefficient solution. A business is fragile when its products try to solve too many Jobs at once. It increases costs of production and likely means that a product doesn't do any particular Job well. Fragility makes businesses vulnerable to competition and creative destruction. Instead, a product should focus on helping customers get one or a few Jobs Done.

Hidden business opportunities for your existing products emerge. You may identify new business opportunities when customers use products in ways other than intended. Often, they appear when you see that customers feel the need to combine products and/or engage in compensatory behavior to make the progress they want. Arm & Hammer's wide range of baking soda products draws inspiration from the various ways consumers used the original baking soda powder.

Competition for a JTBD is fast changing. Investigation helps you keep tabs on what customers consider as competition to your product. Competition in some markets changes faster than in others. Adjust frequency of research as needed.

BE SELECTIVE ABOUT WHICH CUSTOMERS YOU INVESTIGATE

Talking with just any customers won't do. I learned this lesson the hard way while I was product manager for FDT. For at least six months, the team and I continually improved the product. We added more features and improved performance. Our increased costs of production were not generating much revenue.

I failed to generate more profits for FDT because I was gathering the wrong data, for the wrong reasons. I was improving the product for loyal, regularly paying customers. But what benefit would we gain from improving the product for them? They would not buy or use it any more often; they were already buying it regularly and using it daily. Adding benefits for them wouldn't increase revenue. It only increased the costs of production.

I was able to improve revenue when I focused on making changes that could bring that result. I researched customers who wanted to use our product but couldn't, customers who were switching from our product to a competing solution, and customers who expressed irregular purchase patterns.

Your samples should be targeted, not random. When we investigate how the natural world works, our samples should be unbiased and random. This is because we are trying to understand things as they are.

Investigations into customer motivation are different. As we've emphasized, their purpose is to provide a rational basis for action—that is, to generate more revenue with minimal increases in costs. Only the struggling customer will pay for a product that helps him or her make progress, so you should limit your investigation to customers who are struggling. If people are happy with the way things are, they're not suddenly going to buy more of a product. Why would they?

The customers you target should be exhibiting evidence of a struggle and related to the just cause of your investigation.

> Learn what Job(s) your product are being hired for by interviewing customers who've recently started or stopped using your product.

> Improve customer acquisition by talking with newly acquired customers.

> Reduce churn by speaking with customers who've recently stopped buying.

> Create a new product by considering the customers of the products that you think will be your competition.

> Find innovation opportunities by examining customers who exhibit disruptions in usage or who use your product in novel ways.

The type of action you want to take determines the customers whom you should to talk with.

WHAT DATA SHOULD YOU GATHER FROM CUSTOMERS?

You have just cause for an investigation and have chosen your methods. You know which customers to investigate. What data should you look for?

First, there is no singular set of data you should gather. Why? The data you should and shouldn't gather change depending on your investigation. The data you gather should be related to monitoring the system to make sure it's operating as it should and your just cause of investigation.

However, good JTBD data commonly share three common attributes:

1. Those related to *revealed preference*, not *stated preference*. The former is about what customers did; the latter is what customers say and is unreliable.

2.   Data related to customers' struggle and how they imagine life being better.

3.   What trade-offs customers are and aren't willing to make.

The study of revealed preference helps us understand what caused a change in behavior. In the Clarity case study, Dan Martell said that customers often "lie" when you talk with them. Perhaps the word *lie* is a little strong. Customers are not out to deceive you; they just want to give you answers that make sense to them and don't require much thinking. If you ask a question they are not exactly sure how to answer, they'll give you a false but easy-to-explain answer instead of a true but hard-to-explain answer.[90]

For example, imagine you ask a customer why he likes Tide laundry detergent. He's likely to repeat what he's seen in ads or rehearse what the product does. He'll say, "I like how clean it gets my clothes" or "I like how fresh it smells." He probably doesn't have the self-awareness to say, "Tide was the brand my mom always used. It works fine, and I'm used to it. I buy it because it saves me the effort of choosing another brand."

For these reasons, we want to focus on data about revealed preferences—that is, what customers do and why they do it. Something happened, and customers realized that the old way wasn't working for them. They had to make a change. You want to unpack why that change in behavior happened. The data I find most helpful in understanding the causes of this change are behavior-change events and the forces of progress.

JTBD is all about the struggling moment. You want to find struggling moments and discover the data that enumerate the factors that caused those struggles to arise. You want answers. What was wrong with the old way? What is attractive about the new way? Why struggle today but not yesterday?

With these data, you find out what the struggle is (i.e., the Job), how strugglers imagine life being better (i.e., when the Job is Done), and what they do and don't value. Finally, you find out how to make the whole process cheaper, easier, or better—or all three. This could result in changes to an existing product or the creation of a new one.

Collect data about customers' struggle and how life is better. Because JTBD is all about understanding the Job and what it's like when it's Done, it should be little surprise that you want to collect data related to each.

In my experience, these data are revealed as customers describe what they do and don't like about solutions they've used and what it's like to find a solution they do like. Some great examples come from BananaDesk founder Tim Zenderman. As you recall, his product is a complete Front Desk Solution (PMS +

CMS + more) custom built for hostels. At least, that's what it does. But what struggles does it solve, and how does it make customers' lives better? Here's how BananaDesk's customers describe what it was like switching to BananaDesk:

> "Before, I was killing myself to train employees on how manage the front desk. I had to constantly keep tabs on them to make sure bookings were organized."

> "When I reached the hotel and spoke to the reception, in one minute I knew all our bookings were under control. I was then able to get to work building our new bar."

> "It gives me peace of mind. I'm not having to constantly check our computer systems to make sure our bookings are under control. With BananaDesk, it is like having a mini-receptionist working twenty-four hours a day."

> "The truth is, our frequent overbookings meant that it was more expensive to not use BananaDesk. Now that we use BananaDesk, we save money and time."

These are the types of data I like to look for when I'm talking with customers. These data describe the JTBD and are related to revealed preference.

What trade-offs are customers willing to make? Talking with customers about why they chose to use a particular product or feature over another is like reverse-engineering customer preference. If we want to build a grocery-delivery service, we don't ask customers only about what they do and don't like about shopping at the supermarket; rather, we also ask them why they switched from shopping at local shops and started shopping at the grocery store. Comparing and contrasting these solutions helps us understand that these customers were willing to trade quality food for convenience. That means that your grocery-deliver service needs to prioritize convenience. In fact, we saw this happen with YourGrocer customers. Customers who were bad meal planners were tempted to regress to using the more convenient but lower-quality supermarket.

Omer Yariv's investigation into adverse events at hospitals is another example of investigating trade-offs. He talked with a nurse about the various solutions she had used. What made writing on her hand a bad idea? It can be washed off. What's wrong with writing notes with pen and paper? The constant rewriting of notes made them illegible. What made a diagram of hospital beds helpful? A visual layout took away the confusion associated with finding info about a specific patient.

Understanding trade-offs is a great way to prioritize the progress your product needs to deliver to customers. Also, eliminating the need for a customer to make

a trade-off is often a way to discover innovation opportunities. YourGrocer won because it eliminated the low-quality-food trade-off associated with supermarkets. Clarity removed the I-have-to-wait-for-the-next-one trade-off associated with attending a conference.

FAMILIAR ADVICE FOR SOME, NEW FOR OTHERS

The notions that we should speak only with struggling customers and should investigate only when we have just cause strike people differently. Some respond with, "That's obvious!" Others say, "No way! That goes against everything I've heard." I find that the first group usually contains people who make physical goods, whereas software people fall into the other group.

I believe that this is because people who create physical goods know that their products have constraints on what they can do. They are also more aware of the costs of production. A rational microphone manufacturer would never say, "We should build a timer into our microphones so people know how long they've been singing." If that manufacturer looked into adding such a feature, it would get sticker shock at the cost of designing it and of production. This forces manufacturers to evaluate carefully whether a change to a product would be beneficial.

Innovators from the software world often don't have this experience. They may not recognize the consequences that come from changing a product and think that they can simply gain more revenue by adding features. So, they default to talking with the wrong customers, gathering the wrong data, and making the wrong changes to their products.

Every product change brings risks with it. Innovators must be deliberate about the data they collect and discern whether the data justify a change in the product or business. This is because, statistically speaking, it is more likely that your change will make your product fragile and more vulnerable to competitors. Why? You can improve a product a finite number of ways; however, the ways to make your product worse are countless. And the number of ways you can make it better diminishes every time you make a successful change. It's akin to having a jar filled with five good jelly beans and fifty bad ones. Pull out a good jelly bean, and the jar now has four good beans and fifty bad ones. Every time you pull out a good bean, you reduce your chances of pulling out another. We don't like to admit that this is the case, but it is. Remember, your "best" customers are not your best customers when you're looking for JTBD data to support innovation.

20. Interviewing Customers

You are probably very clear now on the point that customer interviews are the best way to gather JTBD data. And the best way to learn specific interview tactics is under the guidance of someone experienced at conducting interviews, analyzing and synthesizing data from them, and making product changes based on the gathered insights.

A discussion on how to interview customers is simply too big for one chapter. In fact, entire books are dedicated to the topic. Steve Portigal's *Interviewing Users* has good tactics on interviewing people. Another is *The Mom Test* by Rob Fitzpatrick.

What this chapter will do is introduce ideas on how to approach an interview, ideas on what kinds of data you should look for, and some models you can use as a basis for your own interviews.

WHAT TO KNOW ABOUT CUSTOMER INTERVIEWS

When it comes to innovation, our choices are limited as to how we interview customers. There are two reasons for this.

Our investigation's just cause determines whom we interview, how we interview them, and what data we get from them. Chapter 19 covers these points. For example, if you want to reduce churn, then you interview customers about why they stopped using your product, what they are using now, and why they switched.

Habits change our brains and invalidate data we gather from observational studies. Ethnography is a research philosophy designed to study the behaviors of people as they are. There is no intent to gather data for the purposes of affecting cause systems. For this reason, ethnography's data are helpful to anthropologists but not suited for innovation.

To look deeper into this point, let's consider research by Institute Professor Ann Graybiel of the Massachusetts Institute of Technology. The part of Dr. Graybiel's research that concerns us is her findings on how our brains change when we develop habits.[91]
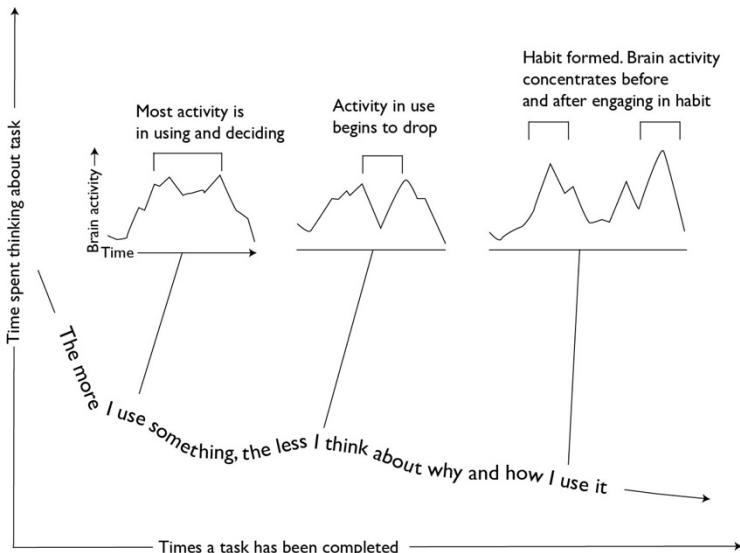
FIGURE 34. PARTS OF OUR BRAIN 'GO TO SLEEP' THE MORE WE EXECUTE A TASK.

In the beginning, most of the brain activity occurs as we execute the task. This is the "sense-making" part where our brains are figuring things out. This includes situational analysis, mental simulation of options, visualizations of future states and outcomes of actions, investigating discrepancies, what to do, what not to do, what's important, and what's not important.

These data contain a cornucopia of insights that help us understand customer motivation. Embedded in them are data that tell us what customers do and don't value, what their struggle is, and how they imagine their lives improving when they find the right solution. These are the data we need to help customers make progress.

As we execute the task more and develop habits, our brains "go to sleep" as we execute those activities. Our brain activity shifts from areas that focus on evaluation and decision-making to areas that look for queues to start the task and predict the outcome.

What are the implications? Investigations that involve a study of customers' habits are unable to access data that give us the greatest insights into customer motivation. Such studies are focusing on the "asleep" part of our brains.

Moreover, they do not account for and distinguish between the different types of variation.

For these reasons, I recommend that innovation efforts do not incorporate data from techniques such as contextual inquiry, diary studies, ethnography, or any type of longitudinal research. When you conduct any study that involves the habits of customers, you are studying the asleep part of their brain. At best, your data will be incomplete; at worst, they will be misinformation—and misinformation leads to bad changes to a product, as with Coca-Cola's.

I recommend these techniques only when you are monitoring the relationships between customers and the system of progress. The goal here is to ensure that the system is operating as you intend. You will observe variations due to common causes, but you should rarely act on them. But when you detect a variation due to a special cause, there is a good reason to explore a just cause for investigation.

CUSTOMER CASE RESEARCH

The type of interview I recommend is inspired by a research technique called customer case research (CCR). This tool was popularized by Gerald Berstell in his 1992 article, *Study What People Do, Not What They Say.*[92]

Berstell's argument was that surveys and interviews do not yield accurate and reliable data about customer motivation precisely because customers' stated preferences often contradict their revealed preferences. He suggested interviewing customers at the scene of a purchase, having them tell the story of how they ended up making it on that day.

Customer case research today. Various interpretations of CCR have come and gone in the decades since it was introduced. The biggest changes to the approach are due to Bob Moesta, who developed the timeline approach that you'll learn about later. I have also added my own experiences to this approach, and the innovators I've featured in this book have also created their own flavors of CCR. I encourage you to take this approach and make it your own as well.

BASIC STRUCTURE AND INTENT FOR AN INTERVIEW

Here's the basic format for an interview. The intent is to gather data about why the old way wasn't working, why the new way was so appealing, and how the transition happened. This is the archetype for whatever flavor of CCR you employ.

Study changes in behavior, not just the purchase. Earlier versions of CCR limited interviews to being conducted at the scene of the purchase. The idea was that if you want to study why people buy milkshakes, you go to a fast-food restaurant and talk with people who just bought them.[93]

As I've interviewed customers over the years and talked with a great many other JTBD practitioners about interviewing customers, I've expanded the conditions that I believe make for a good interview. Such a shift arose out of necessity more than anything else. For example, when I started Aim, my cofounder and I didn't have a product yet, and we didn't have customers to interview. So, I interviewed people who were buying and using products that I thought would be competitors to ours.

Another example of adjusting classic CCR comes from the Clarity case study. When Dan Martell wanted to create a new feature, he interviewed customers about their past behaviors. He described these data as "feature-usage timelines."

A third example of doing interviews around a behavior change is from the YourGrocer case study. Morgan Ranieri interviewed customers who exhibited disruptions in their usage of YourGrocer. Such a disruption is a just cause for investigation

What are some examples of behavior changes to investigate? Anything that you suspect as a special cause of variation should be investigated. Examples of where you can look for them include when someone purchases a product, begins to use a new product, stops using a product, suddenly uses a product more, and suddenly uses a product less.

TYPES OF QUESTIONS

Your interview process is all about unpacking why and how. Why did the customer feel the need to change? How did that change happen? Here are some examples of the types of questions you should ask:

> Before you began [using the current solution], how did you solve these same problems in the past?

> When did you realize the old way wasn't working?

> When were you forced to make a change? Was there a deadline or specific event you needed to be ready for?

> What alternatives did you consider before using [the solution]? What was good or bad about each of those?

What was the hardest part of figuring out what solution to use? Was there any point where you got stuck?

With [the solution], what can you do that you couldn't do before?

Did you alone make this decision to change, or was someone else involved?

What other changes did you have to make to integrate [the solution] into your life?

This list of questions is by no means complete, but it should give you an idea of the types of questions to ask.

THE PURCHASE TIMELINE MODEL

Building on the going-from-an-old-solution-to-new-solution concept, the purchase timeline model encourages you to look for specific moments that lead to a behavior change in the form of a purchase. Each stage of the timeline represents a moment that gets the customer closer to a purchase. The study of each stage reveals helpful data about the interactions between customers and the system of progress.
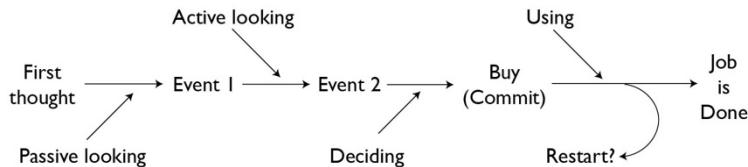

FIGURE 35. PURCHASE TIMELINE

Talk with customers about their journey from "first thought," to buying/committing to using a new product, to using it. Are they happy with it, or did they try something else?

First thought. This is when the customer realizes that she needs to make a change sometime in the future. A JTBD forms. Example: the customer's car makes terrible noises when it starts.

Passive looking. A seed of change has been planted in the customer's mind. She starts to think about and notice alternative solutions for the JTBD. Example: the customer notices new cars or thinks about how other people's cars don't make a noise when they start up.

Event 1. This is the moment when the customer decides there is a need to make a change. Example: one day, the car doesn't start at all.

Active looking. The customer starts to look for a solution, putting dedicated effort into the search. Examples: the customer goes to a car dealership, reads car reviews online, and talks with friends and family for advice.

Event 2. The customer won't act unless she needs to. A time element must be involved that pushes the customer to buy the product before a certain deadline. Example: "I need my car to get to work tomorrow."

Deciding. The customer constructs hiring criteria. She evaluates solutions. Example: the customer goes to the car dealership and asks the salesperson about specific models under consideration.

Buy (commit). The customer makes a purchase or signs up to use a product. Example: the customer buys the car.

First use and evaluation. The customer applies the product toward the JTBD. She asks, "Can I fit this solution into my life? Is it helping me make progress?" Example: the customer starts driving the new car and considers how it performs compared with the old one.

Reasons to use the purchase timeline. The timeline approach to CCR is ideal if you are new to it or to interviewing customers. It gives you a just-structured-enough script to guide your interview, yet you have room to dig into other data.

Reasons not to use the purchase timeline. Obviously, this approach is used to investigate purchase behaviors. If that's not what you are interviewing about, it doesn't help you very much.

As you get better at knowing where, when, and how to search for energy around a JTBD (e.g., what Omer Yariv was talking about in his case study), you will know how to find it without needing a structured approach. This is true of almost every JTBD practitioner I know.

A MORE GENERAL INTERVIEW APPROACH

This more general model is less concrete than the purchase timeline approach but more concrete than the previously discussed interview archetype. This is how I think about customer interviews today.
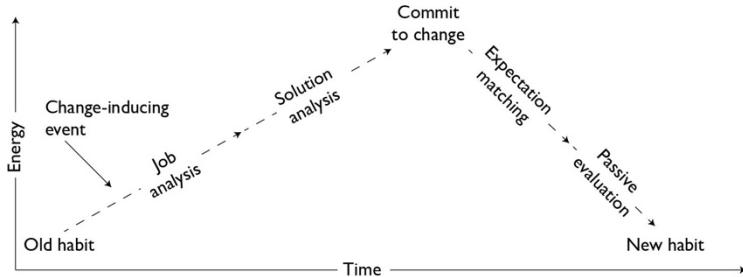
FIGURE 36. A MORE GENERAL TIMELINE THAT FOCUSES ON A CHANGE IN HABIT, RATHER THAN A PURCHASE.

In the mental model I have when I interview customers, I am trying to create a story of how customers went from one habit of doing things to a different habit. This model is flexible; I can use it for any of the five behavior changes I've outlined. I also use it to investigate specific behaviors when I consider possible new product features.

Here are the parts:

Old habit. This is the way the customer used to behave.

Change-inducing events. These are anything related to encouraging the customer to change behavior by prompting him to reevaluate a JTBD. Customers rethink their struggle and how they imagine their lives being better. Sometimes, I find only one change-inducing event; sometimes, I find many.

Job analysis. The customer engages in sensemaking. He does his best to understand what his problem is and the progress he is trying to make. He also starts to think about how life might be better once he has the right solution.

Solution analysis. The customer has decided to make a change, investigating options and the trade-offs associated with each solution.

Commit to change. The customer makes the change to try something new. It may or may not stick.

Expectation matching. The customer tried something new. How did it work out? Did the desired effect arrive? Does the customer need more or less of the effect? Has the mental picture changed of how life will be better?

Passive evaluation. The solution is still fairly new to the customer. Maybe he hasn't yet used the product in all

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anticipated ways. There is no habit regarding the product quite yet, but the customer is becoming comfortable with it.

New habit. If the customer makes it through all the stages, a new habit forms. The customer's brain starts to forget all the sense-making that had to be done up until that point.

Reasons to use or not use this approach. The pros and cons of this approach are really the inverse of the purchase timeline's. If you are completely new to interviewing customers, you should use a model that has more structure to it. More general models might work better for experienced interviewers.

The biggest pro for this model is that it can be used to describe any change in behavior. It can also be used at the product level or the feature level.

DO WE NEED A MODEL?

I have had very successful interviews with customers who don't follow any models. This is usually when I'm creating a new product or feature from scratch or talking with customers about a competing product they use. It's difficult to gain access to customers who have recently started or stopped using a competing product.

Sometimes, you have no choice but to talk with customers who have already developed habits. In these cases, I do look for change-inducing events and the forces of progress; however, as I've pointed out, interviews that involve people's habits yield unreliable data. If at all possible, try to get customers to talk about solutions they used and why they switched from one to another. Another helpful tactic is to ask about the conditions that arose and caused customers to use a product for a JTBD—for example, try to collect Job Stories from them. Often, you can triangulate a JTBD by collecting enough Job Stories.

This is the approach I took when developing Aim. I had limited time to talk with mortgage bankers, and I had no idea what products they had used. The only thing I could do was talk with them about the last time they had tried to capture leads (people looking for mortgages). Eventually, I learned how they tried: they attended open houses and waited for buyers to show up; went to industry events and met real estate brokers; sent out newsletters to industry people; bought leads online; and got referrals via family, friends, and previous clients. I then talked with them about what they did and didn't like about each of these solutions and when they did and didn't use each. Through that, I was able to figure out the JTBD and build a solution that would deliver them progress.

WHEN THE BUYER AND USER ARE DIFFERENT PEOPLE

So far, our discussions have concentrated on Jobs that generally involve scenarios where the consumer and the purchaser are the same person. But what about scenarios were the buyer and consumer are different people? What happens when a product involves people who may not even interact with each other? This chapter will help you know how to answer these questions.

First, I'd like you to consider a few scenarios. As you read them, think about the progress each person is trying to make:

A. Two parents want to do something special for their two children. They decide to take everyone to Disneyland for a weekend adventure.

B. A CRO (chief revenue officer) wants to make her sales team better and wants to impress the CEO and board of directors. She decides to upgrade the company's customer relationship management (CRM) software.

C. A teenager nags his father to buy him a new game console. After a few months, the father buys the game console as a birthday present for his son.

D. A software engineer complains to her boss about back pain. Her boss, after going through the red tape involved in approving a special order for office equipment, is able to get a new standup desk for the software engineer.

People, not businesses, buy products. Some are tempted to treat B and D differently than A and C. The case is made that there are differences between what is called business to business (B2B) and business to customer (B2C) markets. I don't make any such distinction. From a JTBD point of view, there's not much difference between children asking their parents to take them to Disneyland and employees asking their bosses to get them better equipment.

What matters to us are:(1) do multiple people have varying degrees of influence on the decision and (2) what kind of progress is everyone trying to make with a particular product – regardless if they are using it, buying it or both.

When multiple systems interact. Instead of segregating B2B markets from B2C markets, I suggest we make the distinction between products that interact with one system of progress (what we've studied thus far and what most call B2C products), and those that interact with multiple systems of progress (bottom of Figure 34).

Business ⟷ Business   Business ⟷ Chooser ⟷ User

Business ⟷ Customer   Business ⟷ Chooser & User

B2B vs B2C   **Chooser vs User**
(linear)   **(linear)**

Producer

Decision maker   **Product**   Decision maker

User   User
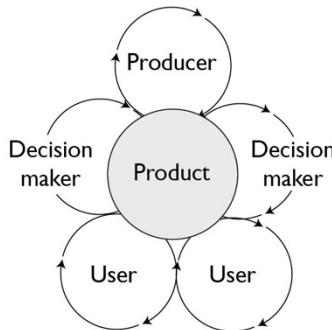
Various JTBD interacting as a system
(focuses on interactions between the parts)

FIGURE 37. THE IDEA OF B2B VS B2C (TOP LEFT) TAKES A SIMPLE, LINEAR APPROACH TO BUSISNESS. THE CHOOSER VS USER PERSPECTIVE (TOP RIGHT) IS BETTER, BUT IS STILL LINEAR AND OVERSIMPLIFIED. A JTBD APPROACH, ON THE OTHER HAND, WANTS TO UNDERSTAND THE SYSTEM SURROUNDING A SOLUTION AND THE VARIOUS JOBS TO BE DONE IT INTERACTS WITH (BOTTOM).

Everyone expects a product to help them make progress, regardless if they don't buy it or use it directly. This approach helps us understand that if Disney wants to make a family trip to Disneyland successful, it needs to make sure – first and foremost – that parents feel like they are making progress. Why? Because they are the ones paying for the trip. Disney needs to do everything it can to make sure that the reality of a family trip to Disneyland matches up with the mental picture parents have in the minds of what a successful trip to Disneyland looks like.

But of course there's a catch. In this case, the progress parents are hoping to make depends a great deal upon the progress their kids are hoping to make. If the kids are unhappy, they will certainly make sure their parents know about it! This is where it gets tricky and where Disney needs to be innovative. Disney needs to make sure that it delivers one kind of progress to the kids, and also delivers another kind of progress to parents (Figure 35).

A dynamic, systems approach to JTBD also helps us understand the different types of progress that products such customer relationship management (CRM) software need to deliver. A CRM product is only one part in a system that

involves different people (parts) who each have their own desires for progress, and who have different kinds of interactions with other parts (Figure 35). The producer doesn't just need to deliver progress to those who use the product – e.g. a CRO and a sales team – but it needs to satisfy the desired progress for those who may never use it – e.g. a CEO and a board of directors.
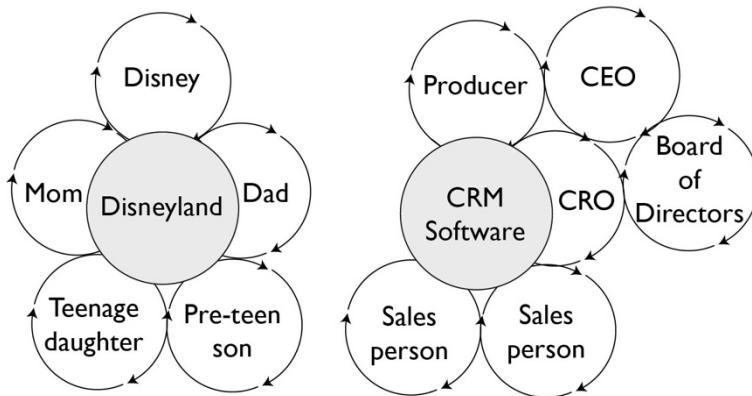
FIGURE 38. EACH FAMILY MEMBER (LEFT) HAS THEIR OWN IDEA OF PROGRESS AND INTERACTS WITH THE OTHER PARTS DIFFERENTLY. SOMETIMES (RIGHT) A PRODUCT HAS TO DELIVER PROGRESS TO SOMEONE WHO MAY NOT EVEN INTERACT OR KNOW ABOUT THE PRODUCT. NOTE: THE FAMILY IMAGE SHOULD SHOW ALL FAMILY MEMBERS TOUCHING EACHOTHER. THIS ILLUSTRATION HAS BEEN MODIFIED FOR VISUAL SIMPLICITY.

Study the system, not just "users" and "choosers". One of the most important principles of JTBD is *solutions and Jobs should be thought of as parts of a system that work together to deliver progress to customers*. Figure 35 shows just how complex these systems can be, as well as the dynamics an innovator needs to consider. For example, A CRM solution could make itself more valuable to the CEO – even though she never uses it – by offering a feature that enables her and the CRO to have better conversations with the board of directors about the status of the company's customers. In turn, this will also help the board of directors make progress themselves because they have the data available to them to offer appropriate advice to the CEO and CRO. This makes them feel like they are contributing to the success of the company. If they are shareholders, they will also feel more confident about how well the company is being run and that profits will likely continue.

Remember, the study of a JTBD is the study of system. We are less concerned about each individual part and more concerned about how those parts interact.

21. Creating JTBD Insights

Analysis versus synthesis
Combine some analysis with mostly synthesis
OSEMN
KISS

There's not much room to be subjective about what data you can and cannot trust. However, subjectivity and creativity affect the methods you use to gather data. To create insights from the data, we can't rely on psychology, math, or statistical theory to guide us; we have only personal preference.

Another factor that makes it impossible to teach a "right" way to create insights is that how you go about doing it depends on your just cause for research, what you plan on doing with your insights, and how your team or organization best absorbs insights.

For these reasons and more, the best way to learn how to create insights is through trial and error or the guidance of someone who is experienced at gathering the right data, distilling insights, and applying the insights to product and/or marketing changes.

I'll give you some theories on creating JTBD insights here, which should help you go on to create your own insight-creation process.

ANALYSIS VERSUS SYNTHESIS

Analysis is a process that answers how and what by breaking down a whole into parts, investigating each part, and then considering each part's function in relation to the whole. Synthesis, on the other hand, is about answering why. Its interest is in knowing the purpose of the whole and how the individual parts contribute to the whole's purpose. Analysis and synthesis represent different ways of understanding systems and problem solving.

Here are three illustrations that demonstrate analytical versus synthetic thinking.

An example from W. Edwards Deming. The management team of a furniture company decided that they would make pianos, since they already had the materials and machinery. They bought a Steinway piano, took it apart, analyzed the parts, duplicated the parts, and then put their new parts together exactly like the Steinway's. But when they tapped on the keys, they could get only thuds. Disheartened, they decided to put the original Steinway back together in hopes

of returning it; however, just like their own piano, the reassembled Steinway could produce only thuds.

What happened? Deming did not explain why the pianos made only thud sounds. But people who know pianos understand the problem: the piano strings were not properly tuned. The employees of the furniture company did not understand the theory of music or sound. They also did not understand how these theories dictated how the keys, strings, and soundboard needed to work together to produce a beautiful sound.

An example from Bob Moesta. In the early 1980s, Ford cars cost more and performed worse than Japanese-made cars. The Ford engineers bought a Japanese car and did the same thing as the piano people had, hoping to find out why the car performed so well at such a low cost. They were dismayed to discover that each individual part of the Japanese car was built to standards that Ford considered inferior. But the systems the Japanese manufacturers created—e.g., exhaust or suspension—performed better than anything Ford created.

What happened? Ford made worse cars that cost more because each car part had its own definition of quality—one that did not consider how the part interacted with the system that it belonged to. Each part had qualities added to it that did not help the system. Ford made a worse car because it was trying to make each individual part great.

An example from Des Traynor. Intercom creates software that helps businesses interact with their customers. Early in the company's history, its designers added a map feature to the product that businesses could use to represent visually where their own customers lived. The feature was an instant success.[94]

Intercom then thought about adding features such as geographical accuracy and interactivity. But when it investigated how customers used the map feature, what it found was surprising: customers were using it to help them impress people at trade shows, on social networks, and during presentations to investors. With these data, Intercom decided not to add any new map features. Instead, it made the feature look stylish—which made it a less accurate map—and easy to share. Customers loved it even more.

What happened? Intercom improved its map feature by making the "map" parts worse and added parts that were unrelated to what a map does. The result was a worse map that customers shared and used more.

The whole is not the sum of its parts. The furniture manufacturer was wrong to believe that it could create a successful piano by analyzing its parts. Ford's

engineers learned that they were overengineering their car parts and therefore made low-quality cars that were made of high-quality—and high-cost—parts.
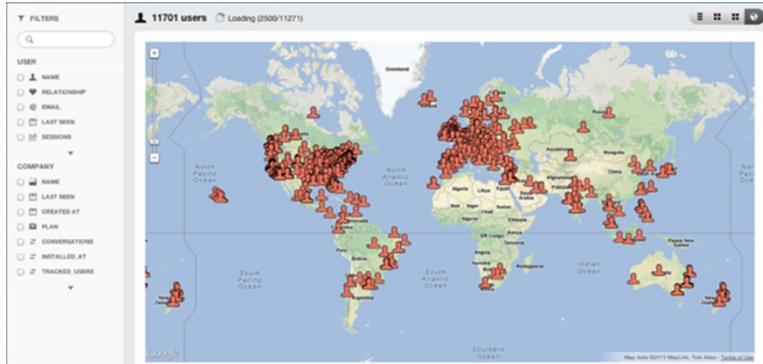
FIGURE 39. THIS MAP, IS NOT A 'MAP'.

Now, consider what Intercom did. It made its customers enjoy the map feature more by not improving it as a map but adding parts that helped customers feel more impressive. This was a synthetic approach to innovation, whereas Ford and the furniture manufacturer were using analysis.

We cannot understand customers' JTBD and help them make progress within the system of progress through analysis alone. The intent of JTBD is to explain why, not how or what. Analysis answers how and what; it can never answer why.

Using analysis to understand customers' JTBD is why the Pony Express thought it was in the "transport letters" business, and it's why some drill manufacturers believe that customers buy drills because they want holes. These mistaken beliefs came from studying one part (i.e., analyze) of the system of progress— that is, when customers use a solution for a JTBD. Had Pony Express and the drill manufacturer looked at the system as a whole and not thought about functional jobs, they would have asked, "Do people really want to send letters? Can the

same progress be made with a different technology?" and "Do holes make people's lives better? What if people don't need to make holes?"

For these reasons, I believe that developing actionable JTBD insights is primarily a process of synthesis, with some analysis included.

COMBINE SOME ANALYSIS WITH MOSTLY SYNTHESIS

I believe in keeping things simple whenever possible. If a process or explanation becomes too complicated, it's a red flag that something is wrong. If Einstein can convey the idea of mass-energy equivalence with $E = mc^2$, then if an innovation process requires reams of paper, pretty graphs and charts, or lots of jargon, it is a sign that something is off.

Regardless of what insight-creation process you end up using, my firmest recommendation is to ask these questions constantly:

What part is this, and what is it a part of? For instance, is this customer describing a struggle to improve her life or a struggle when using a specific product? When we change the product, does the struggle change as well? If so, how?

What are the interdependencies between this part and the whole it belongs to? When a change happens "here," what happens "over there"? For instance, how do variations in struggling moments affect customers' hiring criteria; how they search for, choose, and use a solution; and how they imagine life being better (when the Job is Done)?

In this context, a "part" can be a force of demand, the customer, something the customer does, or the JTBD. A "whole" here usually means the system of progress.

OSEMN

To understand what Jobs customers want to get Done, try to follow stick roughly to the OSEMN (pronounced like *awesome*) approach: obtain, scrub, explore, model, and iNterpret.[95]

Obtain. Gather your data. Remember to use research methods that are valid and reliable, and use only data you can trust. If any data are questionable, throw them out. One bad data point can do a lot of damage.

Scrub. Before you get to the next stage of OSEMN, your data need to be clean and consistent. This doesn't mean you should make things up or change anything; rather, make sure the data are in a form that's easy to work with. For example, make sure the formatting is consistent, the spelling is correct, and the

keywords are operationalized (e.g., you may define a customer as someone who pays for the product and a user as someone who uses the product but does not pay for it).

Explore: aggregate. I like to split *explore* into two stages. The first is *explore: aggregate*. Here, you aggregate your data, creating one summary per customer of what you collected about him or her.

Then, your goal is to get to know your data. Have open discussions with teammates about the data. You're not making any claims, hypotheses, or predictions; you're merely talking about what you see in the summaries and data you have. The goal is to root out whatever biases or prejudices you may have, to make sure everyone is on the same page about the data, and to throw some randomness into your investigation.

Yes, randomness is desirable when you know what you are doing and have good data. For example, while discussing your data, ask people from outside your team to review your customer summaries. Ask them to look at the data and tell you what they think. They might bring up something that you didn't consider or see something you don't.

Explore: disaggregate). Now it is time to disaggregate your data. Go through each customer and break up the data into smaller, cohesive bits. Answer these questions:

> What forces of progress does each customer experience?
>
> What are key events that help customers or block them from moving through the system of progress? Can you explain the interactions between the parts you see and the system of progress?
>
> When do customers realize they have a struggle?
>
> What solution are they using now? What did they use in the past?
>
> How did they find and choose a solution?
>
> What were their hiring criteria? How did their hiring criteria affect how they chose a solution? Did their hiring criteria change as they moved through the system of progress?
>
> When they chose and used a solution, did it affect their idea of how life would be better?
>
> Were any new struggles activated as customers realized the better lives they were thinking of?

If they found the right solution for their JTBD, what can they do now that they couldn't before?

Next, compare and contrast each individual customer with the others. What trends do you see? Where does everyone experience the most energy? The least energy? What interactions are the most common? Which are not common?

Last, aggregate struggling moments (Jobs) and how customers expect their lives to be better (when the Job is Done) and situations that prompted the customers to reach for the chosen solution for their JTBD.

Model (prediction). Develop models of your data that best explain what you see now. This is when you put into words—that is, model—the customers' JTBD (the Job and Done parts together) and create Job Stories. Here are some important questions to ask:

Which customers did or did not experience this JTBD?

Which customers did or did not experience this Job Story?

Can this description of a JTBD or Job Story be applied to the solutions that customers have used? If not, then perhaps it's not the best one.

Remember, the JTBD should be the same—or very similar—as they move from one product to another.

Testing your models against your data is absolutely crucial. Perhaps you believe that a JTBD for a group of customers is "Get me out of a rut by inspiring me with advice from someone whom I respect." Now you need to test it. Make sure it explains the struggle of specific customers and the solutions that customers have used.

Let's say that the wording *get me out of a rut* doesn't fit your customers' struggle well. Perhaps a better way to phrase the JTBD might be "Help me feel more confident about product changes by giving me advice from someone whom I respect."

Don't kill yourself trying to create perfect models, though. All models are wrong, but some are useful. The intent is to create some guidance to help direct your product and marketing efforts.[96]

iNterpret. The interpretation stage is when you look at the insights you've gathered—the Jobs you've uncovered or other data about the system of progress—and determine which course of action to take. Do you add new features? Do you change your marketing strategy? Do you remove features? These are all questions you need to ask.

But we do not engage in investigation, gather data, and create insights just to make changes blindly. The purpose of every investigation is to increase profits for the company—whatever that may mean. To that end, we must understand the system of progress that our product(s) are a part of and then decide how (or if) we can improve that system. This is vital.

For example, Dan Martell from Clarity conducted an investigation to figure out if his team should build a new bookmark feature. They found that the feature would not improve the system, so they did nothing. Changing the product would only have added costs without increasing revenue.

In another example, Anthony Francavilla from Form Theatricals learned that theater patrons were unaware of the after-the-show set tour. He suggested that his client remove the tour. This would increase profits by reducing costs without taking away value.

Always use OSEMN? As mentioned before, your just cause for investigation determines what kind of investigation you do, the data you gather, and how you create insights. This means you don't always have to use OSEMN.

KISS

However you choose to go about creating insights, again, I recommend that you "keep it simple, stupid" (KISS). You don't have to understand math, statistics, or risk engineering to know that the more complicated something is, the more likely something will go wrong. Even worse, complicated things are better at hiding risk.

This fact of complexity carries over to any innovation, research, or design process out there. A complex process will keep you busy and make you believe you're making progress, but all the while, it's giving you bad data and invalid insights. The only time you figure that out is when it blows up in your face.

Just look at what happened to Coke and its many-faceted, complicated research stack and large customer sample. It was supremely confident right up until the bottom fell out.

The innovators featured in this book got it right because they kept it simple. If I can't convince you to keep it simple, then perhaps the innovators in this book can. All of them engaged in simple, straightforward investigations. They knew which data were and weren't important, they knew a good investigation method from a bad one, and they respected when it was appropriate to take action. The result? They created and sold products that customers bought, thereby increasing profits for their businesses.

22. Tools for JTBD Insights

Data dimensions & Job Map
Modeling interview and JTBD data
Intermissions
Customer roles

Here are a few tools by members of the JTBD community that may help you analyze and synthesize data about the system of progress and customers' JTBD. Adjust or use them at your discretion.

DATA DIMENSIONS & JOB MAP
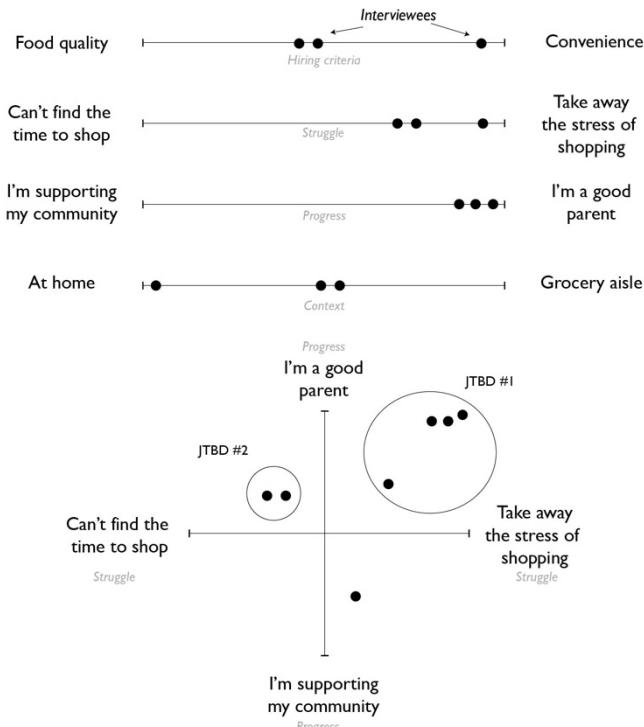
**FIGURE 40. DIMENTIONALIZING STRUGGLES, PROGRESS, AND HIRING CRITERIA (TOP).
CONTRASTING PROGRESS AND STRUGGLES INTO A JOB MAP (BOTTOM).**

A helpful exercise developed by Chris Spiek, Ervin Fowlkes, and Bob Moesta helps take away the stress and conflict that arise within teams when their

members think they are talking about the same things but are not. You can also use it to aggregate data about what customers do and don't value, as well as qualify the data you have.

Each axis here has a quality at each end. These qualities can be struggles, progress, contexts, or hiring criteria. I recommend that you limit each axis to only one type of quality—for example, struggle versus struggle, progress versus progress, context versus context.

Combining dimensions into a Job Map. To model a JTBD with this tool, you use these axes as graph dimensions. We call these graphs Job Maps.

The above map contrasts progress dimension with a struggle dimension. Plot the interview subjects on the map and see where any clusters arise. Clusters are good indications that customers are experiencing the same JTBD.

MODELING INTERVIEW AND JTBD DATA

Ryan Hatch (@rdkhatch) has a model (top of Figure 33) that can be used to unpack JTBD data. It can be used as an interview outline and as note-taking tool. The accompanying questions would vary based on whether it is a business-to-consumer (B2C) or business-to-business (B2B) switch interview.

Eric White (@ericmwhite) offers a helpful way of modeling the forces of progress (bottom of Figure 33). The goal of this exercise is to focus on how the forces of progress affect each solution that customers have used before, considered as an option, and are using now.

INTERMISSIONS

The team at Intercom has developed *intermissions* (Figure 34). These are one-page briefs that are created before starting a project. These intermissions incorporate JTBD data and Job Stories. These documents help the team stay focused on the problem or opportunity it is addressing. This model also shows how data about your customer's JTBD can be added to an an existing workflows and development processes.[97]

CUSTOMER ROLES

The customer role (Figure 35) is a tool developed by Andrej Balaz (@Designamyte). It helps you dive into customer research with other stakeholders during an analysis and synthesis workshop. It helps everyone involved put insights about a customer's JTBD on one sheet and functions as a

handy reference during workshops. It focuses on the main customer's struggle and analyzes what motivates or keeps the customer away from making progress. A list of situations and a contrasting section of hired and fired solutions help you analyze the underlying anxieties and motivations that drive the customer's behavior.

It's important to note that this does not describe a customer; it describes one or more situations that a customer may face. I find the concept of customer roles helpful when an innovation team struggles to switch from focusing on customers (e.g. personas) to focusing on the Jobs that customers have. The next step would be to drop the "customer role" language and use "the Job to be Done" instead.
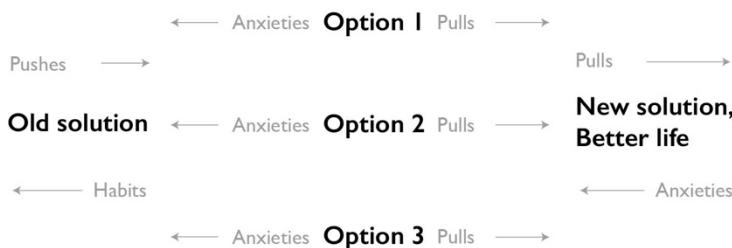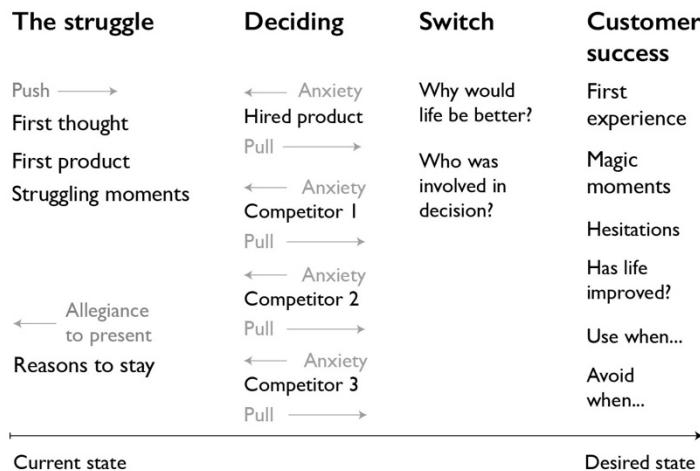
FIGURE 41. RYAN HATCH'S MODEL (TOP). ERIC WHITE'S MODEL (BOTTOM).

INTERMISSION NAME

What problem are we solving and why?

Add the problem we're solving (or speculative opportunity we are addressing), why we're solving it, any links to customer conversations or research. Clearly explain all facets of the problem and how it affects different parts of Intercom.

Job Stories

Describe job stories to make the value we deliver to customers clear, and what it will enable them
to do: When _____, I want to be able to _____, so I can _____.

How will we measure success?

Add how we will determine whether the problem has being solved. Qualitative and
quantitative measures.

Scope

Once high level product design is figured out, add the releases below, what is in scope and out of scope, and estimated dates for shipping to beta.

Notes:

- *Do not add the solution here.*
- *An Intermission must always fit on a printed A4 page. If it does not, you haven't a clear enough view of the problem yet. Keep working on it.*
- *Always have active and upcoming Intermissions printed in your team area or war room.*
- *Always use plain simple English, no technical terminology or codenames. Write this document as you would describe the problem to a colleague face to face.*
- *The PM owns the Intermission, but should always always solicit input from the full team.*

FIGURE 42. AN EXAMPLE OF INTERCOM'S INTERMISSION. IT IS A PROJECT BREIF THAT INCLUDES JTBD DATA. READ MORE AND DOWNLOAD A TEMPLATE AT WWW.INTERCOM.COM

Customer role   Describe this customer type's behavior

is trying to...

make his friends happy by inviting them for dinner and feel a little bit of normality again. He wants to feel like a chef tonight, even though he suffers from a sudden, but uncurable motoric disability.

Quote

Situations
Describe situations in which the person feels that what they're doing is not good enough.

Currently hired...
Which solutions/workarounds is the person currently using? Why?

Recently fired...
Which solutions did the customer consider but eventually did not use? Which did he/she abandon for good? Why?

WHAT
WHY

Anxieties
What is keeping the customer away from making progress? What is he/she afraid to lose?

Motivations
Which events or information helped the customer to move forward? What made him change his behaviour?

What's important to me regarding my struggle:

Control   Relief   Price   Value   Planning   Spontaneity

Photo by Mark Daynes

FIGURE 43. CUSTOMER ROLES BY ANDREJ BALAZ. A HELPFUL WAY TO TRANSITION A TEAM FROM FOCUSING ON CUSTOMERS TO THE JTBD.

Appendix: A Summary of JTBD

WHAT IS JTBD?

As a theory, JTBD is a collection of principles that help you understand customer motivation.

A JTBD itself has two parts:

A Job is one's emotional struggle to make life better.

It's Done when one finds the right solution to overcome that struggle and make that better life happen.

WHAT ISN'T A JTBD?

If you are in doubt whether someone is describing a JTBD, ask these questions:

Does this describe an action?

Can I visualize someone doing this?

Does this describe a "how" or "what" and not a "why"?

If you answer yes to these questions, you're probably describing a solution for a JTBD and not a JTBD itself. Remember, a JTBD is not a task, activity, or has any functional characteristic. It describes customer motivation – something that can neither be seen nor can described in terms of actions or functional qualities. For example, you can see someone cutting the grass so they can maintain their lawn, but you can't see why they care about either.

WHAT ABOUT DIFFERENT TYPES OF JOBS?

It is best to avoid coming up with different types of Jobs or stratifying them. Any attempt to do so will lead to logical inconsistencies and overlaps. It's best to keep it simple: all Jobs are emotional.

WHAT ARE JTBD PRINCIPLES?

Customers don't want your product or what it does; they want help making their lives better (i.e. they want progress).

People have Jobs; things don't.

Competition is defined in the minds of customers, and they use progress as their criteria.

When customers start using a solution for a JTBD, they stop using something else.

Innovation opportunities exist when customers exhibit compensatory behaviors.

Solutions come and go, while Jobs stay largely the same.

Favor progress over outcomes and goals.

Progress defines value; contrast reveals value.

Solutions for Jobs deliver value beyond the moment of use.

Solutions and Jobs should be thought of as parts of a system that work together to deliver progress to customers.

Appendix: Summary of Putting JTBD to Work

CHAPTER 4

Ask customers about what they've done, not just what they want. Confirm it if you can.

Ask the right questions to learn how your customers view competition.

Learn what kind of progress customers are seeking. What's their emotional motivation (JTBD)? Use that to segment competition.

Ask yourself, "From which budget will my product take away money?"

Create better marketing material by speaking to your customers' JTBD.

Focus on delivering emotional progress (getting a Job Done). Don't focus solely on functionality.

CHAPTER 5

How do you convince teammates or management to change a product? Frame design challenges as a JTBD.

Dig deeper when you tap into a struggle or aspiration. How have customers tried to solve it before?

Determine if anxiety is a competitor. If it is, find ways of reducing it.

Be suspicious of the "impulse purchase" concept. No purchase is random.

CHAPTER 6

Don't depend on demographics.

Create better advertising and promotional material by speaking to what customers value.

Teams become more motivated, build consensus, and share a vision when they do JTBD research together.

CHAPTER 7

First, study the push and pull.

Dig into habit and anxiety after identifying push and pull.

Fight anxiety and generate pull by helping customers visualize the progress they will make by using your product.

Reduce anxiety-in-choice with trials, refunds, and discounts.

Identify any habits-in-use that keep customers from using your product. Adjust your product to help them along.

CHAPTER 8

Create a *constancy of purpose to innovate* for your organization.

Discover the customers' JTBD by focusing on what doesn't change.

Before you make anything, have a clear picture in your mind of what customers will stop doing.

CHAPTER 9

Don't restrict competition to products with similar functionality or physical characteristics.

Talk with your customers!

Confirm that competition exists between products by finding customers who switched.

Do you think you're creating a new market? Think again.

Know what budget you're taking away from.

Continually refresh the competitive landscape with ongoing feedback from customers.

Remember that not every JTBD needs to be solved with a product that customers buy.

CHAPTER 10

Begin by identifying a struggle. Start wide, and get progressively narrow.

Find innovation opportunities when customers exhibit compensatory behaviors.

CHAPTER 11

Innovation opportunities are found through looking for specific data.

Know the difference between a struggling customer and a merely inconvenienced customer.

Great advertising comes from speaking to the customers' struggling moment.

Digging deep into customer motivation reveals innovation opportunities.

You can deliver progress to your customers' JTBD by offering a set of products that work together as a system.

CHAPTER 12

Grow your business, reduce churn, and capture more profits by delivering progress to customers.

Unlock your innovation creativity by asking, "What comes after?"

CHAPTER 13

Grow your business by unlocking new struggles and offering products for them.

Think of your business as delivering a combination of products that work together to forward the system of progress.

Find product opportunities by looking forward and backward on the system of progress.

CHAPTER 14

Persuade customers to reject their current products by changing their JTBD.

Bring focus to which system of progress you're solving for by splitting up products that deliver different types of progress.

Notes

1   From Joseph Schumpeter's book *Capitalism, Socialism, and Democracy* https://goo.gl/k3EG5d. Chart data is from Richard Foster's analysis http://goo.gl/KngXcR

2   The story of Kodak's management rejecting digital camera from an article in the New York Times by James Estrin http://goo.gl/mZMMOL

3   Sunk-cost fallacy from Hal R. Arkes and Catherine Blumer's *The Psychology of Sunk Cost* https://goo.gl/fZ4JmL. Sunk-cost fallacy from Hal R. Arkes and Peter Ayton in *The Sunk Cost and Concorde Effects: Are Humans Less Rational Than Lower Animals?* https://goo.gl/4EAHgF

4   Donald Norman's *Human-centered design considered harmful* https://goo.gl/gxy166

5   *The Story of the Pony Express* by G. D. Bradley https://goo.gl/Owz7gy

6   Twitter's revenue via Marketwatch: https://goo.gl/S7IUtc

7   Quotes are from George Box https://goo.gl/vhxFTc, Deming and Lyon Nelson https://goo.gl/08h0Wp, and Ronald H. Coase https://goo.gl/744P5H

8   Deming's 1st, 2nd and 5th Deadly Diseases https://goo.gl/J4mvvQ

9   Steve Blank's article *No Business Plan Survives First Contact With A Customer – The 5.2 Billion Dollar Mistake* http://goo.gl/tdlWio

10 Charles Revson's quote http://goo.gl/SjjWYt. Susan Prescott's from New York Times article *Once Taunted by Steve Jobs, Companies Are Now Big Customers of Apple* http://goo.gl/oNALUz

11 Quotes are from Deming's *Quality, Productivity and Competitive Position* https://goo.gl/a3CIzm and *Out of the Crisis* https://goo.gl/3xgH8t

12 Ford's numbers on Mustang sales from Ben Geier's *This is the Best-Selling Sports Car Among Women* http://goo.gl/MFu67T

13 Interview with Notre Dame's Jack Swarbrick from *Synthetic Turf to be Installed in Notre Dame Stadium by 2014 Football Season* http://goo.gl/Pgn0fk

14 Quotes are from Miriam Jordan and Jim Carlton's article *In California, the Grass is Always Greener on the Painted Side* http://goo.gl/zMkKAj. More info about homeowners reacting to the drought from Jennifer Medina's *In Drought-Ridden California, the Classic Lawn Loses Ground* http://goo.gl/SNp6xd

15 Daniel Kahneman describes attribute substitution in his Nobel prize lecture *Maps of Bounded Rationality: A Perspective on Intuitive Judgment and Choice* https://goo.gl/iWXVhr

16 GMO grass example from Tor L. Bollingmo's *Get Out of Your Product Bubble: Defining Competitive Markets* http://goo.gl/m6RSR8

17 Revlon's revenue from Yahoo finance. http://goo.gl/7p5RS9

18 The "customers want a quarter inch hole" comes from Leo McGinneva https://goo.gl/EM761j

19 Baking soda timeline http://goo.gl/p3bVK3

20 Segway for tour groups and police http://goo.gl/C8ulJ1

21 Thanks to Bob Moesta for the pizza vs steak example

22 Again, Kahneman's attribute substitution https://goo.gl/iWXVhr. Learn about revealed preference vs stated preference from Paul Samuelson's *A Note on the Pure Theory of Consumer's Behavior* Economica 1938. HS Houthakker's *Revealed Preference and the Utility Function* Economica 1950. MK Richter 's *Revealed preference Theory* Econometrica: Journal of the Econometric Society 1966

23 Preference reversal is explained in *The Causes of Preference Reversal* by Amos Tversky, Paul Slovic, and Daniel Kahneman https://goo.gl/uv88iz

24 Read about expectations being violated in Gary Klein's *Sources of Power: How People Make Decisions* https://goo.gl/LVvRkf

25 Elon Musk in *The Secret Tesla Motors Master Plan (just between you and me)* http://goo.gl/A99Iq and *Master Plan, Part Deux* http://goo.gl/d7KGCv. Tesla preorders from Tom Warren's *Tesla has received almost 400, 000 preorders for the model 3* http://goo.gl/CM2Hw7

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28 Tata Nano crash during handling test - not really a stable car. http://goo.gl/sW0CRP and *Where did it all go wrong for Tata's Nano?* http://goo.gl/Ekp6N9

29 *Tata GenX Nano launched* by Vikas Yogi http://goo.gl/RVUjVN

30 George Loewenstein describes Anticipatory emotions and anticipated emotions in *Risk as Feelings* https://goo.gl/KXZttM

31 Gary Klein NDM and mental simulation from *Sources of Power* https://goo.gl/TkfSjV

32 iPod sales numbers http://goo.gl/TFClod

33 *'Project Purple' and the pre-history of the iPhone* by R Ritchie http://goo.gl/FT6wAz

34 Apple cannibalizing iPod sales http://goo.gl/zckZOn and http://goo.gl/mDNVyT

35 Kodak's numbers from the Economist *The Last Kodak Moment?* Available at: http://goo.gl/Iocfhs

36 Easy to read reference *How Netflix Bankrupted And Destroyed Blockbuster* from Business Insider http://goo.gl/fCQAQl

37 Read the quote here https://goo.gl/OtqXGL

38 A great video about creative destruction and monopolies by L. Lynne Kiesling *Joseph Schumpeter: Economic Growth and Creative Destruction* http://goo.gl/v9Rp5p

39 Deming's carburetor example is from *The New Economics* https://goo.gl/xSrsZg

40 Deming's "Create Constancy of Purpose" and other quotes from Out of the Crisis https://goo.gl/mKOGwU

41 It could be argued that customers might combine products for JTBD—but even in that case, something is being replaced

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44 George Meneze's quote about selling millions of chotuKools from *Fundamentals of Management: Asia Pacific Edition* https://goo.gl/z14cWj. chotuKool wins Edison Award from Innosight http://goo.gl/hF3IXh and http://goo.gl/wpfvGn. Dr. Christensen praising the chotuKool http://goo.gl/ioRFAK. Harvard Business School praising the chotuKool

Godrej chotukool: A cooling solution for mass markets http://goo.gl/75UmXn. Harvard Business School case study *Little Cool, Big Opportunity* by Rory McDonald, Derek van Bever, and Efosa Ojomo https://goo.gl/W0niu3. Reference to water purifier and chotuWash *At Godrej, ChotuKool spawns major business strategy* http://goo.gl/hLK5l1 and *Multinational companies are becoming Indian: Godrej's George Menezes* http://goo.gl/MgygOr. More on the chotuWash http://goo.gl/S57eu9 and *A small innovation leads to the next big thing* http://goo.gl/BGB226

45 Only 15,000 chotuKools from DNA India S. Sharma's article in DNA India *At Godrej, ChotuKool spawns major business strategy* http://goo.gl/4oxFQ1. Also in *Engineering applications in sustainable design and development* by Striebig, Bradley, Adebayo A. Ogundipe, and Maria Papadakis Nelson Education, 2015. Page 664. The chotuKool was first released in the state of Maharashtra: population 114.2 million. In *Back to business fundamentals: Making "Bottom of the Pyramid" relevant to core business*, E. Simanis, M. Milstein, and D.Ménascé point out that the chotuKool was celebrated by Godrej before any units were sold https://goo.gl/gfFiL3. Comments about the chotukool's failure, as well as the general flaw with disruptive innovations are echoed here: Soni, P. (2014) *Why corporate frugal innovations fail and grassroots frugal innovations succeed* http://goo.gl/rqcX0w

46 Navroze Godrej's comment "Today it is a lifestyle product that people use in cars" is from K Vijayraghavan's article from The Economic Times *Godrej & Boyce is getting sexier, in a hurry* http://goo.gl/fBhZA0. G Sunderraman's comment "We are now targeting a mid-level buyer" appeared in the article *Godrej's chotuKool Fridges to Flaunt Heritage Art Designs* by Amrita Nair-Ghaswalla http://goo.gl/wgosLI. G Sunderraman's comment "How can you expect poor consumers with a minimum sustenance to be your pot of gold?" appeared in K. Vijayraghavan's article *Companies like Nokia, Philips, HUL, Godrej Eye Emerging Middle Class India* http://goo.gl/y8vWXW

47 These quotes and alternative solutions are mentioned in the case study previously referenced *Godrej Chotukool: A Cooling Solution for Mass Markets* https://goo.gl/HfnKRs. The MittiCool as an alternative to the chotuKool is mentioned by P. Soni in *Why Corporate Frugal Innovations Fail and Grassroots Frugal Innovations Succeed* http://goo.gl/jvZIyu

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49 Stories like this are repeated in books like Christensen's *The Innovators Dilemma* https://goo.gl/hQVOvm. Also see Christensen's: (1) Harvard Business Review article *What Is Disruptive Innovation?* https://goo.gl/jvoqKB (2) His personal home page *Disruptive Innovation "Key Concepts"* https://goo.gl/0APjIE (3) From the Christensen Institute *Disruptive Innovation* https://goo.gl/KkEVm1. It's also echoed in Jill Lepore's article *What the Gospel of Innovation Gets Wrong* https://goo.gl/KQyJ6x. Here's a good video of Christensen selling this mainframe theory at the Saïd Business School http://goo.gl/p9TCti

50 Sacconaghi's quote can be found in the Economist's article *Old dog, New Tricks* http://goo.gl/atcnj1

51 Numbers on mainframe install base from a white paper by Janet L. Sun titled Don't Believe the Myth-Information About the Mainframe https://goo.gl/cdfqcz

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58 Data on PC margins are found here in Z. Epstein's article *You Won't Believe How Little Windows PC Makers Earn for Each PC Sold* http://goo.gl/4GbPlL

. *Sad state of PC from Zacks PC market plight continues in Q3 say Gartner, IDC* http://goo.gl/zWWv9m. Mainframes keeping up with needs of technology is discussed in Steve Lohr's article *I.B.M. Mainframe evolves to serve the digital world* http://goo.gl/xTPglX. Also see Don Clark's The Wall Street Journal article *IBM Moves to Refresh Mainframe Line* http://goo.gl/Wue5S2

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62 See Robert McMillan's The Wall Street Journal article *PC Sales Drop to Historic Lows* http://goo.gl/ls3TvR

63 Des Traynor's quote comes from *Not All Good Products Make Good Businesses* http://goo.gl/ERsmHM

64 Read about Deming and Ford http://goo.gl/khzdpt and http://goo.gl/sS4WJa

65 Read about DDT and its effect on the ecosystem from the Fish, U.S. and Service http://goo.gl/KZCeDu

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68 Apple's iPhone numbers from statista http://goo.gl/5TiRmr. Applications in App Store http://goo.gl/wqL8Lm. Service vs system: Instead of calling a

collection of products a service, you could call them a system—a smaller system that contributes to the larger System of Progress. User whatever language is most comfortable for you.

69 Read Tim Cook's statement during an earnings report by R. Ritchie *This is Tim: Apple's CEO on the company's 2016 Q3 earnings* http://goo.gl/ujQtqX

70 Special thanks to David Wu for this example *If they don't ask about the price it's absolute bunk* http://goo.gl/Nyzr8N. Spirit Airlines financials http://goo.gl/ZexDI2. Read about customer complaints about Spirit Airlines Bloomberg's article *The most hated U.S. Airline is also the most profitable* http://goo.gl/9qGpmr

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72 Steve Ballmer's comments on the iPhone http://goo.gl/7Eqjo8

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77 Deming's quote from an interview *Management today does not know what its job is' (part 1)* http://goo.gl/glVo4i. Steve Jobs quotes http://goo.gl/z2yaUw

78 Read more about Joanna's story http://goo.gl/xG7xcE

79 Read about the Android bug Mark Ward *Android bug fear in 900 million phones* http://goo.gl/uItYZl

80   Read about Indians switching in P Rana's The Wall Street Journal article *Indians Spurn Snacks, Shampoo to Load Their Smartphones* http://goo.gl/SKWmQY

81   Special thanks to Lee Yanco for "situation" suggestion

82   Learn about Coke's story from Robert Schindler's *The real lesson of new coke: The value of focus groups for predicting the effects of social influence* https://goo.gl/kqYQF4

83   Read about attribute substitution in Daniel Kahneman and Shane Frederick's *Representativeness revisited: Attribute substitution in intuitive judgment* https://goo.gl/vX7o4N. Kahneman calls this WYSIATI in his book Thinking, Fast and Slow https://goo.gl/hVbZlW

84   A more in-depth explanation is found in Nassim Nicholas Taleb's Silent Risk (work in progress): http://goo.gl/iuniFF. A less technical explanation is by J Dunietz's *How Big Data Creates False Confidence* http://goo.gl/fk4b2q. Another good example of "big data" failure is what happened to Google Flu. See S. Lohr's article in The New York Times. *Google Flu Trends: The Limits of Big Data* http://goo.gl/XhPYRJ

85   More problems and challenges with data accumulation: (1) *The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice, and Lives* by Stephen T. Ziliak and Deirdre N. McCloskey https://goo.gl/quCDag (2) W. Edwards Deming's *On Probability as a Basis for Action* https://goo.gl/5V6OFu   (3) W. Edwards Deming's *Some Theory of Sampling* https://goo.gl/AlPn73 (4) Kate Crawford *The Hidden Biases in Big Data* https://goo.gl/MPOqUE (5) Nassim Nicholas Taleb *The Meta-Distribution of Standard P-Values* https://goo.gl/ky0vhw (6) Donald Geman, Hélyette Geman, and Nassim Nicholas Taleb *Tail Risk Constraints and Maximum Entropy* https://goo.gl/HPWFXh. A good intro of overfitting, underfitting, and the bias-variance tradeoff is B. Duncan's *Bias, variance, and Overfitting, machine learning overview* http://goo.gl/IeCljW and Scott Fortmann-Roe's *Understanding the bias-variance tradeoff* http://goo.gl/PzQLQy

86   Variations due to common cause and special cause: Shewhart called the types of variation "chance causes" and "assignable" causes. Deming renamed these "common" and "special" to make it easier for people to understand. The bus school example comes from Deming's book *The New Economics* https://goo.gl/NvtCc4

87   Persona story from Paul Adams *How We Accidentally Invented Job Stories* http://goo.gl/Wji6Ax

88 This quote is from W. Edwards Deming's On a Classification of the Problems of Statistical Inference https://goo.gl/MAot0Z

89 Get an over view of the Pepsi Challenge here http://goo.gl/2TVzOA

90 Attribute substitution from Kahneman's Thinking, Fast and Slow

91 Data for this image comes from Dr. Graybeil's paper *A dual operator view of habitual behavior reflecting cortical and striatal dynamics* https://goo.gl/TQUIsh. A great video to watch on this topic http://goo.gl/6lBp4v

92 Consumer case research: (1) Gerald Berstell's "Study what people do, not what they say." Marketing News 26 (1992). (2) Gerald Berstell and Denise Nitterhouse *Looking 'outside the box'* (3) Gerald Berstell and Denise Nitterhouse *Asking All the Right Questions* Marketing Research 13.3 (2001)

93 CCR is the type of research "Milkshake Marketing" employed

94 Read more about this story from Des Traynor's *This is Not a Map* http://goo.gl/1o8Bt3.

95 OSEMN is from: Hillary Mason http://goo.gl/t1X1d8

96 The "All models are wrong…" quote is from George Box: Box, George EP. "Science and statistics." Journal of the American Statistical Association 71.356 (1976): 791-799

97 Paul Adams explains intermissions in How We Accidentally Invented Job Stories http://goo.gl/S099Qi