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RUNNING

Iterate from Plan A to a Plan That Works





We're building more products today than ever before, but most of them fail—not because we can't complete what we want to build but because we waste time, money, and effort building the wrong product. What we need is a systematic process for quickly vetting product ideas and raising our odds of success. That's the promise of *Running Lean*.

In this inspiring book, Ash Maurya takes you through an exacting strategy for achieving product/market fit for your fledgling venture. You'll learn ideas and concepts from several innovative methodologies, including the Lean Startup, business model design, design thinking, and jobs-to-be-done. This new edition introduces the continuous innovation framework and follows one entrepreneur's journey from initial vision to a business model that works.

- Deconstruct your idea using a one-page Lean Canvas
- Stress-test your idea for desirability, viability, and feasibility
- Define key milestones charted on a traction roadmap
- Maximize your team's efforts for speed, learning, and focus
- · Prioritize the right actions at the right time
- Learn how to conduct effective customer interviews
- Engage your customers throughout the development cycle
- Continually test your product with smaller, faster iterations
- Find a repeatable and scalable business model

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Praise for Running Lean

Having been involved in thousands of products and worked side by side with hundreds of founders, Ash's approach in *Running Lean* is one of the few books that I have seen that truly reflects the reality of my experiences over my 40 years career of entrepreneurship, innovation, and new product creation. Most people just talk about a process and some tools, but the simple quote of "Love the problem, not the solution" is a statement of experience and deep expertise. This book is a great starting point for first-time founders and a guide and reminder for a seasoned founder. I not only recommend this book but re-read it once a year to keep me grounded. Thank you, Ash, for putting to words what I can't.

—Bob Moesta, author of Demand-side Sales 101 and president & CEO at The Re-Wired Group

Running Lean is a masterpiece of depth and simplicity.

—Zach Nies, managing director at Techstars

If you're looking for an entrepreneur's guidebook to launching new products, this is it.

—Mike Belsito, cofounder of product collective and organizer of INDUSTRY: The Product Conference

The new and updated version of *Running Lean* is even more actionable and valuable to serial entrepreneurs and first-time founders than the original.

-Sean Ellis, author of Hacking Growth

The 10th Anniversary edition includes great new insights and updates of the original material and at least as much brand new learning, insights, and techniques.

—George Watt, executive vice president of product and delivery at Portage CyberTech and author of Lean Entrepreneurship

From passion side project (DIY flight simulator) to a growing helicopter simulator company, *Running Lean* has helped us stay focused on systematically building our business model.

-Fabi Riesen, CEO at VRM-Switzerland (VRMotion Ltd.)

We have leveraged *Running Lean* to build a grassroots movement of intrapreneurs in our organization focused on accelerating value creation for our customers through insights-driven, evidence-based decision making.

—Marco De Polo, global head of growth acceleration & open innovation at Roche

Reading this book saved years of my life by helping me focus on building the right product versus building the product right.

—Thomas Botton, lead business design at Liip

Running Lean is one of my most gifted books for entrepreneurs.

—Ryan Martens, board member at Scaled Agile and former CTO at Rally Software

The strength of Ash's great work lies in his personal experience as an entrepreneur and his extensive research and adaptation of lean startup concepts developed by thought leaders in the innovation and entrepreneurship space.

—Barry G. Bisson, professor emeritus at University of New Brunswick and retired CEO at Propel ICT

It's hard to imagine that *Running Lean* is celebrating its 10th anniversary. It's just as relevant today to product developers.

—Jin Zhang, director of engineering at Meta

This is a book about how to improve the odds of making products that people want by quickly and efficiently testing your ideas for business success.

—David Romero, professor of advanced manufacturing and adjunct professor of technology-based entrepreneurship at Tecnológico de Monterrey

Running Lean is packed with proven techniques for founders seeking a business model that works.

—Chris Curran, entrepreneurship Professor of Practice at Texas A&M University and retired incubator CTO at PwC

Too often entrepreneurs who seek advice after completing a business plan are so emotionally tied to their plan that they are unlikely to act on the advice they receive. *Running Lean* helps change that mindset.

—Craig Elias, entrepreneur-in-residence at Chiu School of Business

Hands down *Running Lean* is the book I've recommended the most to founders. This new edition has been informed even further by years of continuous testing and tweaking by Ash.

—Anuj Adhiya, author of Growth Hacking for Dummies

THIRD EDITION

Running Lean

Iterate from Plan A to a Plan That Works

Ash Maurya



Running Lean

by Ash Maurya

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For Natalia and Ian, who gave me a new appreciation for our scarcest resource—time.

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Foreword

"Practice trumps theory." When I first read those words on Ash Maurya's blog more than 10 years ago, I knew he would be a valuable addition to what was then the fledgling Lean Startup movement. In those early days, what we needed more than anything were people who could turn Lean Startup principles into practice and then share that practice with others. Ash was a key figure in that mission, and in the years since, he's passed his knowledge on to teams, coaches, and stakeholders of all kinds, all over the world. In no small part because of people like him, the Lean Startup movement has grown and evolved in ways I never could have imagined. As the very first book in the Lean series, *Running Lean* has long been an important part of that growth. Now it, too, has evolved.

This revised and expanded new edition reflects just how much deeper and more inclusive Ash's thinking about what Lean Startup can be and do has become. It also shows his continuing commitment to helping entrepreneurs find the way to turn their passion into a sustainable business. Instead of making a few changes here and there, he's tested the information he presented in earlier editions, refined it, and then added to it in response to feedback. He calls this new approach the Continuous Innovation Framework, and it reflects where the Lean Startup movement is now, rather than where it was a decade ago. The name he's chosen indicates the understanding that, in order to survive and thrive in an increasingly—unceasingly—uncertain world, innovation isn't a one-time thing entrepreneurs do to find success. It's a state of being. Beyond that, what was once perceived as a method for building software is now widely understood to be the best way to build, as Ash says, "anything that delivers value to customers."

It still begins, however, with the fundamental idea I read on Ash's blog years ago: practice. And after a decade of it, he has a lot to share in the service of helping readers get to product/market fit faster. The third edition of *Running Lean* is an important handbook for entrepreneurs of all kinds, updated to match the evolution of how the method has been practiced since its wide adoption. It remains as true as ever that we live in an age of entrepreneurship. Many of the companies that now shape the landscape of our lives were once small startups, and their success is the result of maintaining their entrepreneurial roots even as they've grown. Others have shown that they were adept at adjusting practices that served them well in the last century to meet the needs of this one. We need many more of both of these kinds of companies to ensure our future prosperity. Their existence depends on making sure they have the knowledge and tools to thrive.

Like new products, successful companies require constant, disciplined experimentation—in the scientific sense—in order to discover new sources of profitable growth. This is true for the tiniest startup as well as for the most established organization. *Running Lean* provides a blueprint for doing this through the three phases that define the creation and scaling of a company: design, validation, and growth. Its simple, action-oriented templates provide tools that startups in all stages of development can use to help build breakthrough, disruptive new products and organizations.

It's been almost 15 years since I first wrote the phrase "lean startup" in a blog post that a few dozen people read. Since then, these ideas have grown into a movement, embraced by thousands of entrepreneurs around the world dedicated to making sure that new products and new startups succeed. As you read through *Running Lean*, I hope you will put these ideas into practice and join our community. Thank you for being part of our continuing grand experiment.

—Eric Ries February 20, 2022

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Preface

Time flies. It's been 10 years since the last edition of *Running Lean*. Since then, I've spent thousands of hours training and coaching hundreds of product teams, coaches, and stakeholders all over the world. My goal was to further test and refine the systematic step-by-step process that I laid out in the book across a diverse set of products and industries.

Along the way, I developed additional business modeling tools (the customer factory blueprint, Customer Forces Canvas, and traction roadmap), better validation strategies, and more practical techniques synthesizing concepts from a wide range of methodologies and frameworks, including Lean Startup, Design Thinking, Business Model Design, jobs-to-be-done, Systems Thinking, Behavior Design, and many more.

I found that to achieve breakthrough innovation under conditions of extreme uncertainty, you shouldn't be limiting yourself to any one of these frameworks, but rather should be using all of them. While they all overlap, each has a specific superpower that makes it stand out above the others. I've curated these superpowers into a new framework of frameworks (the Continuous Innovation Framework) that is laid out in this book.

In this 10-year anniversary edition of Running Lean, you'll find:

- More effective stress testing techniques for shaping your early business model
- A completely revised problem discovery interview script for uncovering real customer problems worth solving
- A battle-tested process for building products you know customers want and don't just hope they want

This book is the product of 10 years of rigorous testing, hundreds of product case studies, and thousands of iterations. I'm excited to share it with you.

Life's too short to build something nobody wants.

—Ash December 21, 2021

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Acknowledgments

Launching a book is no different from launching any other product. I wrote *Running Lean* using the same Continuous Innovation process described in the book.

This book would not have been possible without the practitioners and coaches who trusted me enough to openly share their unique startup/product challenges. Their unwavering commitment to stress testing the early iterations of the Continuous Innovation Framework was key to codifying it into a systematic process.

You are all co-creators.

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Introduction

A Tale of Two Entrepreneurs

I'm going to start by telling you a story about two entrepreneurs. Let's call them Steve and Larry. Both of them studied at the same university and got good grades, and after graduation, both worked at a high-tech startup where they quickly grew into key roles.

After a few years, they both got hit with an idea for a startup and decided to quit their jobs and venture out on their own. Even though I've given them names to make them more personable, I want to emphasize that what makes them similar isn't their age, gender, or geography, but that they both were struck by a "big idea" and decided to act upon it.

Now, what differentiates them is how they look a year later (Figure I-1).

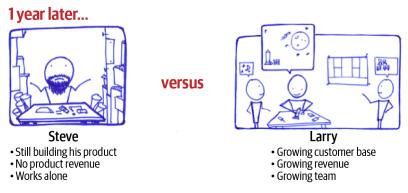


Figure I-1. Steve and Larry look quite different a year later

A year later, Steve is still building his product. He has *no product revenue* and relies on part-time freelancing work to fund his product development. And he works alone. Larry, on the other hand, has a growing customer base, growing revenue, and a growing team. How did they end up in such different places?

To answer that question, let's travel back in time.

One Year Ago...

Steve is at his desk, lost in thought. Earlier that day, his manager told him that their parent company (following on from a recent acquisition) would be shutting down their offices in a couple of months. And Steve was given the choice to either relocate to headquarters or take a severance package.

Steve reads this as a sign.

He had always planned on starting his own company when the timing was right. After graduating from university, he made a conscious decision to join a promising startup, in order to gain some firsthand experience before venturing out on his own. Even though this startup had a few bad product starts, they did eventually manage to get acquired. Steve felt really proud to have been part of the core team.

"This may be as good a time as any," he thinks to himself. He decides to take the evening to think things over.

Steve estimates that if he keeps his expenses in check, the severance package and his savings will provide him with a year of runway to get something off the ground. He does have this one augmented reality/virtual reality (AR/VR) idea that he's been noodling around in his head for a few months already...

The next day, he decides to take the plunge and accepts the severance package.

Off to the Races

Steve wastes no time getting to work. He anticipates that if he stays focused and works full time without distractions, he should be able to launch the first version of his product in three months (Figure I-2).











Figure I-2. Steve in the metaphorical garage

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He wants to go about things the "right way," so like a craftsman, he meticulously begins designing and building his product.

But little things start taking longer than expected, and the delays add up—weeks quickly turn into months.

Six Months Later

Steve is starting to get nervous. The product isn't up to his standards, and his revised estimates put the launch date out at least another three months, or maybe even six.

He'll be out of money by then.

He realizes he needs help.

Steve hits up some of his close friends and tries to recruit them, offering up generous equity in exchange. But they don't see what he sees and find it hard to justify leaving their secure, well-paying jobs (Figure I-3).



Figure I-3. Nobody sees what Steve sees

Steve attributes this setback to a "lack of vision" on his friends' part, and is even more determined to find a way to finish his product.

He decides to hit the pitching circuit and raise money.

He starts by contacting his previous startup's founder, Susan, who readily agrees to meet with Steve. Susan likes the idea and offers to introduce Steve to a number of investors.

She leaves him with this advice: "Make sure you put together a bulletproof business plan first."

Steve has never written a business plan before. So he downloads a few templates and picks one he likes. As he starts writing, he finds that he doesn't know the answers to many of the questions being asked, but he does his best anyway to complete the plan.

He's especially encouraged by the financial forecast spreadsheet. The more he plays with the numbers, the more he's convinced that he's on to something

INTRODUCTION XXI

really big. He decides to tweak a few numbers downward, though, to downplay the fantastic model he has created—it's so good, people might not believe him!

He knows a lot is at stake, so he spends many more days developing his elevator pitch, outlining his product roadmap, and polishing his 10-page slide deck.

He reaches out to Susan a few weeks later, who helps him set up a half-dozen meetings with investors. Steve is a nervous wreck during the first few meetings, but thinks they go okay. He starts to get more comfortable with practice and feels a lot better about his later meetings.

He doesn't get an instant "yes." But at least he doesn't get an outright rejection either. He debriefs Susan later, who reluctantly bursts his bubble: "Sorry, Steve, but 'you're too early for us' and 'let's touch base in six months' are code for 'we're not interested, but we're too polite to say no!" (Figure I-4).

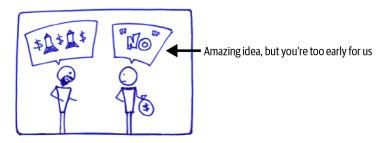


Figure I-4. Investors have mastered the art of the polite "no"

Catch-22

Steve is in a classic catch-22. He can't make people see his vision until he completes his product, but investors won't give him the resources to complete his product (Figure I-5).

What is he to do?

Steve still believes in his product and is determined to build it.

He retreats back into his metaphorical garage and decides to self-fund his idea with part-time freelancing.

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Figure I-5. Steve is in a catch-22

Progress is slow, but at least he's still working on his product nights and weekends, moving his idea forward.

Now, let's turn to Larry. He too was hit by an awesome idea a year ago, but unlike Steve, he doesn't start with a build-first or investor-first approach. That's because a build-first or investor-first approach is backward.

A Traction-First Approach Is the New Way Forward

Larry recognizes that a build- or investor-first approach used to work at a time when building products was really hard and expensive, but the world has changed.

Investors used to value intellectual property and funded teams that demonstrated they could build stuff. But this is no longer the case.

Also, because building products often used to be prohibitively expensive, teams that managed to raise funding used to have a significant unfair advantage over others, because they could get to market faster and learn faster than their competitors. Even if they got the product completely wrong the first time around, they could still manage to course-correct and get back on track because there were very few competitors nipping at their heels.

But the world is quite different today... (Figure I-6)

We are living through a global entrepreneurial renaissance. Today, it is cheaper and easier than ever to build a product, which means that there are many more people "starting up" all over the world. While this explosion in startup activity represents an incredible opportunity for all of us, it comes with a dark cloud: more products translates to more choices for both investors and customers, making it harder to stand out.

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Old world

- Hard to build product
- Not too many competitors
- Few choices for customers



New world

- Easier to build product
- A lot more competitors
- Lots of choices for customers

Figure I-6. We are living in a new world

Investors today don't value intellectual property, but *traction*. Traction isn't about being first to market, but first to market *adoption*.

Traction is evidence that people other than yourself, your team, and your mom care about your idea—aka customers. More importantly, traction is evidence of a working business model.

—— TIP

Investors today don't fund solutions that work; they fund business models that work.

But how do you demonstrate traction without a working product? Aren't we back to the catch-22? Not really, because Larry knows that customers today are constantly bombarded with a multitude of product choices. When customers encounter a half-baked product, they don't turn into beta testers and give you feedback; *they leave*.

Without customer feedback it's too easy to fall prey to the "build trap," where a breakthrough always seems one killer feature away but remains ever elusive. You end up spending needless time, money, and effort building something nobody wants, until you run out of resources.

Larry has experienced this build trap one too many times before with his startup's past products, and he decides to level up his game and start with a better foundation for his product. A fundamental mindset shift for doing that is *starting with problems before solutions*.

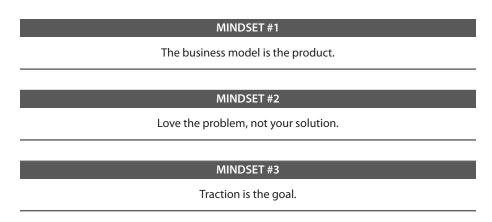
—— NOTE

Customers don't care about your solution; they care about their problems.

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He understands that if his product doesn't solve a big enough problem for his customers, no amount of technology, patents, or giveaways can save his business model.

This leads to a number of epiphanies for Larry:



Larry spends half an afternoon sketching out a business model design for his idea using a 1-page template (Lean Canvas) that was recommended to him by one of his trusted mentors.

He then tests the viability of his business model using a quick back-of-theenvelope calculation, and from there builds out a traction roadmap that highlights his key milestones. This helps him map out a bottom-up go-to-market validation strategy (Figure I-7).

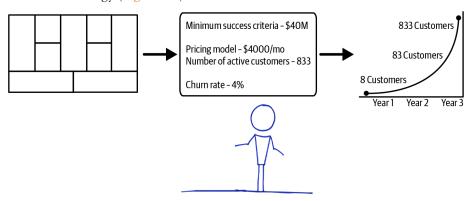


Figure I-7. Larry does some quick business modeling of his idea

A key difference of his validation strategy from Steve's is that he prioritizes testing what's riskiest versus what's easiest in his business model.

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Larry correctly recognizes that in the new world what's riskiest for most products has shifted, with customer and market risks outweighing technical risks.

The challenge question today isn't "Can we build it?" but "Should we build it?"

This is why he decides to take a traction-first approach versus a build-first or investor-first approach.

MINDSET #4

Right action, right time.

And here's the really counterintuitive bit: you don't need a working product to uncover problems worth solving, or even to land your first batch of paying customers.

Unlike Steve, who is still perfecting and polishing his product a year down the road, Larry manages to define his minimum viable product (MVP) in less than eight weeks, with a growing customer pipeline.

- NOTE -

A minimum viable product (MVP) is the smallest solution that creates, delivers, and captures customer value.

Following this approach, Larry avoids spending needless time, money, and effort building a product he hopes customers will buy and instead builds a product he knows customers will buy.

- NOTE

Steve is following a Build-Demo-Sell playbook, while Larry is following a Demo-Sell-Build playbook.

This puts Larry's idea on solid footing, and he spends the next four weeks building out a first version of his solution which is aimed not at everyone, but at his ideal early adopters. Once his MVP is ready, he doesn't do a big-bang marketing launch, but rather soft-launches his product to just 10 early adopters and starts charging them from day one.

His logic for starting small and making a bold promise is putting his money where his mouth is. He thinks to himself: "If I can't deliver value to my first

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10 handpicked customers, what makes me think I'll be able to do that with thousands of customers trying the product on their own?"

MINDSET #5

Tackle your riskiest assumptions in stages.

A nice side effect of starting small is that Larry can afford to provide a high-touch customer experience. This lets him sidestep a few shortcomings of his MVP and still overdeliver on value, while maximizing learning from his customers.

His first batch of customers is blown away by Larry's attention to detail and responsiveness to their needs. He manages to convert all of them into true fans while continually refining his MVP.

MINDSET #6

Constraints are a gift.

Even though Larry is a jack-of-all-trades, he recognizes that he can't scale his business on his own. So he invests a third of his time in pitching his vision to potential cofounders. He doesn't look for people just like him, but rather searches for people with complementary skill sets to his. He knows that:

- Good ideas are rare and hard to find.
- Good ideas can come from anywhere.
- Finding good ideas requires lots of ideas.

The fact that Larry already has happy paying customers (early traction) and a growing customer pipeline enables him to attract and recruit his dream team.

Too many teams take a divide-and-conquer approach to testing their business model, where they split their focus based on individual team member strengths. For example, hacker types typically focus on products, and hustler types typically focus on customers. This spreads the team thinly across many different priorities and is suboptimal.

Larry instead harnesses the full potential of his team by getting them to collectively focus on what's riskiest rather than what's easiest in the business model. As the risks in a business model are constantly shifting, he establishes a

INTRODUCTION XXVII

regular 90-day cycle in order to maintain a sense of urgency and keep his team externally accountable.

MINDSET #7

Hold yourself externally accountable.

Each 90-day cycle is broken into 3 key activities:

Modeling

Larry's team kicks off each 90-day cycle by updating and reviewing the business models (using a Lean Canvas and traction roadmap). This helps the team constantly realign around a common set of goals, assumptions, and constraints.

Prioritizing

The team then collectively prioritizes the riskiest assumptions and proposes a number of possible validation strategies (campaigns) for overcoming these risks.

Testing

As it's hard to know which campaigns will work at the outset, instead of making a few large bets, the team makes many small bets on the most promising campaigns using fast iterative experiments. The learning from these experiments helps Larry's team identify and double down on the best campaigns (Figure I-8).

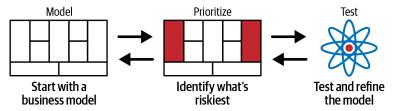


Figure I-8. The Model-Prioritize-Test cycle

MINDSET #8 Place many small bets.

MINDSET #9

Make evidence-based decisions.

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Each 90-day cycle ends with a cycle review meeting where the team reviews what they did and what they learned, and plans for what's next.

This Model-Prioritize-Test flywheel allows the team to systematically search for a repeatable and scalable business model. The journey isn't a straight shot to success. There are twists and turns, dead ends, and backtracking. But because Larry's team is moving fast and constantly learning, it's able to avoid huge big-bang failures by making many small course corrections along the way.

MINDSET #10

Breakthrough requires unexpected outcomes.

By the end of the year, Larry's customer base is growing, his revenue is growing, and so is his team. His business model is on track to achieve product/market fit.

What Determines Success Isn't Differing Skill Sets But Differing Mindsets

The difference between Steve and Larry is not differing skill sets but differing mindsets.

Steve is operating like an Artist and is primarily driven by his love for his product (solution).

You can easily substitute Artist with Software Developer, Designer, Creative, Maker, Writer, Author, Hacker, Inventor...

He takes a build-first approach, which in today's world is highly risky.

Larry, on the other hand, is operating like an Innovator.



He recognizes that we are living in a new world where the rules have changed. Today, it is no longer enough to simply build what customers say they want because, by the time you build that, you'll have learned that what they really wanted was something quite different.

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In this new world, the only way to ensure you build what customers want is to engage them continuously.

The Stakes Are Much Higher This Time

The old way of building products used to work at a time when there were huge barriers to entry and few competitors. Even if you got the product completely wrong, you had time to course-correct and get back on track.

But fast-forward to today, and it has become cheaper and faster than ever to introduce new products, which means there is a lot more competition than before—both from incumbents and from new companies starting up all over the world.

In the old world, failing to deliver what customers wanted led to failed projects. But in the new world, continually failing to deliver what customers want leads to total business model failure.

This is because customers today have a lot more choices than they did before. If they don't get what they want from your product, they simply switch to something else.

At the other end of the spectrum, the most successful companies today realize that good ideas are rare and hard to find, and that the best way to find the next big idea is to quickly test lots of ideas.

While the early adopters of this new way of working were high-tech startups like Airbnb and Dropbox, over the years continuous innovation has been increasingly applied in many different domains, and it works even at massive scale. Some of the most valuable companies in the United States, like Google, Netflix, Amazon, and Facebook, all practice a culture of Continuous Innovation.

Speed of Learning Is the New Unfair Advantage

Companies that continuously learn fast outlearn their competition and get to build what customers really want.

This is the essence of *Continuous Innovation*, and it's the approach that Larry takes. When you're going really fast under conditions of extreme uncertainty, you can't afford to spend long cycles analyzing, planning, and executing your idea. You need a more iterative approach that involves continuous modeling, prioritizing, and testing.

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Succeeding in the New World Requires New Mindsets

Too many people fail at Continuous Innovation because they start in the wrong place, cherry-picking tactics without first internalizing the underlying mindset behind them.

NOTE
Mindsets define how we perceive the world around us.

If you believe that we are indeed living in a new world, then it should naturally follow that a new world requires new mindsets. Here are the 10 mindsets that power each of the 3 activities in the Continuous Innovation Framework:

1. Model

- Mindset #1: Your business model is the product.
- Mindset #2: Love the problem, not your solution.
- Mindset #3: Traction is the goal.

2. Prioritize

- Mindset #4: Right action, right time.
- Mindset #5: Tackle your riskiest assumptions in stages.
- Mindset #6: Constraints are a gift.
- Mindset #7: Hold yourself externally accountable.

3. Test

- Mindset #8: Place many small bets.
- Mindset #9: Make evidence-based decisions.
- Mindset #10: Breakthrough requires unexpected outcomes.

We'll touch on each of these mindsets as we move through the book.

You Can't Afford to Wait for an Idea Whose Time Has Come

It's been a little over 18 months since Steve quit his day job and ventured out on his own. Even though his savings ran out six months ago, he has hit a comfortable groove using freelance consulting to keep his product development going.

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He's come to terms with the fact that bringing his vision to life is going to take time, but he's not in a hurry. Rome, after all, wasn't built in a day.

It's a Tuesday morning, and Steve is in line waiting to order his coffee before heading to a client site for a meeting. He gets a text message from an old buddy of his: "Have you seen what Virtuoso X just launched? It's your idea, Steve!!!"

Steve clicks the link, scans the page, then goes white.

Virtuoso X's product does look very similar to what he has been working on for the last year and a half. They just got covered by TechCrunch and announced a big fundraise.

He starts feeling sick to his stomach and leaves the coffee shop. He reschedules his client meeting from his car and heads back to his home office instead.

There, he spends the rest of the day poring through Virtuoso X's site, trying out their app, and searching online for anything he can find on them. After several hours, he concludes that while the idea is indeed similar, Virtuoso X's implementation of the product is quite different from his.

Steve feels a bit relieved because he believes he still has the more elegant solution. But that relief is short-lived, as new anxiety sweeps over him: "What good is a better solution if I launch too late or never get to launch it?"

He needs to kick things back into high gear.

Maybe now he can get the support of his developer friends who failed to see his vision earlier? Or maybe now he'll have an easier time raising funds from investors?

A million ideas start racing through his head. Where should he start?

He decides to reach out to Mary for advice.

Steve used to report to her in his previous startup. Like him, she too had taken the severance package after their startup got acquired and then shut down. He had run into her at an event a few months back and learned that she had also started a new company with a few other former coworkers. And by all accounts, they seemed to be doing quite well. They already had over 30 employees, paying customers, and venture funding.

He shoots her an email, briefly outlining his situation, and asks to meet for lunch.

He gets a near-instant reply: "Let's meet for tacos tomorrow at noon—usual spot."

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Steve Learns About Minimum Viable Products

Steve gets to the restaurant a few minutes before noon and grabs a quiet table in the back. As he settles in, he notices a text message: "Sorry, running 10 minutes late—deployment day. Please order me the usual, and I'll get the next one."

He takes the extra time to organize his thoughts and doodles out a high-level plan in his journal:

- 1. Secure seed funding.
- 2. Hire three developers.
- 3. Finish and launch the platform in three months!

Just then, Mary walks in.

"Sorry for being late, Steve. We have a big rollout this week and we've been fighting several production issues all morning. I would normally have rescheduled, but your email sounded urgent. What's up?"

Steve pulls out his phone, hovers it over the table for a few seconds, and then asks Mary to take a look. A bewildered expression flashes across Mary's face and she stretches out her hand as if to grab something on the table, but her fingers just wave through the air. She bursts out laughing.

"This is the most realistic AR app I've ever seen. This Coke can and glass of ice sitting next to it are so inviting. It's making me thirsty."

"I'm glad you think so. I've developed a way to render any real-world object as a 3D model inside an AR or VR application without having to write any code or use complex modeling software. All you need to do is take a few pictures of the object using the phone's camera, and the rendering engine builds the 3D model in a couple of minutes. I generated these models while I was waiting for you."

"Neat. What's the name of your project?"

"Altverse—as my ultimate vision is creating an alternate virtual universe as rich as the one we currently inhabit."

Mary nudges Steve to go on.

Steve takes the next five minutes to summarize what he's been up to over the last year, describing the Virtuoso X launch and his high-level plan for moving forward.

Mary listens patiently and then asks him a simple question. "Would you rather spend the next six months pitching to investors or pitching to customers?"

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Seeing the puzzled look on Steve's face, she goes on to explain that even in the best-case scenario, raising money without traction is typically a six-month process and a full-time job. "And during that time you're not going to make much progress on your product. So given your estimates, you're probably looking at nine months to a launch."

"I can't afford to wait nine months!" blurts out Steve. "Virtuoso X has the first-mover advantage. By then, they'll have cornered the entire market!"

Mary adds, "I know this will sound like a cliché, but competition is a good thing. Competition helps validate a market, and most first movers really have a disadvantage, not an advantage. Facebook, Apple, Microsoft, Toyota—I can keep going—weren't first movers. They were all fast followers."

Steve isn't convinced, but nods his head anyway.

"Okay...but I still need to launch something in less than nine months."

"That, I definitely agree with. Yes, you do."

"But for that, I need more developers. And I can't hire more developers without money—"

Mary cuts him off. "You need to get to an MVP that customers want."

"An MVP?"

"A minimum viable product."

"Is that like a beta?"

"Sort of...but not really. A minimum viable product is the smallest solution you can build that delivers monetizable value to your customers. I know you have a big platform vision in mind, but customers don't care about platforms. At least, not at the beginning. They care about solutions that solve their immediate problems. You need to find the smallest solution that solves a big enough customer problem and deliver that. To do that, you have to really narrow down on your ideal early adopters first and not go too broad. When you're trying to market to everyone, you reach no one."

Just then Mary's phone pings, and she glances at the screen. "Sorry, I'm needed back at the office. My best advice for the moment is to read everything you can find on MVPs. Investors today don't fund ideas, or product development, but traction. And you need customers to demonstrate traction."

Steve interjects, "How much traction is enough?"

"If you can demonstrate any traction at all, it sets you apart from the pack. That's what we did before we spoke to any investors. Having just five paying customers gave us leverage and completely changed the dynamics of

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fundraising for us. Today, we have 10 times that number of customers, but without those first 5 our pitch would have just been a bunch of promises. Let's meet again once you've defined your MVP."

Steve thanks Mary for her time as she takes one last bite of her lunch and then sweeps out of the restaurant.

Don't Start with an MVP

It's been three weeks to the day since Steve's meeting with Mary. He's meeting with her again to give her an update.

"I followed your advice. I read up on MVPs, and since I had already built out quite a bit of the product, I was able to launch my MVP within a week...but I don't think it's working."

He pauses for a second, then goes on. "I've got lots of users signing up every day, which is great, but no one has upgraded yet, and retention is quite low—most users never come back after the first day. I've been running all kinds of A/B tests and even pivoted a few times. I've concluded that my MVP isn't good enough. The product is still missing several core features. Though I think I've finally figured out the killer feature, and I'm planning on building that next—"

Mary cuts him off. "Let's back up a bit. Who are these users? And where are they coming from?"

"I announced my product launch in a few online communities, like Product Hunt and Hacker News. That announcement generated some buzz. Some of the traffic is still coming from there. The rest are coming from online ads. I set up a small budget of \$25/day."

"Okay. And who are these users? Have you talked to them?"

Steve looks a bit surprised. "Talked to them? No. But I've been measuring everything they do using analytics. That's how I know retention is really low."

"I see. We made a similar mistake after our MVP launch. We stopped talking to our customers and relied solely on metrics to guide us. The problem with metrics is that they can only tell you what's going wrong, not why. We kept guessing at what the problem was, but nothing we did worked. It was only when we started talking to our customers again that we were able to truly understand why things weren't working, and turn things around. You have to keep talking to your users, Steve."

Steve clears his throat. "Keep talking to my users? I've never talked to any of them."

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It's now Mary's turn to look confused. "Huh? Then, how did you define your MVP?"

"Well, I had built up so much of the platform already that I was able to quickly launch a small reference application that showcased its power. You said I needed to ship something. Isn't the premise of the MVP to rush to ship a first release, which kicks off the learning cycle...then use fast experiments to iterate and refine the product?"

Mary sighs. "Sorry, Steve, I should have warned you that *MVP* is quite a loaded term with many different definitions and approaches out there. Yes, a lot of people subscribe to that approach. And to be fair, it's still a better approach than spending a year building out a more complete product, only to find out that you've overbuilt—or worse, built something nobody wants."

Mary notices that Steve blushes a bit at her last comment. She chooses to ignore it and goes on. "But simply throwing your best guess at a solution, no matter how small, over the fence, and calling that an MVP, doesn't guarantee any better results."

"Doesn't the Lean Startup Build-Measure-Learn loop help you iterate and refine the MVP?" Steve asks.

"In theory, yes, but a lot of teams just get stuck. Think of the Build-Measure-Learn loop as a fast idea validator. If you put a reasonably good idea in *and* manage to attract early adopters, it is possible to iterate and refine your MVP as you describe. But if you start with a bad idea, all you learn is that your idea sucks. And then you're stuck."

"Why is that?" Steve asks.

"Because customers today have lots of choices. If your MVP fails to resonate with them, they don't turn into testers and patiently deliver you feedback on how to improve your product. They simply leave—a lot like your low-retention users. You're then left guessing why things aren't working, which kicks off the search for the mythical killer feature—the one that always feels like it's just around the corner. Sometimes you get a lucky break, but more often than not you find yourself going around in circles, trying out one idea after another, and are never able to break through. The build trap ensues."

Steve's eyes widen, as Mary has just succinctly summarized his situation.

He then asks her the obvious question. "If success is predicated on the quality of the starting idea, how does one start with a reasonably good idea?"

"That is the right question, Steve. You do that by focusing on problems before solutions. The challenge today isn't building more features, but uncovering what to build."

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A puzzled look comes over Steve's face, so Mary adds, "Think of it this way... starting with a solution is like building a key without a door. Sure, you can build a great-looking key quickly, but then you spend a whole load of time searching for the right door to open. You might get lucky or brute-force your way in, but where you end up is usually not where you expected to be."

She waits for a nod from Steve, then goes on. "If you simply flip this around and start with doors, or problems worth solving, key-building becomes a lot easier. You start building keys to doors that actually take you places."

"And there is a process for doing this?" Steve inquires.

"Yes. That was what I was hoping you'd find in your research on MVPs. We didn't start with building an MVP in our startup, but an offer. We first sketched out several variants of our idea on a Lean Canvas, which is a rapid idea modeling tool. That helped us identify and home in on several promising customer-problem-solution possibilities. We then set up some two dozen customer interviews to validate our customer and problem assumptions. Once we did that, defining the solution was a piece of cake. But even then, we didn't rush to build out an MVP. We built a demo instead and assembled an offer that we delivered to prospects over many more interviews. Only when we got enough customers to buy into our offer did we start building out the MVP. What we eventually built looked very different from what we thought we'd build."

Mary pulls out her phone and looks up an illustration of the concept of problem/solution fit, which she shows to Steve (Figure I-9).



Figure I-9. The problem/solution fit process

"Ah, so that's what you meant the last time by 'defining' an MVP?"

"Exactly. You raise your odds of success significantly by spending the requisite time first defining the MVP, then validating it using an offer, before building it. Think of it as Demo-Sell-Build versus the more traditional Build-Demo-Sell approach."

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"And how long did all of this take you? It seems like a lot of steps."

"It took us about 90 days to go from just a napkin sketch to problem/solution fit, where we secured our first 5 paying customers. And yes, there are more steps than simply rushing to build an MVP, but if you follow the process and stay disciplined, you end up with a mafia offer."

"A mafia offer?"

"Yes—an offer your customers cannot refuse. You know, from the movie *The Godfather*. Unlike in the movie, you don't strong-arm your customers, but instead show them something so compelling they just can't turn it down. At the end of the eight weeks, we ended up with five paying customers who were pushing us to deliver them the MVP quickly, versus the other way around."

"Hmm...this is a very different approach to product development than I'm used to, but I'm starting to see the logic of it. But I've already launched my product and have users. Can I still apply this process to my product, or do I have to start all over from scratch?"

"You can definitely apply this process to an existing product, provided you're willing and open to trying a new way. As you just pointed out, this approach is different, and different often feels uncomfortable. The biggest obstacle for us was unlearning old product development habits and instilling new mindsets across the entire team. The good news is that the learning and results come quickly, so you don't have to run on faith alone."

"I still have a hundred tactical questions on how to actually do any of this. How do you get users to talk to you? How many people do you talk to? What do you say to them? You've been very generous with your time, but can you guide me a little further?"

"Definitely, Steve. This process, like any, has its fair share of sand traps and pitfalls. The biggest one is our own bias or love for our solution—our Innovator's Bias. We selectively, and even unconsciously, choose to only pay attention to what justifies building the solution we've already envisioned. Shifting to a problem-first mindset sounds simple, but it isn't easy."

"Are there any tools or resources you can point me to?" Steve asks.

Mary smiles. "Oh yes. I'll send you a list of resources, tools, and actual customer interview scripts we used and continue to use to train our team. Uncovering problems worth solving isn't limited to just the MVP phase...it's key for everything that comes next also. I'll warn you again that this will feel a bit weird and even uncomfortable at first. The key is to be patient and follow the process, and the results will come."

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"At this point, I've spent 18 months doing things my way and it hasn't worked. I'm open to trying—no, testing—anything."

Mary smiles again. "Great! Let's plan on talking again soon."

There Is a Systematic Approach to Entrepreneurship

On his drive back to the office, Steve can't help but replay his last conversation with Mary in his mind.

Is it really possible to build what customers want (what Mary described as a mafia offer) just by interviewing customers?

When he gets back to his office, he finds an email from Mary waiting in his inbox. As promised, she has sent him an extensive list of resources and a high-level roadmap (Figure I-10).

Steve quickly recognizes *product/market fit* on the roadmap, but a lot of the other terms are foreign to him.

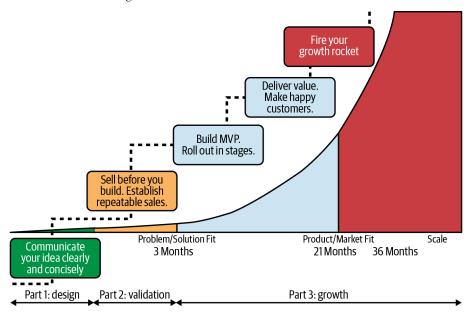


Figure I-10. The Continuous Innovation roadmap

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He then reads Mary's email:

Hi Steve,

As promised, here are the links to the Continuous Innovation Framework and the step-by-step playbooks we use.

There are lots of dots to connect, so be patient.

The Continuous Innovation Framework uses 90-day Model-Prioritize-Test cycles, so be sure to start at the beginning, with the modeling work. Then work your way through the other stages.

Lastly, remember that learning anything new often requires unlearning old habits. Apply and test the framework rigorously.

If you get stuck, you know where to find me.

Mary

Steve gets to work, and over the course of several weeks, he learns:

- How to deconstruct his idea into a business model
- How to test whether his idea is worth pursuing
- How to identify and prioritize the riskiest assumptions in a business model
- How to stress test his riskiest assumptions using small and fast experiments
- How to use customer interviews to learn from customers
- How to achieve traction without a product
- How to pitch to customers so they buy
- How to operate and make decisions under conditions of extreme uncertainty

Over the next several months, Steve manages to bring his product back on track with paying customers, growing revenue, and a growing team.

This book shows you how.

About Me

Hi, my name is Ash Maurya and I'm the founder of LEANSTACK and the creator of the popular business modeling tool Lean Canvas. I too used to be a Steve. I too was hit by an awesome idea. An idea so good I never told anyone but close friends sworn to secrecy.

I spent a year building out my "big idea" in stealth. And, like Steve, I too struggled to get other people to see what I saw.

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It took me roughly seven years to transition from Steve to Larry, and there's been no looking back ever since. This is my personal mantra: "Life's too short to build something nobody wants."

I attribute all the success and attention I've received over the years with my books and tools to this new way of thinking about and approaching products.

LEANSTACK was founded to help the next generation of entrepreneurs avoid these same mistakes.

From here on out, this isn't a story of two entrepreneurs, but just one entrepreneur: Steve.

Steve, not Larry, is the hero of our story.

How This Book Is Organized

One of the most significant milestones for a startup is getting to product/market fit (aka the inflection point in the hockey-stick curve when a product's traction starts rapidly growing). The reality, of course, is that 80% of products never get there.

Operating under conditions of extreme uncertainty is the reason often cited for this low rate of success, and also why the journey prior to product/market fit is often described as aimless wandering (Figure I-11).

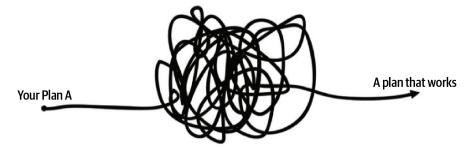


Figure I-11. Aimless wandering

But it doesn't have to be this way. Yes, the early stages of a product are riddled with extreme uncertainty, but they don't have to be messy. With the right mindsets and thinking processes, the early stages can be systematically traversed much like you would a labyrinth (Figure I-12).

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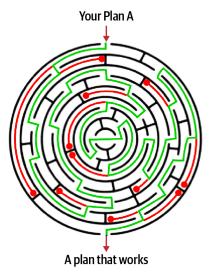


Figure I-12. The idea labyrinth

The objective is to get out of the maze with a business model that works before running out of resources. Yes, there will be twists and turns, dead ends, and backtracking, but this process is systematic, unlike the tangled mess of aimless wandering.

This book outlines just such a step-by-step systematic process for taking an idea from an initial spark to product/market fit, breaking the journey into three parts.

Part I: Design

A key mindset for putting the ideas in this book into practice is viewing your business model, not your solution, as the true product of your startup. As with any product, the first step is design.

Part I walks through the process of deconstructing your initial vision (or Plan A) into a business model. I'll then show you how to stress test your business model design to avoid the most common pitfalls that trip up early-stage products. Finally, you'll learn how to communicate your idea clearly and concisely to others and get them to see what you see.

Part II: Validation

While a starting business model blueprint is key for driving clarity and focus, it's important to recognize that all models are abstractions of reality, not reality

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themselves. In other words, they must be validated with evidence, not taken on faith.

Part II shows you how to iteratively test your business model in stages using 90-day cycles, starting with the first validation stage: problem/solution fit. You'll learn how to use the Demo-Sell-Build process to test demand for your product and secure paying customers without having to first build out your product.

Part III: Growth

Achieving problem/solution fit sets you up for building a product you know customers will buy, rather than just hope they will buy. The next step is launching your product (MVP) and iterating your way toward product/market fit

Part III shows you how to maximize your product launch for speed and learning while constantly focusing on what's riskiest. Rather than launch your product to everyone, you'll learn how to use a stage-based launch to first test your business model at a small scale and establish repeatability before pursuing growth.

Is This Book for You?

The principles covered in this book can be applied to launching a new product either at a startup or a large company. While tactics may vary, the principles are universal.

Throughout this book, I'll use the term "entrepreneur" to refer to anyone charged with bringing a bold new product to life.

Running Lean is for:

- Aspiring and serial entrepreneurs
- Corporate innovators and intrapreneurs
- Product managers
- Makers and visionaries who want to level up and build the next generation of products that matter

Does It Work for Services and Physical Products?

In this book, a product refers to anything that delivers value to customers. This can be a digital product, a physical product, or a service. So yes, all the concepts in this book can be readily applied to any type of product.

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Practice Trumps Theory

Everything in this book is based on firsthand experiential learning and experimentation on my own products, and across thousands of other products built by teams I have advised and coached over the last 10 years.

I encourage you to rigorously test and adapt these principles for yourself.

No framework can guarantee success. But a good framework can provide a feedback loop for making better evidence-based decisions in the face of extreme uncertainty.

That is the promise of this book.

Let's begin.

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PARTI

DESIGN

We live in an age of unparalleled opportunity for innovation. With the advent of the internet, cloud computing, and open source software, the cost of building products is at an all-time low. Yet, the odds of building successful startups haven't improved much: *most new products still fail*.

The more interesting fact is that of those startups that succeed, two-thirds report having drastically changed their plans along the way. So, what separates successful startups is not necessarily starting with a better initial plan (or *Plan A*), but finding a plan that works before running out of resources.

Up until now, finding this better Plan B or C or Z has been based largely on gut, intuition, and luck. There has been no systematic process for rigorously stress testing a Plan A. That is what *Running Lean* is about. This book presents a systematic process for iterating from Plan A to a plan that works before running out of resources.

1

There Is an "I" in Vision

All men dream: but not equally. Those that dream by night in the dusty recesses of their minds awake to find that all was in vanity: but the dreamers of day are dangerous men, for they may act their dreams with open eyes, to make it possible.

—T.E. Lawrence, Lawrence of Arabia

The media loves to celebrate stories of visionaries who saw the future and charted a course to intersect it with a "groundbreaking" new product offering. In a visionary product launch there is no place for being too early or too late.

While these make for great stories, behind every visionary story usually lie years of hard work, experimentation, and learning. Even the iPad, described by Steve Jobs at its unveiling as a "revolutionary device," was several years in the making, built on at least three generations of software and five generations of hardware.

The way these stories actually play out is never quite as simple as we're led to believe. First, there is never a single customer adoption curve, but a whole family of them, with each customer segment adopting solutions at different rates. You launch based on your best understanding of who you think the customers are and what they want (or will want). Odds are you won't find yourself on the curve you were targeting. From here, you iterate until you intersect with the best curve (aka *achieve product/market fit*), which likely will not be your original one (aka *the pivot*).

Unlike the visionary launch, which aims to perfectly hit the mark, it is possible to start either to the left (too early) or the right (too late) of the customer adoption curve, as long as you can learn where the curve is heading and eventually intersect it before running out of iterations (cash).

It All Starts with an Idea Spark

Everyone gets hit by ideas when they least expect them (in the shower, while driving, etc.). Most people ignore them—entrepreneurs choose to act on them.

One of the major challenges with ideas is that at the outset, all ideas seem amazing. Having acted on some of my own ideas in the past and experienced all of being too early, too late, and totally off mark, I believe that what's more important than acting on an idea is having a process to quickly separate good ideas from bad ideas.

While passion and determination are essential attributes needed to drive a vision to its full potential, left unchecked they can also turn the journey into a faith-based one driven by dogma.

NOTE -

Reasonably smart people can rationalize anything, but entrepreneurs are especially gifted at this.

Most entrepreneurs start with a strong initial vision and a Plan A for realizing that vision. Unfortunately, most Plan As don't work.

While a strong vision is required to create a mantra and make meaning, you should strive to uphold a strong vision with facts, not faith. It is important to accept that your initial vision is built largely on untested hypotheses (or guesses).

Don't Write a Business Plan; Use a Lean Canvas Instead

The first step to driving clarity around your idea is deconstructing your big idea into a set of clearly articulated assumptions. Traditionally, we have used business plans for this purpose.

Have you ever written a business plan? Did you enjoy the process? I have posed these two questions to thousands of makers, entrepreneurs, and innovators around the world, and here's what I found: only 30% of them had ever written a business plan, and less than 2% enjoyed the process.

I posed a different question to the investors (and stakeholders) in the room: "Do you read the entire business plan?" Again, less than 2% admitted to doing so, citing a preference for the 1-page executive summary, 10-page slidedeck, or 30-second elevator pitch.

Why then are we still forcing people to spend weeks writing a 40-page document that no one reads and that is seldom kept up-to-date?

The problems with traditional business plans are:

They take too long to write

In order to get your idea green lit, you are often asked to write a 30-page business plan and create a 5-year financial forecast and an 18-month product roadmap. This can easily take up weeks, if not months, of your time.

PART I: DESIGN 3

They are best guesses at best

The reason entrepreneurs and innovators choose to forgo the heavyweight business plan isn't because they are lazy. Rather, it's because at the earliest stages of any new project, many assumptions are simply unknowable.

NOTE	
At the earliest stages of a product, you don't know what you don't know.	

When you're working really fast and under conditions of extreme uncertainty, as is required for Continuous Innovation, you can't afford to rely on static plans—you need dynamic models. The Lean Canvas (Figure I-1) is one such dynamic model.

Problem List your customers' top 3 problems	Solution Outline possible solutions for each problem	Unique value proposition Singular, clear, compelling statement that turns an unaware visitor into an interested prospect		Unfair advantage Something that can't be easily copied or bought	Customer segments List your target customers and users
Existing alternatives List how these problems are solved today	Key metrics List key numbers telling how your business is doing today	High-level concept List your X for Y analogy (e.g., YouTube = Flickr for videos)		Channels List your paths to customers	Early adopters List characteristics of your ideal customer
Cost structure List your fixed and variable costs				ie streams cource of revenue	

Lean Canvas is adapted from Business Model Canvas and is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License.

Figure I-1. The Lean Canvas

The Lean Canvas is my adaptation of Alex Osterwalder's Business Model Canvas, and it's the first model we use in the Continuous Innovation Framework.

A Lean Canvas replaces a long and boring business plan with a 1-page business model that takes 20 minutes to create and that actually gets read.

If you have ever written a business plan or created a slide deck for investors, you'll immediately recognize most of the building blocks on the canvas. We'll cover these blocks in more detail in Chapter 1. A key point I'd like to drive home, though, is the first Continuous Innovation mindset.

MINDSET #1

Your business model is the product.

I purposely made the Solution box take up less than one-ninth of the entire canvas. This is because, as entrepreneurs, we are most passionate about the solution and what we are naturally good at—but, as we saw in the book's introduction:

- Your solution, while important, typically isn't what's riskiest, and you should focus on what's riskiest first.
- Investors don't care about your solution; they care about traction (customer engagement).
- Customers don't care about your solutions; they care about their problems.

Your job, then, isn't just building the best possible solution, but owning the entire business model and making all the pieces fit.

Recognizing your business model as a product is empowering. Not only does it let you own your business model, but it also allows you to apply well-known techniques from product development to building your company.

The Business Model Design Playbook

The first step to building out a product is starting with a design blueprint or sketch. Similarly, the first step to building out a business is starting with business model design. A business model design blueprint helps you deconstruct your idea into a set of key assumptions (captured on a 1-page Lean Canvas). You then prioritize your riskiest assumptions and formulate a stage-based validation strategy for bringing your idea to life (see Figure I-2).

PART I: DESIGN 5

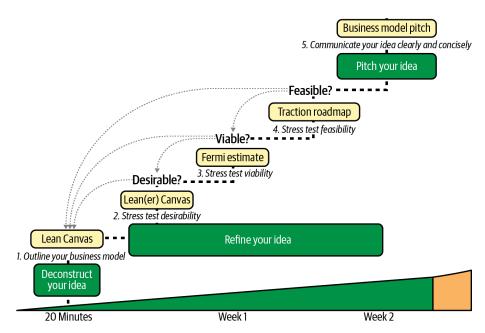


Figure I-2. The business model design playbook

In Part I of this book, you'll learn how to:

- Deconstruct your idea on a Lean Canvas (Chapter 1)
- Stress test your idea for desirability (Chapter 2)
- Stress test your idea for viability (Chapter 3)
- Stress test your idea for feasibility (Chapter 4)
- Communicate your idea clearly and concisely (Chapter 5)

Deconstruct Your Idea on a Lean Canvas

When taking on a complex project, like say building a house, you wouldn't start by putting up walls. You'd start with some kind of an architectural plan or blueprint—even if it's just a sketch.

Building and launching an idea is no different.

In this chapter, you'll learn how to deconstruct your idea into a set of key assumptions using a 1-page Lean Canvas (Figure 1-1).

A Lean Canvas can be used to describe a business model, a product release, or even a single feature, making it a highly popular business planning and product management tool that's used by millions of people around the world.

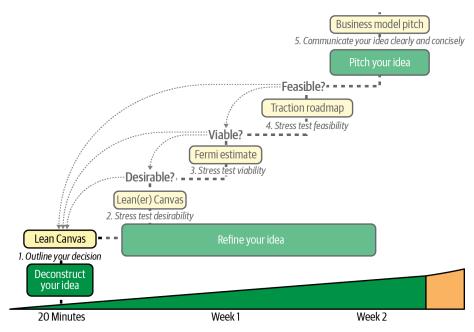


Figure 1-1. Deconstructing your idea on a 1-page Lean Canvas

Sketching Your First Lean Canvas

A business model describes how you create, deliver, and capture value (get paid) from customers.

-Saul Kaplan

In this section, I'll outline the process of sketching a Lean Canvas for your idea. The result will be a description of how you plan to create, deliver, and capture value from your customers. Here are some guidelines to keep in mind:

Sketch the canvas in one sitting

While it's tempting to iterate endlessly on the whiteboard, your initial canvas should be sketched quickly—ideally in less than 20 minutes. Unlike a business plan, the goal with a Lean Canvas isn't to achieve perfection, but to take a snapshot.

Avoid groupthink

If you're part of a team, avoid creating a Lean Canvas as a group exercise. Instead, have each team member create their own snapshot first. Then get together as a group and reconcile your canvases into a single Lean Canvas. Not only will this encourage more independent perspectives and avoid groupthink, but it will also save you time.

Know that it's okay to leave boxes blank

If you're unsure about a particular box, it's okay to leave it blank. We'll cover the boxes on the canvas in more detail in subsequent sections.

Embrace a 1-page constraint

If you can't describe your idea on a single page, it's probably still too complex to explain. Describing your idea on a single page is not about using smaller fonts, but fewer words. It's a lot easier to describe something in a paragraph than in a single sentence. Respecting the space constraints of the 1-page canvas is a great way to distill your business model down to its essence.

Think in the present

Business plans try too hard to predict the future, which is impossible. Instead, write your canvas with a "getting things done" attitude. Based on your current stage and what you know right now, what are the next sets of hypotheses you need to test to move your product forward?

Remember there is no right order for sketching a Lean Canvas

Sketching a Lean Canvas is like putting together a jigsaw puzzle. There is no right place to start or specific order to follow, so start with whatever box you think you understand the best and build out the rest of the canvas from there. If you still aren't sure how to proceed, use the sample ordering in Figure 1-2 to get going.

Next, we'll look at each of the boxes in Figure 1-2 in detail.

Problem List your customers' top 3 problems 2 Existing alternatives List how these problems are solved today	Solution Outline possible solutions for each problem 4 Key metrics List key numbers telling how your business is doing today 8	Unique value proposition Single, clear, compelling that turns an unaware visitor into an interested prospect 3 High-level concept List your X for Y analogy (e.g., YouTube = Flickr for videos		Unfair advantage Something that can't be easily copied or bought 9 Channels List your path to customers	Customer segments List your target cutomers and users 1 Early adopters List characteristics of your ideal customer
Cost structure List your fixed and va	nriable costs	Reveni		le streams cources of revenue	

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Figure 1-2. Sample fill order for a Lean Canvas

Customer Segments

As the Continuous Innovation Framework is heavily customer driven, the Customer Segments box of the Lean Canvas is typically a natural starting point.

Distinguish between customers and users

If you have multiple actors in your business model, aim to first identify your customers.



Then identify any other actors (users, influencers, etc.) that will interact with these customers.

Examples:

- In a blogging platform, the customer is the blog author, while the user is a reader.
- In a search engine, the customer is the advertiser, while users are people running searches.

Model multiple perspectives

It helps to view your idea from the perspective of each actor in your business model. Each will likely have different problems, channels to reach them, and value propositions. For example, an advertiser working with a search engine may be struggling with driving awareness to their product, while the people running searches are really looking for answers to specific questions. I recommend keeping these perspectives on the same canvas and using a different color or hashtag to identify each actor's perspective.

Home in on early adopters

As an entrepreneur, you need to simultaneously communicate a big market opportunity while staying razor-focused on your early adopters.



Your list of customer segments should represent the total addressable market (TAM) for your idea, while your early adopters represent a specific subset of your TAM. This is your ideal starting customer segment (also called your ideal customer profile).

Problem

Problems, not solutions, create spaces for innovation. The Problem box is where you list the specific problem or problems you are going to tackle with your product.

List the top one to three problems

While it's tempting to brainstorm and list many possible problems, prioritize the top one to three issues that you believe are most pressing for your customers.

List existing alternatives

Document how you think your early adopters currently address these problems. Unless you are solving a brand new problem (unlikely), solutions probably already exist. These solutions may not be from an obvious competitor.

Steve tackles the Customer Segment/Problem quadrant

Before Steve takes on sketching his first Lean Canvas, he digs up the original vision statement he wrote down a year ago:

To create an alternate virtual world (a metaverse) as vast and rich as the real world and make it universally accessible and useful.

He is tempted to put down "everybody" under Customer Segments, but he remembers Mary's advice against defining too broad a customer segment: "When you're trying to market to everyone, you reach no one."

He instead turns his focus to who he considers his ideal early adopters and writes down "software developers." While he envisions that his platform will eventually allow anyone to create rich immersive AR/VR applications, it will be easiest to start with software developers that already build or want to build these kinds of applications.

Under this segment, he lists various industries that are likely to adopt AR/VR technologies over the next several years. Next, he turns his attention to listing out the top problems he plans to address and captures the top existing alternatives on the Lean Canvas.

Figure 1-3 shows what his Customer Segments and Problem boxes look like after just a few minutes of pondering.

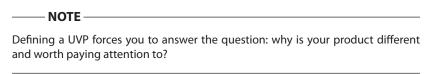
Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive	Solution Key metrics	Unique propos	e value sition	Unfair advantage Channels	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education Health care
Existing alternatives Google AR/VR, Apple ARKit, Vuforia, MAXST, Unity					Early adopters Software developers/ agencies that build AR/VR apps for clients
Cost structure				ie streams	

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Figure 1-3. Steve's problem and customer segments

Unique Value Proposition

Dead center in the Lean Canvas is a box for your unique value proposition (UVP). This is one of the most important boxes on the canvas and also the hardest to get right.



Before paying for your product with money, customers pay you with attention. Your UVP is hard to get right because you have to distill the essence of your product in a few words that can fit in the headline of your landing page. Additionally, your UVP needs to be different in order to stand out from the competition, and that difference needs to matter to your customers.

The good news is that you don't have to get this perfect right away. Like everything on the canvas, you start with a best guess and iterate from there.

Connect to your customer's number one problem

The key to crafting an effective UVP is connecting it to the number one problem you are solving for your customers. If that problem is indeed worth solving for them, you're more than halfway there already.

Target early adopters

Too many marketers try to target the "middle" of their customer segments, in the hopes of reaching mainstream customers, and in the process they water down their message. Your product is not ready for mainstream customers yet. Your sole job should be to find and target early adopters, which requires bold, clear, and specific messaging.

Focus on outcomes

You've probably heard about the importance of highlighting benefits over features. But benefits still require your customers to translate them to their worldview. A good UVP gets inside customers' heads and focuses on the benefits they will derive from using your product—that is, the desired outcomes.

So, for instance, if you are creating a résumé-building service:

- A feature might be "professionally designed templates."
- The benefit would be "an eye-catching résumé that stands out."
- And the desired outcome would be "landing your dream job."

Keep it short

Most advertising platforms limit the number of characters in the primary headline field to 120. Pick your words carefully, and avoid empty fillers.

Answer what, who, and why

A good UVP needs to clearly describe what your product is for and who it's for. The "why" is often hard to fit into the same statement, so a sub-headline is often used for this.

Here's an example:

- Product: Lean Canvas
- Headline: Communicate Your Idea Clearly and Concisely to Key Stakeholders.
- Sub-headline: A Lean Canvas replaces a long and boring business plan with a 1-page business model that takes 20 minutes to create and gets read.

Create a high-concept pitch

Another useful exercise when crafting a UVP is creating a high-concept pitch, popularized as an effective pitching tool by Venture Hacks in the ebook *Pitching Hacks*. High-concept pitches are also used heavily by Hollywood producers to distill the general plot of a movie into a memorable sound bite.

Examples might include:

• YouTube: "Flickr for video"

• Aliens (movie): "Jaws in space"

• Dogster: "Friendster for dogs"

The high-concept pitch should not be confused with a UVP and is not intended to be used on your landing page. There is a danger that the concept the pitch is based on might be unfamiliar to your audience. For this reason, the high-concept pitch is more effectively used in scenarios where you want to quickly get your idea across and make it easy to spread, such as after a customer interview. We'll cover a specific use of the high-concept pitch in Chapter 8.

Steve crafts his UVP

Given that all the existing alternatives require technical know-how and coding knowledge, Steve decides to use "no-code" as the keyword to position his UVP around (see Figure 1-4).

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive	Solution Key metrics	Unique propos Create ric immersiv experienc coding re	ch e AR/VR ces—no	Unfair advantage Channels	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education Health care
Existing alternatives Google AR/VR, Apple ARKit, Vuforia, MAXST, Unity		High-le concep No-code	ot		Early adopters Software developers/ agencies that build AR/VR apps for clients
Cost structure			Revenu	ie streams	

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Figure 1-4. Steve's UVP

Solution

You are now ready to tackle your solution.

Know that it is fairly common for your customer problems to get reprioritized or completely replaced with new ones after just a few customer conversations. For this reason, I recommend not getting carried away with fully defining your solution just yet. Rather, simply sketch out the simplest thing you could possibly build to address each problem listed on your Lean Canvas.



Steve defines a solution

Based on his list of problems, Steve creates a shortlist of top features that address each problem (see Figure 1-5).

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click Key metrics	Unique propos Create ric immersiv experienc coding re	ch e AR/VR ces—no	Unfair advantage Channels	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education Health care
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Cost structure			Revenu	ue streams	

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Figure 1-5. Steve's solution

Channels

If a product is launched in a forest, does it make a sound? Failing to build a clear path to customers is among the top reasons why startups fail.

The initial goal of a startup is to learn, not to scale. So, at first, it's OK to rely on any channels that get you in front of potential customers.

The good news is that following a "customer discovery/interview" process (which we'll discuss in Chapter 7) forces you to build a path to "enough" customers early. However, if your business model relies on acquiring large numbers of customers to work, that path may not scale beyond the initial stages, and it's quite possible you'll get stuck later.

For this reason, it's equally important to think about your scalable channels from day one so that you can start building and testing them early.

While there are a plethora of channel options available, some channels may be outright inapplicable to your startup, while others may be more viable during the later stages of the startup.

Steve outlines some possible paths to customers

Since Steve plans on targeting software developers and agencies as early adopters, he plans to start with warm referrals, direct sales, conferences, and trade shows as initial channels, and possibly scaling later using advertising (see Figure 1-6).

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click	Unique propos Create ric immersiv experien coding re	ch /e AR/VR ces—no	Unfair advantage	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education Health care
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Cost structure			Revenu	ue streams	

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Figure 1-6. Steve's channels

Revenue Streams and Cost Structure

The bottom two boxes, labeled Revenue Streams and Cost Structure, are used to model the viability of the business.

Revenue streams

A lot of startups choose to defer the "pricing question" to a later stage, but this is a mistake. Here's why:

Price is part of the product

Suppose I place two bottles of water in front of you and tell you that one costs \$0.50 and the other costs \$2. Despite the fact that you wouldn't be able to tell them apart in a blind taste test (the products are similar enough), you might be inclined to believe (or at least wonder whether) the

more expensive water is of higher quality. Here, price has the power to change your perception of the product.

Price defines your customers

More interesting is the fact that the bottled water you pick determines your customer segment. From the existing market for bottled water, we know there is a viable business for bottled water at both price points. What you charge signals your positioning on which customers you want to attract.

Getting paid is the first form of validation

Getting a customer to give you money is one of the hardest challenges, and is an early form of product validation.

NOTE
Revenue is the difference between a hobby and a business.

Cost structure

How do you determine the cost structure of your idea/product? That is, how much will it cost to make your product and keep your business running?

Rather than thinking in terms of three- or five-year forecasts, it's better to take a more stage-based approach. Focus on your most immediate short-term milestones for three to six months from now. First, model the runway you will need to define, build, and launch your MVP. Then revise after you get there. Ouestions to consider include:

- What will it cost you to define, build, and launch your MVP?
- What will your ongoing burn rate look like (salaries, office rent, etc.)?

Steve thinks through his cost structure and revenue streams

While Steve had found a comfortable groove of self-funding his project through consulting revenue, the competitor launch (Virtuoso X) was his wake-up call to speed things up. Steve sets a goal to get his MVP launched within the next six months and outlines his costs, which are mostly his time.

Steve had not given any serious thought to his pricing model up until now, but decides to heed the advice of not deferring this until later. He figures he should anchor his pricing against other software development tools, and finds that they vary from free to several hundred dollars a month. He decides to go down the middle and picks the most popular entry-level pricing model of \$50/mo with a free 30-day trial.

For his cost structure, Steve estimates his runway needs for the next six to nine months. He anticipates working alone and continuing to bootstrap his product until he can attract enough customers or investors. Figure 1-7 shows what Steve's Lean Canvas looks like with these boxes filled in.

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click	Unique propos Create ric immersiv experienc coding re	s ition :h e AR/VR :es—no	Unfair advantage	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education
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Cost structure Hosting costs People costs: 40 hours x \$65/hr = \$10K/mo			30-day fro	LIE streams ee trial or unlimited apps	

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Figure 1-7. Steve's cost structure and revenue streams

Key Metrics

Every business has a few key numbers that can be used to measure how well the business is performing. These numbers are important for both measuring progress and identifying hot spots in the business model. I'll give you a few examples here.

List three to five key metrics

Don't go overboard on metrics. Instead, list the top three to five metrics that you'll use to measure whether your business model is working.

Prefer outcome metrics versus output metrics

Instead of measuring how much stuff you're building (outputs), focus on measuring how many people are using your product and how (outcomes). The right outcome metrics tend to be customer-centric versus product-centric.

Examples of outcome metrics include:

- Number of new customers
- Monthly recurring revenue (MRR)
- Customer lifetime value (LTV)

Prioritize leading indicator metrics versus trailing indicator metrics

Find the key number that tells you how your business is doing in real-time before you get the sales report.

-Norm Brodsky and Bo Burlingham, The Knack

While you'll need to measure and report on metrics like revenue and profit, understand that these are trailing indicators, not leading indicators of progress.

Here are some examples of leading indicator metrics:

- Number of qualified leads in your pipeline
- Number of trials/pilots
- Customer attrition rate (churn)

Study analogs

Research what metrics other companies in your product space/industry use to measure and communicate progress to their stakeholders.

Here are some examples:

- Typical SaaS metrics:
 - Lifetime value (LTV)
 - Cost to acquire customers (CAC)
 - Monthly recurring revenue (MRR) or annual recurring revenue (ARR)
- Typical ad-based metrics:
 - —Daily active users (DAU) and monthly active users (MAU)
 - Click-through rate (CTR)
 - Cost per impression (CPM) and cost per click (CPC)
- Typical marketplace metrics:
 - —Buyer to seller ratio
 - Average transaction size
 - -Take rate

Steve identifies a few key metrics

In the Key Metrics box, Steve decides to use the starting list of metrics for a SaaS product identified in the previous section (see Figure 1-8).

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive Existing alternatives Google AR/VR, Apple ARKit, Vuforia, MAXST, Unity	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click Key metrics Number of trials Paid conversion rate LTV/CAC	Unique propos Create ric immersive experiencoding re- Coding re- Conception No-code	ch re AR/VR ces—no rquired	Unfair advantage Channels Warm referrals Direct sales Conferences Trade shows Ads	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education Health care Early adopters Software developers/ agencies that build AR/VR apps for clients
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Figure 1-8. Steve's key metrics

Unfair Advantage

This is usually the hardest section in the canvas to fill in, which is why I leave it for last. Most founders list things as competitive advantages that really aren't, such as passion, lines of code, or features.

Another frequently cited advantage in business models is the "first-mover" advantage. However, it doesn't take much to see that being first can actually be a disadvantage, as most of the hard work of paving new ground (risk mitigation) falls on your shoulders—only to be capitalized on by fast followers, who may overtake you unless you're able to constantly outpace them with a real unfair advantage. Think of Ford, Toyota, Google, Microsoft, Apple, and Facebook: again, none of these companies were first movers.

An interesting perspective to keep in mind is that anything worth copying will be copied, especially once you start to demonstrate a viable business model.

Imagine a scenario where your cofounder steals your source code, sets up shop in Costa Rica, and slashes prices. Do you still have a business? How about if Google or Apple launches a competitive product and drops the price to \$0?

You have to be able to build a successful business in spite of that—an observation that led Jason Cohen to offer the following definition: "A real unfair advantage is something that cannot be easily copied or bought."

Here are some examples of real unfair advantages that fit this definition:

- Insider information
- The right "expert" endorsements
- A dream team
- Personal authority
- Network effect
- Platform effect
- Community
- Existing customers
- SEO ranking

A great illustration of the difference between a real unfair advantage and a fake unfair advantage is the difference between organic SEO ranking versus paid keywords for search engine marketing. Keywords can be easily copied and bought by your competitors, while organic ranking has to be earned.

Some unfair advantages can also start out as values that become differentiators over time. For example, Zappos CEO Tony Hsieh believed strongly in creating happiness for his customers and employees. This manifested itself in many company policies that, on the surface, didn't make much business sense, such as allowing customer service representatives to spend as much time as was needed to make a customer happy and offering a 365-day return policy with two-way paid shipping. But these policies served to differentiate the Zappos brand and helped build the large, passionate, and vocal customer base that played a large role in the company's eventual \$1.2 billion acquisition by Amazon in 2009.

What do you do if you don't have an unfair advantage on day one?

Most entrepreneurs don't have an unfair advantage at the outset of their idea. Consider Mark Zuckerberg. He wasn't the first to build a social network, and a number of his competitors already had a huge head start with millions of users and millions of dollars in funding. That didn't prevent him from building the largest social network on the planet.

Start with an unfair advantage story

While Mark didn't have an unfair advantage on day one, he had an unfair advantage *story*. He knew his unfair advantage needed to come from large network effects. This clarity of focus helped Facebook develop a systematic launch and growth strategy that helped the company eventually realize this advantage.

Leave the unfair advantage blank

If an unfair advantage story isn't readily apparent, it is always better to leave the Unfair Advantage box blank rather than stuffing it with a weak unfair advantage.

Embrace obscurity

As mentioned previously, the good news with unfair advantages is that you don't need one from the outset. When you are just starting out, embrace obscurity to build something valuable without calling out competitor attention, and keep searching for your true unfair advantage.

Steve ponders his unfair advantage story

Steve normally would have put down software IP (intellectual property) as his unfair advantage, but after learning about real and fake unfair advantages, he decides instead to rely upon an unfair advantage story built on the "platform effect" (Figure 1-9). If he can get enough software developers and agencies to build enough killer apps, that will accelerate his vision of creating a massive reusable library of 3D objects, creating a flywheel that will make it easier for everyone to build more apps faster and establishing his platform as the platform of choice for AR/VR applications.

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click	Unique propos Create ric immersiv experienc coding re	sition ch e AR/VR ces—no	Unfair advantage Platform effect	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education
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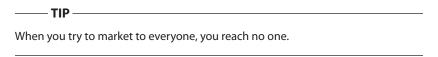
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Figure 1-9. *Steve's unfair advantage*

Refining Your Lean Canvas

Sketching out a Lean Canvas quickly is a great first step for taking stock of your big idea and visualizing your business model as a set of assumptions. That said, most entrepreneurs either go too broad or too narrow with their first canvases. This is a Goldilocks problem.

If you struggled to fit your idea on a single page, chances are you went too broad. When you go too broad, your canvas becomes watered down and undifferentiated. I've worked with several startups that felt the problems they were solving were so universal, they applied to everyone.



While you might be aiming to build a mainstream product, you need to start with a specific customer in mind. Even Facebook, with its now 500 million+users, was originally oriented toward a very specific user group: Harvard University students. At the other extreme, when you go too narrow, you face the

danger of falling into a local maximum trap and not finding the best possible market for your idea.

This is illustrated in Figure 1-10 as the *hill-climbing problem*.

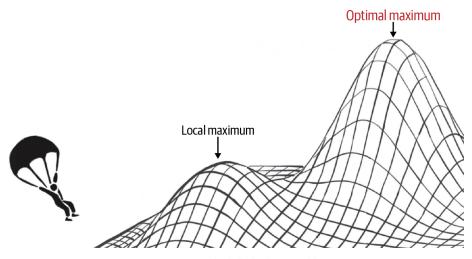


Figure 1-10. *The hill-climbing problem*

Imagine you are blindfolded and given the task of finding the highest point in this landscape. You might be able to fumble your way to the top of the small hill and declare it the highest point—only to find out, once your blindfold is off, that there is a neighboring mountain right next to you that you missed.

So, How Do You Avoid the Goldilocks Problem?

You need a strategy that allows you to simultaneously go broad and narrow. The way you do this is by splitting your first Lean Canvas (your "big idea canvas") into additional canvases (Figure 1-11).

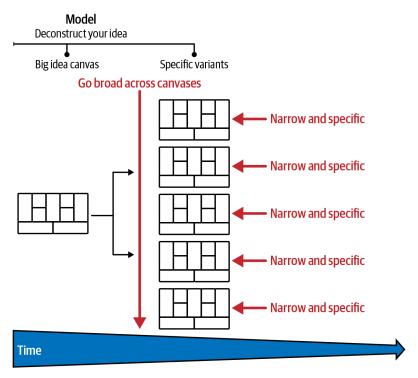


Figure 1-11. *Splitting your big idea canvas into one or more variants*

Each of your additional canvases needs to be narrow and specific, but you can and should go broad across these canvases by sketching out multiple possible variants of the same idea. For example, a photo-sharing service could be targeted at consumers or businesses. Within businesses, there could be many possible business models to consider. Each of these variants can and should be explored on a different canvas.

While there's no guarantee that you'll uncover a mountain with this approach, you can probably appreciate that by casting a wider net and staying open to all possibilities early you can avoid getting tunnel-visioned around a single implementation of your idea. After you've short-listed your best variants, you can systematically prioritize and test your ideas over time. Remember, building a business model requires a search mindset, not an execution mindset.

How Do You Know When to Split Your Lean Canvas?

The reason most Lean Canvases become too broad is that they try to capture too many business model stories on a single canvas. Your objective should be to describe a single business model story per Lean Canvas.

There are three basic business model archetypes: direct, multisided, and marketplace. If you find yourself mixing multiple types of models on one Lean Canvas, split them into separate canvases. Let's take a look at each.

Direct

Direct business models are the most basic and widespread type. They are one-actor models where your users become your customers. Starbucks is an example of a company with a direct business model; an example Lean Canvas for this company is shown in Figure 1-12.

Starbucks - Starbucks

Problem People have few choices for freshly brewed high quality coffee	Solution Bring Italian coffeehouse tradition to the US	propos A third pl		Unfair advantage Community, convenience, and accessibility	Customer segments Coffee drinkers
Existing alternatives - Supermarket coffee - Dunkin Donuts / McDonald's - Home-brewed coffee	Key metrics - Number of cups served - Number of customers - Average revenue per customer	High-le concep McDonal coffee	ot	Channels - Retail stores - Supermarkets - Advertising	Early adopters People who brew their coffee at home
Cost structure - People - Retail store costs			- Coffee: \$	ie streams 63/cup eans: \$10/bag	

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Figure 1-12. Starbucks Lean Canvas

With a direct business model, your Lean Canvas should capture your total addressable customer segment as a single entry under Customer Segments, and your ideal starting subsegment under Early Adopters.

Multisided

In a multisided business model, the goal is still to create, deliver, and capture value from users, but that value is monetized through different customers. These are two-actor models made up of *users* and *customers*.

Users typically don't pay for usage of your product with a monetary currency, but rather with a derivative currency. This derivative currency, when aggregated across enough users, represents a derivative asset that your customers pay to acquire. Facebook is an example of a company with a multisided model; at the time of launch in 2004, the users were college students and the customers were advertisers.

An example Lean Canvas for Facebook is shown in Figure 1-13.

Facebook - Advertisers + College Students

Problem Existing online social networks fail to deliver on core promises and are characterized by: 1. Friends as badges versus true friends 2. Low quality of conversations 3. Low user engagement Advertisers want a	Solution Instead of trying to create a new social network, remove friction from preexisting social networks such as those on college campuses	with you (not stra #user - Reach a segmen audience	sition t and share ur friends ungers) highly ted e of active th a high	Unfair advantage High user engagement through network effects translates to more clicks for advertisements #customers	Customer segments - College student #user - Advertisers #customers
highly targeted and active audience #customer Existing alternatives - Friendster, Myspace #user - Banner ads, Google adwords, Yahoo #customer	Key metrics - \$100M valuation in 2 years - #Customer traction metric: impressions, clicks, conversions - #User traction metric: DAU/MAU/ page views	High-li conce Friendste college s #user	pt er for	Channels - Viral usage model #user - Seed Ivy League schools #user - Auction-based platform #customer - Direct sales #customer	Early adopters - Ivy League schools starting with Harvard University #user - Advertisers that want to reach college students #consumer
Cost structure - People: unpaid - Hosting costs: \$85/r	no		- Derivativ views pe - Advertis #custom - Derivativ month	ing revenue: \$1 CPM,	\$X CPC, \$Y CPA rate: ARPU=\$0.30/

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Figure 1-13. Facebook Lean Canvas—user perspectives (college students) are tagged #user, and customer perspectives (advertisers) are tagged #customer

With a multisided business model, your Lean Canvas should model your idea from the perspective of both your users and your customers. For example, from the user's perspective, an alternative to Facebook would be Friendster.

Marketplace

Marketplace business models are a more complex variant of the multisided model that warrants its own category. Like multisided models, these are multiactor models made up of two different segments: in this case, buyers and sellers. Airbnb is an example of a company with a marketplace model; a Lean Canvas for this company is shown in Figure 1-14.

Airbnb - Airbnb

Problem - Looking for a room to rent when hotels are sold out #buyer - Earn extra cash by renting a room in your house/apt #seller	Solution Marketplace that connects guests with hosts		sition	Unfair advantage	Customer segments - Guests #buyer - Hosts #seller
Existing alternatives - Hotel rooms #buyer - Couch surfing #buyer - Stay with friend #buyer - Can only rent out entire apt #seller	Key metrics - Guest nights booked - Number of listings #seller - Number of searches #buyer	High-lo conce Couch su professio	pt Irfing for	Channels - Billboards - Online ads - Word of mouth	Early adopters - Travelers attending events/conventions #buyer - People with extra rooms they are willing to rent #seller
Cost structure - Website - Advertising - People costs			Revenu Booking fe	e streams e	

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Figure 1-14. Airbnb Lean Canvas—buyer perspectives are tagged #buyer, and seller perspectives are tagged #seller

Here too, you should model your idea from both the perspective of the buyer and the seller. For example, from the buyer's perspective, alternatives to Airbnb are hotel rooms, couch surfing, etc.

Strive for simplicity, not complexity. Simple is hard enough.

NOTE -

It is possible to find more complex models in practice that layer these basic archetypes. The thing to keep in mind is that even these more complex models started with a basic model at the outset. Gall's law states that a complex system that works is invariably found to have evolved from a simple system that worked.

Steve Splits His Big Idea Canvas into Specific Variants

Steve revisits his Lean Canvas and immediately recognizes that he has identified too many customer segments (Figure 1-15).

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive Existing alternatives Google AR/VR, Apple ARKIT, Vuforia, MAXST, Unity	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click Key metrics Number of trials Paid conversion rate LTV/CAC	Unique propos Create ric immersiv experienc coding re High-le concep No-code	ch e AR/VR ces—no equired evel ot	Unfair advantage Platform effect Channels Direct sales Conferences Trade shows Ads	Customer segments Software developers/ agencies Marketers Retail Construction Travel Education Nealth care Early adopters Software developers/ agencies that build AR/VR apps for clients
Cost structure Hosting costs People costs: 40 hou	rs x \$65/hr = \$10K/mo		30-day fre	ie streams ee trial or unlimited apps	•

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Figure 1-15. Too many customer segments

"Do they all belong to the same business model?" Stever wonders.

After a few minutes of staring at his Lean Canvas and using his newly acquired knowledge of business model archetypes, he starts to recognize distinct business models intertwined on his Lean Canvas.

He gets to work splitting them into separate canvases and decides to focus on what he considers his top three variants (Figures 1-16 through 1-18).

Problem Creating augmented/virtual reality (AR/VR) apps is hardRequires coding skills -Takes too long -Expensive	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click	Unique value proposition Create rich immersive AR/VR experiences—no coding required		Unfair advantage Platform effect	Customer segments Software developers/ agencies
Existing alternatives Google AR/VR, Apple ARKit, Vuforia, MAXST, Unity	Key metrics -Number of trials -Paid conversion rate -LTV/CAC	High-le concep No-code	ot	Channels Direct sales Conferences Trade shows Ads	Early adopters Software developers/ agencies that build AR/VR apps for clients
Cost structure Hosting costs People costs: 40 hours x \$65/hr = \$10K/mo		l: I:	30-day fre \$50/mo fo	or unlimited apps	

Figure 1-16. Software Developers Lean Canvas

Problem Creating virtual reality (VR) renderings for clients is hardRequires technical modeling skills -Takes too long -Expensive	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click	Unique propos Create ric immersiv experienc coding re	s ition ch e AR/VR ces—no	Unfair advantage Platform effect	Customer segments Architects #customers Homeowners #user
Existing alternatives BIM and CAD tools: SketchUp, Autodesk	Key metrics -Number of trials -Paid conversion rate -LTV/CAC	High-le concep No-code	ot	Channels Direct sales Conferences Trade shows Ads	Early adopters Architects who build 3D rendering for their clients
Cost structure Hosting costs People costs: 40 hours x \$65/hr = \$10K/mo			30-day fr \$100/mo		

Figure 1-17. Home Construction Lean Canvas

Problem Creating 3D models for an ecommerce store requires technical skills and is expensive. #customer #Customer shopping for furniture online struggles with visualizing and	Solution -Scan a physical space or object with your phone to create a 3D model -Quickly customize your model -Deploy your app with a single click	Unique value proposition Quickly embed 3D models to enhance online shopping experience	Unfair advantage	Customer segments Retailer #customers Consumer #user
measuring if the furniture will fit their space Existing alternatives Build in-house, hire a software development agency, Houzz	Key metrics -Number of trials -Paid conversion rate -LTV/CAC	High-level concept Ikea Place for your furniture	Channels Direct sales Conferences Trade shows Ads	Early adopters Furniture retailers
Cost structure Hosting costs People costs: 40 hours >	s \$65/hr = \$10K/mo		ie streams ed object/year	

Figure 1-18. Retail Furniture Lean Canvas

Steve can immediately see that these variants are clearer than his original big idea canvas.

Now It's Your Turn

Documenting your Plan A is a prerequisite for moving on. As I stated at the start of the chapter, too many founders carry their hypotheses in their heads alone, which makes it hard to systematically build and test a business.

How you create your Lean Canvas is up to you. Visit the LEANSTACK website to:

- Download a blank Lean Canvas template
- · Create your Lean Canvas online

What's Next?

It's tempting to "rush out of the building" after completing your first Lean Canvas sketch and immediately start testing out your business model on customers. It's even possible to rapidly find clusters of problems, pitch an offer, build a quick MVP, and charge your customers from day one—which sounds exactly like what we should do.

So what's wrong with this approach?

The danger is getting stuck with a suboptimal business model six or nine months down the line that either doesn't match your ambition or doesn't scale.

For an idea to be successful, it must constantly balance three types of risks: customer, market, and technical. These risks can be more easily visualized through what IDEO has popularized as the *Innovation Trinity*: desirability, viability, and feasibility (Figure 1-19).

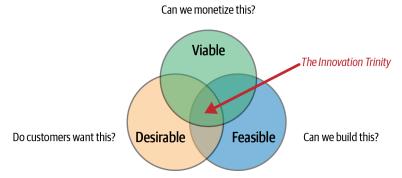


Figure 1-19. The Innovation Trinity

Before engaging in several weeks or months of customer validation, it's prudent to spend a few more hours (inside the building) stress testing your business model and tightening up any obvious cracks or flaws in your thinking.

You do this by subjecting your business model to three stress tests that check for:

- 1. Desirability (Do your customers want this?)
- 2. Viability (Can you monetize this?)
- 3. Feasibility (Can you build this?)

Stress Test Your Idea for Desirability

Desirability: Do customers want this?

Place yourself somewhere on the product timeline in Figure 2-1, and think back to what caused you to switch from that solution to the next one.

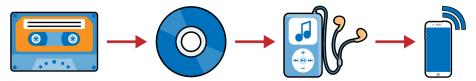


Figure 2-1. A music timeline

These were massive changes, where we completely replaced one way of listening to music with another. While it's tempting to declare that we switched for better sound quality, that wasn't it. Sound quality went up when we moved from cassettes to CDs, but it went down on subsequent evolutions. So, there was something else at play.

As entrepreneurs, we are charged with building better products, but what does *better* even mean? That's the key question to address when stress testing your idea for desirability.

Defining Better

Defining better starts with recognizing that customers don't care about solutions, but about achieving desired outcomes.

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The best way, then, to get a customer's attention is not by leading with your solution, but leading with your unique value proposition.

A compelling unique value proposition either promises a better desired outcome, a better way of achieving the desired outcome, or both.

The way you craft a compelling unique value proposition is by first getting razor focused on who you are targeting and then understanding the obstacles (or problems) that stand in the way of them achieving their desired outcomes.

MINDSET #2

Love the problem, not your solution.

On the Lean Canvas, these observations are captured in the Customer Segments, Problem, and Unique Value Proposition boxes. If you get these assumptions wrong, it's easy to see how everything else in your business model falls apart. You end up describing a solution that no one wants (not desirable). Even if you manage to build this solution (feasible), no one buys it (not viable). Your business model is doomed.

This is why desirability is one of the first stress tests to subject your idea to immediately after sketching your initial Lean Canvas, and it's what we'll cover in this chapter (Figure 2-2).

NOTE -

I created a variant of the Lean Canvas called the Lean(er) Canvas with just these three boxes (Customer Segments, Problem, and Unique Value Proposition). While I still recommend that startup founders attempt filling out the entire Lean Canvas, a Lean(er) Canvas can be a more appropriate starting canvas for product teams operating in highly specialized environments where the team is removed from sales and marketing activities.

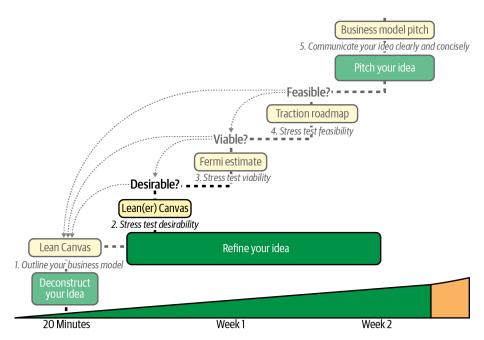


Figure 2-2. Stress testing desirability

Our Innovator's Bias Gets in the Way

While the concept of starting with problems before solutions is simple, it isn't easy. When pressed to think in terms of problems, entrepreneurs often unconsciously invent (or even fake) problems in order to justify the solution they already have in their mind. Instead of asking "What problem do my customers have?" they ask "What problem could my solution solve?"

TIP When you've already decided to build a hammer, everything starts looking like a nail.

This is our Innovator's Bias in action (Figure 2-3). Don't worry, it happens to everybody.

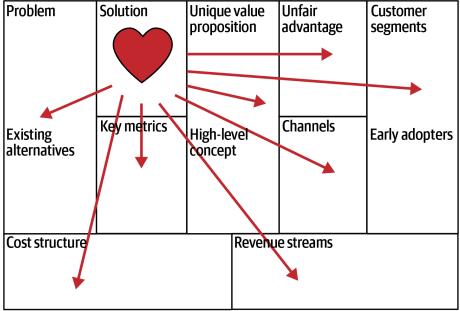


Figure 2-3. The Innovator's Bias, represented on a Lean Canvas

In the next section, I'm going to show you the perfect antidote to the Innovator's Bias—something I call the *Innovator's Gift*.

Meet the Innovator's Gift

The basic premise of the Innovator's Gift is simple: new problems come from old solutions.

When searching for an innovative idea, while you need an innovative solution, you don't want an innovative problem—one that no one understands or cares about. The secret is framing problems in terms of the existing obstacles with old solutions that prevent customers from achieving their desired outcomes.

The Innovator's Gift is realizing that there is no such thing as a perfect solution. Problems and solutions are two sides of the same coin. And new problems worth solving come from old solutions.

Sounds too simple? Let's go back to the question I asked you at the beginning of this chapter: what caused you to switch from one way of listening to music to another?

The main reason most people switched from cassettes to CDs wasn't because of better sound quality, but the ability to instantly play a song. Cassette tapes were just fine until CDs came along and broke the format by making a problem that was always there—rewinding and fast-forwarding to find your favorite song—a problem worth solving.

The main reason we then switched from CDs to MP3s wasn't better sound quality either, but the ability to buy just the songs we wanted, and not the entire CD.

The reason we switched from MP3 players to the cloud was because "a thousand songs in our pockets" was no longer enough. We now want access to 40 million songs in the cloud that we don't even have to own, but rather rent on demand (Figure 2-4).

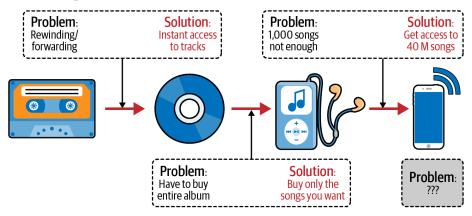


Figure 2-4. Why we switched

Can you see the common thread here?

All of these are massive switching stories, and sure, there are new solutions and technologies at play. However, what caused the switch in each case wasn't solving *new problems*, but solving *old problems* that were always there. We tolerate and even work around these problems for a while, until one day we encounter a *switching trigger* that breaks our current solution and *causes us to switch* to a new solution.

This is the story of what all successful innovation looks like:

Once upon a time, there was a [customer]. Whenever they needed to get a certain [job] done, they would pick [existing alternative]. One day, that existing alternative broke because of [switching trigger]. Because of that, the [customer] realized that the [existing alternative] wasn't the best choice for the [job] because of these [problems]. This realization pushed the

[customer] to search for a better solution and consider other alternatives. Until finally they found a [new solution] that helped them get the [job] done better

We can visualize this story on a customer journey diagram, as shown in Figure 2-5.

Old way Passive looking Active looking Deciding Evaluating Consuming New way Status quo > Browsing Shopping > Selection > Early use > Repeat use > New status quo Desired 4. A new solution is chosen 1. Customer experiences an expectation violation iggerii event Existina alternative 3. Other alternatives are considered 2. Existing alternative breaks because of problems

Figure 2-5. Innovation as a switch

Extending the music product timeline into the future, I can guarantee with high certainty that how we listen to music will change again. To what, I don't know. But whatever comes next will be "better" than music streaming services.

This is what makes the concept of the Innovator's Gift a gift. It offers a systematic way of uncovering problems worth solving while sidestepping our own disproportionate bias for our solution—the Innovator's Bias.

Here are the key takeaways:

- 1. New problems worth solving come from old solutions. *There is always an old way*.
- 2. Innovation is fundamentally about *causing a switch* from the old way to a new way.

3. The best way to cause this switch is by anchoring new solutions against problems caused by old solutions—i.e., *breaking the old way*.

Unpacking the Innovator's Gift

The first step to applying the Innovator's Gift to your product is understanding the theory of jobs-to-be-done (JTBD). You may have come across this before: the basic premise is that we *hire* products to get a specific *job* done. I came across JTBD several years ago when I first read about the Milkshake Study, popularized by author and Harvard Business School professor Clayton Christensen, where a team of researchers inadvertently uncovered some unexpected insights for improving milkshake sales at a fast-food company.

Prior to hiring the research team, the company had conducted its own market research using more traditional approaches like surveys and focus groups. While this research had generated lots of promising customer-generated ideas for improvements, none of these ideas actually increased sales when implemented.

Rather than follow a similar line of inquiry—i.e., asking customers what they wanted—the team they hired chose a different path. One of the researchers on the team, Bob Moesta, wondered what *job* arises in people's lives that causes them to come to this restaurant to *hire* a milkshake? Framing the question this way allowed the team to uncover why people bought a milkshake, which led to very different insights than when you simply ask customers how to improve a milkshake.

After reading this case study, I wondered if a similar approach could be applied not just to improve an existing product, but to identify opportunities for new products. I had more questions than answers, so I read up on JTBD and even worked alongside several JTBD thought leaders and practitioners, including Bob Moesta, Chris Spiek, Tony Ulwick, Alan Klement, and Des Traynor. A lot of their work influenced my own thinking on the Innovator's Gift.

But even after all this research, two things continued to bother me. First, I found the commonly cited definitions of a JTBD to be circular, polymorphic, or vague. Second, a lot of the case studies I encountered felt like neat magic tricks—obvious in hindsight, but hard to re-create from scratch with a new product. I attempt to address both of these issues in this book.

Let's start with my definition of a job-to-be-done, an example of which is illustrated in Figure 2-6: a job-to-be-done is the instantiation of an unmet need or want in response to a trigger.

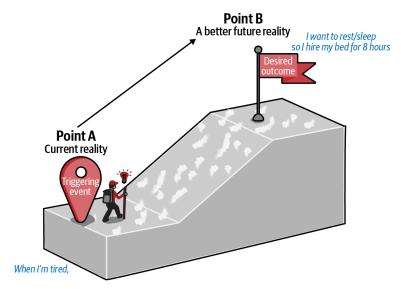


Figure 2-6. A job-to-be-done

Let's unpack this a little further.

All jobs start with a trigger

We all encounter multiple triggering events throughout the day, which means we encounter multiple jobs to be done throughout the day too.

Some examples:

- It's 10:36 p.m. and I'm tired. I need to sleep.
- It's 12:36 p.m. and my stomach is grumbling. I need to eat.
- It's 7:36 p.m. and my stomach is grumbling and it's my wife's birthday. I want to take her to a fancy restaurant.

Triggers are what define the context that shapes the job-to-be-done.

Habits define what we do most of the time...

Having to find new solutions every time we encountered a triggering event would generate too much cognitive load, so once we find a good enough solution for a specific job-to-be-done, we tend to remember it for the next time and hire it again.

NOTE -

Hiring a solution is not the same thing as buying a solution. We buy lots of products, with the best intentions of using them, but they end up collecting dust instead. Hiring a solution is *selecting and using* a solution (whether previously purchased or not) in response to a job we find ourselves needing/wanting to do.

It takes a few successive hires of the same solution to turn it into our preferred way of getting the job done (i.e., for it to become ingrained in habit).

...Until we encounter a switching trigger

A *switching trigger* is a special type of trigger that comes with an *expectation violation*. That's when we realize that our existing alternative is no longer good enough to get the job done. That's also when we begin to seek out a new and different solution. I label this motivation for change as *PUSH* in the Customer Forces Model shown in Figure 2-7 because it pushes us toward a *better way* of getting the job done.

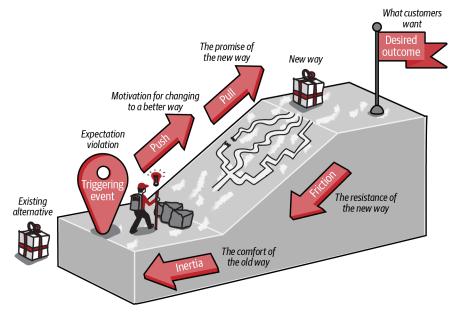


Figure 2-7. The Customer Forces Model

NOTE -

The Customer Forces Model is a behavioral model that describes the causal forces (PUSH, PULL, INERTIA, and FRICTION) that shape how people select and use (hire) a solution for a specific job-to-be-done.

For example, if you had a regular routine of visiting a specific restaurant for lunch, what might cause you to seek out a new restaurant? There are generally three types of switching triggers:

- 1. A bad experience (e.g., food poisoning from the usual lunch spot)
- 2. A change in circumstance (e.g., a special occasion like a birthday)
- 3. An awareness event (e.g., hearing about a new popular restaurant that just opened)

Therein lies the opportunity

Triggering events instantiate jobs-to-be-done that favor *familiar solutions* (existing alternatives). Switching triggers, on the other hand, create expectation violations that open spaces for *new solutions*. Entrepreneurs need to chase switching triggers.

Causing a switch starts with a promise of better

If a new solution is only incrementally better, the old way always wins. It wins because it's already ingrained in habit. I label this resistance to change from the status quo as *INERTIA* in Figure 2-7.

You additionally have to contend with the anxiety one feels whenever they embark on a new way of doing things that challenges their familiar old way. I label this resistance to adopting the new way as *FRICTION* in Figure 2-7.



Causing a switch requires overcoming these resisting forces. It starts with promising a significantly better way of getting the job done. I label this promise of something better as the *PULL* of the new solution in Figure 2-7.

A switch is set in motion when the attractor forces are greater than the detractor forces; i.e., PUSH + PULL > INERTIA + FRICTION.

How much better does a new way need to be than the old way to cause a switch? Think 3 to 10 times better.

Emotionally better versus functionally better

Is coffee from a specialty coffee shop three times better than coffee from a large coffee chain? Can the coffee drinker tell them apart in a blind taste test? You don't have to deliver *significantly better* solely by being functionally better. Emotion helps.

"Functionally better" is where needs live. "Emotionally better" is where wants live.

Being functionally better is about addressing unmet needs. Positioning your product this way can be enough to cause a switch if these unmet needs are well understood by your customers as obstacles standing in the way of them achieving their desired outcomes (what they want). But if the unmet needs are not well understood by your customers, it's far more powerful to switch your positioning to address their wants or desired outcomes.

For example:

- "We help you create a business plan faster" is positioning around being functionally better.
- "We help you create a business plan that gets read" is positioning around being emotionally better.

Emotionally better lives in the bigger context

Every product lives in two contexts: the solution context and the bigger context. The solution context is where your product's features and benefits live. The bigger context is where your customer's desired outcomes live (Figure 2-8).

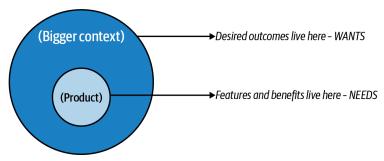


Figure 2-8. *The bigger context*

A great way to direct your thinking toward being emotionally better is focusing on the bigger context.

Getting hired is only the first battle

When prompted to switch, we often evaluate and trial multiple products in search of the one that gets the job done best. Getting your product hired, while an important step, is only the first step. Unless you can quickly deliver value

and then establish yourself as the new status quo for the job, you could easily find your product on the firing block.

In Part II of this book, we'll cover how to use carefully scripted interviews to uncover your product's job-to-be-done. For now, though, let's see how to use the Innovator's Gift to stress test your idea for desirability.

Steve Challenges the Innovator's Gift

"I can see how the Innovator's Gift applies to the music example, but what if the product is so disruptive that there is no competition?" Steve asks.

Mary smiles. "Doesn't *disruption*, by definition, imply an old way (the establishment or status quo) being radically challenged by a new way?"

Steve blushes a little. "Hmm...maybe *disruptive* isn't the word I was looking for, but a new *category* or new *market*. What if a product is a new category product defining a new market?"

"Can you name one?" Mary challenges Steve.

"How about the internet?" Steve responds.

"When you apply the Innovator's Gift, you have to go beyond the solution context to the bigger context. The way to find the bigger context is asking what's it for? In other words, what's the use case, or more specifically, job-to-be-done? While the internet today is used for many things, going back to the dot-com era, some of the primary early uses of the internet were access to information using web directories and search engines. Accessing information is the JTBD. So how did we get access to information before the internet? Through the yellow pages, encyclopedias, libraries, books, etc. Those were the old ways that the internet was displacing."

"I see..." But Steve isn't fully convinced yet.

"How about vaccines?" he fires back.

"Again, widespread use of vaccines is a relatively new solution for providing immunity to a long history of infectious diseases. What did people do before vaccines? They isolated the sick, and during the Middle Ages, even used remedies involving leeches to bleed out patients, which didn't help but made matters a lot worse. Those were some of the old ways."

While Steve is trying to come up with another example, Mary throws one out. "How about fire? Fire is a technology that changed the course of human history. If you were an entrepreneur selling fire to other humans, how would you pitch it? What's the competition to fire?"

"Let's see. If we ask what fire was used for...it could be used for staying warm. So the old way would have been using animal hides for warmth?" Steve muses.

"Yup, that's the right train of thought. However, is that the most viable use case?" Mary asks.

Steve thinks for a while and then replies, "I guess fire was also used for protection to ward off predators, and of course, cooking."

"Bingo. Using fire to keep caves warm is a seasonal and geographical use case, so the market size is somewhat limited. But using fire to unlock new food sources, like meat and certain grains that humans could otherwise not consume, has global appeal. If you were sketching Lean Canvases on your cave wall, you'd see that of the three use case—heating, protection, cooking—that last one would be the most viable."

Steve laughs. "I get it now. I guess I was still stuck in the solution world. The key is seeing the bigger context of how the solution is used. So this begs my next question: are there any new jobs-to-be-done?"

"I don't believe so. Early humans certainly had to figure out various jobs-tobe-done for the first time, but by now, most if not all of our basic needs and wants have been identified. You've probably seen models like Maslow's hierarchy that model these needs as a pyramid, starting with physiological needs like food and clothing, then safety, love and belonging, esteem, and finally self-actualization."

"Yes, I have, and that's exactly why I asked the question," Steve responds.

"But while we may have figured out all the jobs we need done, remember that there is no such thing as a perfect solution. Every job requires work, but the human condition strives to achieve the best possible desired outcome with the least amount of effort. That's the utopian ideal of a perfect solution, which if you want to get philosophical is perpetually unattainable."

Steve muses, "Yeah, I wonder what we'll all do when we automate everything in our lives? We'll probably end up like the humans in that Pixar movie *Wall-E*."

"Yeah, probably, but remember that they still craved something more," Mary adds.

"You're right...but back to Earth. I'm starting to see problems and solutions through a totally different lens. Even when we describe products as entering new markets, that's a relative category description. The market itself always had another way of getting the job done."

"You got it. However, you'll find many examples of jobs not being done well at all, like some of the pre-vaccine remedies we talked about. The key in all

these stories is finding enough pockets of people triggered by some event that motivated them to start marching up the hill toward a desired outcome."

"Okay, I'm convinced. Time to apply the desirability stress test to my idea."

Using the Innovator's Gift to Stress Test Your Idea for Desirability

When stress testing your idea for desirability, it helps to imagine putting together pieces in a jigsaw puzzle. It's time to take another pass at your Customer Segments/Problem/UVP boxes (the Lean(er) Canvas). This time I want you to go through these boxes in a very specific order, as shown in Figure 2-9. Start with Customer Segments. Review your early adopters, then move on to the Problem box and consider the existing alternatives. This will help you arrive at your UVP.

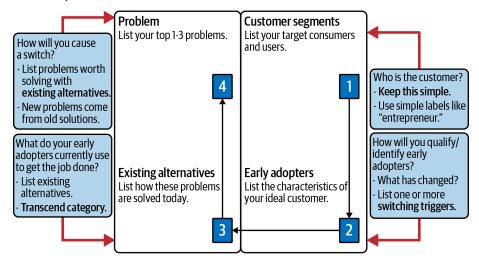


Figure 2-9. The Innovator's Gift test

Customer Segments: Keep It Simple

At this stage of your idea, keep your customer segments simple. Remember that you're aiming to capture your total addressable market, so use simple labels like *entrepreneur*, *homeowner*, *coffee drinker* to describe your overall customer segment. The early adopters section is where you need to get specific (without going overboard).

Early Adopters: Forget Personas

While it's tempting to list a bunch of demographic and psychographic attributes in the early adopters section, be wary that these are still guesses. The danger here is going too narrow, actually finding customers, and ending up on a small hill—remember the local maximum trap.

For example, let's assume I define a startup founder using the "two guys in a garage in Silicon Valley" stereotype. If I go looking, I'll actually find entrepreneurs that meet this criterion, and if I don't bother looking any further, I'll miss the much larger global market of entrepreneurs. The art of customer segmentation isn't chasing after the most number of distinguishing traits, but the *least number* of distinguishing traits that *cause* people to buy from you.

There is one distinguishing trait that all early adopters have. Can you guess what that is? A switching trigger. Remember that innovation is about causing a switch, and all switching stories start with a switching trigger. An early adopter is someone who has experienced a switching trigger and decided to do something about it—i.e., start the journey up the progress hill. Make sure you list one or more switching triggers in your early adopter criteria.

Existing Alternatives: Transcend Category

Many startup founders manage to convince themselves that they have no competition. But this is often because they aren't looking broadly enough, and instead are defining their competition solely in terms of their solution or product category.

If you are building cutting-edge collaboration software, for instance, your immediate competitor might not be the shiny startup down the street, but email. Email is free and ubiquitous and the de facto collaboration platform. Sure, you may think you have superior technology, but your job is getting people to stop using email and start using your product instead. That is your true competition.



This is why you won't find a "competition" section on the Lean Canvas, but the more general "existing alternatives." Every successful product ever built had competition in the form of an existing alternative. Make sure you're in full alignment with this fundamental tenet, because it's key to applying the Innovator's Gift.

Problems: What's Broken with the Old Way?

Finally, you need to be able to make the case for the problems listed in your Lean(er) Canvas without relying on your solution. How do you do that? By describing problems with respect to your customer's existing alternatives instead. In other words, don't focus on problems you can solve with your solution. Rather, focus on problems your customers encounter when using existing alternatives.

UVP: How Will You Cause a Switch?

Anchoring your unique value proposition against the problems with existing alternatives is the secret to crafting an effective UVP that grabs attention and causes a switch—because it's *specific*, *familiar*, *and compelling*. This subtle change in perspective is often the difference between *inventing* problems to justify your solution, and *uncovering* real problems worth solving.

Steve Realizes He Has a Hammer Problem

As Steve takes another look at his Lean Canvas variants, it dawns on him that they're all centered around his solution-specific category: AR/VR.

For example, in his Software Developers Lean Canvas:

- His early adopters are software developers who build AR/VR apps for their clients.
- The existing alternatives are other AR/VR platforms.
- His UVP is built on the functional benefit of making it easier and faster for software developers to build AR/VR apps.

But is AR/VR really what his customers want? He now sees that building an AR/VR app is a functional outcome that might be enough to cause a switch if building these apps were in high demand. But that isn't the case, or at least not yet. AR/VR technology is a promising but emerging and largely unproven technology. An AR/VR app isn't what end customers really want. They want what comes after the app, like:

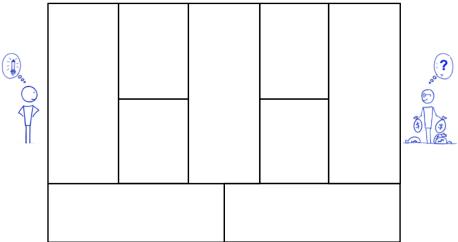
- Selling more billable project work (software developers)
- Selling more furniture online (retailers)
- Helping clients visualize their dream home (architects)

Steve realizes that he has been stuck in the solution context all this time, and needs to instead focus on the bigger context of end customer wants and desired outcomes.

Stress Test Your Idea for Viability

Viability: Can you monetize this?

While a Lean Canvas is a great way to deconstruct your early-stage idea into a more coherent business model story, your stakeholders (investors or budget gatekeepers) probably still struggle to see what you see. A business model story—even with early customer validation—just doesn't cut it for them (Figure 3-1).



Lean Canvas is adapted from Business Model Canvas and is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License.

Figure 3-1. A Lean Canvas is not enough

Why is that? Because investors are in the business of getting a return on their investment, they need to see the numbers side of the business model story. Before you discount this as just an investor-only perspective, you too need to learn how to see your idea through the lens of an investor.

Why? Because you are Investor #1 in your idea. While you may not be investing with lots of money, you invest with your time—which is more valuable than money.

NOTE	
Time is your scarcest resource.	

The amount of money you have can go up and down, but the amount of time you have moves only in one direction—down. All ideas, especially good ones, consume years of your life. Do you really want to spend the next three years on an idea with a "Let's see what happens" approach?

For this reason, you need to be even tougher on your idea than a professional investor. Ultimately, both you and your investors want the same thing: to help turn the idea into a "big enough" business to make it worthwhile.

So how do you determine whether your idea has the potential to become "big enough"? How can you tell if it's viable? In this chapter, I'll show you how (Figure 3-2).

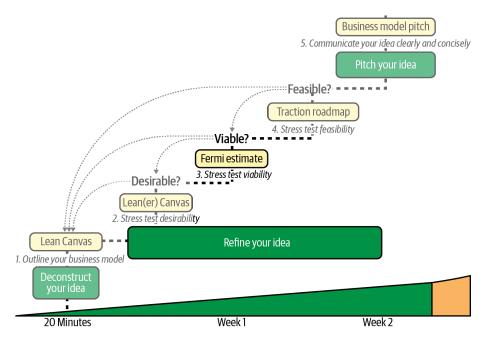


Figure 3-2. Stress testing viability

Don't Create a Financial Forecast; Use a Fermi Estimate Instead

In order to get more clarity on the numbers side of your business model story, investors often push you toward building a financial forecast spreadsheet.

The problem with these spreadsheets is that they have too many numbers in them that quietly mask your riskiest assumptions in layers of compounding lies. More importantly, if you do end up getting funded based on one of these spreadsheets, you end up back in the old world: executing a plan. Your investors start measuring the performance of your startup against your forecasts, which often results in a rude awakening.

Your investors care about growth, but at the earliest stages, you need to focus on product and learning. This creates a dichotomy of progress stories. The story we tell our stakeholders is not the same as the story we tell ourselves. They both start out the same, but they diverge significantly over time because each uses a different definition of progress.

You can't learn and move fast if you're stuck executing and defending a fictional plan—especially as your input assumptions start getting challenged over time, which they will. So there is a problem: unless you can completely break

away from the waterfall business planning process, you'll be hard-pressed to effectively practice Continuous Innovation.

To solve this drowning-in-fictional-numbers problem, I devised a simple *back-of-the-envelope business model test* that takes less than five minutes to do. It's based on a Fermi estimate, which is widely used in physics for doing quick order-of-magnitude calculations.

If you've ever tried to guess the number of jelly beans in a jar, that's a great Fermi estimate problem. Fermi estimates work by making justified guesses about a problem's input assumptions that are accurate to within an order of magnitude (nearest power of 10). This is often the best we can do with little data, but the resulting estimates are surprisingly useful.

The mistake we make with financial projections in the business model planning phase is that we spend a disproportionate amount of time focusing on the output of our models when it's the *inputs* that really matter.

The traditional top-down approach for justifying an idea is attaching your business model to a "large enough" customer segment. Then the logic goes that if you can capture "just 1%" of this large market, you'll be all set. After all, 1% of a billion-dollar market is still a lot of zeros.

The problems with this approach are that:

- It gives you a false sense of comfort.
- It doesn't address how to get to this 1% market share with your specific product.
- A 1% market share might not even be the right success criterion for you.

A Fermi estimate, on the other hand, takes a bottom-up approach, where you start with a set of inputs, roughly estimate them to your best ability, and then test the viability of your idea using these input assumptions. As long as your input assumptions aren't off by an order of magnitude, the resulting estimate will be accurate enough to make a go or no-go decision.

To test the viability of an idea, we're not going to use dozens of numbers but just five to seven key metrics. What are these key metrics? To answer that question, we need to first cover the one metric to rule them all: *traction*.

MINDSET #3

Traction is the goal.

What Is Traction?

While traction is a popular concept, it's poorly understood and often misused to mean any convenient metric that happens to be going up and to the right. For instance, a plot of the cumulative number of users over time has nowhere to go but up and to the right. A more sophisticated investor will see right through this facade of vanity metrics.

While a lot of stakeholders ask for financial metrics like revenue and profit, these aren't the right traction metrics either. Why? Because revenue and profit often start out near zero and even track in negative numbers in the product's early stages (Figure 3-3).

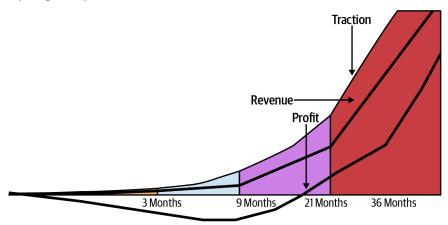


Figure 3-3. The product J-curve

More importantly, revenue and profit are *trailing indicators* of progress. Good traction metrics, on the other hand, are *leading indicators* of progress—i.e., they help you predict future business model growth.

What do such metrics look like? The first clue comes from realizing that traction is nothing other than a measure of a working business model. All business models have customers, and so it follows that traction metrics need to be customer-centric.

The next clue comes from revisiting our earlier definition of a business model as a description of how you create, deliver, and capture value from customers. As capturing value from customers is key to building a working business model, we can define traction as the rate at which a business model captures monetizable value from its customers.

It's important to emphasize that *monetizable* value is not the same thing as revenue. Rather, monetizable value is a future indicator of revenue. It's easy to see this distinction in a multisided business model like Facebook, where monetizable value comes from the users on the social network (more specifically, their attention and data). Facebook converts this monetizable value into revenue through its customers (advertisers) placing ads on the platform.

As all businesses share a universal goal of turning users into customers, we can make this definition of traction even more tangible by visualizing the output of a working business model using a customer factory metaphor.

Welcome to the Customer Factory

In this metaphor, a customer factory represents everything inside your business: marketing, sales, customer service, and product. The job of your customer factory is to make customers. It does this by taking in unaware visitors as input (raw material) and turning them into happy customers (finished product). In this metaphor, traction is the throughput of your customer factory, which is equivalent to the rate at which you make customers.

This process of making customers can be further broken down into five macro steps that can be universally found in all types of business models: acquisition, activation, retention, revenue, and referral (Figure 3-4). The customer factory is the second model we use in the Continuous Innovation Framework.

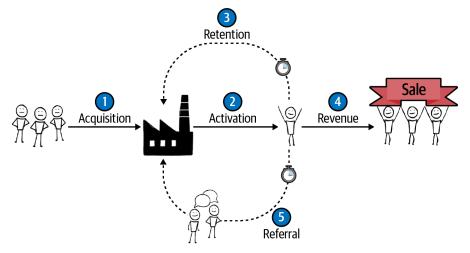


Figure 3-4. The customer factory blueprint

These five macro steps represent the leading key metrics that can be used to measure traction in any kind of business. Let's walk through each step using a flower shop and a software product as examples.

Step 1. Acquisition

Acquisition describes the point when you turn an unaware visitor into an interested prospect.

In the case of the flower shop, getting someone walking by your window to stop and come into your shop is an acquisition event.

On a product website, getting someone to do anything other than leave (abandon) the site is a measure of acquisition. I specifically recommend measuring acquisition at the point when you can uniquely identify a visitor and start a conversation with them (e.g., getting their email address).

Step 2. Activation

Activation describes the point when the interested customer has their first gratifying user experience. This is also often described as the *aha moment*. In the case of the flower shop, if the prospect found the shop in disarray once they came inside, that would be a disconnect with the promise made at the front of the store, and they'd probably leave and never return. You want them to come in and find arrangements so magnificent that it's impossible to resist buying one.

On a product website, once the prospect signs up, you have to quickly get them to a point where they can connect the promise you made on your landing page (your UVP) with your product.

Step 3. Retention

Retention measures repeated use and/or engagement with your product. In the case of the flower shop, the action of coming back to the store—and in the case of the product website, the act of logging back in to use the product again—would count as retention.

Step 4. Revenue

Revenue measures the events that get you paid. These could be buying flowers or buying a subscription for your product. These events may or may not occur on the first visit, and even if they do, most products offer a trial period where a customer may return the product for a refund. This is why revenue is drawn as step 4 in Figure 3-4.

Step 5. Referral

Referral is a type of acquisition channel that uses a feedback loop from your happy customers to drive new prospects into your customer factory. In the case

of the flower shop, this could be as simple as telling a friend about the store. For the software product, this could range from implicit social sharing features (like a Share button) to explicit affiliate referral programs.

NOTE -

You might have recognized the steps in the customer factory blueprint from Dave McClure's Pirate Metrics model. If you don't know what that is and are wondering why it's called Pirate Metrics, the first letter of each of the macro steps together spell out the word "AARRR," which is something pirates like to say.

The difference between the Pirate Metrics model and the customer factory is that the former visualizes a business model as a linear funnel while the latter visualizes the business model as a system (with feedback loops). We'll cover the ramifications of modeling your business model as a system (rather than a funnel) in later chapters.

Testing the Viability of Your Idea Using a Fermi Estimate

Now that you understand how to visualize traction as the output of a customer factory, you are ready to stress test the viability of your idea (Figure 3-5).

The first step is defining a target throughput goal for your customer factory. Next, you estimate reasonable values for the macro steps in order to test the viability of your customer factory. If your customer factory cannot deliver on your target throughput, you need to either adjust your target throughput goal or your customer factory steps (or both).

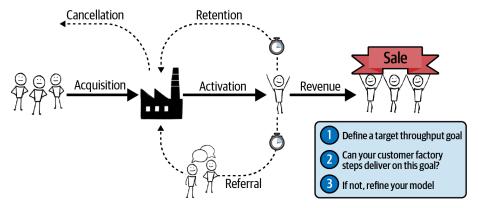


Figure 3-5. Stress testing for viability using a Fermi estimate

Let's walk through these steps in more detail.

Define a Target Throughput Goal

If you don't know where you are going, any road will take you there.

-Adapted from Alice in Wonderland, by Lewis Carroll

The quote above captures the reason we need a goal. However, while we are told to set goals, we generally aren't taught how to set *good* goals. The reason a lot of forecast models result in fictional plans is that they attempt to estimate the maximum upside potential of an idea too far into the future. This is very hard (if not impossible) to do in the early stages of an idea, which are riddled with extreme uncertainty.

It's much more practical to set your target goal based on a shorter horizon rather than a longer horizon—think *minimum success criteria* (MSC) versus *maximum upside potential*. If, for instance, you had asked the founders of Airbnb, Google, or Facebook when they were first starting out whether they thought they would go on to build billion-dollar companies, they would probably have laughed at you. As Mark Zuckerberg famously said:

We built it and we didn't expect it to be a company, we were just building this because we thought it was awesome.

While Zuckerberg had no idea Facebook would turn into a billion-dollar company less than 10 years after its founding, within the first 2 years he turned down a \$50 million acquisition offer from Myspace because he thought they were lowballing. He countered with \$75 million, which was his MSC at the time, and Myspace turned him down.

— NOTE -

Your MSC is the smallest outcome that would make you deem your project a success three years from now.

When asked to set the MSC for an idea, a lot of entrepreneurs aim for breakeven. This, however, is too short-sighted as it doesn't guarantee you'll be able to build a repeatable and scalable business model as you grow beyond your initial founding team (typically a team of one).

The right balance is setting your target goalpost a little beyond your product/market fit point (Figure 3-6). That is when your business model is largely de-risked and your focus shifts toward scaling growth. That is also when you can see further and make more accurate five- to seven-year financial forecasts. Most products average about two years to achieve product/market fit, which is why I recommend setting the time horizon for reaching your MSC at three years.

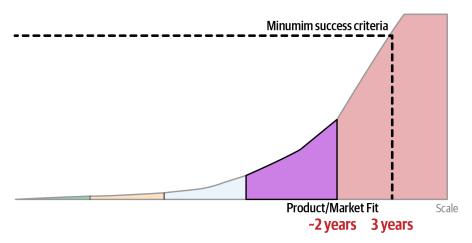


Figure 3-6. *Timeline for achieving your MSC*

Following are some additional guidelines for defining your MSC.

Set your minimum success criteria independently from your idea

Many entrepreneurs consider pursuing multiple ideas at the same time (rightly so), but how do you pick among them? Why would you ever want to work on an idea that has no chance of hitting your MSC?

Once you define your MSC, use this to filter out your most promising idea(s). In other words, don't start with an idea and ask how big it could get; start with your MSC, and ask if your idea can deliver on your goal.

Frame your goal in terms of annual recurring revenue (ARR)

I recommend using revenue rather than profit or company valuation to frame your goal because revenue has fewer inputs (number of customers, price, and frequency of purchases), which keeps the model simple. Profit and valuation are derivatives of revenue anyway, so as long as you buffer accordingly, you cover your bases.

For example:

- If you are building a SaaS business, most are expected to run at >80% profit margins by product/market fit. If you want to generate profits of \$10m/yr, set your target throughput goal to \$12.5m ARR.
- If you are building a hardware business with typical margins of 40%, for profits of \$10m/yr, set your target throughput goal to \$25m ARR.
- If you are building a marketplace business with typical take rates of 10%, for profits of \$10m/yr, set your target throughput goal to \$100m ARR.

Even impact-driven businesses should use revenue to frame their goal. Start by estimating the impact you'd like to deliver (e.g., plant one million trees per year). Then ask how much money you'd need to fund that impact.

NOTE		
INOIL		

Revenue is like oxygen. We don't live for oxygen, but we need oxygen to live.

Next, I emphasize *recurring revenue* versus just *revenue*, because you need to think in terms of systems, not goals.

Focus on systems, not goals

While there's a place for goals, simply setting a goal is never enough. It's way more actionable to focus on building systems that move you toward a goal.

NOTE —
Goals focus on outputs. Systems focus on inputs.

For example:

- Goal: Losing 10 pounds
- System: Learning to eat right

The problem with goals is that they don't tell you how to achieve them or what to do when you achieve them. In the preceding example, people may be able to brute-force losing 10 pounds once through sheer willpower. But once that wears off, the weight goes back on.

Systems, on the other hand—like learning to eat right—help you focus on key activities or routines that move you toward the goal. Once these key activities turn into habits, you not only achieve your goal but shoot past it.

The best approach, then, is to use goals for ballparking your desired outcome, and systems for formulating key steps to achieving the goal.

You still need to size up your goal, because the effort that goes into losing 10 pounds is quite different from that for losing 100 pounds. But once a ballpark goal is set, like losing 10 pounds, does it really matter if you lose 9 pounds or 11 pounds?

Focus your energy instead on building systems to help you achieve the goal.

Your minimum success criteria are determined by your operating environment

If you are a startup founder, ask yourself whether you intend to raise money from investors. If the answer is yes, your MSC will be set by them, not you. Study how your target investors value companies at product/market fit; that will give you some specific benchmarks to use in your modeling.

If you don't intend to raise money from investors and instead want to bootstrap your company all the way, ask yourself:

- How big a company would I like to build?
- How many employees will my company have?

The answers to these questions can help you ballpark your ARR target. For example, a company with 30 employees needs roughly \$5m ARR just to cover payroll.

If you work at a big company, ask your stakeholders now (not three years from now) how they define a successful product. If they aren't sure, suggest that they revisit their past product launch archives to determine what the first-three-year trajectory looked like. Then set your MSC based on the top five products your company has launched. If you can promise to outperform their three-year revenue trajectories by a factor of two or three (because you're using a *better* innovation process), you should be able to get your stakeholders on board.

Don't chase three-digit precision

The purpose of this exercise is to ballpark a rough three-year ARR estimate. Don't overthink this. When in doubt, think in powers of 10:

- \$100k ARR: Roughly enough to quit your day job
- \$1m ARR: Enough for a small company (two or three employees)
- \$10m ARR: Enough for a VC-backed business

Adjust accordingly from here.

Don't go outside the building without minimum success criteria

In their exuberance for action, a lot of entrepreneurs rush outside the building too soon and start building and testing their product—only to find out months later that they were chasing too small an idea. Taking the requisite time to deliberate and define your MSC is a critical first step. I wouldn't advise skipping it.

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There is no right or wrong number for your MSC, but you should have a number.

Steve sets his minimum success criteria

Every major publication that covers AR/VR technologies predicts that this technology is going to change entire industries, and the market for AR/VR is valued in the billions of dollars. There are already major players, like Microsoft, Apple, Google, Facebook, and Amazon, deploying this technology.

As Steve has his sights set on building a key enabler platform for AR/VR technology, he recognizes that while he can get started on his own, he will eventually require venture capital in order to scale his vision and establish his platform's unfair advantage.

Steve decides to set his ballpark MSC goal to \$10m ARR (annual recurring revenue) in three years.

Test Whether Your Idea Can Deliver Your Target Throughput Goal

With your MSC set, you can now start testing the viability of your idea by inputting your best-guess estimates for your customer factory metrics.

I recommend doing this in the following order (shown in Figure 3-7):

- 1. Revenue (review assumptions to estimate active customers)
- 2. Retention
- 3. Acquisition
- 4. Activation
- 5. Referral

If you aren't interested in the thinking process behind the math, feel free to skip to the end of this section, where you'll find a link to an online tool that does all the calculations for you.

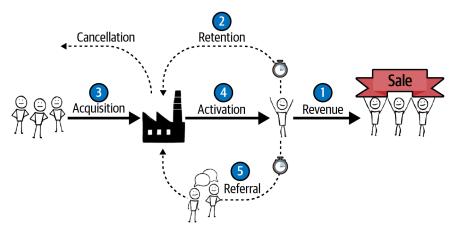


Figure 3-7. Recommended order for testing viability

Estimate the required number of active customers

If you don't have any specific pricing assumptions on your Lean Canvas, go back to "Revenue Streams and Cost Structure" on page 18 to learn how to set ballpark pricing for your product. Then use the following formula to determine the number of active customers you'll need to reach your MSC goal:

Number of active customers =
$$\frac{\text{Yearly revenue target}}{\text{Yearly customer revenue}}$$

The number of active customers is already a more telling number than your revenue goal. It helps to test whether your overall customer and early adopter segments are big enough. As shown in Figure 3-8, your early adopter segment should ideally be roughly 16% of your overall customer segment (your total addressable market).

This number comes from the *diffusion of innovations* theory, popularized by Everett Rogers in his book of the same title (Free Press). Diffusion of innovations explains how and why new ideas spread starting with innovators and early adopters (which I group together) to the early majority, the late majority, and finally the laggards.

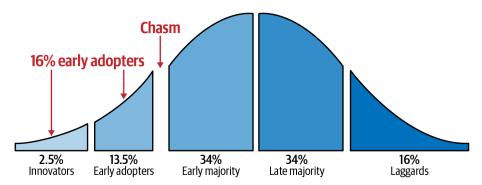


Figure 3-8. The ideal early adopter segment size

The way you position your product changes with each group of adopters (visualized as breaks or gaps in the figure). According to Geoffrey Moore, the biggest gap is the one between early adopters and the early majority, which he identified as a chasm big enough to derail a startup in his groundbreaking book *Crossing the Chasm* (HarperBusiness). Why is that? Because early adopters (and visionaries) have above-average motivation to be first with the new technology if it promises to get them closer to their desired outcomes. The marketing strategies that win over this group, however, won't work so well for the next group—the early majority—because they tend to be pragmatists and are risk averse. This is why you should ideally aim to get as close as possible to your MSC using your early adopter segment alone.

Steve estimates how many active customers he'll need

Steve decides to stress test his Software Developers business model first. Given that his MSC is hitting an annual recurring revenue of \$10m/yr using a subscription model (SaaS) with a fee of \$50/mo, Steve determines that he'll need 16,667 active customers (\$10m/yr / (\$100/mo x 12 months)) by year 3.

He's a little surprised by that number and does a quick online search for "top AR/VR app companies," which returns 2,286 firms. That makes him nervous, because that only accounts for 14% of his required number of customers. As this number only represents his early adopter segment, he wonders whether demand for AR/VR will grow rapidly enough to provide the missing 86% in this time frame.

While he's hopeful that his no-code platform will turn non-software developers into customers, there is a lot of ground to cover, which makes him uneasy.

Estimate the required minimum customer acquisition rate

It would be great if all we had to do was work really hard for the first three years, hit our ARR goal, and then collect an annuity for life. We could retire on a beach! But unfortunately, it doesn't work out that way because of customer attrition, or *churn*.

All businesses have churn. This means that at some point customers will start leaving, and you'll need to replace them—not to grow your business, just to sustain it. This represents your *minimum customer acquisition rate*.

If you want to grow your business beyond your MSC, your new customer acquisition rate will need to be greater than your minimum customer acquisition rate. For example, if you have 10,000 active customers and 5% monthly churn, every month you will lose 500 customers on average. You'll need to acquire at least 500 new customers a month (6,000 new customers a year) just to maintain your business model, and more than that to grow.

While most people understand the concept of churn, they struggle with estimating it. A more practical approach is using the inverse of churn: customer lifetime, or retention. Your customer lifetime is how long on average (in months or years) you expect to keep your customers.

How do you estimate your average customer lifetime? Here are some ideas:

- Study other businesses in your industry to determine average attrition or churn rates.
- Estimate the utility of your product. Every job has a finite lifetime. For example, it typically takes two weeks to paint a house.
- If you find yourself going above five years on your average customer lifetime estimate, be prepared to justify your reasoning with additional evidence.

Once you estimate your average customer lifetime, you can use Table 3-1 to determine your monthly churn rate.

Table 3-1. Customer lifetime to churn rate conversion

Lifetime in years	Monthly churn rate
1	8.33%
2	4.17%
3	2.78%
4	2.08%
5	1.67%
6	1.39%
7	1.19%
8	1.04%
9	0.93%
10	0.83%

Churn rate =
$$\frac{1}{\text{Customer lifetime(in months)}}$$

Then calculate your minimum customer acquisition rate using the following formula:

Minimum customer acquisition rate(monthly) = Number of active customers x Monthly churn rate

Steve estimates his minimum customer acquisition rate

Steve does a quick lookup on the average customer lifetime for SaaS companies and finds that four years is considered a good target. Based on Table 3-1, that represents a 2.08% monthly churn rate.

If in year 3 he has 16,667 active customers, this means he'll be losing 347 customers/mo. That means he'll have to acquire at least 347 customers/mo (roughly 4,000 new customers/yr) just to maintain his business model.

He draws a quick sketch to visualize these numbers (Figure 3-9).

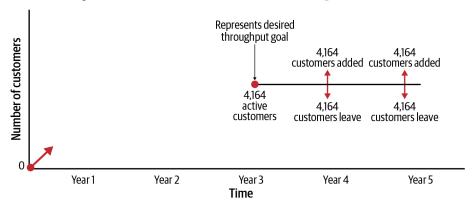


Figure 3-9. Steve's minimum customer acquisition rate after year 3

Estimate the required number of leads

No customer acquisition funnel converts at 100%, which means you'll need a lot more users than customers.

The customer factory breaks the conversion from users to customers into three steps:

- Acquisition (user acquisition rate)
- Activation (trials or pilot conversion rate)
- Revenue (customer conversion rate)

With a little research, it's fairly easy to find typical conversion rates for your type of product. If you're struggling to find accurate numbers, remember that you only need to be within an order of magnitude to create a useful estimate. Most products, irrespective of product type, start with a customer conversion rate somewhere between 0.5–3%. When in doubt, it's safe to assume a 1% customer conversion rate. Here are a few guidelines:

- For B2B sales, according to Salesforce, an average conversion rate for MQL (marketing qualified lead) to SQL (sales qualified lead) is 13%. From there, only 6% of SQLs convert to deals. That's a 0.78% customer conversion rate.
- For SaaS products, according to various industry benchmarks, 2–10% sign up, 15–50% become subscribers, and 20–40% churn on the first pay period. That's a 0.6–1.2% customer conversion rate.
- For ecommerce sites that have just started out, most report a 1–3% customer conversion rate.

Steve estimates the number of leads he'll need to attract

Steve uses the ballpark 1% paid conversion rate for SaaS to realize that in order to acquire 347 new customers per month, he will need to attract 34,700 leads/mo (Figure 3-10). And this is just to maintain his annual recurring revenue, not to grow it.

As VCs expect a 10x return in the subsequent 2 to 4 years after product/market fit, that means he'll need to find a way to eventually attract 347,000 leads/mo (or 4m+ leads/yr). That leaves a knot in his stomach.

Steve's business model has fallen apart. What now? Don't despair. There's still one more metric: referral.

¹ See Lean Analytics by Alistair Croll and Benjamin Yoslovitz (O'Reilly).

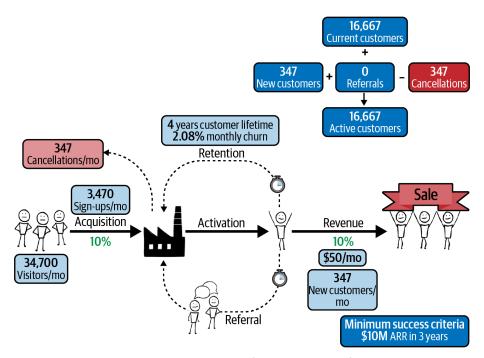


Figure 3-10. Steve's customer factory at the start of year 4

Use your referral assumptions to lessen the burden of customer acquisition

The referral loop in the customer factory utilizes existing customers to grow your business model, thereby lessening the burden of customer acquisition. Start by estimating a reasonable customer referral rate for your type of product.

Viral growth requires the referral rate to be above 100%, and unless your product has inherently viral behavior (sharing with others) built in as a byproduct of usage (e.g., Facebook), this is incredibly rare. From my experience, a sustainable referral rate of 15–25% is good, 40% is great, and around 70% is excellent.

Steve tries to save his business model

Steve does not expect his product to go viral and decides to use a more modest 20% as a reasonable referral rate. At first, he's a bit relieved to see that instead of having to acquire all 34,700 leads by himself, he might be able to rely on his existing customers to help attract 20% of that traffic (6,940 leads). But while that helps, it isn't enough.

He quickly realizes that unless he can drive really high referral rates (>80%) or get his product to go viral (>100%), while referrals will serve as an amplifier,

they aren't enough to save his business model. Is it really doomed? Read on to learn how he finds a fix.

Revise Your Goal or Fix Your Business Model

Even though what we're creating is a rough estimate, any estimate is better than none. If your model doesn't have a chance of working on paper, it's not going to work in the real world either.

____TIP_____

It's much better to invalidate your model in five minutes than to spend five months pursuing a flawed model.

Unlike a spreadsheet, where you can hide behind (or get lost with) lots of numbers, there's nowhere to hide with a Fermi estimate. When confronted with a business model that fails your viability test, there are only two possible solutions: review your goal or fix your business model. Since no one enjoys revising their goal downward, we'll leave that as a last resort. Let's first consider possible ways to fix your business model.

Fixing your business model

Because a Fermi estimate uses a handful of input assumptions, it makes it a lot easier to understand why a model fails—and better yet, what levers to pull in order to fix your model. Before we get into specific levers, it helps to realize that for a given MSC goal, there are only a finite number of viable ways to hit that goal, as shown in Figure 3-11.

This chart was inspired by a blog post by Christoph Janz, a VC at Point Nine Capital, titled "Five Ways to Build a \$100 Million SaaS Business."

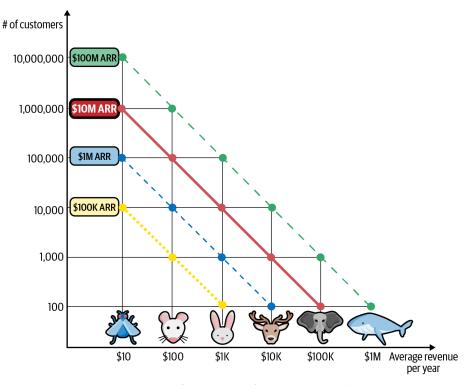


Figure 3-11. There are a finite number of viable ways to build a business

Here's how to use the chart. Let's assume you have an MSC goal of achieving \$10m ARR in three years. Find that line on the chart, and you'll see that in order to achieve that goal you'll need to acquire one of the following:

- 1 million customers paying you \$10/yr
- 100,000 customers paying you \$100/yr
- 10,000 customers paying you \$1,000/yr
- 1,000 customers paying you \$10,000/yr
- 100 customers paying you \$100,000/yr
- 10 customers paying you \$1,000,000/yr

There are trade-offs at both extremes; for example, the only way to acquire a million customers in 3 years is through a viral engine of growth, and getting 10 people to pay you a million dollars per year requires a very high-value unique value proposition and a complex sales process. Both of these paths, while not impossible, are extremely difficult to pull off—leaving you with four

more practical ways for achieving your goal. Pick one or two and explore from there.

The power of this kind of thinking is that it lets you take a step back from your specific idea and view multiple business models through the lens of viability. Once you select a particular way of achieving your goal, such as acquiring 10,000 customers paying you \$1,000/yr, the question changes from "How big could my idea get?" to:

- Can I realistically acquire 10,000 customers within 3 years?
- Do I have a \$1,000/yr problem worth solving?

If the answer to either question is shaky, you'll need to adjust your model. Given that we aren't considering downsizing your MSC at this point, the only other avenue for fixing your model is increasing the average revenue per user (ARPU) per year that you capture from your customers. Small incremental adjustments seldom fix a Fermi estimate. You're looking for either one big 10x lever or, more realistically, a few levers that add up to 10x.

Here are some ways of finding such levers.

Revisit your pricing. Raising the price of your product is one of the most underutilized levers. If you double your pricing, you'll only need half the number of customers. A lot of entrepreneurs hesitate to raise pricing because they are scared they'll lose customers. Here's how to think about this: if you double your pricing and don't lose more than half your customers, you still come out ahead. You come out ahead because while your revenue stays the same, your operating expenses to serve fewer higher-paying customers go down—so your net revenue or profit goes up.

Many entrepreneurs make a mistake when setting the price for their products using cost-based pricing. They start by estimating the cost of building their product. They then slap on a "reasonable" margin to determine the price of the product. This more often than not leads to suboptimal pricing—i.e., leaving money on the table. It's also a backward way of setting pricing. Here's why: your customers don't care about your cost structure or your margins. They care about achieving their desired outcomes (value) at a fair price. How do you set fair pricing? By applying the Innovator's Gift.

We used the Innovator's Gift in Chapter 2 to stress test the desirability of your UVP—i.e., do you have a big enough problem to *cause a switch*? Here, we are going to apply the Innovator's Gift to stress test the viability of your revenue streams—i.e., do you have a big enough problem *worth solving*?

Remember that innovation is about causing a switch from an old way to your *better* new way. When customers consider a switch, they compare the new way

against the old way. That's how you too should think about your product's pricing.

Your optimal price sits somewhere between two anchors. The first anchor comes from the monetary value your customers place on your unique value proposition. A customer will only use your product if they stand to realize more value for themselves than they pay you. This anchor typically sets the ceiling for your pricing.

The second anchor comes from the cost of the existing alternatives. In other words, how much time, money, and effort are customers currently spending on getting the job done? If your UVP is indeed better, you can stand to charge a premium, but be wary that customers will always compare your product against the existing alternatives. This anchor typically sets the floor for your pricing.

The optimal price for your product then is somewhere between the cost of existing alternatives and the monetary value customers place on your UVP. Don't aim to nail your optimal price at this stage. Getting to optimal pricing is more science than art and takes lots of testing. We'll cover some techniques for price optimization later in the book, but for now your goal is simply ballparking a *rough fair price* for your product.

How far are you able to push your pricing? Can you double it? Can you raise it by a factor of 10? If applying the Innovator's Gift doesn't fix your business model, there are still a few additional levers to consider.

Revisit your problems. Consider taking on a bigger problem to solve, or a problem that occurs more frequently, or both. Chasing a bigger problem allows you to raise the pricing of your product. Increasing the frequency of usage of your product (utility) potentially allows you to increase your customer lifetime, thereby allowing you to recapture more value.

Consider a different customer segment. You can find every product from bottled water to cars offered on a wide spectrum of prices. The type of customer who buys a \$25,000 car is very different from one who buys a \$250,000 car. Pricing is not only a part of your product, it defines your customer segment. If you need to increase your pricing by 10x, you could try to change your UVP, or you could simply change your target customer segment. Revisit your other idea variants and reprioritize them through the lens of viability.

Revising your goal

While no one enjoys revising their goal downward, this exercise hopefully surfaces a healthy appreciation for just how hard it can be to grow a business. If your idea cannot hit your MSC but you want to pursue it anyway for other reasons, recalibrate your goal and move forward.

It may also be possible to break your journey to product/market fit across multiple business models. The most common approach is targeting an initial customer segment at a lower price point and then moving upstream across a second and maybe even a third customer segment at subsequently higher price points. For example, you might start with a self-serve SaaS product and then move into the enterprise software space.

While this may sound like a highly appealing strategy because it dispels your immediate business model viability woes, a word of caution is in order. Taking on multiple business models in a three-year period is not easy: you'll have to switch across multiple channels, craft new value propositions, build different features, etc.

The ideal is getting to your MSC goal with a single business model, whenever possible.

Steve fixes his business model

Steve goes over his back-of-the-envelope calculations and lists out the input assumptions he used. He finds that his model fell apart with just four key metrics:

- MSC: \$10m ARR in 3 years
- Pricing (revenue): \$50/mo
- Customer lifetime (retention): 4 years
- Paid conversion rate (paid acquisition): 1%

Next, he goes over each one and tries to find a 3x-10x lever.

He recognizes that his MSC is set by his ambition and is nonnegotiable, so he skips that. He feels the same about his customer lifetime assumption. Sure, he might be able to keep good customers for an additional 1 to 2 years, but there's no way he can guarantee they'll stay 3 to 10 times longer!

All of a sudden, it dawns on him that the most actionable lever in his control is pricing. The reason he picked \$50/mo was to make his product highly appealing to software developers in order to drive adoption. But could a software developer justify paying 10x that?

Most of the existing alternatives on his Lean Canvas are free to use, but they require the software developer to then spend hundreds of hours coding to build an app. A typical app takes 200 hours to build, and at a billing rate of \$50–75/hr, that represents \$10–15k.

Steve believes that his platform could easily shave 10x off the app development time, so it would take 20 hours/app versus 200 hours/app. Using that anchor,

he would surely be able to justify charging at least 5x the price (\$250/mo). Could he charge 10x the price (\$500/mo)? Maybe. He realizes that:

- With 5x the price, he would need 1/5 the number of customers.
- With 10x the price, he would need 1/10 the number of customers (Figure 3-12).

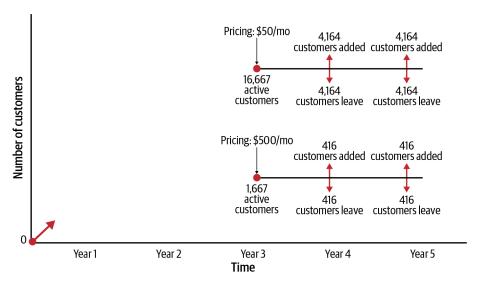


Figure 3-12. Pricing is a highly underutilized lever

Isn't this just funny math?

Not really, because this exercise exposes the input assumptions that make your business model work (or that cause it to fail). When Steve started this exercise, all he had was a business model story with a set of qualitative assumptions, which seemed like a promising start for an early-stage product.

However, after running the Fermi estimate exercise, he found that even in a best-case scenario his Software Developers business model would not hit his MSC goal of \$10m ARR. In order to have a chance of hitting the goal he needed to raise his pricing by at least 5x (\$250/mo), and his model would be even better at 10x (\$500/mo).

Steve's pricing model just became his riskiest assumption—one that he can and should test sooner rather than later.

Next, he turns his attention to the other canvases. He wonders:

- How much would a retailer value a solution that helped them sell 3x–10x more stuff online?
- How much does an architect bill a client for a 3D rendering?

These are the right questions to be asking in order to determine value-based pricing. Remember, customers don't care about your solution, they care about their problems. They definitely don't care about what your solution costs to build. The best way, then, to set pricing for your product is not by anchoring it against the cost of building your solution, but by anchoring against:

- The cost of how your customers are solving these problems today
- The value you promise to deliver (your unique value proposition)

Running a Fermi Estimate on Your Idea

While we all need a ballpark destination to justify the journey, it's not the destination itself but the starting assumptions and milestones along the way that inform whether we are on the right path or need a course correction.

Ballpark your business model using the three-step process outlined here:

- 1. Define your minimum success criteria.
 - Remember, this can be a deep "why" question, but it's critical to use your MSC to constrain your idea, not the other way around.
- 2. Test whether your idea can deliver on your goal.
 - Use your pricing model, customer lifetime, and conversion rate assumptions to estimate how many customers you'll need to hit and sustain your goal.
- 3. Revise your goal or adjust your business model (if needed).
 - If your idea falls short of your MSC goal, identify the key levers that broke your model and see if they can be dialed in to fix it. These key levers are typically also the first set of assumptions you should test.

The deliverable from this Fermi estimation exercise is a business model that works on paper. Don't forget to add these input assumptions to your Lean

Canvas. If you have a multisided or marketplace model, the steps are the same but you need to consider both sides of the model.

Now It's Your Turn

How you create your Fermi estimate is up to you. You can:

- Do the math on paper.
- Visit the LEANSTACK website to learn how to create a Fermi estimate online.

Steve Reviews His Business Models with Mary

"Mind blown," Steve says. "This Fermi estimation exercise was a crash course in startup growth metrics. Up until now, I was solely focused on building a great product. Now I understand that you can't just expect growth to happen. You have to plan for it."

Mary nods her head. "Yup, it's the best five-minute investment you can make at the outset of any idea. The real power of this tool is that it helps you find what constitutes a problem worth solving, which informs your solution, rather than the other way around."

Steve takes a moment to process Mary's point and comments, "Hmmm, I think I see what you mean. I guess I figured out that I need to find at least a \$500/mo problem to make my business model work, irrespective of who the customers are and what problems I had initially on my Lean Canvases. For my Software Developers Lean Canvas especially, this was a significant jump from my initial \$50/mo price point that I simply pulled out of thin air without much thought."

"That's exactly right," says Mary. "Price is such an underutilized lever, and lots of entrepreneurs fall into the cost-based pricing trap instead of thinking in terms of value-based pricing or anchoring against existing alternatives."

She goes on, "The other big idea that hopefully you took away from the exercise is that it's generally better to focus on building any business model around fewer high lifetime value customers than lots of low lifetime value customers—"

[&]quot;Because of churn?" Steve interrupts.

[&]quot;Yes." Mary smiles.

Next, Steve walks Mary through his latest Lean Canvases to outline how he:

- Set his MSC goal
- Found the right levers to pull
- Prioritized his top three canvases

"I see you're still leaning toward the Software Developers canvas. All in all, this is pretty thorough, Steve...and a great starting point for your models."

"I think so too, but I still have this nagging feeling that..."

Mary nudges Steve to go on.

He shifts uncomfortably in his chair, then continues. "While these models have helped me focus my product's unique value proposition around desired customer outcomes versus product features and think hard about pricing, they have also increased the scope of what I thought I initially needed to build. I've been outlining my 18-month product roadmap, and if I stick with just the Software Developers canvas, I'm at least 6 months away from a working first release, and more like 9 months away. Frankly, I'm worried about the ramp to my minimum success criteria." Steve pulls out his notebook and shows Mary the sketch he made (Figure 3-13).

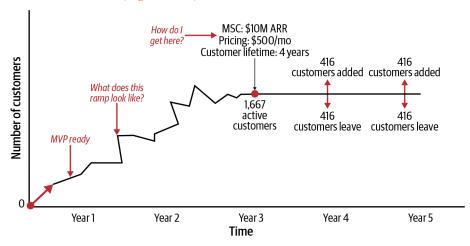


Figure 3-13. Steve wonders about his initial ramp

"I know that three years seems like a long time and maybe I shouldn't worry about it...but getting to roughly 1,600 paying customers by then translates to over 500 customers per year! I've already been working on this project for over a year and I feel I'm just not going fast enough. If only I had more

resources—another developer or two would greatly speed things up, and someone to handle marketing and sales..."

Mary glances at her watch and says, "I've got to be in a meeting in 10 minutes, so I'll send you some information on traction roadmaps over email."

"A traction roadmap? Is that like a product roadmap?" Steve asks.

"Not quite. A traction roadmap helps break your three-year goal into more intermediate milestones with specific traction goals at each stage, and a time-line. It addresses one of your questions on how you model the ramp. Once you see these milestones, you'll be able to more clearly formulate a rollout plan."

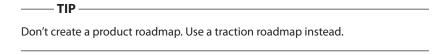
Mary notices Steve wants to jump in, but she keeps talking. "The first step in the Continuous Innovation Framework is sketching out a business model that *can possibly work*. Since most products initially fumble on customer and market risks, you need to start there by stress testing your business model for desirability and viability, which you've done. You're now wondering how to pull off your business model. This is exactly what the next feasibility stress test is all about and where traction roadmaps and rollout planning come in. Once you've charted a traction roadmap, shoot me a note."

Mary glances at her watch again and says, "Shoot, I'm going to be late again!"

Stress Test Your Idea for Feasibility

Feasibility: Can you build this?

Product roadmaps have traditionally been used for feasibility testing and rollout planning. But product roadmaps assume you know what you'll be building for the next 18–24 months, which you don't. This is where traction roadmaps come in.



Unlike a product roadmap, a traction roadmap isn't output oriented, but outcome oriented. You already learned about an outcome-oriented metric in the previous chapter, which fits the bill perfectly: traction. You also know how to measure it three years into the future with your minimum success criteria.

But while three years is the right time frame for sizing the viability of your idea, for the reasons covered in the last chapter, it's still too far out into the future for determining your idea's feasibility—i.e., how you'll pull it off.

You need a way to break your MSC goal into shorter-term milestones. These intermediate milestones will help you visualize your journey as more manageable stages and chart a stage-based rollout plan. That's what we'll cover in this chapter, which focuses on stress testing feasibility (Figure 4-1).

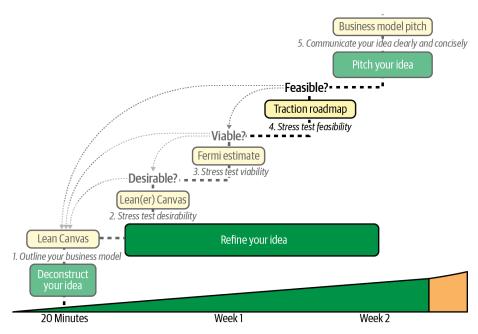


Figure 4-1. Stress testing feasibility

Charting a Traction Ramp

In the last chapter we saw Steve struggling to figure out how he'd meet his goal of having roughly 1,600 customers by year 3. How would you suggest he model the first three-year ramp for his product: linearly, nonlinearly, exponentially?

The ramp can't be linear because the shortest distance between two points is a straight line. Growing a product linearly would require already having the perfect plan to execute. A perfect plan in the world of startups is a myth.

The diffusion of innovations theory discussed in "Estimate the required number of active customers" in Chapter 3 posits that market share for a new idea follows an S-curve. The first half of this S-curve is the familiar hockey-stick trajectory and the right answer to how you should model the first three years of your product rollout ramp (Figure 4-2). Remember that with your MSC, your objective is getting a little beyond product/market fit (the inflection point in the hockey-stick curve).

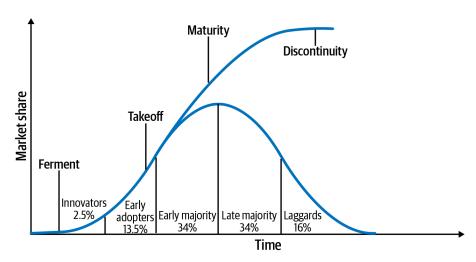


Figure 4-2. The S-curve and adoption life cycle

- NOTE -

A hockey-stick trajectory isn't only for startups. All new product adoptions, whether at a startup or a large company, follow a similar trajectory, starting with a flat portion that gets increasingly steeper over time, until it eventually reaches market saturation or gets disrupted by something else.

Since your MSC goal pegs the number of customers you'll need at the threeyear mark, you need just one more input assumption in order to model the ramp to your goal: growth rate.

What's a good growth rate to use for an early-stage product: 3x/yr, 5x/yr, 10x/yr, or something even higher? When asked to pick a growth rate for their traction roadmap, a lot of entrepreneurs steer toward a smaller number, but this isn't necessarily the best strategy.

Take a look at Figure 4-3, where I chart traction roadmaps using three different growth rates.

You may have been surprised to see that using a smaller growth rate actually requires a higher customer acquisition rate at the beginning than using a larger growth rate. A 10x model requires half the number of customers at year 2 and a quarter the number of customers at year 1 than a 5x model!

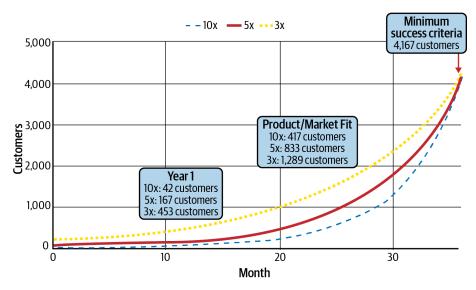


Figure 4-3. Three ways to hit your goal

This is because your three-year endpoint is fixed by your MSC goal and cannot change. All you are changing with your growth rate assumption is the slope of your hockey-stick curve. When confronted with this counterintuitive way of thinking about growth rates, many teams I coach change course and veer toward using a higher growth rate.

You want to be careful not to go too far the other way, either. I find that the right starting growth rate should strike a balance between learning and scalability, and I recommend that you set your starting growth rate to 10x/yr for the first 3 years.

While using a 10x/yr growth rate may only seem appropriate for hyper-growth startups, that isn't true. Remember that every company in the world starts at the same place—with a single customer. If you plan on growing from 1 customer to at least 100 customers in the first 3 years, you can use a 10x model:

Year 1: 1 customer

• Year 2: 10 customers

• Year 3: 100 customers

Steve Charts His Traction Roadmap

Steve decides to use the recommended 10x growth rate for his traction road-map, which results in the chart in Figure 4-4.

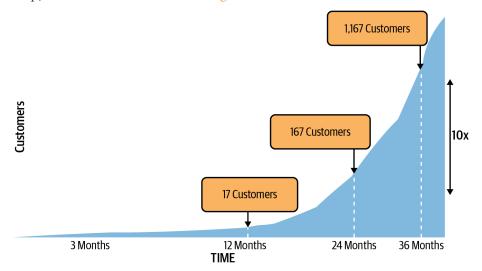


Figure 4-4. Steve's traction roadmap

He's greatly relieved to see that with a 10x model, he only needs to acquire 17 customers in year 1 versus 500+ customers with his original linear model. But that relief is short-lived. As he turns his attention to the righthand portion of the hockey-stick curve, a new worry comes over him.

He pulls out his phone and texts Mary a screenshot of his traction roadmap with a note below it: "How am I going to acquire 1,500 new customers in year 3? That's three times the customer acquisition rate I was originally worried about!"

He gets the following reply from Mary: "You have to walk before you can run. Focus on the lefthand side of the curve before the right, and use the numbers on your traction roadmap to formulate a *now-next-later rollout plan*."

Steve: "Hmm...okay, but even the year 1 goal, while smaller than what I was originally thinking, is still a stretch. I'm not sure how I'll acquire 17 customers when my product won't be ready for another 9 months. That's just 3 months to get 17 customers."

Mary: "You'll just have to find a way to get those customers sooner:)"

Steve: "I don't know how to do that :("

Mary: "Let's meet for lunch tomorrow to discuss."

Steve: "I can't wait."

Mary: "In the meantime, here's a thought exercise to work through. Imagine that you are an aspiring first-time restaurateur looking to open a new restaurant. It goes without saying that the food business is risky—most new restaurants don't survive their first year. Also, most restaurateurs, like entrepreneurs, typically have their solutions figured out. They have the perfect menu, the silverware and napkins all picked out...all they need is an investor to write them a big fat check and they'll be in business. The problem, of course, is that no one wants to take a chance on a first-time restaurateur because of all the risks associated with starting a new restaurant. Sound familiar?"

Steve: "lol...very funny."

Mary: "The key to breaking this catch-22 is prioritizing your starting risks versus your scaling risks. Your homework is to come up with what's immediately riskiest for this restaurateur and to formulate a now-next-later rollout plan."

Steve: "Okay, I'll give it a go..."

Mary: "Since we'll be talking food, maybe we could meet at the new taco place that just opened around the corner for lunch tomorrow. I heard it's pretty amazing."

Steve: "I love that place...but we'll need to get there early to beat the lines. Otherwise, it could easily be a one-hour wait."

Mary: "11:30 works for me...see you then."

Formulating a Now-Next-Later Rollout Plan

Many entrepreneurs are understandably in a rush to get to the righthand side of the hockey-stick curve. They do this by trying to go fast on everything. But going fast on everything doesn't necessarily make you go faster. Rather, it's a recipe for getting lost faster, because it's easy to lose focus and fall prey to the premature optimization trap.

Some examples of premature optimization include:

- Trying to optimize a product for thousands of users at the outset before you have any users
- Hiring a VP of sales before you have any customers
- Raising funding before you have traction

Premature optimization is one of the top killers of startups because it prioritizes the wrong risks at the wrong time, which depletes your already limited resources for achieving product/market fit. The way to avoid the premature optimization trap is by embracing a Continuous Innovation mindset.

MINDSET #4

Right action, right time.

At any given point, there are only a few key actions that stand to have the biggest impact on your business model. Your job is to focus on those key actions and ignore the rest. This is the essence of the right action, right time mindset.

Isn't there a danger of being too short-sighted? As an entrepreneur, you need to be able to simultaneously plan for the long term while acting for the short term. But as the startup journey is inherently shrouded in a fog of uncertainty, we can often only see what's immediately in front of us and struggle to make clear plans too far into the future. That's okay—this is where the now-next-later rollout plan comes in.

The idea behind the now-next-later plan is viewing your traction roadmap using three time horizons that roughly align with the three distinct segments of the hockey-stick curve: a flat section, followed by an increasingly steeper section that continues until you hit a noticeable inflection point, where the curve shoots up. Each of these segments represents a specific stage in the product life cycle, visualized in Figure 4-5:

- 1. Problem/solution fit
- 2. Product/market fit
- 3. Scale

You use your traction roadmap to determine the traction goal you need to meet at the end of each of these time horizons. You then attempt to formulate a plan for each time horizon. As can be expected, your *now* plan should be the most concrete, your *next* plan less so, and your *later* plan the fuzziest.

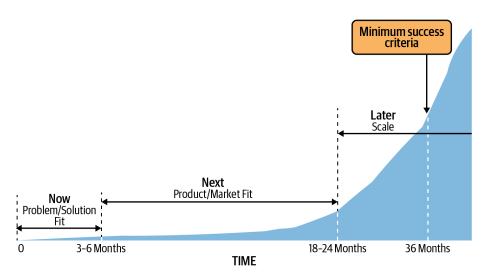


Figure 4-5. The three stages in the product life cycle

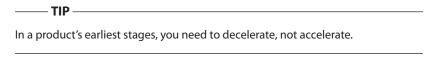
If you use a 10x growth rate, each stage is roughly one order of magnitude larger than the previous stage. What's not obvious is recognizing that these stages also drive what's riskiest in your business model. This is a key insight for formulating a stage-based now-next-later rollout plan—one that prioritizes your riskiest assumptions systematically.

MINDSET #5 Tackle your riskiest assumptions in stages.

Let's walk through these three stages, discussing at a high level the objectives, typical timeline, deliverables, and strategies for navigating each of them.

Stage 1: Now—Problem/Solution Fit

While no one enjoys the flat section of the hockey-stick curve, with the right mindset you learn to see it as a gift. The first step to practicing the right action, right time mindset is realizing that you can't get to the right side of the hockey-stick curve without first going through the flat section.



The flat section of the hockey-stick curve is where you uncover the key insights or secrets that allow you to build something unique and valuable. You do this by taking the requisite time to deeply understand your customers, uncover real problems worth solving, and test possible solutions using a Demo-Sell-Build process.

The counterintuitive insight here is that you don't need a working product to acquire paying customers.

The end deliverable of this stage is an evidence-based go or no-go decision to move forward to the build stage of your idea (stage 2).

By the end of this first stage, you specifically need to:

- Have a clear understanding of your customers' needs (and wants)
- Know the smallest thing you need to build to deliver value to your customers (your MVP)
- Have secured sufficient tangible commitments (e.g., advance payments, letters of intent) from customers

Achieving problem/solution fit typically takes three to six months for most products. We'll cover the detailed steps for achieving problem/solution fit in Chapters 7 through 11.

Stage 2: Next—Product/Market Fit

By the end of stage 1, you should have a clear definition of a product you know customers will want, rather than just hope they want. You then spend the next several weeks or months building out the first iteration of your product (your MVP) and getting ready for launch. The initial objective is racing toward demonstrating value delivery—i.e., determining whether you've built something that customers want. You do this by continuously improving your product using continuous feedback loops with your customers.

The counterintuitive insight here is that you don't need lots of users to hit repeatability in your business model.

Driving repeatability in your business model is the key deliverable of this stage. This is also where you cross the inflection point of the hockey-stick curve and start setting your sights on accelerating growth, which prepares you for entering stage 3.

Achieving product/market fit typically takes 18 to 24 months for most products. We'll cover the detailed steps for achieving product/market fit in Chapters 12 through 14.

Stage 3: Later—Scale

Some level of success is guaranteed after hitting product/market fit. The question is how much. In the Scale stage, there is a marked shift in strategy where your focus changes from getting the product right to pursuing growth. During this stage, you use several optimization experiments to test many possible growth strategies and campaigns.

The counterintuitive insight here is that even at this stage, going fast at everything is a recipe for getting lost faster—you need to focus on one engine of growth at a time.

The goal of this book is to help you navigate the journey from concept to just beyond product/market fit. I'll share some high-level guidelines on pursuing growth and life beyond product/market fit in Chapter 14.

Steve Gets a Lesson on Right Action, Right Time

Mary grabs the last available table at the taco restaurant and signals Steve over. As he pulls up a chair and sets down his lunch, he lets out a sigh and comments, "Wow, look at that line. It's already out the door and snaking around the corner. And it's only 11:45. We got here just in time."

"Yup. Ever since this place got written up and featured on a few lists, it's been like that every single day."

Mary waits for Steve to settle in and then asks, "So how did you do with the challenge question from yesterday? What do you think are the riskiest assumptions facing a first-time restaurateur?"

"Well, look at this place," Steve replies. "Surely, a good product and a good location are the ticket. As they say in real estate, it's all about location, location, location, location."

"Are you sure starting with a good location is a smart idea for a first-time restaurateur?" asks Mary.

She adds, "Good locations come at premium prices, which means the runway for making the restaurant a success is a lot shorter and the stakes a lot higher."

Mary waits for a nod from Steve, then goes on, "Furthermore, a good location alone doesn't guarantee success. Surely you've been to bad restaurants in great locations, and vice versa."

"Are you saying the location isn't important?"

"Not at all. A good location helps with growth—but that's a scaling risk, not a starting risk. At this point in our story, our restaurateur has an unproven

product. So their starting risks should center around value delivery, not growth acceleration."

Mary lets that sink in and then continues, "The reason I picked this place, apart from the amazing tacos, of course, is that while they are growing like crazy and have a number of prime locations today, that's not how they started. Do you know their origin story?"

Steve shakes his head.

"The founder, Jack, started with a food truck on the east side of town, which as you know is not exactly prime real estate."

Steve jumps in. "I remember reading about that now. I'm guessing that because starting with a food truck is a lot cheaper and faster than opening a brick-and-mortar restaurant, it allowed him to more quickly test his food concept. Was the food truck the MVP for the restaurant?"

Mary nods her head. "Exactly. The trap too many entrepreneurs fall into is premature optimization. They imagine their finished product being used by hundreds or thousands of customers and try to bring that to life. This prioritizes the wrong risks and leads them to work on the wrong actions at the wrong times. At the earliest stages of an idea, you don't need lots of users, just a few good customers—your early adopters."

"So what would you say was his riskiest assumption when he was starting? The food?"

"In a manner of speaking, yes, but there's more to it than just cooking up a bunch of food and driving around town trying to sell it. The first battle with any product is getting the attention of customers. You remember the Innovator's Gift? Innovation is fundamentally about causing a switch. Come lunchtime, in this town there are over a hundred lunch options within a three-mile radius. Why would anyone choose to go to the food truck?"

"Word of mouth?" Steve thinks aloud.

"Word of mouth comes later. You have to first grab the attention of your first batch of customers (your early adopters) with a unique value proposition. Once you have their attention, you need to deliver something different and remarkable. If you manage to do that, then word of mouth kicks in."

"Sure, that makes sense. But how do you actually get customers to the food truck? Did the founder invest in a huge branding campaign or already have a huge social media following?"

"Nope. Let me show you." Mary takes out her phone, pulls up an early photo of the food truck, and shows it to Steve.

"Tell me the first thing you notice."

Steve looks at the photo and sees a huge banner that spans the top half of the food truck.

"Korean BBQ Tacos?" he answers.

"That's exactly right. But that isn't the name or logo or even tagline of the restaurant—the things we product people love to obsess over. What is it?"

"Their unique value proposition?"

"Bingo. Here in Texas, if you offer great BBQ or great tacos you'll grab the attention of foodies—the early adopters, in this case. If you do both well, that's even better, but there are already a number of good places doing just that. But if you add a new twist—*Korean* BBQ tacos—that's unique and attention-grabbing. That's the kind of different that foodies and influencers want to be the first to sample, then tell others if it's good enough."

Mary pauses to take a sip, then goes on. "So let's put all the pieces together here. The biggest risk for a first-time restaurateur starts with attention. It starts by asking, what's the unique value proposition of your product? What's it for and who's it for? In this case, the founder decided to target foodies and chose a food truck because it's a much cheaper and faster vehicle (literally) for reaching this audience and testing his concept. That was his now plan, which he put into action in days, not weeks or months."

"Did he also come up with a next and a later plan at the same time?"

"Yes, he did. But they were pretty high-level. He had always envisioned opening up multiple restaurants around town as his next plan, and had ambitions for moving into other cities and building a nationwide brand as part of his later plan."

"How long did the founder run the food truck?" Steve asks.

"In his case, not very long. Not unsurprisingly, his original concept wasn't the one that took off, but he discovered his winning concept through dozens of small iterations in the early days of the food truck. He hit on some great recipes and then word of mouth kicked in. Within four weeks of opening, long lines started forming even before the food truck opened for lunch service."

"That quickly?" Steve asks.

"Yup, and it went bonkers after that. He started selling out every single day, which caught the attention of a few food critics. Once they covered and featured the food truck, the lines got even longer. He had to figure out a way to handle all this demand, which led him to put his later plan into effect."

"Opening another food truck!" Steve jumps in.

"Yup. He opened another food truck very close to the location we're in. A food truck was still a cheaper way to get into this market. As you know, rents here aren't cheap. That food truck started selling out too, which made for a killer early traction story that he used to raise money from investors. Within nine months of starting his original food truck, he had converted both of them into two brick-and-mortar locations. And I think he has three more locations coming. The rest, as they say, is history—"

Steve cuts in. "Weren't his investors worried that Jack wouldn't be able to scale the business? After all, running a food truck is quite different from running multiple brick-and-mortar locations, much less building a nationwide brand."

"I'm sure they were, but those are exactly the kind of risks that investors love to get involved with—scaling risks versus starting risks. The initial challenge for any product is solving for demand. Once you can generate sufficient demand, the supply side is usually solvable too."

"By supply side, you mean building a product?"

"Yes, exactly. Another way of putting this is that demand-side risks have to do with the customer (desirability) and market (viability) risks, while supply-side risks are typically product (feasibility) risks."

"Sure, that makes sense," Steve acknowledges.

"I'm sure Jack had all kinds of scaling risks as he grew his business from two food trucks to a dozen restaurants, from staffing to training to branding. But once you have a good core validated product, these are less risky and often solvable obstacles. Think back to the early days of Facebook, YouTube, and Twitter. In their journeys from thousands of raving early adopters to hundreds of millions of users, they all had massive scaling risks that they too managed to overcome. Remember Twitter's fail whale?"

Mary notices Steve's eyes widen.

"Avoid premature optimization," he says. "This has all been very enlightening...but I'm still trying to process how to apply this to my product."

"Whenever you encounter a case study like this one, it's important to separate principles from tactics," Mary explains. "While growing a food business can be tactically quite different from, say, growing a software business, the underlying principles behind the tactics are universal. They can be applied to any kind of product."

"Are these principles truly universal, though? I can see how they worked for a restaurant, but the MVP for food is a few hours of cooking. What do you do when you're building products that take months or years to build?"

Mary smiles. "You were always the hardest one on the team to convince. But you're right. So let's take it up a notch and consider a product that does take years to build—an electric car."

Mary takes another sip of her drink, then continues. "Tesla. If you were Elon Musk with a vision of building the first affordable electric car in 2006, how would you formulate a now-next-later rollout plan?"

Just then Mary's phone goes off.

"Lunch break is officially over. Take a stab at applying these principles to the Tesla launch and let's meet for coffee tomorrow."

And with that, Mary is out the door.

Steve Learns About Wizard-of-Oz MVPs

"So, how did you do with the Tesla rollout plan?" Mary asks Steve the next day at their usual coffee hangout.

"I already knew some of the Tesla launch story and was able to put a few pieces together, I think," Steve responds.

"Let's hear it."

"Okay, here goes. First, I'll admit that if you had asked me this question before our conversation yesterday, I would have probably listed technology, design, manufacturing, charging infrastructure, and branding as the riskiest assumptions for an upstart car company—especially one led by a founder with no prior car-building experience. After yesterday's conversation, however, I was able to identify all of these risks as supply-side risks, not demand-side risks. So then I applied the Innovator's Gift and instead asked: why would anyone want to switch to an electric car?"

Mary nudges Steve to keep going.

"I'm guessing for some it might have been cheaper energy costs, and for others it was reducing their carbon footprint."

"That's very good, Steve. What Elon Musk certainly had going for him in 2006 were two switching triggers: increasing awareness of climate change and rising gas prices. These switching triggers had already led to some switching behavior, from traditional combustion-powered cars to hybrids within certain subsegments of the car-buying population—his *potential* early adopters. The problem with hybrids though is that they still rely, at least partially, on fossil fuels. Complete independence from fossil fuels, or achieving zero emissions, was the promise of an affordable electric car."

"Yeah, I like how you position that as part of a much bigger vision," says Steve. "So the first order of business for Tesla was then testing its unique value proposition, which I'm guessing Elon Musk did by sharing his zero-emissions vision with enough people to get them excited and make them pay attention."

"That's right, but they took it even further. They got people to preorder their first electric car before it was even built, using a Demo-Sell-Build process," adds Mary.

"That's the part I don't get. I understand how you can apply Demo-Sell-Build to a food concept, but a car, especially an electric car that's relying on technology yet to be invented, takes years to build. How do you iterate and test quickly?"

"Ah...But did they build an entire car out of the gate?"

A puzzled look comes over Steve's face. "Do you mean the roadster?"

"Yes. The first car that Tesla launched, the Tesla Roadster, wasn't even a car that they built—at least not entirely. While the Tesla Roadster had the Tesla emblem on it, the design and chassis were licensed from another car company: Lotus Motors. Now, why would they do that?"

"To get the car to market sooner?" Steve muses.

"Exactly. Compared to most car companies that take 10 years to launch a new car from concept to market, Tesla pulled this off in just 2 1/2 years. That's moving at light speed in the car industry. What I love about this case study is that it emphasizes that while speed of learning is key, it's also relative. You only need to outlearn your competition to win."

"I love that," Steve interjects.

"But speed to market was only part of the story here. Not having to design, build, and manufacture an entire car allowed them to prioritize testing their next riskiest assumption and ignore the rest. Can you guess what that was?"

"The electric battery?" Steve asks.

"Yup. Designing, building, and manufacturing a car from scratch, while a lot of work, wasn't an insurmountable risk. Lots of car companies already know how to build production-ready cars. None of them, at the time, knew how to build production-ready *electric* cars. That's what was different and worth prioritizing."

Steve jumps in. "So by licensing an existing car and retrofitting their battery into it, they avoided the bulk of the *known* work and prioritized the *unknown* work. They didn't need to hire automotive engineers or build a large factory.

They could just focus on building an electric battery, stick that into an existing car, and sell that. I know I'm simplifying, but that's genius."

"Yup—and that was their *now* plan. By the way, this approach of cobbling together existing solutions in an MVP is a commonly used validation recipe in the Continuous Innovation Framework called a 'Wizard-of-Oz MVP.' It was first popularized and codified into a pattern during the early days of the Lean Startup movement."

"Wizard-of-Oz? I'm guessing it's named after the movie?"

"Yes. The essence of this validation pattern is to *fake it until you're ready to make it*. In other words, reduce the scope of your initial MVP by cobbling together existing solutions, instead of building everything from scratch."

"How do you ensure defensibility if you're cobbling together existing solutions?" Steve asks.

Mary responds, "Remember that the goal is still delivering on a unique value proposition. That unique value may come from a novel approach to assembling existing solutions where the whole is greater than the sum of its parts, or it may come from a novel component to the assembled solution that you provide. In the case of Tesla, it was the latter. They electrified an existing car with their unique battery technology, thereby delivering a new UVP that customers wanted."

Mary notices Steve staring into space, and stops talking to get his attention.

"Sorry. My mind is racing. I think I might be able to apply the Wizard-of-Oz MVP pattern to speed up my product launch. I'll have to think more about that...I'm still not clear on how Tesla managed to balance customer demand against its technical risks, though. I mean, they were taking preorders for a car that was going to be relying on technology that was still being invented. Wasn't there a huge risk that they would get overwhelmed by customer demand and make promises that they couldn't deliver on?"

"Yes, there certainly was that risk, which they managed using a stage-based now-next-later rollout plan."

Mary sees a confused look come over Steve's face, so she elaborates further. "Elon Musk promised the world an affordable electric car in 2006, but the first car Tesla launched, the Roadster, was the opposite of that, with a starting price of over a hundred thousand dollars. Theoretically, they could have retrofitted their battery into any car. Why did they pick a really expensive sports car and not something more affordable like a Kia, a Volkswagen, or a Ford Mustang?"

"Hmmm...I want to say they were going for premium branding or profits maybe, but I'm guessing there's more to it than that?"

Mary smiles. "There sure is...this was all part of a carefully orchestrated three-stage rollout plan that played out over three different car models—all designed to prioritize tackling the right risks at the right time. Elon Musk vaguely described this rollout plan as his 'secret master plan' in a blog post in 2006. He further explained his master plan during the keynote launch of the Model 3. You can still find a replay of this keynote online. If I remember correctly, he covers the rollout plan around the three-minute mark."

Steve makes a note to catch the replay while Mary presses on.

"Yes, the biggest risk for the first car was electrification. And licensing an existing car rather than building a new car was the first key component to their stage 1 or now plan," she explains. "The next key component of the plan was picking the right car. Why the two-seater Lotus Elise roadster, and not some other car? What happens to a product's demand when you set the starting price three times higher?"

"It goes down?" Steve answers.

"Exactly. By launching their first car using a premium sports car brand, they were creating a highly desirable car that everyone could see and want, but only a few could afford and get."

"So they were never aiming to enter the mainstream market with the first car?" Steve asks.

"Nope. Remember the diffusion of innovations bell curve. They were solely focused on targeting the early adopter market, and in this case they used premium pricing very effectively to play the hockey stick. The roadster was a high-price, low-volume car. They only sold 500 cars a year for a few years and then stopped production."

"So this was a learning MVP then?" Steve asks.

"That's right, Steve. Stage 1 was all about testing their MVP—in this case, their battery in a shell of a sports car."

"I see it now. Chances are high that someone who can afford to place an order for a seven-figure car already has multiple cars in their garage and wouldn't be relying on this car as their primary vehicle. They'd be willing to wait up to two years for delivery and would drive the car very differently than a mainstream customer."

"That's exactly right. Having fewer customers also meant they didn't need to be distracted by building scalable infrastructure—dealerships, charging stations, or service centers. They 'concierged' those aspects of value delivery."

"And I'm guessing that once they de-risked the battery sufficiently, they leveled up to stage 2 and took on the luxury sedan market with their Model S?"

"Yes. This was a less high-priced, mid-volume car that they still rolled out incrementally with preorders. While they were rolling out the Model S, they took new sets of risks like manufacturing their own cars, and building charging stations, retail stores, and other infrastructure."

"And I'm guessing the Model 3 was their stage 3—the affordable electric car for the mainstream market," Steve adds.

"You got it. By the time they announced the Model 3, a lot of the infrastructure to handle the mainstream market was in place. More importantly, they'd sufficiently de-risked the idea of electric cars for the mainstream to literally buy in. The Model 3 car launch was the biggest product launch, securing 250,000 preorders within a span of 2 weeks."

"Yeah, I remember reading about that launch. So by intentionally going slower at the beginning, they were able to cross the chasm and go much faster later. Now I get what you meant by playing the hockey stick. Did these stages follow a 10x traction model as well?"

"Yes. Elon Musk is known to be an exponential or 10x thinker, and these rollouts were textbook 10x. You can probably still find a few charts floating around online that depict Tesla's traction roadmap forecasts for selling 500,000 vehicles across this 3-car rollout over 10 years."

"10 years? That's a much longer time horizon than the three years I've been using."

"Sure. When building cars or rocket ships to Mars, one does need to adjust timelines. There's nothing wrong with having a big vision that could take 10 years to realize. Your metaverse vision is no different. But remember that in order to make your vision actionable, you need to break the journey into smaller time horizons. Don't forget that Tesla was still able to take preorders for their car just weeks after announcing it. No matter the type of product, you should aim to achieve problem/solution fit within the recommended threemonth time box because you're not yet building out the product at this stage."

"Got it. And even during the build stage, Tesla took a huge shortcut with their Wizard-of-Oz approach," Steve adds.

"That's right, with discipline and a little creativity you can almost always reduce the scope on your initial MVP. I'm sure we'll have lots more to discuss there when the time comes."

"That makes sense. Though, I'm still unclear about how you extrapolate the traction roadmap for problem/solution fit from year 1 to three months—

especially if you aren't going to be ready with a product to sell by then. Do you always have to take preorders?"

"That's a great question, Steve. The goal is getting as close to making a customer as possible, and taking advance payment with a preorder is about as close as you're going to get at the problem/solution fit stage. That said, not all products and customer relationships are conducive to preordering. In those cases, it's perfectly okay to use an earlier 'customer making' step in your customer factory, like starting pilots or trials ,or collecting leads."

"Of course, the customer factory...that makes total sense. I'm guessing that I would use my customer conversion rate estimates from my Fermi estimate to determine those?" Steve asks.

Mary nods. "You got it."

"Neat. I know our time's up. This was a pretty inspiring case study and my head's still spinning a little. I'm going to work on my now-next-later plan this afternoon at the office."

Mary smiles. "My pleasure, Steve. Keep me posted."

Steve Formulates His Now-Next-Later Rollout Plan

Back at the office, Steve is ready to think through his now-next-later plan. His first order of business is extrapolating his year 1 throughput goal of 17 customers down to 3 months in order to determine his problem/solution fit success criteria.

He pulls out his original Fermi estimate inputs and gets to work:

• Minimum success criteria: \$10m ARR in 3 years

• Pricing model: \$500/mo

• Customer lifetime: 4 years

• Customer acquisition conversion rate: 1%

— User acquisition conversion rate (trials): 10%

—Trial to paid conversion rate (upgrades): 10%

• Referrals: 20%

To keep the math simple, he assumes that the year 1 ramp, being largely flat, is okay to model linearly. He then uses the conversion rate assumptions from his estimate to translate those into the graph in Figure 4-6.

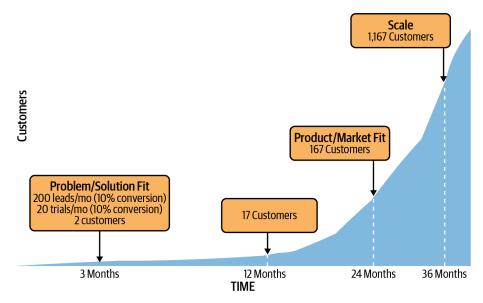


Figure 4-6. Steve's problem/solution fit success criteria

He thinks through his options. By the three-month point, he will need to be either:

- Closing two paying customers per month (rounding up)
- Starting 20 trials per month
- Collecting 200 leads per month

Since he was already leaning toward using a subscription model for his product with a 30-day trial, he decides to use the trials metric as his problem/solution fit criterion. This means he will need to get 20 software companies to start a 30-day trial for his product with \$500/mo pricing and continue to sign up 20 new software companies every month thereafter for the first year in order to hit his year 1 goal.

To pull this off he'll need to really scope down his MVP, but he's optimistic after learning about the Wizard-of-Oz MVP pattern. Steve believes he can go a lot faster and build something unique and valuable by starting with a plug-in solution to an already popular platform used by thousands of software companies, instead of trying to build an entire platform by himself. This will be his stage 1 (now) plan.

Like Tesla, he'll eventually expand on his UVP and lead people to his own platform (stage 2). His big metaverse vision will play out in stage 3. He catches himself daydreaming about stage 3 and stops himself.

He outlines his now-next-later plan in an email and fires it off to Mary. A couple of hours later, he gets a text message from her.

Mary: "Nice work on the traction roadmap and now-next-later plan. I suggest sharing your business model design with a few advisors and friendly investors for feedback."

Steve: "Isn't it too early?"

Mary: "No, it isn't. Notice I said *for feedback*, and not to raise funds. The challenge most early-stage founders face is communicating their idea clearly and concisely to others. Framing your initial conversation around feedback is a great way to practice, form relationships, and evolve toward a killer pitch."

Steve: "My last round of pitching didn't go too well. We just went around in circles. I got defensive a few times and it felt like a waste of time for everyone."

Mary: "Don't beat yourself up. A lot of founders struggle with getting others to see what they see at the outset. You have a much clearer story now, and the best way to refine your model even further is to start sharing it with others."

Steve: "Do you have some tips for how to structure these early conversations?"

Mary: "Yes I do:) Look for an email on communicating your idea clearly and concisely."

Communicate Your Idea Clearly and Concisely

The number one reason why startups fail is that they build something nobody wants. The number two reason why products fail is not getting the right buy-in from key stakeholders.

—— NOTE

Your key stakeholders include your founding team members, early customers, advisors, and investors.

If you're incubating your idea in a large company, you're probably going to be asked to write a 60-page business plan with a 5-year financial forecast and an 18-month product roadmap. For new, innovative ideas, these things are simply unknowable at the outset. As a result, these ideas seldom get past the gatekeepers.

If you're a startup (or part of an innovation team with a mandate to innovate), getting started is a bit easier. You may sketch your Lean Canvas, formulate your MSC, identify the problem and customer segments...but then you get stuck shortly thereafter when trying to secure additional resources to grow your product and team. You need to pitch your idea in order to get others to see what you see, to buy into your worldview, join your mission, and invest their time, money, and/or effort.

We saw how Steve struggled to get others to see what he saw with his idea. He wasn't able to convince others (investors or cofounders) to get behind his vision, which led to a classic catch-22. Even if you're bootstrapping your

project and not seeking investors, you'll eventually need additional resources like cofounders, equipment, etc. to grow an idea.

Pitching is a key skill all entrepreneurs need to learn. You don't just pitch for investment. You pitch to acquire customers, cofounders, and advisors. In this chapter you'll learn how to communicate your idea clearly and concisely to others to obtain feedback and buy-in (Figure 5-1).

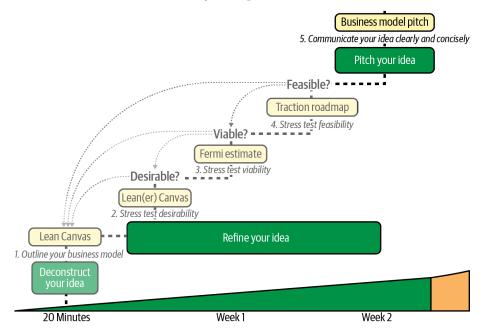


Figure 5-1. The business model pitch

What's Your Elevator Pitch?

An *elevator pitch* is meant to be a quick overview of your idea that you can present in the event that you find yourself in an elevator with a potential investor or customer and have just 30 seconds to pitch them. It's often the first type of pitch most entrepreneurs create, and it's what we'll start with as well. The problem, however, with most elevator pitches is that they sound like this:

We build a blockchain-driven logistics engine that is powered by machine learning and artificial intelligence that helps shippers maximize their bottom-line revenue.

They are often a barrage of buzzwords that leave you flummoxed as to what the company really does. At the other end of the spectrum are pitches that sound like this:

We build lightsabers.

We train Jedis.

We help Jedis fight the evil empire.

While these elevator pitches don't drown you in buzzword bingo, they still typically fall flat. Why? Because they assume too much and are too solution-centric. The mistake many entrepreneurs make is *trying to explain their solution* by cramming it into a 30-second pitch. That's not the job of an elevator pitch. The job of an elevator pitch is to pique interest—and, if you're successful, to prompt the other person to ask for more (rather than making an excuse to leave).

The way you pique interest isn't by leading with your solution, but your desirability story (from Chapter 2), which shows why your product needs to exist.

In the next section, I'll share a template for crafting an elevator pitch based on that story.

Outlining Your Elevator Pitch

Use the following template to outline your elevator pitch as a story about your customers:

When [customers] encounter a [triggering event],

they need to do [job-to-be-done] in order to achieve [desired outcome].

They would normally use [existing alternatives],

but because of [switching trigger] these [existing alternatives] no longer work because of [these problems]. If these problems are left unaddressed, then [what's at stake].

So we built a solution that helps [customers]

achieve [desired outcome] by helping them [unique value proposition].

Here's an example of an elevator pitch from one of my own products:

When entrepreneurs get hit with a killer idea,

they often need to raise money in order to get their idea off the ground.

They would normally write a 40-page business plan,

but because of the recent explosion in the number of startups all over the world (global entrepreneurial renaissance), no one reads business plans anymore. We are living at a time where there are far too many ideas competing for attention. Investors today don't fund or read business plans and instead look for startups with traction. If a startup fails to grab the attention of

investors, they don't get the necessary resources to grow their idea, and it withers away.

So we built a solution that helps entrepreneurs

communicate their idea clearly and concisely in under 20 minutes and get buy-in from key stakeholders—so they can spend more time building versus planning their business.

Notice that nowhere in this pitch do I name the product: the Lean Canvas.

Elevator pitches, when delivered well, set the stage for a longer pitch to follow. What you say next largely depends on the worldview of your audience.

The Different Worldviews of an Idea

In his groundbreaking book *All Marketers Tell Stories* (Portfolio), author Seth Godin defines a worldview as the set of rules, values, beliefs, and biases people bring to a situation. Good marketing is *not* about changing a person's worldview, but rather framing your story in terms of their preexisting worldview.

The same is true in entrepreneurship: all entrepreneurs tell business model stories, and good pitching is *not* about brute-forcing your solution onto others, but rather framing your business model/product story in terms of your audience's preexisting worldview. Your audience, in this case, comprises investors, customers, and advisors.

The first step to developing an effective pitch is understanding your audiences' respective worldviews.

The Investor Worldview

Investors don't care about your solution, but they do care about a business model story that promises them a return on their investment within a set time frame. Investors looking to invest their bags of money typically have many existing alternatives (other startups, the stock market, cryptocurrencies, etc.). Why should they pick your business model?

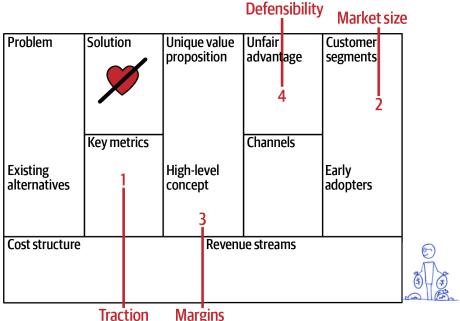
This is what they really want to know:

- How big is the market opportunity? They don't care *who* your customers are, but *how many* there are—your *market size*.
- How will you make money? They want to understand the intersection of your cost structure and revenue streams—your *profitability or growth potential*.

• How will you deter competition? They want to know how you will defend against copycats and competition who will inevitably enter the market if you are successful—your *unfair advantage*.

But what gets an investor's attention above everything else, as we've discussed in earlier chapters, is *traction*. If you walk into an investor's office with the beginnings of a hockey-stick curve, you'll trigger a Pavlovian response—they'll sit you down and try to understand the rest of your business model story.

These are the parts of your Lean Canvas that you will want to focus on when pitching to someone with the investor worldview (Figure 5-2).



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Figure 5-2. The investor worldview

In lieu of actual traction, a traction roadmap with a now-next-later plan is your next best proxy for defining, measuring, and communicating a business model story to an investor.

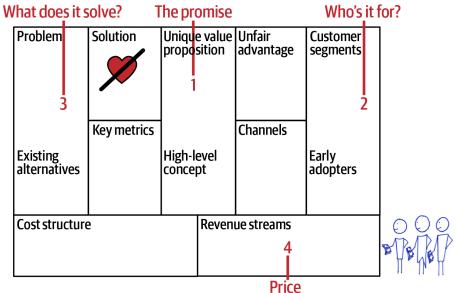
The Customer Worldview

Customers don't care about your solution either; as we've seen, what interests them are the problems (or obstacles) that keep them from achieving a desired outcome or getting a job done. Like an investor, when a customer wants to get a specific job done, they typically have many existing alternatives. Why should they pick your product?

As we discussed in Chapter 3, getting a customer's attention is the first battle. That's the job of your unique value proposition. If the promise of your UVP connects with a customer, then you have permission to tell that customer more about your solution—typically through a *demo*.

A demo is a carefully scripted narrative that helps the customer visualize how they will go from point A (riddled with problems) to point B (problems removed by your solution). If you deliver a compelling demo, the only thing left to address is what you want in return—the currency exchange captured under Revenue Streams. In a direct business model this may be a direct money exchange, but in multisided models it could instead be a derivative currency (like attention) that is then converted to money through a secondary transaction (with advertisers).

Figure 5-3 shows the parts of the canvas to focus on when crafting a pitch to customers.



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Figure 5-3. The customer worldview

The Advisor Worldview

We all need people other than ourselves to guide us, call out our BS, and hold us externally accountable—aka advisors.

Advisors, too, bring a unique worldview to the conversation, but in their case it's driven by their unique past experiences and interests. That is why it is important to surround yourself with complementary advisors, and to be as open and honest with them as possible.

When you simply practice "success theater" with your advisors (where you only share good news), you may get a pat on the back, but you miss out on a huge opportunity for learning. Communicating effectively with advisors requires using a learning frame, not a pitching frame.

So where do you start? You'll eventually need two types of pitches:

- One to address the investor worldview
- Another to address the customer worldview

Since investors care about traction above everything else and traction comes from customers, it follows that you should prioritize your customer pitch before your investor pitch. But neither of these pitches is where you should start. The best place to start is with a path catering to the advisor worldview.

Initially using a learning frame rather than a pitching frame will enable you to approach anyone (potential investors, early adopters, and actual advisors), share your business model with them, and get feedback. A learning frame disarms the other person and lowers the stakes, which allows you to learn, gauge interest, build trust, and iteratively evolve your pitch.

Delivering Your Business Model Pitch

Pitching, like any skill, improves with practice. In this section, I'll share some guidelines for delivering your initial business model story pitches using a learning, not pitching frame:

Choose your targets

Target anyone that fits the loose definition of an "advisor." These could be potential cofounders, peer entrepreneurs, friendly domain experts, potential early-stage investors, and startup coaches/mentors. Notice I didn't include customers in this list. Customers don't care about your entire business model; they only care about the subset that pertains to them. I'll provide a separate script for pitching to customers in Chapter 10.

Ask for sufficient time

I would suggest asking for 30 minutes to walk through your pitch and feedback.

Use a combination of slides and handouts

Your Lean Canvas and traction roadmap make for perfect handouts to avoid interruption while leading your audience through a 10-page slide deck. A template for the slide deck is provided in the next section.

Use a 20/80 rule

Spend 20% of the time (5 minutes) delivering your pitch, and the remaining time soliciting feedback.

Walk your audience through your business model pitch in five minutes. The goal of the pitch isn't to dive deep, but to provide a clear and concise description of your business model.

Then listen. After your five-minute overview is done, ask for feedback and listen. See if the audience was able to understand your business model. If they got confused by any points and ask for clarification, address their questions and make notes to improve those parts of your pitch.

Be wary of the Advisor Paradox

Ask 10 people for advice, and you could get 10 very different prescriptions that are in conflict with each other. I see this all the time at accelerators. Your job isn't to follow all the advice you're given, but rather to internalize, synthesize, and apply it.

NOTE
Give anyone a soapbox, and they become a critic.

If you do find someone giving you overly prescriptive solutions, try to determine the underlying chain of beliefs behind the advice. Is it based on a leap of faith, anecdotal evidence, or deep learning?

Recruit good advisors

A good coach/mentor should be focused on asking the right questions, rather than trying to give you the right solutions. If you find one, try to keep them. Entrepreneurship is a journey best taken with others.

The 10-Slide Business Model Pitch Deck

The slide deck template I provide here follows the same order used when stress testing your models: you want to focus on your idea's desirability, viability, and feasibility, in that order. The following sections discuss what to address on each slide.

Desirability

The opening slides should address the following topics:

Slide 1: Why now (switching trigger)

What has changed in the world that makes this the right time for your idea? This is often a well-known macro shift or global trend, such as climate change, the invention of the internet, or a sweeping pandemic that disrupts and potentially breaks old ways of getting the job done.

Slide 2: What's at stake (market opportunity)

If things are left the way they are (doing nothing), what's at stake? An opportunity can be framed in terms of either a pain (crisis/loss) or a gain (aspiration/win).

Slide 3: What's broken (the problem)

This is where you introduce the existing alternatives and outline why they aren't fit to adapt to this triggering event. Your job here is to break the existing alternatives as viable solutions.

Slide 4: The fix (your solution)

You now introduce your innovative idea and describe how you address the problem differently (your solution) and help your customers achieve their desired outcomes (your UVP).

Viability

The next set of slides should provide information on:

Slide 5: Your moat (unfair advantage)

Once investors are able to contextualize your solution and understand your unique value proposition, they'll want to know how you'll defend against copycats and competition. This is where you:

- State your unfair advantage if you already have one.
- State your unfair advantage story if you are working toward one.
- Come clean and declare that you don't have an unfair advantage but are searching for one.

Slide 6: How you make money (revenue stream)

Next, explain how your business model works. You do this by describing who your customers are (if you have multiple actors in your business model) and how monetizable value is captured (revenue streams).

Slide 7: Your key milestones (key metrics)

This is where you demonstrate how you'll gain traction. Use your traction roadmap to identify your three-year MSC goal and highlight your key milestones along the way.

Feasibility

The topics to address in the final set of slides are:

Slide 8: Your current progress (rollout plan)

Position your current progress on your traction roadmap and walk through your now-next-later rollout plan. If you're just starting out, you're at the starting line of your traction roadmap.

Slide 9: How you're going to pull it off (the team)

This is a good place to share your origin story and introduce your founding team, if you have assembled one. If you don't yet have a team, identify the key skill sets you'll need in your founding team to pull off your product.

Slide 10: Your call-to-action (the ask)

What you put here is largely dependent on who you're pitching and your goal. If you're seeking advice, ask for feedback. If you're seeking buy-in, be clear on what you need next.

Steve Shares His Business Model Pitch with Others

"It was like night and day." Steve is updating Mary on how his round of business model story pitches went.

"I reached out to several of the same people I spoke to last year about either joining me in my startup or investing. I did what you suggested and framed the conversation around using a learning versus pitching frame. I also included my rough elevator pitch in the email."

"And?" Mary asks.

"Well, I got quick responses from everyone and got to speak with all of them. Unlike the last time, my pitch was met with nodding heads instead of blank looks. I believe there were two things that made all the difference. The first was sending them my elevator pitch in advance. The last time I was pitching a technology platform and I think people struggled to see who it was for. We went around in circles brainstorming possible customer segments and use cases. This time they came to the meeting already clear on context and were eager to dive in."

"That's great to hear. And what was the second thing?" Mary asks.

"The second thing was the combination of the traction roadmap and the now-next-later plan. The last time I was pitching the big vision (or my stage 3) without a clear roadmap for how I'd get there. I can see how people were unable to connect the dots. Frankly, I've never been this clear on the dots myself!" Steve laughs.

"Awesome. So where did you leave things at the end of these conversations?"

"That's the best part. Two of the people I spoke with were angel investors who passed on investing last year and asked me to reach out when I was further along. This time they both promised to invest provided I reach my problem/solution fit success criteria."

"Wow, that's great news Steve. I'm not surprised. Angel investors love stagebased investing, and the traction roadmap is the perfect tool for quantifying these stages. We can talk about how to evolve a business model story pitch into an investor pitch down the road."

"Cool. The other thing that happened is Lisa and Josh from our last startup are both interested in joining the team as cofounders."

"That's awesome. The last I heard was that Josh was taking some time off after the acquisition, and I think Lisa took a senior marketing position at a large company."

"Yeah, I tried recruiting them as cofounders last year, but they weren't interested. This time I think I got through. Josh, as you know, is an amazing UX designer, and he already shared some ideas in our meeting that I can't wait to implement. And Lisa was always a natural at sales and marketing. Both of these areas are my Achilles' heel. They both want to discuss a part-time arrangement to start, and make the jump at the appropriate time."

"These are all great developments, Steve. I'm particularly excited about Lisa and Josh potentially joining your founding team. They are both A players and will complement your skill set perfectly. This is also perfect timing as you're ready to transition from business model design to business model validation."

"I'm excited too. While I've gotten used to working as a solo founder, I can't wait to step things up into higher gear. We've already started discussing all the areas that need attention, and with three people on the team, we can split up the work and get a lot more done."

"Hmmm...all that sounds good in theory, but the reality is that you'll actually get more done if you work on fewer things as a team versus more things separately."

A confused look comes over Steve's face. "I'm not sure I understand what you mean."

"In an early-stage startup especially, a divide-and-conquer approach spreads an already resource-constrained team even thinner," Mary explains. "Instead of chasing three separate problems individually, you'll be much more effective prioritizing your #1 problem and tackling it as a team."

"That makes sense. But aren't there hundreds of problems to tackle in a startup? How do we identify our #1 problem?" Steve asks.

"By applying systems thinking," Mary explains. "Your business model is a system. And in any system, there is always a single constraint or weakest link holding back throughput. Trying to optimize all the steps is wasteful, as overall throughput will always be held back by the slowest step. If you want to increase throughput, you only need to fix the slowest step, and then search for the next-slowest step."

"Hey, isn't that Goldratt's Theory of Constraints?" wonders Steve.

"Yes, it is. And it's just as applicable to the customer factory. At any given point in time, increasing throughput (or traction) is the goal. Your job is to find the limiting step, or constraint, in the customer factory and fix that. While

it's often easy to spot the constraint with metrics, knowing how to break it isn't. This is where leveraging the full potential of your team comes in. There will, of course, be other things to tend to, but strive to allocate 80% of your resources to tackling your limiting constraint at all times."

"If I remember my systems theory, don't these constraints move around over time?" asks Steve.

Mary laughs. "Yes, unpredictably so. Once you get enough people signing up for your product, it's impossible to predict where the next constraint will pop up without metrics and analytics. Imagine trying to find the slowest step on a factory floor without any data."

"Sure, that's what I thought you were going to say. How often should we reevaluate our constraints?" Steve asks.

"Since every system has delays, you should ideally monitor your metrics weekly—but allow sufficient time for your customer factory to settle before making any big business model decisions. The Continuous Innovation Framework suggests using 90-day cycles for making these kinds of big business model decisions—90 days is long enough to achieve a significant enough traction goal but still short enough to course-correct along the way."

"I've been working on this project for 18 months already and it feels like a blink of an eye. I'm sure three months goes by fast."

"It certainly does, especially since you further break down each 90-day cycle into six 2-week sprints."

"Sprints? Like Scrum/Agile?" Steve asks.

"Yes, but more like Agile++," replies Mary. "Remember that in the Continuous Innovation Framework, the business model is the product. So each sprint doesn't use build velocity as the measure of progress, but traction velocity."

"Interesting...You know what I'm about to ask next, don't you?"

Mary smiles. "Yes, I think I do. You'll get an email from me later today with all the details on running 90-day cycles."

"Thank you, Mary!"

PART II

VALIDATION

It was a cold January morning in 2012, almost four months after we'd launched Lean Canvas as an online tool. I was reviewing our weekly product metrics, coffee in hand, as I always do on Monday mornings.

There it was again.

I had been tracking a disturbing trend for the four weeks in a row—our activation rate had been progressively dropping.

We define *activation* as a user completing their initial Lean Canvas. This is a critical milestone metric because it serves as a leading indicator for ongoing engagement. Users that complete their Lean Canvas during their first week usually come back and explore more of the product. Those that don't almost never come back.

Today, our activation rate was hovering at just under 35%—down from a peak of 80% right after launch. That meant for every 100 people that signed up, 65 of them would likely never come back!

What was even more concerning was that we had been aware of this issue for weeks, and we hadn't been sitting idle. During the last four weeks, I had asked my designer to implement several usability enhancements addressing steps in the activation flow where we saw the biggest drop-offs.

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But none of them seemed to be making a difference. And things were still getting worse. No matter what we did, we seemed unable to pierce a certain ceiling of achievement (Figure II-1).

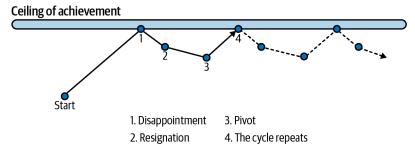


Figure II-1. The typical life cycle of an experiment

It felt like a scene from the movie *Groundhog Day*, where the protagonist, played by Bill Murray, is forced to relive the same day until he makes a breakthrough revelation about himself.

The rest of the team was busy growing other aspects of the product. We had decided to each focus on a specific area:

- I was primarily focused on driving new user sign-ups through content and workshops.
- The other developers were building out a few other tools to complement Lean Canvas.
- Our designer had lots of other stuff on his plate supporting both of these initiatives.

At that moment, I realized that this divide-and-conquer approach wasn't working. It was certainly keeping us busy, but we were spread too thin and not all focused on the right thing—fixing activation.

It was time to take a completely different approach.

Focus on Your Weakest Link

I called a team meeting and made a case for *the entire team* to focus on the activation issue, because it was the bottleneck (key constraint) in the business model (Figure II-2). Focusing too much attention on other areas was not productive, because:

- Even if we managed to sign up more users, we would end up losing 65% of them after the first week.
- Even if we built more tools, 65% of our users would never get to them.

We needed to address activation first.

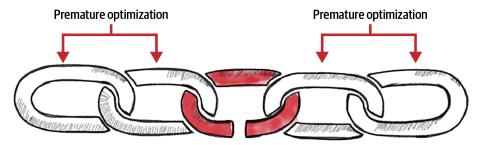


Figure II-2. Addressing your weakest link is the only thing that matters

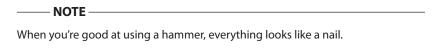
The team saw the logic of my argument, but asked how to prioritize other initiatives. We couldn't drop the ball on everything else, so we agreed to implement a new policy: we would focus 80% of our attention on breaking the key constraint(s) and 20% on all other work.

Avoid the Curse of Specialization

The discussion then turned to possible solutions, and a surprising thing happened:

- My developers started proposing build solutions.
- My designer started proposing more design solutions.
- The marketer on the team wanted to do more marketing.

This is the *curse of specialization*—a variant of our old enemy, the Innovator's Bias.



We were going around in circles. So I called the meeting short and suggested that instead of group brainstorming, we should all go away for a few days and each independently formulate a proposal for breaking this constraint.

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Identify Problems

Before everyone left, I emphasized that we were a small team and could only pick one or two campaigns to focus on at a time. I proposed that we would vote to select the most promising proposals.

In order for a campaign to get selected, it wouldn't just have to pass the solution feasibility test; more importantly, it would have to *make a strong evidence-based case for the problem(s) the proposed solution would address*.

We agreed to reconvene at the end of the week.

Generate a Diverse Set of Possible Solutions

Up until now, I had been the only one generating possible solutions for this issue and they clearly hadn't worked. I knew we needed to come up with a broader range of ideas, which is why I'd called the meeting—but group brainstorming wasn't the answer. Group brainstorming quickly devolves into groupthink or gets hijacked by HiPPOs.

—— NOTE —	
HiPPO: Highest paid person's opinion.	

I was the HiPPO in the room, and while I had several more ideas of my own, I decided to keep them to myself and put them to the vote like everyone else.

The way to flip specialization from being a curse to being a blessing is by fostering a diversity of ideas by using a *converge-diverge process* (Figure II-3). In this technique, meetings are used only for alignment and decisions—not free-form discussion or group brainstorming.

So everyone went away to research and sketch out some possible proposals.

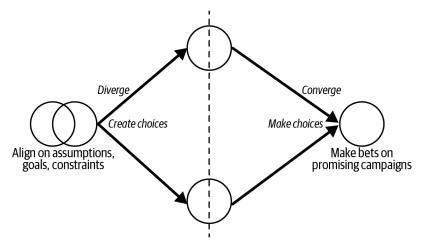


Figure II-3. The converge-diverge process

Make Bets on Your Most Promising Proposals

We met again at the end of the week, by which time the team had generated a dozen proposals.

Unlike before, instead of just pitching their solution, everyone was required to first provide supporting evidence for the problem they had uncovered, and then demonstrate how their solution fit.

The review process was efficient, swift, and unanimous: we all picked the "Blank Canvas Proposal" submitted by our designer.

He had spent the last few days conducting quick usability tests with new users, and after just seven tests, he noticed that almost everyone hesitated when filling out the Lean Canvas boxes. Most of them asked if there was some kind of guide or example canvas they could reference.

Sure, more testing would be needed, but this was a key insight that allowed us to postulate the following theory:

The reason our activation rate had been much higher immediately after launch was that those users were early adopters. They were already familiar with the Lean Canvas, through my blog, workshops, and/or book (*Running Lean*). They didn't need additional help to fill out a Lean Canvas. But over time, our user base had been broadening, and this new segment of users didn't have this prior knowledge. They were staring at a blank canvas with writer's block.

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Once we had a problem thesis, the solution was obvious and simple: we needed a way to guide new users through their first Lean Canvas using help content.

Test, Test, Test

With the campaign selected, we then discussed ideas for the fastest way to test it. Should we, for instance, use tooltips, allow users to download an excerpt of my book, or use videos?

We settled on creating a single helper video using slides and content from my workshops to guide new users through their first canvas.

We set a two-week time box and got to work.

Within a couple of days the video was ready, and we pushed it as a split test visible only to a segment of new users—this meant that only half the users who signed up saw the helper video, and the other half didn't. That way we could easily isolate and measure the effectiveness of the solution.

Decide on Next Actions

At the end of the two weeks, we got together to review the results.

There was a measurable improvement in activation, along with lots of good engagement from new users who'd seen the video.

The experiment had succeeded in moving the needle, and early signals were strong to support doubling down on this campaign.

As a next action, we decided to turn it into a longer 90-day campaign and rolled out the helper video to all users. We continued to measure metrics in order to verify the results at a larger scale.

The video continued to prove effective: it got shared and linked by our users, and ratcheted hundreds of thousands of views over this time. As this validated the effectiveness of the video campaign, we ended up doubling down further, producing more video content and even creating some full courses.

The Continuous Innovation Framework (CIF) was starting to take shape.

Part II of this book lays out the practical steps needed to put the CIF into practice using 90-day cycles and shows you how to get started on achieving your first significant validation milestone: problem/solution fit. The chapters in this section will teach you how to:

- Validate your idea using 90-day cycles (Chapter 6)
- Kick off your first 90-day cycle (Chapter 7)
- Understand your customers better than they do (Chapter 8)
- Design your solution to cause a switch (Chapter 9)
- Deliver a mafia offer your customers cannot refuse (Chapter 10)
- Run a 90-day cycle review (Chapter 11)

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Validate Your Idea Using 90-Day Cycles

While deconstructing your idea into a business model helps lay a solid foundation for it, it's important to recognize that no matter how compelling your business model story pitch is, it's still built on a set of untested assumptions.

The way you turn your *designed* business model (Plan A) into a *working* business model is through business model validation.

It can be tempting to take a divide-and-conquer approach to business model validation, where you split your team's focus based on individual team members' strengths. But as the example given in Part II shows, focusing on many different priorities spreads your resources too thin and thus is suboptimal. The best way to harness your team's full potential is by getting them to collectively focus on what's riskiest at any given point in time in your business model (i.e., your limiting constraint or weakest link).

How do you correctly identify what's riskiest? Too many entrepreneurs simply guess at their constraints by making a list of their riskiest assumptions and using their intuition, or seeking the advice of other "experts"—but such an approach is highly subjective, and prone to biases (your own and those of your team and advisors).

—— NOTE ————————————————————————————————————
HOIL
Incorrect prioritization of risk is one of the top contributors to waste.

So, is there a better way? The answer is yes. It requires using a systems-based approach—specifically, applying the Theory of Constraints (TOC). TOC is a constraints-driven approach to system optimization pioneered by Eliyahu

Goldratt and described in his groundbreaking book *The Goal* (North River Press).

The basic premise of TOC is that at any given time, a system is always limited by a single constraint or weakest link. Imagine being tasked with improving the throughput of a factory. You could interview the line workers or managers for input, but doing that would most likely result in a list of problems and a list of possible solutions. Which would you investigate?

A better approach would be to start by baselining the factory's throughput as a series of steps. Your objective is to identify the slowest machine on the line. The slowest machine represents the current limiting constraint in the system. There is always one, and this is where your riskiest assumptions live. Attempting to improve any other steps will not improve the factory's throughput because the slowest machine is what's limiting the system's throughput. Trying to work on other steps is a premature optimization trap.

When people identify a limiting constraint, the common tendency is to want to overcome the constraint by acquiring more resources—for instance, hiring more factory workers or buying more machines. While these fixes would certainly break the constraint, they can also be needlessly wasteful. What if you could break the constraint instead by upskilling your current workers through training, or servicing the slowest machine?

MINDSET #6

Constraints are a gift.

From a systems perspective, constraints are gifts and are the key to practicing "right action, right time":

- Baselining the system as a series of steps helps you identify the limiting constraint.
- Correctly identifying the limiting constraint drives focus.
- Getting to the root cause(s) behind the limiting constraint unlocks possible ways of breaking the constraint and increasing system throughput.

This same constraints-driven approach can be used to uncover the riskiest assumptions in your business model.

Taking this a step further, once you successfully break the limiting constraint in a system, the constraint shifts (often unpredictably) to a different part of the system. If you don't stay vigilant and notice the shift, it's all too easy to

fall into the overoptimization trap, which results in diminishing returns to your optimization efforts.

Your business model will also inevitably change over time, and so will what's riskiest in your business model. The way to systematically optimize and grow it is by establishing a regular cadence for continuously reviewing your business model goals, assumptions, and constraints with your team.

MINDSET #7

Hold yourself externally accountable.

This is where 90-day cycles come in.

The 90-Day Cycle

90 days is about the right cadence for holding yourself, your team, and your business model externally accountable. It's long enough to take on meaningful work and make measurable progress (achieve traction), while still being short enough to drive a sense of urgency.

Using a 90-day cadence breaks the 3-year journey to achieve your MSC goal into *just twelve 90-day cycles* (Figure 6-1). Each 90-day cycle is framed with a traction goal, captured as your objectives and key results (OKR), that is extrapolated from your traction roadmap. Having a clear goal coupled with your models and metrics aligns your team around a common mission while keeping them open to exploring multiple ways of achieving the goal, which they capture as one or more campaigns.

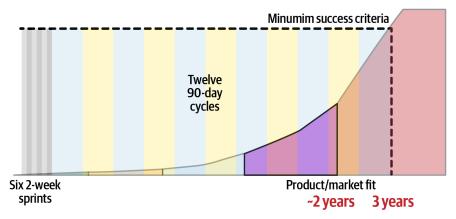


Figure 6-1. Goals, cycles, and sprints

A campaign is a proposal for how to achieve or get closer to your 90-day cycle OKR (traction goal) within 90 days.

A single campaign may not be enough to get you to your goal, which is why you often need to run multiple campaigns in parallel or stack one after another during a 90-day cycle. Each campaign is further broken into a series of two-week sprints. Sprints not only afford more structure but also provide shorter feedback loops for iteratively testing your campaigns using small and fast experiments. To recap:

- Goals define the mission.
- Campaigns define the strategies for achieving your goals.
- Sprints test these strategies.

A Typical 90-Day Cycle

A typical 90-day cycle is organized into three phases: modeling, prioritizing, and testing (Figure 6-2). The first 2 weeks of the 90-day cycle are set aside for modeling and prioritizing. This is where you align your team around a common 90-day OKR and short-list your most promising campaigns. The remaining 10 weeks of the 90-day cycle are where you test out your campaigns.

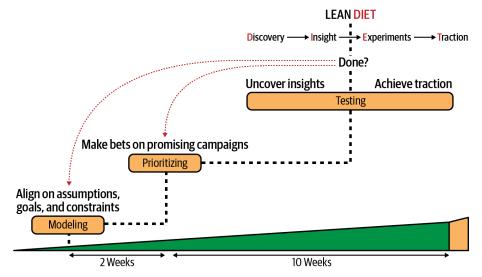


Figure 6-2. A typical 90-day cycle

The 90-day cycle ends with a 90-day cycle review where you look back at the cycle, review what you did and what you learned, and decide on what's next, which starts the next 90-day cycle.

Let's walk through these three phases in more detail.

Modeling

The modeling phase is where you align your team around *key goals, assumptions, and constraints*. At the start of each new cycle, you call a *90-Day Cycle Kickoff Meeting* to shape this cycle's OKR. This is the *converge* step in the converge-diverse process.

You start with the models you created during the business model design phase. Moving forward, it's critical to keep these models regularly updated across cycles, as they'll evolve over time. Unlike heavyweight plans, like business cases, forecast spreadsheets, and product roadmaps, these models were intentionally designed to be lightweight enough that keeping them up-to-date is relatively quick and easy.

In addition to keeping your models updated, you're also going to need to start benchmarking your business model using metrics. When starting out on a new idea, all your initial metrics start at zero. Your first objective is getting your customer factory running. Your constraints will follow a somewhat predictable order, matching the typical customer life cycle steps:

- 1. Acquisition
- 2. Activation
- 3. Retention
- 4. Revenue
- 5. Referral

However, once your customer factory is up and running—i.e., you start interacting with customers—your constraints will start moving rather unpredictably. The only way to reliably uncover your constraints (and riskiest assumptions) is through systematic analysis of your current metrics. Remember that guessing at your riskiest assumptions is subject to biases, and a wrong diagnosis is a recipe for waste. I'll share some guidelines on how to measure these metrics later in this chapter.

Prioritizing

The next phase is prioritizing, where you place bets on your most promising campaigns. After the 90-day cycle kickoff, the team breaks to independently analyze the constraint and formulate campaign proposals for achieving the cycle's objectives.

Everyone then reconvenes for a 90-Day Cycle Planning Meeting, where they pitch their campaign proposals.

A campaign pitch:

- Identifies possible causes for the constraint
- Summarizes the underlying problem with supporting evidence
- Proposes a possible solution
- Declares some expected outcomes

It's usually not possible to work on all the campaigns that are proposed, so the team votes on the most promising campaigns to take on during each 90-day cycle.

MINDSET #8

Place many small bets.

For the reasons discussed earlier, it's far better to pick fewer campaigns than too many. A good starting rule of thumb to determine how many campaigns to select for a given 90-day cycle is dividing the number of team members by two. For example, a team of five should aim to take on up to two, and no more than three, campaigns per cycle.

Unlike traditional product planning, the goal here isn't striving for fully baked plans that you execute, but rather identifying the most promising campaigns, which you then evaluate in parallel.

The rest of the 90-day cycle (10 weeks) is broken into five 2-week sprints and used to further test and refine these campaign bets.

MINDSET #9

Make evidence-based decisions.

Testing

Once your campaigns are selected, you move into the testing phase. Campaign authors design experiments, form subteams, and assign tasks. Then you officially kick off the first sprint.

When people think of testing, they usually only think about running evaluative experiments. These are experiments where we test a set of input assumptions (or hypotheses) against an expected outcome, like, "If I do X, I expect to get Y." For example:

- 1. If I launch my product, I will get 100 new paying customers.
- 2. If I run this ad, it will drive 1,000 sign-ups.
- 3. If I build this feature, it will reduce churn by 40%.

Evaluative experiments are *traction experiments* that tie expected outcomes to one of the five customer factory steps (AARRR; see Chapter 3). However, rushing to run evaluative experiments is usually not the optimal approach. Why? The utility of the results you achieve from these experiments is directly proportional to the quality of your input hypotheses. In other words, if you put garbage in, you'll get garbage out. This begs the question, how do you start with better assumptions or hypotheses?

This is where generative experiments come in. Generative experiments are *discovery experiments* that help you uncover new insights or secrets. These insights are often nonobvious at the outset, and they're the key ingredient for achieving breakthrough and driving traction.

MINDSET #10

Breakthrough requires unexpected outcomes.

Generative or discovery experiments uncover key insights that help you formulate better hypotheses, which you then verify through evaluative or traction experiments.

I've devised a simple mnemonic aid to help drive home this point of discovery before traction: the *D-ARRRR-T* (The Art) of Testing.

Good validation campaigns should start with problems before solutions, or discovery (D) before traction (T). And since increasing traction (T) is the ultimate goal of every campaign, it shouldn't come as a surprise that all campaigns should tie back results to one or more customer factory metrics (AARRR).

When designing any campaign, it helps to consider these seven questions:

- 1. Discovery: Is there an underlying problem worth solving?
- 2. Acquisition: Are enough people interested/impacted?
- 3. Activation: Does it deliver value?

4. Retention: Do people come back?

5. Revenue: What's the impact (on revenue or some other meaningful metric)?

6. Referral: Do people tell others?7. Traction: Did traction go up?

It's usually not possible to answer all these questions within a single two-week sprint, which is why campaigns are typically tested over a series of sprints. As you'll see in the next chapter, D-AARRR-T provides a helpful template for designing what you test in each sprint of a campaign.

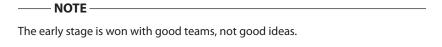
Getting Ready for Your First 90-Day Cycle

Now that you understand how 90-day cycles work, let's cover some prerequisites for running effective cycles.

Assemble the Right Team

While it is possible to start building a product by yourself, it's important to recognize that there usually comes a point where your progress will be limited by your available time (we all get only 24 hours in a day), skill set (the curse of specialization), or worldview (other biases).

For the reasons I've already discussed, it's critical to prioritize building a team with cross-functional skill sets and multidisciplinary worldviews. It even helps to have one other person who can, at a minimum, help to enforce periodic reality checks. Ideally this is a cofounder, but advisors, investors, and even an ad hoc board made up of other startup founders can fill this role.



Good teams quickly recognize and kill off bad ideas, and eventually find good ideas. Bad teams can't tell a good idea from a bad idea, and they either stick with bad ideas for too long or hopelessly fumble good ideas.

As putting together a good team always takes longer than expected, it helps to start as early as possible by sharing your business model story pitch with potential candidates, like Steve did.

The following are some additional guidelines to consider when building out your team.

Forget traditional departments

In an early-stage startup, traditional department labels like "Engineering," "QA," "Marketing," and so forth can get in the way and create needless friction. Also, when deliverables are created in silos and driven by different sets of internal key performance indicators (KPIs), you potentially run into issues where your overall throughput may be compromised at the expense of these local metrics. For example, a sales team incentivized by commissions is typically driven by close rates, not learning and discovery.

You're best served by having a single founding team organized around a common mission of hitting your traction goals.

Start with a minimum viable team

Metcalfe's law, that "the value of a communication system grows at approximately the square of the number of users of the system," has a corollary when it comes to project teams:

The efficiency of a team is approximately the inverse of the square of the number of members in the team.

-Marc Hedlund, chief product officer, Wesabe

As a team grows in size, communication breaks down and devolves into groupthink. There are many arguments for building your minimum viable product with the smallest team possible, including:

- Communication is easier.
- You build less.
- You keep costs low.

A good rule of thumb on team size is instituting a two-pizza team rule:

Any team should be small enough that it could be fed with two pizzas.

—Jeff Bezos, founder of Amazon

In practice, most new projects typically start with a founding minimum viable team of two to three people and often grow to a core team of five to seven people. Once you grow past these numbers, it's helpful to split people into additional small complete teams still organized around a common mission of achieving traction.

Good teams are complete

More important than the number of members is ensuring that you have the right diversity of skill sets and worldviews within the team to iterate quickly. If

you have to rely on shared external resources to get work done, your speed of learning will be affected.

I like to visualize a complete team as one that is a mix of these roles: hacker, designer, and hustler. If you don't like those labels, consider these alternatives:

- Hacker, hipster, hustler
- Developer, designer, dealmaker
- Builder, designer, marketer
- Make your own

You don't always need three people to form a minimum viable team. Sometimes you can fill these roles with two people, and other times all you need is one person.

Here's how I define them:

Hacker

If you are building a product, you need someone with strong product development skills on your team. Having prior experience building stuff is key, along with expertise in the specific technology you are using.

Designer

Design is about both aesthetics and usability. In newer markets, function can take precedence over form, but we live in an increasingly "design-aware" world where form cannot be ignored. Also, a product is not just a collection of features, but rather a collection of user flows. You need someone on your team who can deliver an experience that matches your customers' worldview.

Hustler

Everything else is marketing (and sales). Marketing drives the external perception of your product, and you need someone who can put themself in the shoes of your customers. Good copywriting and communication skills are key here, along with an understanding of metrics, pricing, and positioning.

Good teams overlap on superpowers

A complete team needs a good overlapping mix of the hacker, hustler, and designer skill sets (Figure 6-3).

Here's how to map the overlap. Ask each team member to name their #1 and #2 superpowers. For instance, my #1 superpower is hustler and my #2 superpower is hacker, which can be written as *hustler-hacker*. If I were looking

to add a cofounder, I'd complete my team by bringing on a *hacker-designer* or *designer-hacker*.

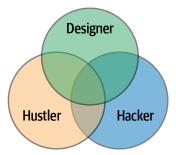


Figure 6-3. *The core team*

Be wary of outsourcing your key skill sets

I constantly run across teams that try to outsource one or more of these three areas, which is usually a bad idea. While you might be able to outsource an early prototype or demo, be wary of putting yourself at the mercy of someone else's schedule, as that can limit your ability to both iterate quickly and learn.

The one thing you should never outsource is learning.

Good teams hold themselves externally accountable

Your core team needs to be empowered to do whatever is needed to achieve the goal. If they have to constantly get permission to test ideas, that will affect their speed. But the other extreme—granting a team full autonomy, where they answer to no one—is also dangerous. This is the traditional skunk works or R&D model where the team is given a large budget and charged to "innovate." One thing is certain: all the money will get spent.

Such teams often move offsite into more creative spaces to give themselves room to think differently from the legacy business. While it's sound in principle, when this kind of autonomy is left unchecked, individual passion (or bias) also finds a way to rear its ugly head.

The Deep Space Intrapreneurship Analogy

Think of intrapreneurship as launching an exploratory probe into space. If you shoot out too far, you will get lost, eventually run out of resources, and die a quiet death.

Even if you do manage to return, you will probably bring back something so alien to the core business that you will be killed off by some vice president.

The key to success is not aiming for deep space, but aiming to orbit a specific target (albeit fuzzy) and maintaining regular communication with an executive sponsor on the home planet.

The target establishes a goal worth pursuing. Regular communication and external accountability manage expectations and safeguard your return.

Adapted from a conversation with Manish Mehta, who was an early intrapreneur at Dell

The right balance is semi-autonomy—i.e., establishing an external accountability system that provides the team with autonomy to explore solutions while staying grounded to certain core business model constraints and goals.

Involvement of your internal and external stakeholders while implementing the Continuous Innovation Framework (CIF) is key. If you are in a startup, these stakeholders can be external advisors and/or investors. In a corporate environment, they can be subject matter experts or executive project sponsors. Even if you are a bootstrapped entrepreneur, I highly recommend creating some sort of ad hoc advisory board for this purpose.

Good teams utilize good coaches

In addition to stakeholders, most teams new to the CIF will additionally benefit from an external coach/facilitator that is neither part of the core team nor a key stakeholder. Unlike stakeholders and domain experts (advisors), a coach focuses on *asking the right questions*, *not giving the right answers*. This is key for keeping biases in check and objectively identifying the right constraints to tackle. Even Steve Jobs, Larry Page, and Eric Schmidt had a coach.¹ Every mainstream methodology today—including Scrum, Agile, and Lean Six Sigma—spread and evolved through the work of countless coaches. The CIF is no different.

¹ Bill Campbell, a former football player and coach. Known as the Trillion Dollar Coach, Campbell helped to build some of Silicon Valley's greatest companies, including Google, Apple, and Intuit.

Assembling the right team is the first step. Establishing a regular reporting cadence is the next.

Establish a Regular Reporting Cadence

While the Lean Canvas and the traction roadmap are the perfect lightweight models for defining, measuring, and communicating progress in your business model and holding yourself externally accountable, they only work if you're motivated to revisit your models regularly.

Therein lies a problem. Motivation alone is seldom enough. Once you get fully immersed in your product, it's fairly common to go into a flow state where you lose the sense of time. Weeks quickly become months and years, as we saw with Steve.

You need a forcing function that does not rely on motivation alone and instead prompts you to revisit your models. This is where establishing a regular reporting cadence comes in—implemented as a set of ceremonies that you run during the 90-day cycle.

The concept of ceremonies isn't new. They are also widely used in Agile, Scrum, and Design Thinking methodologies to foster team communication and drive accountability. If you already follow one of these methodologies, it's easy to adapt your existing ceremonies to include the artifacts used during 90-day cycles. If you don't already run any ceremonies in your team, now is the time to establish this structure.

In a 90-day cycle, there are six ceremonies (Figure 6-4):

90-Day Cycle Kickoff Meeting

Used to align your team around key goals, assumptions, and constraints

90-Day Cycle Planning Meeting

Used to place bets on your most promising campaigns

Sprint Planning Meeting

Used to define experiments and assign tasks for the upcoming sprint

Daily Standup Meeting

Used as a quick check-in to update team members on daily tasks and raise any roadblocks that need attention

Sprint Review Meeting

Used to share key learnings from the sprint

90-Day Cycle Review Meeting

Used to provide a progress report from the 90-day cycle and decide on the next action: pivot, persevere, or pause

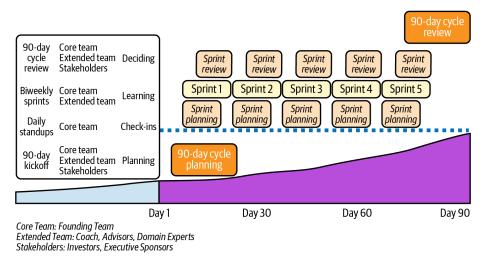


Figure 6-4. 90-day reporting cadence

Seven Habits for Highly Effective Experiments

During the business model design phase, you relied on thought experiments to shape your idea. As you get ready to move into the business model validation phase, you'll rely on actual experiments you run with customers to shape your idea.

What follows are my ground rules for designing and running good experiments. But before we get started, I'd like to contrast the difference between running scientific experiments versus entrepreneurial experiments.

First, the goals are different. Scientists seek perpetual truths in order to uncover the mysteries of the universe, while entrepreneurs seek temporal truths in order to uncover the secrets (insights) that make a business model work.

Second, the timelines are different. Entrepreneurs don't have unlimited time, but rather need to prioritize the speed of learning above everything else.

For these reasons, conducting entrepreneurial inquiry at the same level of rigor as scientific inquiry can be overkill in many instances. Entrepreneurship isn't knowledge acquisition for learning's sake, but for driving results (aka traction). Our goal is to quickly latch on to the right signal in the noise and then double down on the signal.

Testing a few gut-based shortcuts (or hunches) along the way is sometimes the fastest way to find these signals in the noise. How do you balance this trade-off between speed and learning? By adopting a condensed set of seven habits for running highly effective entrepreneurial experiments.

1. Declare Your Expected Outcomes Upfront

If you simply plan on seeing what happens you will always succeed at seeing what happens because something is guaranteed to happen.

—Eric Ries, The Lean Startup

Much as a scientist doesn't simply go into the lab and start mixing a bunch of compounds to "see what happens," you can't go into an experiment without having an idea of what you're looking for.

Here's how this bias creeps up on us: say you launch a product in the summer months and it doesn't sell—it's obviously because everyone is on vacation. If your product still doesn't sell in the fall, it's probably because everyone just came back from vacation, and they're not yet ready to buy. Then, here in the United States at least, we have Halloween, Thanksgiving, and Christmas, all of which conspire to drive down your sales. By this logic, it's never a good time to sell anything.

---- NOTE -

Reasonably smart people can rationalize anything, but entrepreneurs are especially gifted at this.

To avoid falling into this kind of rationalization trap, you need to take a more empirical approach. Instead of simply waiting to see what happens, you need to declare your expected outcomes upfront—and factor in things like seasonality. This is more easily said than done. There are usually two deeper reasons for not wanting to declare outcomes upfront:

- We hate to be proven wrong.
- It's hard to make educated guesses about the unknown.

The next two habits will help you overcome these.

2. Make Declaring Outcomes a Team Sport

If you are the founder or CEO of a company, you might shy away from making bold public declarations of expected outcomes because you want to appear knowledgeable and in control. You don't even have to be the CEO to exhibit this behavior: if you are a designer proposing a new design, it's much safer to be vague on results than to declare a specific lift in conversion rates and risk being proven wrong.

The underlying reason most people shy away from up-front declarations is that we attach our egos to our work. While egos are good for reinforcing ownership, they are bad for empirical learning.

I know it's not easy to consciously detach your ego from your product. After all, you probably spend most of your waking hours working on your product. But at some point you will reach a point where it becomes more important to build the right product than to always be right. This mind shift is essential to building a healthy culture of experimentation.

You might show your fear of declaring outcomes in another way: by making only safe declarations. You won't achieve breakthroughs by taking the safe route. You need to develop a culture that allows people to have strong opinions, strange hunches, and weird instincts that they can then rigorously test.

Here's how I propose you get started. Don't place the burden of declaring expected outcomes on a single person. Instead, make it a team effort, but with a twist.

Seeking team consensus too early can lead to groupthink. Expected outcome declarations are particularly vulnerable to being influenced by the HiPPOs in the room.

It's much better instead to have team members declare outcomes individually first and then compare notes.

So in the case of a designer proposing a new landing page, for instance, the designer would first walk the team through their proposal, then everyone on the team would independently estimate the potential throughput lift in conversion rate. They would then compare their estimates and discuss how they arrived at those numbers.

I recommend doing a similar team-wide poll after running an experiment, then comparing those estimates to the actual results once they've come in. If you want to have a little fun, you can turn this exercise into a game where you award a small token prize to the person with the closest estimate. The point isn't about being right or wrong, but about getting your team comfortable with declaring expected outcomes. This exercise alone can dramatically help improve your team's judgment over time.

If you are a solo founder, it's even more important to write down your expected outcomes before running experiments.

3. Emphasize Estimation, Not Precision

The other reason people shy away from declaring expected outcomes upfront is that they feel they don't have enough information to make meaningful

predictions. If you've never launched an iPhone app before, how can you possibly predict an expected download rate?

You need to accept the fact that you will never have perfect information—and that you need to make these kinds of predictions anyway.

Here are three ways to do this.

Search for analogs

In an ideal world, we would be able to look up the expected conversion rates on any metric. Most companies, however, choose to keep the internal workings of their customer factories secret, for competitive reasons.

Some of these numbers can be pieced together with a little research, as we did in the Fermi estimation exercise in Chapter 3. However, the most accurate estimates will come through investing in improving your own judgment over time. You have to become an expert on your own customers' behavior patterns. The only way to do this is to declare outcomes upfront and incrementally learn from each outcome.

When you first start declaring these outcomes, be prepared for your numbers to be way off. For instance, you might expect to get 100 downloads per day from your iPhone app launch, but find that you get only 10. Your first guess may have been overly optimistic, but when you are consistently off by a magnitude of 10, you naturally start adjusting your expectations to match reality.

Use your traction roadmap and customer factory model

It's important to keep in mind that you don't simply pick numbers, like 100 downloads per day, out of thin air. These numbers should come from your traction roadmap and customer factory model. The point of building a model in the first place is that you can use it to predict how your customers need to behave to make your business work (i.e., compute consequences); you can then validate or invalidate those predictions through experiments.

Start with ranges instead of absolute predictions

Another reason people shy away from making predictions is because they feel the need to be exact.

TIP
Any estimation is better than no estimation.

Let's take a look at another estimation technique, proposed by Douglas Hubbard. It builds on research that shows that assessing uncertainty is a general

skill that can be taught with measurable improvement. Hubbard's technique is built on making predictions in ranges rather than in absolutes. He illustrates this technique with an estimation exercise that I have used quite effectively in my workshops, presented in the following sidebar.

Exercise: What Is the Wingspan of a Boeing 747 Airplane?

Unless you are in aviation, you probably throw your hands up in the air when faced with a question like this one. Instead of attempting a single answer, you can break the problem into two by first tackling the upper bound to a 90% confidence interval and then doing the same with the lower bound. Let's give it a try.

Can the wingspan be less than 20 feet (6 meters)?

No, that would obviously be too short.

We are 100% certain of this.

How about 30 feet (9 meters)?

Keep increasing this number until you are no longer comfortable going any higher. You should be aiming for 90% certainty.

Write this number down. Then repeat for the upper bound.

Can the wingspan be greater than 500 feet (152 meters)?

No, that would obviously be too long.

We are also 100% certain of this.

How about 300 feet (91 meters)? That's the length of a football field.

Keep decreasing this number until you are no longer comfortable going any lower. Again, aim for 90% certainty and write this number down.

How did you do?

The correct answer is 211 feet (64 meters).

When I've run this exercise in my workshops, students have regularly gone from declaring they have no idea to hitting a range within 5 to 20 feet of the right answer. You can apply this same technique to your throughput experiments. The lower and upper bounds of conversion rates already have set floors and ceilings. Let's take the acquisition or sign-up rate as an example. We know it can't be 100%—no one gets that. And it can't be 0%—there would be no point to the experiment. Through progressive adjusting of your lower and upper bounds, you might create a 90% confidence interval of a 20–40% sign-up rate.

That's progress. Over time, your confidence will go up and your ranges will shrink.

4. Measure Actions, Not Words

All evaluative experiments need to define expected outcomes in terms of one or more customer factory actions (AARRR). Discovery experiments, however, can be a bit more challenging because qualitative learning can be subjective. Ask any entrepreneur how a customer call went, and it's usually all positive. This is confirmation bias at work, where we tend to selectively retain only that which agrees with our preexisting worldview and ignore the rest. Rather than trying to qualitatively gauge what users say, measure what they do (or did).

5. Turn Your Assumptions into Falsifiable Hypotheses

It's not enough to simply declare outcomes upfront. You have to make them falsifiable, or capable of being proven wrong. I touched on this earlier when discussing the scientific method. It is extremely difficult to invalidate a vague theory. Falsifiability is required to avoid falling into the inductivist trap, where we gather just enough information to convince ourselves that we are right. You might already be familiar with this trap from the famous "white swans" example. If all the swans you've ever seen are white, it's easy to declare that all swans are white. But it takes only one black swan to disprove this theory.

Let's see how this problem surfaces with a business model assumption stated as: "I believe that my being considered an expert will drive early adopters to my product." To test this statement, you might mention your product in talks, tweet a link, or write a blog post. All of these things may start driving sign-ups. But when do you declare this statement as validated? Is it when you get 10 sign-ups, 100 sign-ups, or 1,000 sign-ups? The expected outcome is vague.

The other problem with this approach is that it is hard to draw lines between activities and causality when you mix a bunch of activities together. Can your sign-ups really be attributed to all these activities equally, or is there one driving most of the sign-ups?

The preceding statement is a good first pass at a "leap of faith," but it isn't yet a falsifiable hypothesis. It needs to be refined further so that it's more specific and testable. Here's a much better version:

• Writing a blog post will drive >100 sign-ups.

Now you have a way of running this experiment and clearly measuring whether it passes or fails. Remember that this 100 sign-ups number isn't simply pulled out of thin air—it needs to be derived from your traction roadmap

and customer factory model. The key takeaway here is realizing that assumptions on your canvas generally don't start out as falsifiable hypotheses, but as leaps of faith. In order to turn leaps of faith into falsifiable hypotheses, you rewrite them as:

• [Specific testable action] will drive [expected measurable outcome].

So far we have covered two habits you should cultivate in order to craft effective experiments: declaring outcomes upfront and making them falsifiable. But that's not enough—there's still something missing in the expected outcome statement. Can you figure out what it is?

6. Time-Box Your Experiments

Say you run the experiment and decide to check on the results in a week. After a week, you have 20 sign-ups. You might decide it's a good start and leave the experiment running for another week. Now you have 50 sign-ups, which is right at the halfway point of your desired goal of 100 sign-ups. What should you do?

Entrepreneurs, being overly optimistic, commonly fall into the trap of running the experiment "just a little while longer" in the hopes of getting better results. The problem here is that when an experiment is left to run unchecked, those weeks easily turn into months.

Just as the inductivist trap allows us to declare success prematurely, lacking a time box allows us to indefinitely extend our experiments. Remember that time—not money or people—is the scarcest resource we have. The solution is *time-boxing your experiment*. We can then rewrite the expected outcome as:

• Writing a blog post will drive >100 sign-ups in 2 weeks.

Establishing a time box like this sets up a nonnegotiable tripwire for a future discussion with your team, irrespective of the results—provided, of course, that the world doesn't come to an end.

I recommend going even one step further with time-boxing: rather than trying to estimate how long it will take to run a particular type of experiment, constrain all your experiments to fit within the same time-box interval. In other words, define a time box in which all your experiments need to fit, irrespective of type. It's perfectly okay to revise the goal downward to fit your time box. For instance, in our example, if you don't think you can hit 100 sign-ups in 2 weeks, but you think you can do it in 4 weeks, split it into 2 experiments:

Experiment 1: Writing a blog post will drive >50 sign-ups in the first 2 weeks.

• Experiment 2: The blog post will drive >50 sign-ups in the next 2 weeks.

If after the first 2-week experiment you have only 10 sign-ups, you'll know that there's a low likelihood of making up the difference in the next 2 weeks unless you take some corrective action. Think of time-boxing as a way to force smaller batch sizes in your experiments. The smaller the batch, the faster the feedback loop from the experiment.

I've applied this time constraint technique in both small and large teams with equal efficacy. Before a time-box constraint was imposed, the teams were scoping their experiments from a couple of weeks for small experiments to several months for large experiments. For the longer experiments, the only visibility on progress was the team's build velocity, which, as we established earlier, is an unreliable progress indicator.

We instituted a two-week time box and prescheduled progress update meetings with project overseers. This meant that the teams had to find a way to build, measure, learn, and be prepared to communicate business results every two weeks. Like magic, they stepped up, finding creative ways of breaking up their "big" experiments into smaller experiments. Through these faster feedback loops, the teams were able to invalidate several large initiatives early and generate more confidence in others. Both these outcomes are progress.

7. Always Use a Control Group

Progress is relative. In order to tell if an experiment is working, you need to be able to benchmark it against a previous state. The equivalent in science would be establishing a control group.

I'll outline the steps for benchmarking your customer factory as weekly batches (or cohorts) later in the book. These weekly batches are a reasonable starting point for establishing a control baseline: they create a benchmark that you should aim to beat in your experiments. This is a kind of serial split testing, and it's usually acceptable when you either don't yet have a lot of users or aren't running simultaneous overlapping experiments.

That said, the gold standard for creating a control group is through parallel split testing. In parallel split testing, you expose only a select subgroup of your user population to an experiment, then you compare group A with the rest of the population (the control group) to determine progress (or not). This is also called an *A/B test*.

Finally, if you have enough traffic to test with and more than one possible conflicting solution to test, you can run an A/B/C (or more) test, where you pit multiple ideas against one another.

Steve Establishes an External Accountability Structure

Steve succeeds in getting both Josh and Lisa to commit to working 20 hours a week on the startup. He relays the news to Mary.

"Great job, Steve. I'm really looking forward to seeing Josh and Lisa again," says Mary.

"So it would be okay to invite them to our sessions?" Steve asks.

"Yes, it would. I would even go so far as to say that would be a requirement for me to continue advising you," Mary adds.

She pauses for a second. "A founding team needs to be 100% aligned, especially on mindsets. You've made a lot of progress changing your mindset from a build-first approach to a traction-first approach in just the last couple of weeks. The last thing you want is for your team members to cause you to slide back into the old world."

"Yeah, I've been wondering about how I'm going to get them caught up on everything you've taught me," Steve replies.

"The power of these models is that they are simple to understand. Putting them into regular practice is the hard part. The best way to get your team caught up is through example—by doing. I'd suggest officially kicking off a 90-day cycle, blocking out calendars for the ceremonies, and following the structured process. Both Josh and Lisa are really sharp. They'll soak up this way of working in no time."

"You're right about the models being simple. Neither of them interrupted me when I delivered my business model story pitch to them. They got it right away, and Josh even asked me to send him a copy of my Lean Canvas and traction roadmap just this morning."

"There you go. Be sure, however, to block off calendars now. Too many entrepreneurs only get together to discuss the good stuff, but the bad stuff is usually where you find the biggest breakthroughs. Brace yourself, Steve, as things are about to get interesting..."

After their meeting, Steve coordinates with the others and sets up dates and times for all the ceremony events on the calendar.

Kick Off Your First 90-Day Cycle

As you learned in the last chapter, the first 2 weeks of a 90-day cycle are set aside for modeling and prioritizing. You kick off the cycle by first getting your models in order, and then calling a 90-Day Cycle Kickoff Meeting where you align your team on goals, assumptions, and constraints (Figure 7-1).

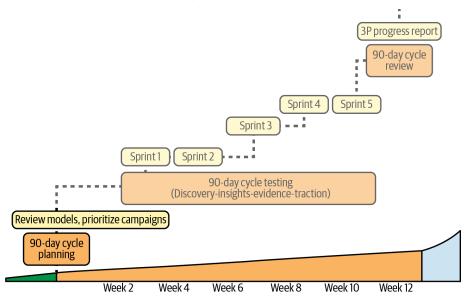


Figure 7-1. 90-day cycle kickoff

Steve Calls a 90-Day Cycle Kickoff Meeting

As Steve has already been working on his models, it doesn't take him very long to get them updated. He calls a 90-Day Cycle Kickoff Meeting, where he spends a few minutes quickly walking Josh, Lisa, and Mary through his updated Lean Canvases and traction roadmaps for his top two customer segments: Software Developers and Architects.

"We've mostly discussed the Software Developers model before and nothing's changed there, but I noticed that you seem much more excited now about the Architects model. Can you elaborate?" Mary asks.

"Well," says Steve, "I kept the Software Developers model mostly because I understand that space the best and have some companies in mind that we can approach. But once I started applying the Innovator's Gift to set fair pricing for the Architects model, it dawned on me that we could anchor against the cost of current 3D rendering solutions and potentially charge a lot more."

Lisa asks, "Is that because you're price anchoring against an architect's hourly rate?"

"Yes," Steve replies. "I figured that our early adopters would be custom home architects who typically bill \$250/hr and have clients who expect to see 3D renderings. Creating a single rendering takes at least 12 hours, which is \$3,000. If they do more than one of these a month, which I think they do, we could charge them \$3–5k/mo—especially since we can get them to a much better outcome (AR/VR) in a fraction of the time."

Josh jumps in. "I'm not sure architects use those models beyond the design phase, which is typically three months. And we don't really know how many renderings they usually create per client. That may affect your lifetime value assumptions."

"Hmmm...you're right," says Steve. "If we assume they'll each have six clients a year and will create renderings for all of them, if we can charge them \$1k per rendering, that's \$6k/yr, or \$500/mo. Funnily enough, that's the same number as for the software companies."

Mary comments, "I'd recommend sticking with the same \$500/mo target pricing for both segments for now. It's the minimum pricing to make your traction roadmap work, and if you find you can go higher, you can always adjust the roadmap then."

Steve turns back to the agenda for the meeting. "Sounds good. So, with these Lean Canvases, we should all be clear on our starting business assumptions. For our 90-day OKR, the key objective is completing stage 1—problem/solution fit—and given that we're targeting the same pricing for both variants,

we would need to secure two trials (rounding up) at \$500/mo by the end of stage 1."

"That's good and clear," says Mary. "How about constraints? What do you guys think?"

The others exchange glances for a few seconds, then turn back to Mary.

"You guys tell me," she responds with a smile.

Steve takes a shot. "Well, in one of our meetings you said that it would be easy to spot with metrics. I assumed we would need to first collect some metrics before we can make that determination— which would be after we launch our MVP?"

"You don't need to launch your product to start collecting metrics," says Mary. "Remember Demo-Sell-Build. What's the first step?"

"Right. Since our customer factory isn't running yet, the first step is getting leads into the factory. So would acquisition be the limiting constraint?"

"That's correct, Steve," says Mary. "Acquisition or demand generation is your current limiting constraint. And until you can get leads, or better yet, sales flowing, there's no point in optimizing any of the other steps. Remember that you need to be able to create enough customers first without having to build a product."

"How do you create customers without a product?" Josh asks with a confused look on his face.

Steve and Mary look at each other, and Mary gestures to Steve to explain. Steve then spends the next 15 minutes sharing the logic behind using a Demo-Sell-Build process rather than a Build-Demo-Sell process. He even leads the rest of the team through the food truck and Tesla case studies he'd previously discussed with Mary.

"Demo-Sell-Build. I like the simplicity of that. If you can't sell the demo, why build the product?" Lisa adds with a laugh.

Josh jumps in. "I guess the next order of business then is building a demo and setting up some calls."

Steve adds, "Maybe we could also build a landing page, and drive some traffic to it with ads—"

Mary cuts in again. "Remember guys, this is only an alignment meeting, not a brainstorming or solution design meeting. If you're all aligned on the constraint, it's best for us to end the meeting here. You all need to go away for a few days and independently formulate some campaign proposals for hitting your 90-day OKRs. Let's plan on meeting again at the end of the week to

review what you come up with and place our bets on the most promising campaigns. I'll forward you some additional information on the problem/solution fit process, which should get you started."

And with that, the meeting comes to an end.

The Problem/Solution Fit Playbook

The first stage in the product life cycle (the "now" in the now-next-later rollout plan discussed in Chapter 4) is achieving problem/solution fit. This stage is about demonstrating sufficient demand for your product *before you build it*.

How do you get paying customers without first building the product? This is the key propelling question, whose answer can shave months off your product timeline. More importantly, by the end of this stage, you'll have a product that you *know* customers want and don't just hope they'll want.

Customers Don't Buy Products, They Buy a Promise of Something Better

Think back to a big new product launch, like the iPhone. Buying the first iPhone required a leap of faith because there was nothing remotely like it. If you were one of the early adopters, like me, who stood in line to buy the first iPhone, you didn't get to test-drive it first. You probably saw Steve Jobs demo the product on stage, fell in love with the promise of the product, and decided to buy the product.

It follows then that what customers buy isn't really a product, but a promise of something better. You don't need a working product to promise something better, you need an offer.

An offer is made up of three things:

- A unique value proposition
- A demo
- A call-to-action (CTA)

As we've discussed previously, getting your customer's attention is the first battle. This is the job of your UVP, where you make an assertion about how you are better than the existing alternatives.

Once you have their attention, the next step is convincing your customer that you can indeed deliver on your promised UVP—and here's the counterintuitive bit. This is not the job of a working product either, but a demo. The art of the demo is showing the least amount possible to convince your customers you can deliver on your UVP and secure their commitment.

Once a customer buys into your demo, the last step is a specific CTA that you want your customers to take. The goal here is to get as close to a paying customer as possible.

Customers don't really buy working products, but an offer. This insight is key to acquiring customers without a product. It opens the door to using a Demo-Sell-Build strategy.

Not convinced yet?

- If you've ever backed a crowdfunding campaign, you bought an offer, not a finished product.
- Selling an offer versus a finished product isn't just for smaller purchases, like a phone. Tesla sold its initial cars using an offer that required a \$5,000 down payment and a \$45,000 wire transfer within 10 days to reserve the product.
- Selling an offer isn't just for B2C products, either. As much as you'd like to close a big B2B deal immediately, the more complex the sale, the more complex the sales process. You have to first sell the UVP, then the demo to multiple parties, and finally have a pricing discussion with the right buyer. This can take several weeks to several months. If you don't manage to sell the offer, your product never makes it to the pilot stage.

Contrary to popular belief, you never need a finished product to close a sale with an early adopter. Depending on your product's level of technical risk (feasibility), you may sometimes need a working prototype for your demo, but don't assume this unless your customers specifically ask for it.

How to Make a Promise of Better

There are a number of different ways you can assemble and test offers. Here are some of the most commonly used offer campaign recipes:

Smoke test

Use a teaser page to collect email addresses.

Landing page

Use an offer page to drive a specific call-to-action (e.g., sign-ups).

Webinar

Use an educational webinar to drive awareness.

Preorder

Use a preorder campaign to drive advance sales.

Crowdfunding

Use a crowdfunding platform, like Kickstarter, to fund a project.

Direct sales

Use a Prospect-Demo-Close sales process to drive sales.

Mafia offer

Use carefully scripted customer interviews to uncover problems, design a solution, and build an offer your customers cannot refuse.

Based on my experience, I've mapped the effectiveness of each campaign, plotting scalability/reach versus conversion rate (see Figure 7-2).

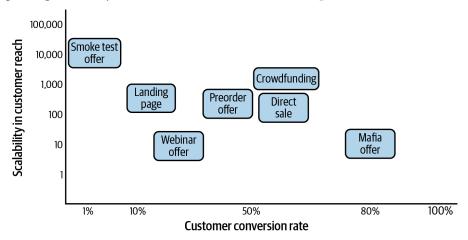


Figure 7-2. The effectiveness of the different offer campaign recipes

Based on your 90-day OKR, you can either pick a single campaign or try multiple campaigns.

When Are You Done with Problem/Solution Fit?

By the end of stage 1, you should be able to make an evidence-based go or no-go decision on whether to move forward with your business model to stage 2 (product/market fit).

Specifically, you should have built a customer factory that can:

- Repeatedly attract, activate, and cause a switch with your early adopters (Desirability).
- Secure sufficient tangible commitments (e.g., advance payments, letters of intent) from early adopters, as defined by your traction roadmap (Viability).

• Clearly define the smallest thing you need to build (your MVP) to deliver value to your early adopters.

Achieving problem/solution fit typically takes one to two 90-day cycles (3–6 months).

Steve Calls a 90-Day Cycle Planning Meeting

The team gets together at the end of the week to review their offer campaign proposals. Both Josh and Lisa want to take a Direct Sales approach, while Steve suggests using a Landing Page to drive trial customers.

Mary weighs in, "While rushing to pitch an offer is definitely faster and better than first building an MVP, it still isn't the most optimal next step given where you are."

There are confused looks across the board.

"Didn't you ask us to start with an offer in the last meeting?" Steve asks.

"Yes, I said to start with an offer. However, the most effective next step isn't pitching an offer, but first learning how to assemble the right offer," Mary explains.

Still seeing blank looks on everyone's faces, she elaborates further.

"Let's first take the landing page campaign. Sure, you can drive traffic to the page with ads, but what if no one signs up? How do you know what to fix? A landing page could fail at the headline, the visuals, copywriting, price, design, and so on. Without customer feedback, this becomes a multivariate optimization problem and a recipe for going around in circles."

Steve muses, "Like the build trap we discussed earlier with rushing to build an MVP."

"Exactly," says Mary. "Remember that an offer, while faster than an MVP, is still a stand-in for your solution. If you simply guess, chances are high it will fall flat. Worse, without customer feedback, the optimization trap ensues."

Lisa then jumps in. "What about Direct Sales? Won't we get customer feedback on the spot?"

Mary replies, "Yes, you will. An in-person pitch that works is a great thing, but a pitch that lands flat typically gets awkward fast and goes nowhere. Right now, all you have is a theory of what could make a compelling pitch; it's still largely built on a tower of untested assumptions best characterized as leaps of faith. At this point, for instance, we don't really know how many AR/VR projects software companies take on or what impact 3D renderings, and more specifically AR/VR, could have on the home construction space.

If any of your foundational assumptions around customer problems, existing alternatives, etc., are wrong, the pitch will miss and position the product as a weak nice-to-have versus a strong must-have."

Lisa nods in acknowledgment and asks, "Sure, but even if we get parts of the pitch wrong, won't we still be able to learn from the prospect and iteratively improve it?"

"Maybe," Mary answers. "It largely depends on your prior relationship with the prospect and the framing of the conversation. Unless the prospect knows you, likes you, and trusts you, they'll typically keep their cards close to their chest. Most of the time, all you learn is that the offer missed the mark—it can be challenging to go deeper and learn enough to pivot to something better. You just get stuck, thank the prospect for their time, and politely end the conversation. That's a learning opportunity lost."

"Hmmm...I see what you mean. Since we don't really know anyone yet in this space, we'll be delivering cold pitches," says Josh. "So what's our best course of action, then?"

"Learning before pitching," Mary responds. "The way you build a compelling pitch is by first taking the requisite time to deeply understand your customer's problems. This may sound weird, but it is possible to understand a customer's problems even better than they do. Armed with this understanding, you'll then be in the best position to design the right solution and assemble a compelling pitch—a pitch that has a much higher probability of hitting the mark because it nails a problem that you know your customers want to solve."

"Is this 'learning about our customers' something we do before running one of the offer campaigns you shared with us?" Lisa asks.

Mary replies, "No, one of the campaign types in that list incorporates all these steps already as part of the campaign itself—the mafia offer."

Steve jumps in. "I was initially drawn to the mafia offer campaign because you've mentioned it before. But then I saw that it was the least scalable of all the offer types, so I opted for something more fitting given the number of customers we'll need to acquire—"

Mary cuts in. "Yes, the mafia offer campaign is the least scalable, but it packs in the most amount of learning per unit time. It also has the highest conversion rate of all the offer types because it's delivered to prospects in person, one-on-one. Yes, it may seem to take longer than the other campaign types, but from my experience it's the fastest way to get you to repeatable sales. Once you can repeatedly sell even 10 people on your product, how to scale from there becomes a lot more obvious."

"How is this different from direct sales?" Lisa asks.

"The mafia offer campaign is quite similar to direct sales once you start pitching," Mary responds, "but it's a lot more tactical on how to use discovery conversations to learn before you pitch. You don't pitch anything until you uncover your early adopter criteria, identify your true competition, and deeply understand the problems. Remember the Innovator's Gift? At the business model design phase, you used the Innovator's Gift to stress test your models using thought experiments. Here, you'll run actual discovery experiments to uncover and test these insights."

"This all sounds very logical," Steve comments, "but I'm still skeptical about how we get people to open up to us and give us all this information if we're not allowed to pitch."

"That's a fair question," Mary acknowledges. "Early prospecting tactics trip up lots of founders. I've got a bunch of information I'll send you guys on how to set up these conversations, conduct interviews, and capture insights. Take a few days to process this information, then let's meet again to kick off your first sprint."

The Mafia Offer Campaign

A *mafia offer* is an offer your customers cannot refuse—not because you strong-arm them, but because you create a compelling offer that:

- Nails your customers' top problem(s)
- Demonstrates a solution for overcoming their problem(s)
- Provides a clear way for them to get started

Building a Mafia Offer

Rushing to craft a pitch or build a landing page is a suboptimal way of building a mafia offer. Such offers are often predicated on a bunch of unvalidated assumptions (guesses), which typically lead to poor conversion rates. Furthermore, trying to troubleshoot your offer when customers don't buy is a multivariate challenge. Did customers leave because of the UVP, the demo, pricing, design, copywriting, or something else?

For these reasons, I advocate using a more systematic three-step approach, shown in Figure 7-3.

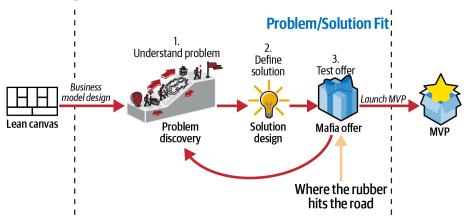


Figure 7-3. The three steps to building a mafia offer

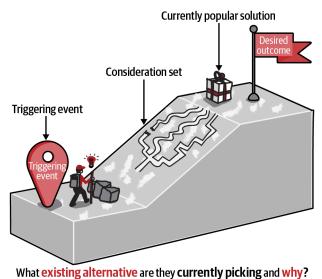
Let's walk through the steps.

1. Problem discovery

Since most initial customer/problem assumptions on the Lean Canvas are best guesses and often barely scratch the surface on the problems, building a mafia offer starts with a deeper dive into understanding your customer's problems.

The fastest way to deeply understand your customer is through face-to-face interviews—not building landing pages, or releasing code, or collecting analytics, but talking to people.

The goal of problem discovery is uncovering problems worth solving with the status quo (i.e., existing alternatives). You do this not by pitching your solution, but rather by studying how people are currently getting the job done with existing alternatives (Figure 7-4).



Ansting afternative are they currently picking and will

Figure 7-4. *Step 1: Problem discovery*

2. Solution design

A problem well-defined is half-solved.

—Charles Kettering, American inventor

If you can find a big enough struggle in the customer's current workflow (the status quo), that's where you'll find opportunities for causing a switch (problems worth solving). The next step is designing or refining your product to fit and cause a switch (Figure 7-5).

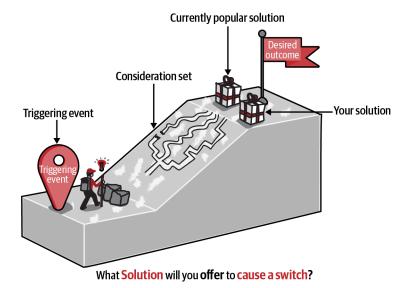


Figure 7-5. Step 2: Solution design

3. Offer delivery

The final step is assembling your solution into a mafia offer, which you then deliver to customers as a pitch and test iteratively. This is where the rubber hits the road.

If enough customers buy into your offer, you achieve problem/solution fit. You then start the process of building out your MVP. How many customers are "enough"? This is determined by your traction roadmap.

Running a Mafia Offer Campaign

The mafia offer campaign is designed to fit within a 90-day cycle. The reason this is possible is that you don't build a *working product* (MVP) during this stage, but rather an *offer*, which is a much faster way to validate demand for your product.

Figure 7-6 shows what a typical mafia offer campaign looks like within a 90-day cycle. You reserve up to two sprints for problem discovery, one sprint for solution design, and up to two sprints for offer delivery. Note that these are only guidelines, and your mileage could vary based on your specific product and customer segment.

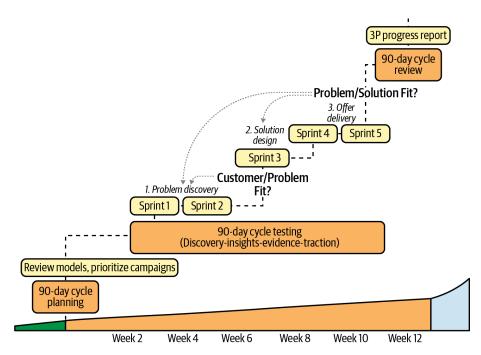


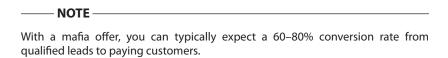
Figure 7-6. Typical 90-day cycle for achieving problem/solution fit using a mafia offer

When to Use a Mafia Offer Campaign

Due to the number of high-touch interactions required to implement this type of campaign, it is tempting to dismiss it in favor of other more seemingly scalable campaigns like crowdfunding or driving traffic to a landing page.

This often leads to suboptimal results, for the reasons I outlined earlier. The counterintuitive reality is that you often go a lot faster later if you start slowly, taking the time to focus on the right things.

The mafia offer campaign, while not the most scalable campaign, is the one that yields the highest learning—which also translates into the highest conversion rates.



For these reasons, I unequivocally recommend starting with a mafia offer campaign—irrespective of product type. The insights you uncover here greatly

facilitate stacking a more scalable offer later, whether it's crowdfunding, a landing page, or hiring a sales force.

For example, I used the mafia offer campaign to launch the first edition of this book (self-published) in 2010. My initial MSC goal was selling 10,000 copies in 3 years. Using a 10x growth rate, I translated this to either selling 100 copies or securing 1,000 email addresses (qualified leads) of people interested in buying the book as my problem/solution fit criteria.

Here's how I stacked my offers to launch the book:

- Use a mafia offer campaign to secure 25 sales (4 weeks).
- Use learning from mafia offer to build a smoke test offer campaign with a teaser page to collect email addresses and secure 1,000 qualified leads (8 weeks).

After hitting my problem/solution fit criteria, I started writing the book, which took nine months to complete. Along the way, I continued to run multiple campaigns to grow traction for the book. These included:

A workshop campaign

Teach concepts from the book and bundle a future copy of the book with the ticket.

A speaking campaign

Give keynotes and bundle future copies of the book for all attendees.

A preorder campaign

Allow early adopters to purchase the book and get chapters incrementally delivered to them as they are written.

These campaigns helped me write and launch the book iteratively with my early adopters. The result was a book that readers wanted, which resulted in book sales outpacing my traction roadmap. I sold 10,000 copies within 18 months of starting the project and increased my MSC goal to 100,000 copies.

Steve Tries Taking a Shortcut

Steve reviews the material Mary sent him on the mafia offer campaign. "The fastest way to deeply understand your customer is through face-to-face interviews."

"Face-to-face interviews? That will take an eternity!" Steve thinks to himself. He decides to use a survey instead.

Steve finds an online service that can target his specific audience for a fee and spends the rest of the day designing the survey. He launches it the next day.

Results start pouring in almost immediately, and by the following day he has over a hundred neatly tabulated responses, and some fancy charts. He beams as he discovers that over 85% of the respondents ranked his top problem as a "must-have."

He immediately drafts Mary an email:

I know you said the problem discovery stage can take up to four weeks. I used a survey to speed things up and got a strong signal that validates my problem (85/100). Am I missing something or are we good to move on to the solution design phase?

He gets a text message two minutes after he sends the email: "Let's meet for coffee asap. I'm free in 30 minutes—usual spot."

Mary Bursts Steve's Bubble (Again)

"I know the engineer in you craves efficiency," Mary begins. "I was the same way. But surveys aren't the right tool for problem discovery."

"Why not?" Steve asks.

"For a number of reasons. For starters, surveys assume you know the right questions to ask. And because surveys are multiple choice, you also need to know the right possible answers to list on the survey. At the earliest stages of a project, you don't know what you don't know."

She pauses for a second and then goes on. "Sure, surveys can be used for problem validation once you know the right questions and answers to validate, but they aren't an effective problem discovery tool."

Steve interjects. "Wasn't the goal of this stage to validate the problem assumptions on the Lean Canvas?"

"Yes, but most of the problems entrepreneurs initially list on their canvas don't turn out to be the right ones."

"Why is that?" Steve inquires.

"Because most entrepreneurs already have a solution in mind, which they can't simply shut off. Instead of asking 'What are my customer's top problems?' many entrepreneurs ask 'What top problems can I solve with my solution?'"

Steve gets a puzzled look on his face.

Mary goes on. "Remember, when you have already decided to build a hammer, everything starts looking like a nail, and you fake the problems on the canvas to justify your solution. When you put those same problems on a survey and ask people to rank them, sure they can rank them relative to the other choices

in your survey. But if their top problem isn't there, they have no way of letting you know, and *you never discover it*."

Mary lets that sink in and then adds, "Even if you get people responding that they have a problem, you don't get to the real 'why' with a survey. The real 'why' is often several levels deep, and the only way to get to it requires a conversation. You don't know what they have tried so far, why it didn't work, etc. Knowing these details is key to building a mafia offer later."

"I see what you mean...So what's the point of starting with a Lean Canvas then?" Steve asks.

"The point is taking a snapshot of your business model, and baselining facts from opinions. No matter how compelling your business model story is, unless you have evidence to back up your assumptions, it's still an opinion. The top starting risks in any business model stem from your customer and problem assumptions. You get those wrong and it's easy to see how the rest of the canvas falls apart. This is why the first step in the problem/solution fit process is problem discovery."

"So is the point getting people to see their own bias for their solution?" Steve asks.

Mary smiles. "In a way, yes. Concepts like the Innovator's Bias and Innovator's Gift are easy to understand and often seem commonsensical, but they require an acute self-awareness to spot in practice. You have to hone this self-awareness over time because cognitive biases are sneaky and operate at an unconscious level. I promise you'll see the Innovator's Bias rear its ugly head many more times along the way."

Steve laughs.

"At this stage," Mary continues, "finding evidence of monetizable pain is your number one priority, and running one-on-one problem interviews is your best course of action. One-on-one interviews may not seem efficient, but you've got to experience them to see what I mean when I say that they pack more learning per unit time than anything else you could possibly do. You also don't need as many data points as you might think to start finding actionable patterns."

"How many interviews are typically enough?"

"You start seeing patterns between 5–10 interviews, but it's better to overcompensate a bit to ensure you're not prematurely drawing conclusions. When you can start predicting what people are going to say before they say it, that's when you know you're done. I've found it takes about 20 interviews to get to that."

Steve nods. "Okay—I promise, no more shortcuts. I'll finish reading all the material you sent us on the mafia offer campaign, and we'll get the team together to kick off our first sprint."

No Surveys or Focus Groups, Please

When asked to do the smallest thing to learn from customers, the first instinct of many founders is to conduct a bunch of surveys or focus groups. While running surveys and focus groups may seem more efficient than interviewing customers, starting there is usually a bad idea. Here's why:

Surveys assume you know the right questions to ask

It is hard, if not impossible, to script a survey that includes all the right questions to ask, because you don't yet know what they are. During a customer interview, you can ask for clarification and explore areas outside your initial understanding.

NOTE		
Customer disco	overy is about exploring what you don't know you don't k	now.

Worse, surveys assume you know the right answers

In a survey, you not only have to ask the right questions but also provide the customer with the right answer choices. How many times have you taken a survey where your best answer to a question was "Other"?



You can't see the customer during a survey

Body language cues are as much an indicator of problem/solution fit as the answers themselves.

Focus groups are just plain wrong

The problem with focus groups is that they quickly devolve into groupthink and only surface the opinions of the vocal minority, which isn't representative of the entire group.

Are Surveys Good for Anything?

While surveys are bad at supporting initial learning, they can be quite effective at verifying what you learn from customer interviews. A customer interview is a form of qualitative validation that is useful for uncovering strong signals for or against hypotheses using a "reasonably" small sample size. Once you have

preliminary validation of your hypotheses, you can use what you have learned to craft a survey and verify your findings quantitatively. The goal is no longer learning but demonstrating scalability (or statistical significance) of the results.

Preemptive Strikes and Other Objections (or Why I Don't Need to Interview Customers)

Saying "Go talk to a customer" is about as useful as saying "Build something people want." Talking to customers is especially hard when you're being asked to interview them and can't pitch your product to them:

- Who do you target?
- What do you say to them?
- What are you specifically trying to learn?

These are some of the questions I will address in the next chapter, but first, let me address some common objections to the idea of interviewing customers so you get these out of your system:

"Customers don't know what they want."

A lot of people declare talking to customers hopeless, often citing Henry Ford: "If I had asked people what they wanted, they would have said faster horses." But hidden in this quote is a customer problem statement: had customers said "faster horses," they would really have been asking for something faster than their existing alternative, which happened to be a horse.

Given the right context, customers can clearly articulate their problems, but it's your job to come up with the solution. Or, as Steve Jobs put it, "It is not the customer's job to know what they want."

"Talking to 20 people isn't statistically significant."

A startup is about bringing something bold and new into the world. Your biggest challenge at first will be to get anyone to pay attention:

When 10 out of 10 people say they don't want your product, that's statistically significant.

-Eric Ries

Once you can get 10 different people to repeatedly say yes, while that may not be immediately statistically significant, the way you drive toward statistical significance is by looking for common patterns (insights) across people who say yes and those who don't. You can then test these insights

over subsequent sprints, with the goal of verifying them with additional data.

"I only rely on quantitative metrics."

Another commonly used tactic is to sit back and rely solely on quantitative metrics. The first problem with this approach is that initially you probably won't have or be able to drive enough traffic. But more importantly, metrics can only tell you what actions your visitors are (or aren't) taking; they can't tell you why these actions are (or aren't) happening. Did visitors leave because of bad copy, graphics, pricing, or something else? You could try endless combinations of fixes, or you could just ask the customers.

"I am my own customer, so I don't need to talk to anyone else."

Scratching your own itch is a great way to get started on an idea—many of my own products (like the Lean Canvas) started this way—but it's not an excuse for not talking to customers. For one thing, can you really be that objective about the problem and pricing when you are role-playing as both the entrepreneur and the customer?

"My friends think it's a great idea."

I advocate talking to anyone at first, but be wary that your friends and family may paint a rosier picture (or not) depending on their perceptions of entrepreneurship as a profession. Instead, use your friends to practice your script, and find more people to interview that are a few degrees out.

"Why spend weeks talking to customers when I can build something over a weekend?"

"Release early, release often" was a mantra that software developers jumped on several years ago as a means to facilitate faster feedback, but spending any time building even a "small" release can be a waste.

First, these "small" releases are almost never "small" enough. But more importantly, as we've already discussed, you don't need to finish building a solution in order to test it.

"I don't need to test the problem, because it's obvious."

Problems may be obvious to you for a number of (sometimes) legitimate reasons:

- You have extensive prior domain knowledge.
- You are solving generally acknowledged problems, such as improving sales or conversion rates on a landing page.
- You are solving well-known but difficult problems, such as finding the cure for cancer or fighting poverty.

In these cases, the bigger risks may not have to do with *testing* the problem, but rather *understanding* the problem—that is, which customers are most affected (early adopters), how they solve these problems today (existing alternatives), and what you will offer that is different (UVP). Even in these cases, I still recommend running a few problem discovery interviews to validate your understanding of the problem before moving on to define/validate your solution.

"I can't test the problem, because it isn't obvious."

You might be building a product that you think isn't designed to solve a problem—for example, a video game, a short film, or a fiction novel. I argue that there are underlying problems, albeit more desire- than paindriven, even in these cases. Rather than asking customers about problems, it's more helpful to focus on the bigger jobs they are trying to get done and then look for obstacles or struggles in their way. We'll cover how in the next chapter.

"People will steal my idea."

The initial interviews are entirely problem focused: you are seeking to uncover problems faced by customers who already have them. So, there's nothing for people to steal from you. Even when you start pitching your product, you only share your UVP and demo (not secrets) with qualified early adopters who would rather pay for your product than build it themselves.

Understand Your Customers Better Than They Do

If you can describe your customers' problems better than they can, there is an automatic transfer of expertise—your customers start believing that you must also have the right solution for them. Marketer Jay Abraham calls this phenomenon the "Strategy of Preeminence."

You've probably experienced this at your doctor's office: after receiving a diagnosis, you believed they had miraculously figured out your ailment and rushed to fill the prescription they'd ordered—even though the doctor was simply following a systematic process of elimination by unpacking your symptoms using educated guessing.



This chapter shows you how to use problem discovery sprints to deeply understand your customers (Figure 8-1).

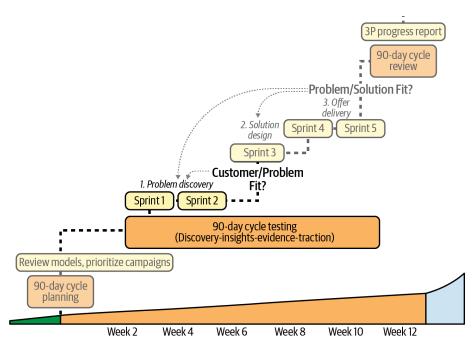


Figure 8-1. The problem discovery sprint

The Problem with Problems

While the idea of uncovering problems through customer conversations is simple, doing this effectively can be quite challenging. You can't simply ask customers to list their top problems, for reasons such as the following:

They may not know what they are

There's a reason why people go to therapists. It often takes another person to go beyond surface problems and get to root causes.

They may not want to tell you

If admitting to a problem makes your customers feel vulnerable or uncomfortable, unless they know you, like you, and trust you, they'll deny having the problem.

You'll bias their responses

When you lead with a problem, you cast a spotlight on specific issues, which tends to exaggerate the customer's response. It's easy to miss the forest for the trees.

They might give you a solution instead of a problem

Be wary that even customers are prone to the Innovator's Bias. When asked about a problem, they will often tell you their idea of how to solve the problem rather than exploring the problem fully with you. A misdiagnosis here is a recipe for going down a rabbit hole.

It is for all these reasons that I recommend not even bringing up the word "problem" during problem discovery interviews. Your objective during these conversations isn't to *validate* problems but to *discover* them. You do this not by asking customers about problems, but by asking them how they currently use existing alternatives. Finding points of friction in their stories (struggles, workarounds, and pet peeves) and/or gaps between their desired and actual outcomes is how you uncover problems worth solving.

Before diving into the mechanics of running a problem discovery sprint, let's see the problem discovery process in action with a case study.

Case Study: Using Problem Discovery Interviews to Drive New Home Sales

Imagine that you're a home builder looking to improve sales and considering advertising. When would be the worst time of year to run ads for your homes?

Most people would say during the holiday season (October through December), when people don't want to be bothered with house hunting and showings. The thinking goes that if only a few people are searching for homes during the holidays, why advertise? Wouldn't it be better to save your ad budget until the new year, when traffic picks up? What if I told you that the holidays are a great time to run ads, albeit of a different kind?

One homebuilder effectively used problem discovery interviews to uncover key insights that helped him build a steady pipeline of qualified leads. Here's what he did: he started by identifying the time of year when most homes are sold (March through May), and targeted people to interview who had closed on their homes during that period. It's important to appreciate that he wasn't looking to pitch his houses to these people (remember, they had already just bought a new house), but rather to learn from them. Specifically, he wanted to understand the series of events that *caused them* to buy their home, starting with the *switching trigger*, which led him back to the holidays.

While he uncovered a few different stories, one specific cluster stood out. A number of his interviewees traced their *first thought* of buying a new home back to the morning after a holiday party (say, Thanksgiving dinner) they had hosted at their house. The morning after the party, the house was a mess and the couple discussed the possibility of upgrading to a bigger home at the breakfast table. Their house, which had seemed perfectly fine the day before

the party, now felt too small for them (expectation violation). They discussed how their extended families had grown and talked about their desire to host more family gatherings in the future, which necessitated the need for more entertaining and living space.

The holiday party had served as the *switching trigger*, which broke their existing alternative (their current home) and pushed these home buyers to passively look for a new home. Using the switching trigger to anchor the conversation, the builder then asked these home buyers to walk him through the detailed series of steps they took to research, find, purchase, and move into their new home. He took copious notes and later postprocessed them into a set of actionable insights.

The following holiday season, the builder was ready with a content marketing campaign. He wrote up several helpful articles that answered the most common questions (points of friction) his interviewees had when navigating their home-buying journey. He gave tips on things like where to find the best mortgage interest rates, the best neighborhoods for schools, pitfalls to avoid when hiring moving services, design trends, etc.

He linked these articles to hyper-local ads he ran during the holiday season, with great effect. Come early January, while his competitors were just ratcheting up their ad spend to attract new leads, he already had a steady pipeline of qualified leads.

Focus on the Bigger Context: The Job-to-be-Done

As we discussed in Chapter 2, products compete in a bigger context, where different *categories* of products compete for the same jobs-to-be-done. Getting to the bigger context during a customer interview is key to uncovering problem(s) worth solving. Let's see how this is done with another case study.

Case Study: Using Problem Discovery Interviews to Build Better Drill Bits

People don't want a quarter-inch drill bit, they want a quarter-inch hole.

—Theodore Levitt

Harvard professor Theodore Levitt made the case for focusing on finishedstory benefits over features. In other words, customers don't want your solution, they want what your solution does for them—i.e., to achieve an outcome or get a job done.

Suppose you are a drill bit manufacturer looking to build a better drill bit. Instead of chasing random features, you decide to study how people use drill

bits. One of the problems that top the list is that drill bits often break. So, you introduce a new titanium-coated drill bit with a unique value proposition of "40% stronger."

Sales are good for a while, until one day a new product shows up in the hardware aisle next to your drill bit. Even though the product seems out of place, customers flock to it and your sales start to erode. That product is Command Strips made by 3M that allow people to get the job done without having to drill a hole.

What just happened?

While Levitt's insight had a profound impact in shifting our perspective from features to outcomes, his example didn't go far enough. A quarter-inch hole represents a functional outcome, and it isn't what people want, but rather what they need to get a job done. An easy way to tell the difference is noticing that "a quarter-inch hole" in itself is actually an undesired outcome. People don't want a quarter-inch hole, but something else that comes after the quarter-inch hole. That is where the desired outcome lives—in the bigger context.

- NOTE

Features live in the product context, while outcomes and jobs live in the bigger context.

Getting to this bigger context first requires a narrowing of focus. Levitt's quote references people in general, but that is too broad. The reason a homeowner hires a drill bit is very different from the reason a construction worker does.

So, the first step is dividing your target audience into two more specific customer segments, like homeowners and construction workers. Then, as before, you set out to study how these customer segments use drill bits. But instead of settling on quarter-inch holes as the desired outcome, you search for the bigger context by looking beyond the quarter-inch hole for a more desirable outcome.

____ TIP

Chasing desirable outcomes is how you move out of the product context space and into the bigger context.

In the case of homeowners, one of these desirable outcomes might be hanging a painting. They drill a hole to secure a hook in order to hang a painting. A painting on a wall is clearly more desirable than a hole or hook in a wall. It represents a desired outcome.

The more interesting innovation question then becomes: how can you help customers get the job done (hang a painting) without the undesired steps (like drilling holes and using hooks)? That's where the 3M Command Strips come in. This solution requires no drilling, so there are no holes, no mess, and hanging a painting is simpler and cheaper than with the alternative.

Focusing on the quarter-inch hole might help a drill bit manufacturer win the battle of building a better drill bit against other drill bit manufacturers. But they could still lose the war, which is fought on the battleground of a bigger context.

Finding the Bigger Context

An effective way of quickly getting to the bigger context is applying this exercise, from author Kathy Sierra:

• Don't build a better (x). Build a better user of (x).

Here are some examples:

- Don't build a better (camera). Build a better (photographer).
- Don't build a better (business model canvas). Build a better (entrepreneur).
- Don't build a better (drill bit). Build a better (DIY homeowner).

Focusing on making your customers better versus making your solution better is a way of breaking through the product context. You move beyond your product's immediate features and benefits and instead focus on your customers' desired outcomes or jobs-to-be-done. The challenge, of course, is that this widening of perspective can lead to the identification of many more customer jobs than you can reasonably take on. Where do you focus? The reality is that most entrepreneurs stay stuck in their own product context and never think beyond tasks or features. That's a mistake.

—— TIP

It's better to level up until you potentially get out of scope than to stay stuck in the weeds.

Too narrow a job scope, and you risk getting displaced by a competitor that addresses a larger job scope better. Too broad a job scope, and you may spread yourself too thin. So how do you determine the right job scope?

Scoping the Bigger Context

The right job scope to tackle lies somewhere between your solution's immediate functional benefit and making your customers better:

- 1. Start with the immediate functional benefit or outcome your customers will realize after using your solution.
- 2. If this outcome is still within your solution space and/or not yet desirable, keep leveling up by searching for what comes after.
- 3. Stop when the answers get out of scope.

Applying these steps to the quarter-inch drill bit yields (Figure 8-2):

- Why do DIY homeowners buy a quarter-inch drill bit?
 To get a quarter-inch hole (functional step, not desirable yet).
- Why do they want a quarter-inch hole?To secure a hook (functional step, not desirable yet).
- 3. Why do they want to fasten a screw? To hang a painting (job, desirable).
- **4.** Why do they want to hang a painting? To decorate their house (job, desirable).
- 5. Why do they want to decorate their house? To express themselves (job, desirable).
- 6. Why do they want to express themselves? Starting to get metaphysical.

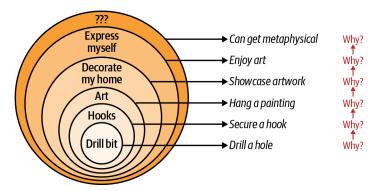


Figure 8-2. *The bigger context*



The bigger context is where you find spaces for innovation.

Diving Deeper into a Bigger, More Specific Context

Once you identify the overlapping bigger contexts, pick one to explore further. What you pick should ideally be constrained by your specific viability and feasibility constraints.

Define your viability constraint in terms of the size of the problem you need to find to make your business model work. Remember that this comes from your traction roadmap. In our example, the "hang a painting" context is a \$10–20 problem, but once you move to the context of art or decorating one's home, you can potentially find problems that are worth hundreds or thousands of dollars.

Define your feasibility constraint in terms of your core competency constraints. In other words, are there domains you would not want to compete in? If you are a drill bit manufacturer, for instance, do you want to get into the glue business?

Once you define the right bigger context for you, dive deeper to explore how the job is done and look for struggles (problems worth solving).

Running a Problem Discovery Sprint

A problem discovery sprint is run in a two-week time box and utilizes oneon-one interviews to understand why and how customers picked an existing alternative to get a job done.

During the interview, it helps to take on the persona of a journalist or detective and be genuinely curious. Your job is to uncover the series of events starting with the switching trigger that set off the interviewee in search of the chosen existing alternative and ending with their most recent encounter with the existing alternative.

You capture these insights after each interview on a Customer Forces Canvas. We'll cover how to do this later in this chapter.

Contrary to popular belief, it doesn't take a lot of interviews for patterns to emerge. With just 10–15 focused interviews, you can typically uncover 80% of the insights. As Mary explained to Steve in the previous chapter, you know you are done when you stop learning anything new from the interviews—in other words, when you can accurately predict what the interviewee is going to say just by asking a few qualifying questions, you're finished.

Broad-Match Versus Narrow-Match Problem Discovery Sprints

While it's tempting to immediately target your early adopters for interviews, the danger here is going too narrow too quickly and falling prey to the local maximum trap (discussed in Chapter 1). A more effective approach is setting yourself to run two batches of interviews (over two sprints): a broad-match problem discovery sprint and a narrow-match problem discovery sprint.

During the broad-match problem discovery sprint, you target people that have recently bought and/or used an existing alternative. As we saw in the homebuilder case study, the builder did not initially target his early adopters, but people who had recently bought a house.

Once you process your initial findings from the broad-match problem discovery sprint, you are then able to further home in on your ideal early adopters. That's when you run the narrow-match problem discovery sprint to verify your insights.

As a rule of thumb, be prepared to run two problem discovery sprints (broadmatch and narrow-match) and interview 20–30 people over a 4-week period. This is roughly equivalent to talking to 5–8 people per week with some time built in for processing your learnings.

By the end of your problem discovery sprint(s), you should be able to demonstrate customer/problem fit (with evidence). You achieve customer/problem fit when you have identified a *big enough* customer problem worth solving. I'll cover more detailed criteria for determining customer/problem fit toward the end of this chapter.

Running a problem discovery sprint—whether broad-match or narrow-match—involves three steps:

- Finding prospects
- Conducting interviews
- Capturing insights

Let's take a closer look at each of these.

Finding Prospects

Since the goal of problem discovery is understanding how people currently get a job done with existing alternatives, it follows that you should target people who have recently attempted to use one or more of the popular existing alternatives listed on your Lean Canvas. If you are unsure what existing alternatives your customers use, turn your focus to triggering events:

- When a customer encounters [a triggering event], they [use possible existing alternative].
- Example: When entrepreneurs get hit with an idea, they go to startup-specific meetups.

Using this exercise, you may end up with indirect and even complementary solutions, which is okay. You can use this approach to find potential people to interview, and through the interviews discover the actual existing alternatives that directly compete with your envisioned product.

Here are a few additional guidelines to keep in mind when prospecting for interview candidates:

Target prospects based on how recently they switched to (or used) an existing alternative

Because memory has a short half-life, it's best to target people who have either purchased or used an existing alternative within the last 90 days. This time frame is short enough to allow people to recall important details but long enough for them to have tried the existing alternative enough times to be able to evaluate whether it got the job done.

Build a frame around learning, not pitching

In a pitch, since you're doing most of the talking, it's very easy for customers to pretend to go along with what you're saying, or to outright lie to you. The problem with starting with a pitch is that it is predicated on having knowledge about the "right" product for the customer. Before you can pitch the "right" solution, you have to understand the "right" customer problem.

In a learning frame, the roles are reversed: you set the context, but then you let the customer do most of the talking. You don't have to know all the answers, and every customer conversation turns into an opportunity for learning. Leading with a learning frame, where you're seeking advice and not selling anything, is also an effective disarming technique, which allows your prospect to let down their guard and talk more freely.

Start with people you know

Finding people to interview can be challenging at first. Start with people you know who fit your target profile. Some are wary that feedback received from close contacts may be biased. My view is that talking to anyone is better than talking to no one. Then use them to get two or three degrees out to find other people to interview. Not only does this help you practice and get comfortable with your interview script, but it's an effective way to get warm introductions to other prospects.

Ask for introductions

The next step is asking your "first-degree contacts" for introductions to people they know who meet your target profile. It's a good idea to provide a message template that your contacts can simply cut and paste and forward to save them time. Here's an example I've used in the past:

Hey [friend],

Hope all is well... I have a quick favor to ask.

I've got a product idea that I'm trying to validate with wedding photographers. My goal is to chat with local photographers to better understand their world and evaluate if it's worthwhile pursuing this product.

I'd really appreciate it if you could send the message below along to people you know who fit this target.

(Feel free to change it a bit if you like.)

Hello,

We are an Austin-based software company and are currently working on a new service to simplify how photographers showcase and sell their images online. We are specifically building better and faster tools for online proofing, archiving, and selling.

I would love to get 30 minutes of your time to help us understand your current workflow. I'm not selling anything, just looking for advice.

Thanks,

Ash

Play the local card

People are generally willing to meet if they can identify with you. The email above emphasizes "Austin" in the body and was quite effective in setting up meetings with local photographers.

Give something back

Turn the interview into a "real interview" and offer a writeup, podcast, blog post, or video in exchange. This creates an incentive for your interviewees to talk to you, in exchange for insights you'll share with them or publicity.

It's okay to compensate prospects for these interviews

Since discovery interviews are geared at collecting factual information only and you will not be pitching your solution, it's okay to offer compensation to facilitate recruitment. A \$25–75 gift card might be reasonable compensation for a 30- to 45-minute interview, depending on the customer segment you are targeting.

Steve Kicks Off the First Problem Discovery Sprint

Steve calls a sprint kickoff meeting with Mary, Lisa, and Josh. They are all on board with starting with the mafia offer campaign. They plan on running 10 problem discovery interviews across 2 business model variants in the next sprint: Software Developers and Home Construction.

"So how do we figure out who to target?" Josh asks.

"Well, the 'software developers' one is easier," replies Steve. "I know a bunch of developers and agencies that do AR/VR work, I can easily arrange 10 friendly interviews there. It's the architects I'm not so sure about. Any of you know any architects that we can speak with?"

"Not directly, but I'm sure I can ask around. If not, I've done lots of cold prospecting before," Lisa replies.

"With home construction, it may be helpful to take a two-pronged approach," Mary jumps in. "You certainly want to try and arrange some meetings with architects, but I'd prioritize warm introductions over cold prospects, if possible, for all the reasons we discussed in the last meeting. In addition, I think it would be a lot easier and beneficial to target clients of these architects—people who've just finished building their homes."

"That's an interesting thought. Is it to get the end-client perspective too?" Josh asks.

"Exactly," replies Mary. "You need to see an idea from multiple perspectives, and I always try to get as close to the end user as possible and work my way backward. I guarantee that the problems an architect sees with building a custom home will be very different from the homeowner's perspective."

"Totally. I can imagine the architect being all about efficiency and process while the homeowner is where we'll find lots of emotional energy—the bigger context," Josh adds.

"I like that approach, too. Mary, why did you say it would be a lot easier to talk to homeowners?" asks Steve.

Mary smiles. "Because everyone likes talking about themselves, especially if they've just finished building something they're proud of. Here, too, if you have any friends or friends of friends who've just completed a home construction project, go talk to them first. Then visit architects' websites and look for homes that were recently completed, and directly approach the homeowners. Simply knock on their door, compliment their house, and let them know that you are doing marketing research on the new home construction. Ask for 30–45 minutes of their time and offer them a \$50–75 gift card. I think that should do it."

"You make it sound so easy," Steve laughs.

"Interviewing people is simple, but we make it hard on ourselves by overthinking the conversation," says Mary. "Remember, this isn't a pitch. Get a little outside your comfort zone, be genuinely curious, and let the other person do most of the talking. You'll be amazed, once they get going, how hard it can be to get them to stop."

"Okay, I'll take your word for it," Steve replies with a skeptical smile. "So we're going to interview three groups of people, then: software developers, architects, and homeowners. We were originally planning on running these in pairs and targeting five interviews each. Everyone still good with that?"

Josh and Lisa nod their heads in agreement.

Conducting Interviews

Like any skill worth developing, conducting interviews can be a bit uncomfortable at the beginning. But with a little practice (and some guidelines), it's an invaluable skill that will serve you throughout the product life cycle. Remember that Continuous Innovation requires building a continuous learning loop with customers—and knowing how to talk to customers is the most effective way to learn.

Here are some guidelines to get you started:

Prefer face-to-face interviews

In addition to picking up on body language cues, I find that meeting someone in person instills a sense of closeness that you can't re-create over the phone. This is critical in customer relationship building. Even if a face-to-face interview isn't possible, prefer using a video call whenever possible.

Pick a neutral location

I prefer to conduct the first interview in a coffee shop to create a more casual atmosphere. Doing it at a prospect's office makes it more "business-like" and makes it feel more like a sales pitch—which it shouldn't be. That being said, I'll agree to meet the prospect wherever they choose.

Ask for sufficient time

Problem discovery interviews typically run 45 minutes, without feeling rushed. I would suggest asking for an hour and ending early if you're done sooner.

Consider outsourcing interview scheduling

The biggest source of waste during this period is waiting—waiting for people to get back to you, coordinating around their schedules, juggling time zones, and so on. If you do a little up-front work, you might be able to successfully delegate this task to a virtual assistant or an online calendar scheduling tool.

Here's how I have made this work:

- I script all my email requests for interviews.
- I clear my afternoons so that it's easy to schedule interviews.
- I'm copied on all the emails so that I can intervene when needed.

Conduct interviews in pairs

If you've got other team members, it always helps to conduct these interviews in pairs. This way, you can take turns asking questions while the other person takes notes and formulates additional questions. It's helpful to compare notes later and is a great way of keeping your confirmation biases in check.

Ask questions, don't make assertions

Your objective with these interviews is to learn, not pitch. How do you tell when an entrepreneur is pitching? Their lips are moving. The way you sidestep this pitfall is by talking less and listening more during these interviews. A good technique is to start or end every sentence (once the interview is underway) with a question:

- Could you elaborate on that a bit more?
- What were you expecting to happen?
- What day was that?

Focus on facts, not hypotheticals

A golden rule for discovery interviews is focusing on what customers actually did in the past rather than asking what they may (or may not) do in the future.

Avoid asking questions like:

- Would you have done X if Y?
- Will you buy X in the future?
- In the future, would you Y?

Pretend you're a journalist. Your job is to uncover the raw story and capture facts, not fiction.

Don't ask customers about problems

For the reasons I've already covered, avoid asking your customers about problems. You'll often end up with only descriptions of surface problems, or the wrong list of problems. Instead, have your customers focus on how they use existing alternatives and look for points of friction. For example, if you had asked people about problems with taxis 15 years ago, they might have said "rude drivers" and "dirty vehicles." Neither of these would have led to the invention of ride-sharing services.

If instead you focused on studying how they *used* taxis, you might have seen that when people had a flight to catch, they:

- Booked a taxi the night before the flight
- Made the booking (and got up) two hours earlier than needed to account for the taxi being late
- Called the taxi company multiple times to confirm that it was still coming

These kinds of pet peeves and workarounds would have uncovered problems worth solving.

Go deep, be curious

When you're interviewing customers, you'll often find that until you break the ice, they only give you short answers that skim surface problems. The way to go deeper is to be naturally curious, don't assume anything, and follow up with qualifying open-ended questions like:

- How did you do that?
- What do you mean by X?
- I'm a bit confused...can we slow down the timeline and could you tell me Y?

Chase the bigger context

As we covered earlier in this chapter, you need to search for desired outcomes to get outside your product context and into the bigger context where jobs-to-be-done live.

Record the interview (if possible)

If the prospect is okay with being recorded, it's very helpful to record an interview that you can listen to again, share with your team members, and even run through a transcription service, which makes postprocessing a lot easier.

Re-create the timeline of events

It helps to start the interview by anchoring the conversation around the selection/purchase event of the existing alternative you are studying. You then work backward from there to uncover the series of triggering events that led up to the selection of this existing alternative. Finally, work the timeline forward to explore the usage of the existing alternative all the way up to the most recent usage.

Figure 8-3 is a sample timeline from an interview of someone who recently joined a gym.

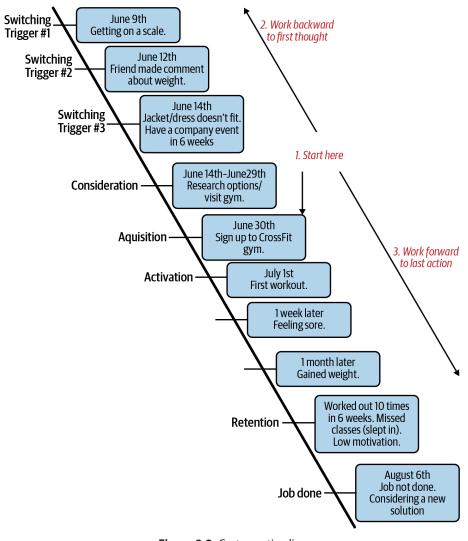


Figure 8-3. Customer timeline

Use a meta-script

Since you have limited time, you need to stay focused on your key objectives during an interview to maximize your learning. This is where having a meta-script helps.

The Problem Discovery Interview Meta-Script (30–45 Minutes) Welcome (set the stage)

(2 minutes)

Briefly set the stage for how the interview works:

Thank you very much for taking the time to speak with us today.

We are doing some early research around how and when people do [job-to-be-done]. I'd like to stress that this is not a pitch. Our objective is to learn from you, not to sell or pitch anything to you.

The best way to think about this interview is that there are no wrong answers. We simply want to get your raw story. It sometimes helps to think of us shooting a documentary film. We are the producer and director and we'd like to learn about all the details in order to fill out the story.

Does that make sense?

Use the rest of the script like a meta-script. The best script for discovery is no script. That said, it does help to have a few questions ready. But remember to be curious and try to piece together the customer's story by asking short, open-ended questions.

Anchor around the chosen existing alternative or the last time the job was done/ attempted (set the anchor)

(5 minutes)

Ask some specific questions to take the interviewee back to the purchase (or hire) event:

When did you sign up to [existing alternative]?

When did you last use [existing alternative]?

As recollection fades quickly, ask for specific details to help jog the interviewee's memory. This has the added effect of further disarming them and opening them up to your questions:

Do you remember what day of the week that was?

Were you alone or did you take someone with you?

You said you searched online, do you remember what search terms you used?

Look for triggering events (first thought to switching trigger)

(5 minutes)

Go back to earlier in the timeline and try to determine the series of triggering events that pushed the interviewee to hire the chosen existing alternative:

Okay, so you bought the product on [day]. Do you remember what prompted the purchase?

What did you do next?

When was the first time you realized you needed a new [product]?

What would have happened if you did nothing?

You said you wanted something better. Can you define what you thought at the time would be better?

Explore selection process (acquisition)

(5 minutes)

Go deeper and understand how they selected the chosen existing alternative:

What happened next? Can you walk us through your selection process?

What else did you consider?

Where did you hear about [existing alternative]?

Why did you pick [chosen existing alternative]?

Do you mind sharing how much you paid for [chosen existing alternative]?

Ask the interviewee to clarify vague terms:

How do you define simple?

You said this was the healthy alternative. Could you help me understand how you tell if something is healthy?

Explore early use (activation)

(5 minutes)

Slow down time to right after the hire and ask them to share their first-use impressions. If you hear a struggle or potential friction, dig deeper:

I'd like to go back to right after you signed up for/received [existing alternative]. Walk us through the unboxing process.

How long did it take you to set it up?

Then what did you do?

How could you tell the product was working?

Explore recurring usage (retention), if applicable

(5 minutes)

Continue exploring ongoing usage and look for struggles and/or friction:

So, how often do you use [chosen existing alternative]?

When was the last time you used [chosen existing alternative]?

What's next? (next summit)

(5 minutes)

Determine if the job was done successfully and what's next for the interviewee:

So at the start, you wanted a product that did [desired outcome]. How did your [chosen existing alternative] fare?

So what's next?

Wrapping up (next steps)

(3 minutes)

Thank the interviewee for their time. Before leaving, you still potentially have one more thing to do and two more questions to ask.

Even though you aren't ready yet to talk about your solution, if the interviewee matches your potential early adopter criteria, you need to provide a hook to maintain interest. Your high-concept pitch or UVP is perfect for this.

Then ask for permission to follow up. And finally, ask for referrals to other potential interviewees:

As we mentioned at the start, we're just doing early research, but based on your responses we think the product we are building may be a good fit. Our product aims to [state UVP].

Would it be okay to follow up with you in a couple of weeks to show you a demo?

Also, as we are in the early stages, we are looking to speak to as many people as possible to learn. Would you be up for introducing us to more [people like yourself]?

Steve Creates a Meta-Script for His Interviews

As Steve has never run these interviews before, he decides to jot down a meta-script to use with the homebuilders. His goal isn't creating an exhaustive list of questions, but organizing the flow of the interview and writing down some learning questions that he can turn to during the interview.

Welcome (set the stage)

(2 minutes)

Thank you very much for taking the time to speak with us today.

We are doing some early marketing research for a major architecture firm in the area and are studying the custom home design process. We saw your home featured on [architect's website]—you have a beautiful home, by the way—and were wondering if you'd be up for sharing your design experience with us.

The interview should take roughly 45 minutes. We know your time is valuable and we can offer you a \$75 gift card of your choice for your time.

If it's okay to proceed:

I'd like to stress that this is not a pitch. Our objective is to learn from you, not to sell or pitch anything to you.

The best way to think about this interview is that there are no wrong answers. We simply want to get your raw story. It sometimes helps to think of us shooting a documentary film. We are the producer and director and we'd like to learn about all the details in order to fill out the story.

Does that make sense?

Anchor around the chosen existing alternative (set the anchor)

(5 minutes)

When was your home completed?

When did you move in?

Is this your first custom home?

How long did the build take?

Look for triggering events (first thought to switching trigger)

(5 minutes)

So the build took [this long]. I'd like to go back much earlier in the timeline to your first thought of building a custom home. What prompted that?

How did you know you wanted to build versus buy?

What were you looking to get or achieve?

Explore selection process (acquisition)

(5 minutes)

What happened next? Can you walk us through your selection process?

How did you pick your architect?

What else did you consider?

Explore early use (activation)

(5 minutes)

So, you'd selected your architect—what was the next step?

How long did the design phase take?

What artifacts did you use to select a design?

Explore recurring usage (retention), if applicable

(5 minutes)

How did you make material selections?

How long did that take?

What about construction costs? When did that happen?

What was the back and forth between design and budget, if any?

What's next? (next summit)

(5 minutes)

So at the start, you wanted to build your dream home—how do think you did?

Are you looking to make any further changes or modifications to your home?

Wrapping up (next steps)

(3 minutes)

Thank you so much for your time. Here's your gift card. I know it's a small gesture, but we really appreciate you inviting us into your beautiful home.

A final question: do you happen to have friends who've also built custom homes? We are trying to speak to as many people as possible and would greatly appreciate an introduction.

Capturing Insights

After each interview, you'll end up with a lot of raw information, which can be overwhelming to track. This problem is only exacerbated as you conduct more interviews.

The end goal of these interviews isn't creating a 20-page customer research report, but summarizing your learnings into actionable insights that describe the most common customer journey stories. For any given market, there isn't an infinite number of customer journey stories. Patterns quickly emerge, and most markets have three to five stories that reoccur.

How do you find these patterns? On the one hand, your brain is naturally pattern seeking and will automatically look for similarities across your interviews. The problem, though, is that your brain can be easily fooled:

The first principle is that you must not fool yourself, and you are the easiest person to fool.

-Richard P. Feynman, American theoretical physicist

This happens through the work of our cognitive biases. Two of the more common biases to be particularly aware of here are *confirmation bias* and *recency bias*.

Confirmation bias is where we tend to pay more attention to things we hear that align with our own worldviews (like problems that justify our solution) and less attention to things that don't.

Recency bias is where we place more weight on things that just happened (like hearing about a particular problem three times in a row) that when taken as a whole may be outliers, not the common pattern.

The way to sidestep these biases is by taking an empirical approach to capturing and ranking your insights on a Customer Forces Canvas (Figure 8-4).

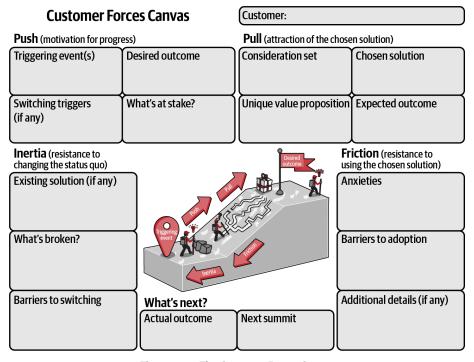


Figure 8-4. The Customer Forces Canvas

Here are some guidelines for effectively capturing the insights from your interviews:

Summarize your insights immediately after each interview

Reserve 5–10 minutes after each interview to postprocess your raw notes into a Customer Forces Canvas. I generally block off an hour on my calendar for a customer interview and aim to wrap up the interview within 45 minutes, leaving 15 minutes for postprocessing.

Avoid groupthink

If you're interviewing in pairs, it's best to create your own versions of the customer story independently and then compare notes in order to avoid groupthink.

Fill out the Customer Forces Canvas in chronological order

While the flow of problem discovery interviews will most likely not follow a chronological timeline, your goal is reconstructing the customer story as a series of causal events in chronological order.

Summarize your interview insights in the order shown in the following sidebar. This is great practice for developing a customer story pitch, which we'll cover in Chapter 10.

Filling Out the Customer Forces Canvas

PUSH (motivation for progress)

Identify what changed in the interviewees' environment that pushed them to get a job done:

Triggering Event(s)

Start by identifying the first thought and any subsequent events that moved them from doing nothing to passively looking, then actively looking for a solution.

Switching Trigger (If Any)

If the person switched from an old way to a new way of getting a job done, highlight the causal event that caused them to switch. This could be due to:

- A bad experience with their current solution
- A change in their circumstances
- An awareness event, like getting diagnosed with high blood pressure at their annual physical at the doctor's office

Desired Outcome

What was the desired outcome at the start of their journey? What specific metric(s) would they use to measure success?

What's at Stake

What were the consequences (if any) for ignoring the triggering event(s) and doing nothing?

PULL (attraction of the chosen solution)

Identify what attracted them to their chosen solution:

Consideration Set

What other existing alternatives were considered for the job?

Chosen Solution

List the chosen solution that was hired for the job. Make note of where they found the chosen solution (channel) and what they paid (if applicable).

Unique Value Proposition (Promised Outcome)

What was the specific appeal of the chosen solution? In other words, why did they pick this solution over other alternatives?

Expected Outcome

What did they expect to achieve with the chosen solution? What specific metric(s) would they use to measure success?

INERTIA (resistance to changing the status quo)

List the resistive forces from their old ways. This could come from an existing solution they are already using to get the job done, or if this is the first time they are attempting this job, it could be from existing habits that get in the way.

Existing Solution (If Any)

If they are currently using a solution (old way) to get the job done, list here. Otherwise, leave this box blank.

What's Broken?

What specific problems have surfaced with their existing solution as a result of the switching trigger?

Barriers to Switchina

Identify any existing habits or switching costs that would prevent them from switching solutions.

FRICTION (resistance to using the chosen solution)

List the resistive forces that get in the way as the person uses their chosen solution. These are often caused by anxiety about change and other barriers to adoption, like usability issues.

Anxieties

List any fears or worries the person expressed as they started using their chosen solution.

Barriers to Adoption

List any challenges the person encountered with the chosen solution during usage.

Additional Details (if any)

Use this section to capture any additional insights about the chosen solution.

WHAT'S NEXT?

Summarize the current state of the person.

Actual Outcome

What was the actual outcome the person experienced after using the chosen solution?

Next Summit

What's the next action for this person? Was the job done well enough? Will they continue using their chosen solution or consider using a new solution?

Practice summarizing the customer journey story

As you complete your Customer Forces Canvas, verbalize your key insights from each interview using the following story template:

When customers encountered a switching trigger,

they had an expectation violation (What's at Stake).

So they started considering some new solutions (Consideration Set).

And they picked a new solution because (Unique Value Proposition).

What kept them from switching (INERTIA).

What pulled them to switching (PULL).

What anxieties they had (FRICTION).

Where they are now (Next Summit).

Categorize your Customer Forces Canvases into jobs-based customer segments As you complete each Customer Forces Canvas, look for common patterns around triggering events, desired outcomes, and existing alternatives, and create one or more jobs-based customer segment buckets (Figure 8-5).

Jobs-based segmentation

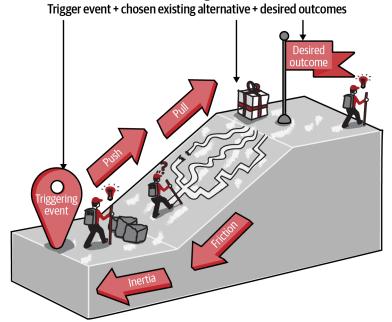


Figure 8-5. *Jobs-based segmentation criteria*

People who share similar triggering events, desired outcomes, and existing alternatives tend to behave more similarly and can be grouped together as a segment (Figure 8-6).

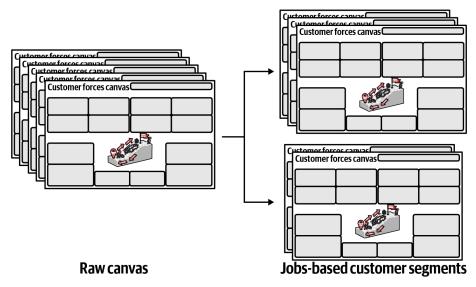


Figure 8-6. Creating jobs-based customer segments

For example, in the homebuilder case study, the builder uncovered the top customer story clusters shown in Table 8-1.

Table 8-1. Top customer story clusters from the homebuilder case study

Switching trigger	Desired outcome	Chosen solution
Holiday party	Want a bigger house for more entertaining space	Picked a 3,000 sq ft home
	(growing family)	
Holiday party	Want to downsize because we don't want to entertain	Picked a 1,200 sq ft condo
	anymore (empty nesters)	
Expecting a baby	Want two extra rooms and a backyard	Moved to suburbs
Moving for a job	Want to be close to work	Picked a home within five miles of
		work

Now It's Your Turn

Visit the LEANSTACK website to:

- Download a blank Customer Forces Canvas template.
- Upload your interview transcript and create your Customer Forces Canvas online.

Steve Reviews the Results of the Broad-Match Problem Discovery Sprint

Steve kicks off the meeting. "Who would have thought interviewing customers could be this much fun? Thinking of products in terms of these customer forces is a game changer! It's even made me more aware of how I buy products."

"I see you got over your stage fright quickly," Mary comments.

"Yeah, having the meta-script was a nice safety net, but I found that once the conversation started it was quite easy to keep the other person talking. Even when I was pausing to think, probably sensing my confusion, people kept talking to fill in the blanks."

Mary laughs. "I see you stumbled into one of the more advanced interviewing tactics. You can learn a lot about interviewing from negotiation tactics. There's a great book by Chris Voss, *Never Split the Difference*, that I highly recommend picking up. So what did you guys learn from the interviews?"

Josh gestures to Steve to give the update.

"Well, I think the Software Developers model is a dead end. The demand for AR/VR apps is still pretty fringe. Only one of the five agencies we spoke with had recently completed a big VR project for a media company. They told us that while there's a lot of promise in this space, many of their clients are still just playing around with the tech and aren't confident enough yet to risk their brand with a mainstream app. I think the industry needs to see a breakthrough app first to pave the way for others to follow."

"That's often the case with new tech like this that is so radically different," says Mary. "How about home construction? How did those conversations go?"

"Those were quite interesting," Steve replies, "but I don't think we've got the whole story yet. You were right about there being two very different perspectives here. We only got to talk to three architecture firms and they were all business. They all offer 3D renderings as part of their design package for higher-end homes, which they use to help the clients visualize the space. Other clients can request renderings for a fee, which was pretty close to our estimate of \$3–5k. But here's the funny part: they do walkthroughs with clients in their office using a computer, but send the client home with a few color prints. They never get the models."

"Do any of them use AR/VR?" asks Mary.

"No. One of them mentioned seeing a demo at a conference once and also thought the tech had a lot of potential, but they said it was still too expensive and complicated. I was so tempted to show them a demo, but Josh kicked me under the table."

Josh laughs and taps Steve on the back. "We weren't supposed to talk about the solution. I also wanted to ask them if they would do more renderings if the process were easier and stopped myself."

Mary smiles. "Those were both the right calls. So what was the homeowners' side of the story?"

"That's where we found lots of energy," Steve replies. "We spoke with five homeowners—three of them got renderings as part of the standard package and one of them paid to get them. They all described their first viewing of the renderings as the moment when they really saw their home 'come to life from a floor plan.' Those were their exact words."

"Yeah, they were pretty excited, and some still have their printouts," Josh jumps in. "What I found interesting is after they were able to visualize their space, that's when they started requesting more changes, which pushed out the design schedule by at least two weeks. In one case, it took three months to land on a finished design."

"Did they get updated renderings with each revision?" asks Mary.

"Not in all cases, which was a pet peeve for sure," replies Josh. "There was the story of this one homeowner who asked for the model file and created his own renderings."

"That's interesting. Was he an architect or designer?"

"No, but he was pretty tech-savvy. He taught himself how to use the modeling software and I think even bought it so that he could visualize the project and make changes."

"That's a great sign. Then what happened?" Mary asks.

Josh and Steve look at each other. Then Steve begins, "That's where we ended our conversations. I think if we can build an app that clients can use to visualize their homes from their phones, that would greatly speed up the design process."

"Sure, that could certainly be the case, but I'd like you to explore the impact of homeowners having access to these models even beyond the design process," replies Mary. "Did the models play a role in cost, or materials selection, or furniture selection? If so, how?"

Lisa finally jumps in. "One of the homeowners briefly mentioned using the floor plans to buy IKEA furniture toward the end of our conversation. Apparently, IKEA has a full-service design offering where they use a floor plan to suggest room furnishings."

"That's exactly the kind of exploration you need to do in your next round of narrow-match interviews—uncover the bigger context of these architecture models," Mary says. "I have a feeling they get hired for multiple jobs."

When Are You Done with Problem Discovery?

At the end of each problem discovery sprint, review your jobs-based clusters of Customer Forces Canvases and first determine if you've uncovered all the top customer journey stories.

As we've discussed, there are typically three to five top stories in any customer segment. If you're still uncovering new information in each interview, plan on running another batch of interviews and run another problem discovery sprint.

If, on the other hand, your recent interviews sounded similar to ones you've previously run, and you've identified some clear patterns, you've probably uncovered all the top stories. Move to test your top story clusters for customer/problem fit—i.e., whether they represent a big enough problem worth solving.

Test for customer/problem fit by asking two questions:

Have you uncovered a big enough problem(s) with the existing alternatives to cause a switch?

Look for evidence of sufficient friction and/or dissatisfaction with the existing alternatives. These could have come up as pet peeves, work-arounds, usability issues, unmet needs or wants, and/or gaps between desired outcomes, promised outcomes, and actual outcomes.

Is enough time, money, and effort currently being spent on the existing alternative?

This is where you test whether the problem(s) is worth solving. Check against your Fermi estimate assumptions (pricing and customer lifetime) from your traction roadmap.

If the answer to both questions is yes, you're ready to move on to the solution design sprint, where you'll design a solution to cause a switch.

The Altverse Team Uncovers Several Additional Jobs-tobe-Done

The team assembles again at the end of their narrow-match problem discovery sprint to review their learning. Steve begins, "So, we went back to our techsavvy homeowner, and interestingly enough, he'd used the model as recently as last week to lay out his office furniture. He even brought up the model and showed it to us. He also mentioned using it with his landscaper to design the landscaping. He admitted the models are rudimentary, but he and his family have used them to make lots of decisions."

Lisa jumps in. "We additionally spoke to another 10 recent homeowners, and a pattern is starting to emerge. There is a big pain point around the design cycle time. They recounted numerous stories of how they were hoping to be done in three months, and while getting to the first concept was fast, reaching a final design that was also within budget took them twice as long."

Josh adds, "This is also where we also struck a nerve with architects. They charge a fixed design fee, so when the design stage takes twice as long, it directly affects their bottom line."

"So you think better round-trip visualizations would help them reach a final design faster?" Mary asks.

Steve cuts in. "I know we aren't supposed to think about the solution, but in addition to better visualization, since we'll have all the material selections in the model, we might be able to generate a rough cost estimate in real time."

"That's an interesting idea, Steve," Mary responds. "And there's nothing wrong with thinking about solutions to new jobs like this one. I just don't want you to rush into building it out just yet. That said, it seems to me like you've found at least three jobs to be done here: visualizing a design, pricing the design, and laying out spaces. I'm sensing there's a big enough problem worth solving in here, which is the litmus test for customer/problem fit."

"Cool—so what are the next steps?" Steve asks.

"The next step is running a solution design sprint where you design a minimum viable product that can cause a switch."

Design Your Solution to Cause a Switch

For people to hire your product, they have to fire something else.

—Clayton Christensen

By the end of your problem discovery sprint(s), you should have identified one or more customer story clusters that represent one or more big enough customer problems worth solving. Given enough time, money, and effort, you can build almost anything today. The challenge, of course, is that you never have enough of any of those. Yet, you have to build something remarkable anyway—and quickly. Remember that speed of learning is the new unfair advantage. This is where your minimum viable problem (MVP) comes in.

— NOTE —

The art of the MVP is racing to deliver the smallest solution that causes a switch.

While it's normal to want to solve all the problems you've uncovered during problem discovery, doing that easily leads to scope creep. Don't automatically assume that everything has to be included in your MVP. Instead, start with a clean slate and use the next two-week sprint to design a solution that causes a switch (Figure 9-1).

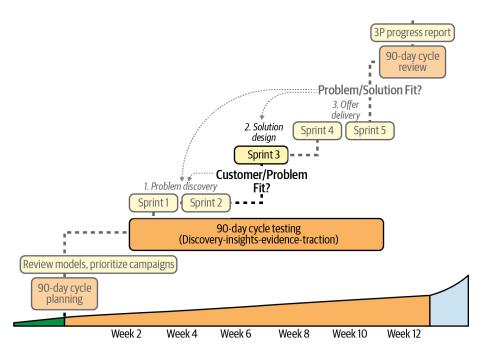


Figure 9-1. The solution design sprint

Steve Learns About the Concierge MVP

"I've mapped out the minimum feature set I think we'll need for the home construction use case. It will be able to accept a 2D floor plan and render a fully immersive 3D model in less than five minutes. Architects can then specify materials which get rendered from a catalog. The catalog will be seeded with some commonly used materials, but anyone can add new materials from their phone just by taking a few pictures of the real material. The resulting model will be viewable on a mobile phone or tablet. We will, of course, probably have to add more features, but this would be the minimum to start."

"That sounds pretty impressive," Mary says. "How long will it take to build?"

Steve lets out a little sigh. "We can demo a working version in two or three weeks, but the fastest I can get a working MVP ready is four to six months."

"Six months!" Lisa exclaims. "Can we speed things up if we get some offshore developers?"

Steve responds, "I don't think so. A lot of this is so new that it could take three months just to bring someone else up to speed. And I wouldn't want to share the core code with anyone outside the company."

"I agree with both of you," says Mary. "Outsourcing is seldom effective for products like these, and six months is too long. We need to find a way to get something running in less than two months."

"That's going to be impossible!" Steve interjects.

Mary holds up a hand. "Hold on...I want to go back to something you said earlier. You said you could demo a working version in the next two or three weeks. Why can't that be the MVP?"

"The core rendering engine is ready," Steve says, "but there is no user interface around it. I can render these models for the demo but I have to drive the entire process from the command line using scripts. I was looking for ways to automate these steps and seeing if we could build a Wizard-of-Oz MVP, but there are still too many manual steps required. Building a user interface with the right UX is where Josh comes in. We'll also have to build a bunch of stuff like user roles and permissions to really productize the engine—"

Mary interrupts Steve again. "So the steps to render the model are manual—how about viewing it on a mobile phone?"

Steve responds, "That's done. It's the same app I showed you when we first met."

"I don't see why you can't launch your MVP now. You are the product, Steve."

A confused look comes across Steve's face.

"This is the perfect place to apply the Concierge MVP recipe, which is another validation recipe popularized by the Lean Startup movement. I think Manuel Rosso may have coined the term after he applied it to his startup, Food on the Table."

"How does it work?" Josh asks.

Mary explains, "At the end of the day, customers want an outcome, not a product. The basic idea behind the Concierge MVP is using a services or consulting model to deliver value to customers. Unless I'm missing something obvious, you have all the pieces to render and view AR/VR models, minus the end user product packaging. That's not what's riskiest, so skip the packaging for now and just deliver the models as a service."

"That makes total sense," says Josh. "The architects take a couple of days anyway to build their current 3D models, so this should work well as they aren't expecting a fully automated product."

Steve jumps in. "That could certainly work, but it won't be scalable. I can probably turn around each model in half a day. The more complex ones might take a day."

"Your traction roadmap requires taking on just two customers a month," Mary comments. "I think you'll be fine for a while."

Steve nods. "Sure, that's easy."

"And remember," Mary continues, "a Concierge MVP isn't meant to be your final product; it's a tactic for racing to value delivery and testing your riskiest assumptions. Along the way, unlike with traditional consulting, your objective is replacing yourself as the product with something more automated and scalable. The best way to do this is by making incremental investments to speed up your efficiency. Your goal would be reducing the model rendering time from a day to five minutes."

A lightbulb goes off for Steve. "I totally get it now. This is another way to play the hockey stick and grow traction in stages."

"You got it."

"Are there more MVP recipes?" Steve inquires.

"Yes," Mary replies. "There are a couple more that could also be applied here. But I think Concierge is the ticket to unblocking your delivery time."

"How would we price the Concierge MVP," Lisa asks, "since people are accustomed to paying more for services than a software product? Do we charge more now and drop pricing later?"

"Good questions, Lisa," Mary replies. "The first thing is to determine a fair price for your product based on the value you can deliver. With the Concierge MVP, you certainly have the option of charging consulting rates now and dropping the price over time as you productize, or starting with the product price at the start. It often comes down to who your customer is. B2B customers, for instance, are accustomed to paying a lot more for services."

"That makes total sense," Lisa says. "Do you have some guidance on how to set fair pricing?"

Mary replies, "Yes, that's the work you'll be doing during the solution design sprint. Other than feasibility constraints, which we just discussed, you need to tackle desirability and viability. I'll send you all some material on that next."

Running a Solution Design Sprint

A solution design sprint is run over a two-week time box, where you use the insights you have gained from your problem discovery sprint(s) to design the first iteration of your solution (MVP) to cause a switch.

While MVPs only emphasize viability, probably because this is often the most overlooked aspect when designing products, the right solution needs to simultaneously balance desirability, viability, and feasibility in order to cause a switch and make your business model work.

Over the next several sections, I'll cover a step-by-step process for reviewing the insights from your problem discovery sprints through the lenses of desirability, viability, and feasibility. Keep in mind that the different lenses may pull you in opposing directions. The art is finding the right balance, where all three lenses intersect. This may require taking multiple passes through the steps.

Addressing Desirability

Desirability, in the context of causing a switch, comes down to *problem* and *promise*. The promise is synonymous with your UVP, and the best way to craft a compelling UVP is nailing a problem your customers are already familiar with.

- NOTE -

A product that causes a switch *promises* customers a better way of getting their job done without the *problems* they are currently struggling with.

Furthermore, as we've previously covered, in order to cause a switch your promise needs to be significantly better than the existing alternatives. Incrementally better (20–30%) isn't enough—you need to be 3x–10x better.

Since your goal with your MVP is racing to deliver value, the right MVP then needs to address the smallest subset of problems that, when solved, still create a big enough promise to warrant switching to your product.

The remainder of this section will walk you through how to think through this process.

Step 1: Identify the primary struggle

Problems can pop up anywhere in the customer journey, but look back over your Customer Forces Canvases and identify the area of primary struggle.

This generally comes from:

- Dissatisfaction (i.e., a job not done well enough)
- Friction during usage of the chosen solution
- Friction during selection of a solution

To identify the area of primary struggle that your product will address:

Find and address dissatisfaction

Remember that all jobs-to-be-done start with a triggering event that initiates an unmet need or want—i.e., creates a gap between the current outcome and the desired outcome. The first thing to evaluate is the size of the gap between a customer's desired outcome and the actual outcome. In other words, start by checking to see if the job was done well enough.

If the answer is no and the gap between desired and actual outcomes is big enough, this could be the basis for your UVP. An unmet desired outcome makes for the most effective kind of switching trigger, provided you can promise and deliver a better outcome.

If you find that the job is being done well enough, do not despair. Lots of products cause a switch not by delivering a better outcome but by making it easier to get the job done, which is the next hot spot to focus on.

Find and address friction during usage

Friction during usage will have manifested in your conversations as pet peeves, workarounds, and/or usability issues. Do not underestimate these types of problems—they can be just as effective at causing a switch.

Here are some examples:

- Uber doesn't necessarily get you to the airport faster. It started by making the car/taxi ordering process a lot easier, then moved on to other parts of the experience, like payments.
- CDs didn't necessarily deliver noticeably better sound quality for most; they made it possible to play the songs you want to hear instantaneously.

Find and address friction during selection

If you notice people getting stuck at the solution selection process, this could represent a possible nonconsumption market. The reason people aren't finding the right solution for the job could be due to the product's cost, complexity, and/or positioning.

For example:

• Use of videoconferencing software exploded in 2020 due to the Covid-19 pandemic, and we now take it for granted—but did you know videoconferencing technology dates back to 1870?! It wasn't until a hundred years later that AT&T introduced the first commercially packaged videoconferencing phone, which cost \$160/mo for 30 minutes of call time (equivalent to \$950/mo in today's money) plus \$0.25 for each additional minute. In subsequent decades the technology evolved, the public internet was created, and costs dropped until

usage went mainstream. Throughout this timeline, we can identify many segments of customers who might have been interested in video-conferencing capability but were shut out because of cost.

• In 2001, an Australian wine company launched the first low-cost engineered wine, Yellow Tail, and became one of the most profitable brands in the industry. This is a classic Blue Ocean Strategy case study, described in the book of the same name by W. Chan Kim and Renée Mauborgne (Harvard Business Review Press), that also addresses friction during selection. In this case, the company found that there was a large segment of customers who had a desire to consume wine but were frustrated by the process of selecting a wine, which was riddled with complicated rules about grapes, vintage, price, etc. So Yellow Tail launched a wine that was easy to select (red wine or white wine), easy to drink (no corkscrew required and tasted good right out of the bottle), and priced under \$10 (positioned to compete with a six-pack of beer, not a premium wine).

Step 2: Craft a compelling promise

Once you've identified the area of primary struggle, shift your attention to crafting a promise that is different and better. Here are some guidelines to follow:

Remember to not get hung up on just being functionally better

Emotion plays a big role in the perception and weighting of "better." That's why we focus on *desired* outcomes and chase the bigger context—aligning with customer wants versus needs.

Identify your axes of better

Based on the problems or struggles you identified in the last section, identify the key attributes you would improve. If you were to draw a two-by-two matrix mapping your product against the alternatives, what would the x- and y-axes be (e.g., speed versus quality)?

This isn't an exhaustive list, but it should give you a starting point for your x- and y- axes:

- Speed
- Performance
- Healthy
- Sustainability
- Simplicity
- Scalability

- Organic
- Practicable
- Safety
- Trendiness
- Privacy
- Professionalism
- Exclusivity

Examples:

- a. LEANSTACK: Simple and Practicable (practice trumps theory)
- b. Tesla: Sustainability and Performance
- c. iPhone: Smart (no physical keyboard) and Easy to use

Go to extremes

When looking for your axes for better, it's tempting to pick what's popular. But what's popular is typically also crowded. You want to go for the edges.

Align with your purpose

Don't treat identifying these axes simply as a positioning exercise that you do once and then forget about. The right axes should also align with your values and purpose. They should guide everything you do. That's how you build ongoing differentiation that compounds over time.

Don't guess

Finally, don't make this stuff up. The axes for better should come from your customer discovery interviews. They should be things your customers care deeply about. Their desired outcomes and trade-offs with current alternatives are generally good places to uncover these.

Addressing Viability

Finding a problem that warrants switching isn't enough—it also needs to represent a business model opportunity worth pursuing. This comes down to *price* and *people*. As we've covered previously, the two are related: price determines your customers, and vice versa.

Since the viability of your business model is already constrained by your MSC goal and Fermi estimate assumptions (see Chapter 3), start by imposing these constraints on your problems and UVP.

Specifically, remember that for a given MSC goal, the most actionable lever that drives viability is your average revenue per user (ARPU) per year. Now is

the time to revisit your target ARPU and see which story clusters can deliver on this target.

Step 1: Set a fair price

As before, your goal isn't aiming for optimal pricing but fair pricing, anchored against the existing alternatives and your UVP. Here are some guidelines:

Pick the right existing alternative

As existing alternatives typically set the anchor for your pricing, aim to displace higher-priced alternatives whenever possible. In the next chapter, you'll learn how to effectively use price anchoring to deliver a more effective pitch. It's perfectly okay to group multiple alternatives together into a broader category.

Put a price on better

The best evidence of a monetizable problem is one where money is already being spent. Also, make note of how much time and effort is being spent, as this information can also be used to place a value on your UVP. Work your way up or down from there based on your promise of better.

Don't forget about retention

ARPU is a function of price and frequency of usage. Explore how often the triggering event occurs. Triggering events that recur at least monthly lend themselves well to subscription services, which is a great tactic to employ for establishing your product as the new status quo.

Check against your Fermi estimate assumptions

Use your pricing and frequency of usage inputs to calculate your expected ARPU. If this doesn't align with your targeted ARPU from your Fermi estimate, you need to revisit your problems and aim for a bigger promise.

Step 2: Identify your ideal early adopters

Imposing the existing alternative and Fermi estimate constraints may have narrowed down your viable customer story clusters. Now you're going to refine your early adopter selection criteria even further.

Remember that the goal of problem discovery wasn't to target early adopters, but active customers (users of the existing alternatives). Your ideal early adopters may be a subset of this active customer segment, but they may also be a past-state or future-state version of these active customers.

NOTE -

A key insight is recognizing that *identifying your ideal early adopters is more a matter of when than who.*

When in the timeline is the customer most likely to consider switching to your product? That's your ideal entry point.

- TIP

The best time to offer a painkiller is when your customer is in pain.

You might be inclined to assume that the obvious entry point would be when the customer's struggle is most acute—i.e., where you identified the primary struggle. That is certainly sometimes the case, but more often these points in the timeline are hard to detect from the outside, making them hard to target. For example, how do you target a customer having a bad taxi ride experience? Other times, it may be possible to steer your customers early enough to avoid the existing alternative altogether—for example, the builder who targets prospects during the holidays.

For these reasons, you often have to consider a different entry point in the timeline, which may be before or after the primary struggle.

Here's how to think this through:

An early adopter is someone open to switching

The first significant event in the timeline is the switching trigger. This is when the customer is pushed past the inertia of the status quo into the consideration stage (passive looking for a new solution). Remember that the status quo could be doing nothing if it's a new job, or rehiring the same product if it's a recurring job.

If this is a new job the person is considering, unless the push of the situation is greater than their inertia, they'll do nothing. This is where aspirational goals live. Many people would like to be healthier, wealthier, and wiser, and every now and then they'll make certain resolutions to change but then not follow through with a single action. These are not your early adopters.

When looking for an early adopter, the first consideration is looking for someone who has experienced a switching trigger and taken some action.

Get clear on where your ideal early adopter is switching from

In the last section, you should have identified the existing alternative you want to displace. The next question to consider is whether it's easier to get people to switch from using the existing alternative to your product, or to switch from what they were using before the existing alternative (which may be nothing) to your product. Your answer will depend on where you found the primary struggle.

Define your switching triggers

Recall from Chapter 2 that there are three types of switching triggers:

- 1. Bad experience (with an existing alternative)
- 2. Change in circumstance
- 3. New awareness of a problem and/or better way

If your UVP is predicated on problems people need to first experience using the existing alternative (dissatisfaction or friction during usage), this falls under the "bad experience" switching trigger. Your early adopters will likely need to be active customers of the existing alternative. Home in on how long after using the existing alternative the customer realizes this. Your ideal entry point can then be worded as:

• [Customer segment] who started using [existing alternative] [x weeks] ago.

Here's an example from an analytics product, USERcycle, I launched in 2010. The UVP of USERcycle was: not more numbers, but actionable metrics. We helped startup founders stop drowning in a sea of nonactionable data and instead use a handful of actionable metrics more effectively to improve their conversion rates.

Our problem discovery interviews showed that:

- Most founders started with no metrics because they prioritized launching a product over analytics.
- The first triggering event was typically 30 days after launch, when their conversion rates were below expectations.
- The first existing alternative they reached for was Google Analytics, and/or some other freemium analytics products. They still hadn't experienced the "drowning in metrics" problem, so they still didn't represent our early adopters.
- Somewhere between the second or third month after launch, they
 were drowning in numbers and failing to move the needle on their
 conversion rates.
- That was our ideal entry point.

If on the other hand your UVP is aimed at someone taking on a new job for the first time or someone prompted to improve how they currently do a job due to an awareness event, your early adopters will likely be people that just experienced the switching trigger. Your ideal entry point can then be worded as:

• [Customer segment] who experienced a [switching trigger] [x days] ago.

Examples:

- A new dad that takes on new child caring jobs
- Someone who gets diagnosed with high cholesterol and is prompted to consider healthier alternatives

Addressing Feasibility

With desirability addressed and constraints in place, you should have at least the beginning definition of an MVP that can cause a switch and make your business model work. The next task is ensuring you can get this to your early adopters quick enough. How quick is quick? How about two months?

Why two months? From the moment your customers buy into your offer (we'll cover offer delivery in the next chapter), most will only be willing to wait up to two months for a solution before moving on to other alternatives. If your product takes longer than that to build and launch, chances are high that you'll have to run through another problem discovery sprint in the future, as a lot can change in that time.

- NOTE -

Note that two months is the time it will take to build out your MVP from the point at which you achieve problem/solution fit, not two months from now. You still need to define and validate the promise of your MVP using the offer delivery sprint. The reason you need to look a little ahead and address the build time constraint is that you don't want to promise something you cannot deliver quickly.

This leads us to the next propelling question: can you design a solution that you can build and launch in two months or less?

With a little creativity and out-of-the-box thinking, it is possible to launch an MVP for almost any type of product in this time frame. It comes down to *packaging*—i.e., how you package your MVP to deliver value to your early adopters.

Some guidelines follow:

Give yourself permission to start small and scale in stages

Remember, the strategy behind the staged rollout mindset is limiting your initial rollout to a small batch of ideal early adopters. If you can't get 10

ideal early adopters to the finish line, what makes you think you can do that with hundreds or thousands of customers?

When you give yourself permission to start small and scale in stages, you can go faster. You don't need scalable channels or infrastructure, and can solely focus on delivering value to your customers.

Revisit your early adopters

If there's a subsegment of your early adopter population that could get started with an even smaller MVP, consider starting there. Then utilize a just-in-time approach to evolve your MVP and bring the rest of your early adopters on board over time.

In other cases, you may be able to pivot your MVP toward an entirely different early adopter segment in order to de-risk your solution (MVP), and then come back to your original early adopter segment at a later time. For example, I once coached a team that was developing a high-efficacy calcium supplementation pill aimed at women. Even though their product was ready, they were still six to nine months away from getting the regulatory clearance required for launch. In order to maintain momentum, they pivoted to a different early adopter segment that had less stringent regulatory requirements—pets and horses.

Consider nontraditional MVPs

The most common approach to building an MVP is scoping down and building the smallest feature set that delivers on your UVP. This is the *Release 1.0 MVP* validation recipe. There are three more validation recipes, though, that enable you to go a lot faster than the traditional approach:

The Concierge MVP

You are the product until you are ready to fire yourself. This recipe uses a services model to deliver value to customers while you incrementally automate the most inefficient aspects of value delivery, until you eventually replace yourself with a scalable product. A lot of my own products, including the Lean Canvas and this book, started as Concierge MVPs where I used workshops to teach (and learn) first, then more scalable packaging of the products followed.

The Wizard-of-Oz MVP

Fake it until you are ready to make it. Here, you reduce the scope of your initial MVP by cobbling together existing solutions, rather than having to build everything from scratch. We saw an example of this earlier with Tesla. Your UVP may come from a novel approach to assembling existing solutions where the whole is greater than the sum

of its parts, or it may come from *a novel component* to the assembled solution that you provide.

The Foot-in-the-Door MVP

Deliver the smallest UVP needed to get inside the customer's world. A lot of entrepreneurs take a Swiss Army knife approach to building products, where they attempt to change too much in the customer's environment at once. You have to realize that before the Swiss Army knife became popular, each of the individual tools was popular. If that isn't the case with your tools, focus on causing a switch one tool at a time.

The 5 P's of MVP

The 5 P's of MVP—Problem, Promise, Price, People, and Packaging—are the key elements that define your MVP. Once you've got a solution designed, use the following questions to check that you have all bases covered:

Problem

Are you solving the smallest subset of problems possible (feasibility) that can cause a switch (desirability) and make your business model work (viability)?

Promise

Is your UVP different and attention-grabbing (desirability), does it communicate value (viability), and is it short-term enough to be specific and measurable (feasibility)?

Price

Have you set a fair price for your product anchored against existing alternatives (feasibility) and your UVP (desirability) that also makes your business model work (viability)?

People

Have you identified an ideal early adopter segment that has above average motivation to switch (desirability), that you can effectively reach (feasibility), and that is currently spending enough time, money, and effort on the problem (viability)?

Packaging

Can you build and launch your MVP quickly (feasibility) in a way that causes a switch (desirability) and makes your business model work (viability)?

Steve Takes a Stab at the 5 P's of MVP

For each of the 5 P's of MVP, Steve jots down the following notes:

Problem

Difficult for first-time custom home owners to fully visualize architectural plans.

- 2D floor plans lack depth.
- Current 3D solutions are expensive, complex, and not photorealistic (video game-quality renderings).

Promise

Help your clients design, build, and fall in love with their dream home faster.

- Turn a 2D floor plan into an immersive virtual reality model in minutes.
- Customize the model with photorealistic assets to create Hollywood-quality renderings.
- Cut design cycle time in half, from six months to three months.

Price

Current alternatives cost roughly \$3-5k to create a single model.

- Software: \$2k
- Modeling effort: 10–20 hours

We can offer a modeling-as-a-service package for \$1k/model or \$500/month.

We'll have to test which of these pricing models they'd go for...I'm thinking the first.

People

Early adopters: Custom home architects.

Packaging

Concierge MVP.

- Allows us to launch in less than four weeks (speed).
- Eliminates the need for customer training/onboarding (simple).
- Allows us to deliver what customers want (desired outcome).

Later that day, Steve walks the rest of the team through the design. "In addition to design visualization, there were certainly a number of additional jobs we could take on, like pricing out a design or furnishing rooms, tying in to our retail furniture business model. But I think the lowest common denominator is starting with a new home owner at the design phase. And architects are the perfect entry channel for that."

"I agree," says Josh. "Trying to get a homeowner to create a model without an architect could get messy. But who's our customer here? The architect or the homeowner?"

"The bigger business model here unfolds over time as the homeowner uses their model for other jobs," Steve replies. "I've been thinking of a way to make the homeowners our customers but use the architects as the vehicle for getting Altverse in front of them. I think the simple solution is hosting everything in the cloud and giving both architects and homeowners accounts, with homeowners owning the model—so they can take it with them."

Lisa nods. "That's simple enough, but we'll have to see how architects feel about that. They already probably use a bunch of cloud solutions, so I don't think it would be a problem."

Josh throws out an idea. "Hey, maybe we could help architects easily showcase their portfolio of projects using these renderings and build a directory or marketplace of sorts over time."

"That's a great idea, Josh," says Mary. "I think once you hit a tipping point on the number of models you create, there will be many interesting paths here. And I agree that it does help to position the homeowner as the owner of the model."

"Okay, that's what we'll do. Setting up the app this way won't take that long. I can get this ready in two weeks," says Steve.

Lisa asks, "So what do we do until then? More interviews?"

"Not interviews," Mary responds. "Pitches. You're ready to sell this. It's time to assemble your mafia offer."

Deliver a Mafia Offer Your Customers Cannot Refuse

Make them an offer they can't refuse...

—Adapted quote from The Godfather

With your problem discovery and solution design sprints completed, you now have all the ingredients to assemble and deliver a compelling mafia offer.

In these next two sprints (Figure 10-1), you're going to put all the insights you've painstakingly gathered to the test. This is where the rubber hits the road. Your goal is to secure enough tangible commitments from early adopters to warrant building your MVP.

Before diving into the mafia offer delivery sprint, let's see what a mafia offer looks like in action.

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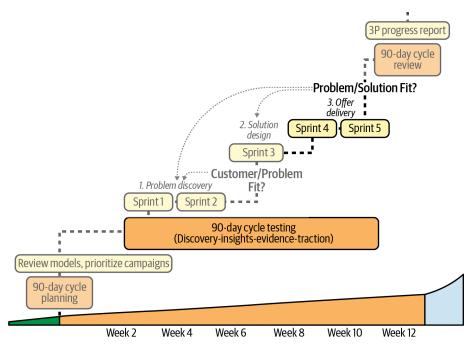


Figure 10-1. The offer assembly and delivery sprints

Case Study: The iPad Mafia Offer

I still remember Steve Jobs unveiling the original iPhone in 2007. As he opened the keynote, he first set the stage by announcing that Apple was entering the smartphone market with a revolutionary new device that combined three devices in one: a music player, a PDA, and a phone. Then he quickly pointed out the problems with existing smartphones: 40% of the phone is taken up by a plastic keyboard (not smart) and they aren't very easy to use. Before showing the iPhone, he hinted at its UVP to great effect: What if you could have a phone that was all screen? And instead of using a stylus to control the phone, what if you could use your fingers? That was immediately different and attention-grabbing. As he walked through the demo, I thought he was performing a magic trick, as I had never seen any user interface like it before. I was sold, and even stood in line to purchase the original iPhone when it officially went on sale.

Three years later, there were rumors that Apple would be unveiling a new tablet device—the iPad. This time, however, I was on the fence. I had been an early adopter of several tablets before the iPad and had been underwhelmed by all of them. Despite my skepticism, I still tuned in to watch the unveiling, and again I ended up buying the product. Fast-forward to today, and there are

more iPads in my household than people. By that logic, you could argue that the iPad was even more successful than the iPhone. How did that happen? Do you remember how Steve Jobs pitched the iPad? Even if you didn't watch the keynote live, can you guess?

He could have come on stage and said: "We are Apple and we build great products that are simple to use. We have built the best tablet in the world, so buy one." The problem, of course, is that no one other than a small sliver of innovators and early evangelists was using tablets at the time. How do you pitch a new category-defining product when the category doesn't yet exist? The answer is that you *transcend* category by going into the bigger context where jobs-to-be-done live.

As Jobs opened the iPad keynote, he talked about how everyone was already using laptops and smartphones and mused about whether there was room for something in the middle. For that product to succeed, it would have to be far better at doing certain key things than both the laptop and the smartphone. He then rattled off some of those things: browsing the web, email, photos, video, music, and reading eBooks. Then, as with the iPhone announcement, he quickly named the existing alternative he'd like the iPad to displace—the Netbook. If you don't remember the Netbook, this was a marketing term used to describe small and inexpensive laptops. Next, he went on to describe the problem with Netbooks: "They're just cheap laptops and not really better at anything—they're slow, with low-quality displays and clunky PC software." This set the stage for introducing the iPad.

Do you recognize what Jobs did here? He identified some jobs-to-be-done that the existing alternatives were failing to do well enough, and he made a promise for getting the jobs done better with an iPad—focusing not on new jobs, but old jobs that people were already doing with existing alternatives. This is the Innovator's Gift.

As he began to demo the iPad, he made a comparison: "The iPad is so much more intimate than a laptop and so much more capable than a smartphone." The job of the demo is not to train your customers on how to use your product, but to highlight what is different and better. The demo walked through these various jobs and showed how the iPad did them better. This is where the *emotional purchase* happens—customers start imagining themselves achieving their desired outcomes in a new and better way. But what makes this a mafia offer is what comes next.

When he got to pricing, Jobs put up a big number on the screen: \$999. He then reminded the audience that the pundits thought the closest competitor to the iPad was the Netbook, and for that reason they thought the iPad should be priced similarly, at "just under a thousand dollars." He then assured the audience that Apple didn't listen to the pundits and had worked really hard to

introduce the iPad not at a starting price of \$999, but 499. The whole room burst into applause as they celebrated the possibility of buying a \$500 device.

You probably recognize this tactic as price anchoring, where you prime customers with a high price and then reveal your pricing at a lower number. What Steve Jobs did, however, was price anchoring taken to the next level. Instead of using some random high number to prime his audience, he used the price of a carefully chosen existing alternative (the Netbook). He had just spent the last 30 minutes convincing the audience that the iPad was better at getting several jobs done than this alternative. Setting the starting iPad price at half the price of a Netbook made it a no-brainer *rational purchase*.

That's what made this a mafia offer—an offer customers could not refuse.

Running an Offer Delivery Sprint

An offer delivery sprint is run over a two-week time box where you first assemble, then pitch your product one-on-one to qualified early adopter prospects.

During a product pitch, most entrepreneurs never bring up their competition, either because they don't think they have any or because they don't want to tip their customers toward their competitors. This is a mistake, because your customers are sophisticated and they will shop around anyway. Would you prefer that they compare you to the competition without you in the room, when you'll have no say in the comparison?

—— NOTE —	
Your competition diffuse it.	n is the elephant in the room, and it's your job to expose it and

A good product pitch acknowledges the popular existing alternatives (your true competition), then goes on to demonstrate how your solution is better. You saw how Steve Jobs did this very early in both his iPhone and iPad pitches. Naming the competition and the problems it has sets the stage for your solution to shine.

Steve Jobs was a great storyteller, and you might be wondering how you'll ever get to delivering your pitch as naturally as he did. It comes down to preparation and practice.

The first key to assembling a good pitch is using a good customer story pitch template. A common fear around using a template is creating a pitch that sounds forced. Don't worry about this. We are naturally wired for stories, and when we encounter the beginning of a good story, we can't help but get pulled

in. I'll present an effective story pitch template, built on the most popular story arc of all time, in the next section.

Once your story pitch is assembled, the next key to delivering a good pitch is practice. As gifted as Steve Jobs was at storytelling, he practiced every pitch for hundreds of hours before getting on stage. The good news is that if you've been doing the work from previous chapters, you've already been practicing parts of the customer story pitch template.

Due to the goal-oriented nature of pitching, patterns emerge quickly. When things work or don't, you know almost instantly. It is, however, critical to continue to maintain a learning mindset. Your goal with these pitches isn't just landing a few customers, but rather building a repeatable sales process.

Repeatable sales come from active listening and constant testing, where you carefully parse out the key causal insights that make customers buy. When things work in your pitch, you double down on them. When things don't work, you probe deeper to learn why not and make adjustments.

As a rule of thumb, be prepared to run 2 offer delivery sprints and pitch your product to 20–30 people over a 4-week period. This is roughly equivalent to pitching five to eight people per week with some time built in for processing your learnings.

By the end of your offer delivery sprint(s), you should be able to optimize your mafia offer to drive at least a 60–80% conversion rate from qualified leads to your specific customer call-to-action. Getting there will take iterative testing, and it's best to plan on running one or two offer delivery sprints to get there. Deliberately going slowly now to rigorously test your key insights will allow you to go much faster later.

Depending on your 90-day traction roadmap goal, you may need to scale beyond the mafia offer campaign to achieve problem/solution fit. I'll share how later in the chapter.

Running an offer delivery sprint involves three steps:

- Assembling your offer
- Delivering your offer
- Optimizing your offer

Let's dive into each of these.

Assembling Your Offer

In this section, I'll show you how to outline your pitch using the most popular story arc of all time: the Hero's Journey, popularized by Joseph Campbell in his book *The Hero with a Thousand Faces* (New World Library).

This story arc shows up in all kinds of epic tales throughout history and is still used today in most Hollywood blockbusters. *Star Wars*, *Harry Potter*, *Cinderella*—they all share it. This same story arc can also be used to deliver a compelling product pitch.

The first step to creating any story is defining the characters.

Define the Characters in Your Customer Story Pitch

All stories need characters. Who do you think are the essential characters for a Hero's Journey story? Yes, a hero and a villain. Ask yourself:

Who's the hero in your story?

It may come as a surprise...but *you* aren't the hero in the product pitch, and neither is your product. The hero is your early adopter.

You don't actually want to be the hero in this story. Think back to movies like *Harry Potter* or *Star Wars*. The Hero's Journey story is a transformation story that begins with a struggling protagonist who reluctantly accepts the call to become a hero.

How about the villain?

This one is easier. Yes, the villain is your true competition. Your true competition represents the group of existing alternatives you are seeking to displace with your solution:

- In the case of the iPad, this was laptops (the Netbook).
- In the case of the iPhone, this was other smartphones.
- In the case of the iPod, these were other MP3 players and portable music devices.

Remember that your true competition not only sets the stage for comparing features, but also pricing—so pick carefully.

So, where do you fit in?

You are the person who guides the hero through their transformation from ordinary to hero. You are the guide character. This is Obi-Wan in *Star Wars*, Dumbledore in *Harry Potter*, and the Fairy Godmother in *Cinderella*.

Where does your product fit in?

Your product is the gift you give the hero that makes this transformation possible.

Let's see how the Hero's Journey story arc works using the original *Star Wars* movie as an example:

The Star Wars Story Pitch

The movie introduces our hero character, Luke, as a regular young adult who is bored out of his mind on a remote planet in the galaxy (STATUS QUO).

Then something happens that changes everything (SWITCHING TRIGGER).

Storm Troopers show up looking for secret plans hidden by Princess Leia in a droid (R2-D2) that we see earlier on Luke's planet. Luckily, Luke is off on an errand when the Storm Troopers reach his village, but unfortunately, his uncle and aunt aren't spared.

These plans are the key to stopping a large weapon (the Death Star) from being built. Once the weapon is completed, the entire galaxy could come under the rule of the evil empire (WHAT'S AT STAKE).

While Luke would like to help destroy this weapon (DESIRED OUT-COME), he has no special powers and cannot overcome the powerful dark lord villain who commands the evil empire: Darth Vader (PROBLEM/OBSTACLE).

Then our hero gets a gift—a lightsaber (PRODUCT)—from our guide character, Obi-Wan (THIS IS YOU).

Our hero reluctantly accepts the call-to-action. He encounters several set-backs along the way, but eventually transforms himself into a powerful Jedi. This gift and Jedi training (UVP) help our hero destroy the Death Star and save the day.

Did you recognize this story arc? Yes, the Customer Forces Model also follows the Hero's Journey story arc. We can visualize a story pitch on the Customer Forces Model, as shown in Figure 10-2.

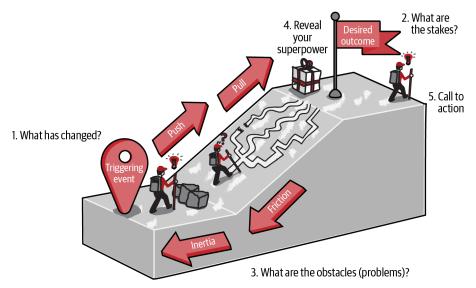


Figure 10-2. *The customer story pitch template*

Outline the Structure of Your Customer Story Pitch

Screenwriters use a popular three-act story structure, dating back to Aristotle, to organize their stories into a beginning, a middle, and an end. These are often labeled the *setup*, *confrontation*, and *resolution*.

I organize my customer story pitches the same way. Additionally, since we are looking to *cause a switch* at the end, I add a fourth act, the *call-to-action*:

- Act 1: Setup (share the bigger context)
- Act 2: Confrontation (break the old way)
- Act 3: Resolution (demo your better new way)
- Act 4: Call-to-action (ask for the switch)

Next, I'll walk you through the steps for assembling each part of your customer story pitch, illustrated with three different product pitches:

- The Continuous Innovation Framework (CIF)
- The Tesla Powerwall battery
- The iPad

Act 1: Setup (share the bigger context)

Act 1 sets up the bigger context for your pitch. It establishes your customer as the protagonist and names a big and relevant change (switching trigger) that raises the stakes and drives a sense of urgency for the desired outcome. Here are some things you'll want to consider for this part of the pitch:

Why not go straight to the problem?

For the same reasons we didn't directly ask customers about problems during the problem discovery interviews. Customers often don't understand their problems deeply enough and/or don't want to admit they have them until they know you, like you, and trust you. Imagine having to pitch the CIF to the head of innovation at a large company. If you immediately start attacking their current way of building products, you'll put them on the defensive and it'll be harder to break through.

Another reason for starting with the bigger context (rather than problems) is that it can inspire customers to buy into a much larger vision of better. In the next section, we'll see how Elon Musk reframed the Powerwall battery pitch to share a much larger vision of clean energy instead of just talking about a better battery.

Finally, remember that the bigger context is where jobs live, and it transcends categories. Especially when you're pitching a new category-defining product, like the iPad, it helps to start with a bigger context, like Steve Jobs did.

Pick an extrinsic switching trigger

The best switching triggers come from *undeniable extrinsic shifts* happening in the world rather than shifts you personally are trying to cause, which could be construed as self-serving:

- The extrinsic switching trigger for the CIF is the global entrepreneurial renaissance. Today, it is cheaper and easier than ever to build a product, which means that there are many more people "starting up" all over the world. Entrepreneurs are everywhere.
- Elon Musk used climate change as the big relevant change that set the greater context for his Powerwall pitch.
- Steve Jobs didn't need to explicitly name the switching trigger in his iPad pitch because he had already named it several years earlier, after the iPhone launch—calling it the beginning of a *post-PC era*. That's also when Apple dropped the word "Computer" from its name to become "Apple Inc."

Raise the stakes

Behavioral economists Amos Tversky and Daniel Kahneman identified a phenomenon called *loss aversion*, where people tend to prefer avoiding losses to acquiring equivalent gains. In other words, simply promising something better with a new way isn't enough. For a switching trigger to be effective, it also needs to communicate the negative effects (crisis) of sticking with the old way (status quo):

- The opportunity side of the global entrepreneurial renaissance is that anyone, anywhere can start a company today. But more products create more choices for customers, which spurs more competition. Doing nothing can quickly make your business model irrelevant in the face of all this new competition. That's the crisis side.
- Elon Musk communicated the crisis side of climate change with imagery showing smokestacks from factories and a chart showing the exponential rate of growth of CO₂ emissions extrapolated to the year 3000.

Show winners and losers

Optionally, back up your claim of what's at stake by citing examples of winners who won big because they changed to the new way and losers who lost because they stuck to the status quo.

The winners' list for a CIF pitch would include companies like Airbnb, Dropbox, Google, Facebook, Netflix, and Amazon. All these companies embrace a culture of continuous innovation. The losers list would include companies like Blockbuster, Kodak, Nokia, RadioShack, and Tower Records. All these companies lost because they stuck to the status quo and got disrupted.

Tease your promise

End the first act of your pitch by *teasing the superpower* your customers will need to acquire in order to overcome the obstacles posed by the switching trigger:

- CIF superpower: speed of learning is the new unfair advantage. If you can outlearn your competition, you win.
- Elon Musk painted the future as a zero-emissions civilization powered by a giant fusion reactor in the sky—the Sun—as something within reach.
- Steve Jobs teased a revolutionary device that combined three devices in one with the iPhone, and a third category-defining product with the iPad that would be better than both the smartphone and the laptop.

Act 2: Confrontation (break the old way)

Act 2 is where you name the specific existing alternative you'll be displacing (true competition), describe why the existing alternative falls short (problems), and break it as a viable alternative for your customers. Here are a few guidelines:

Name your true competition

Your true competition represents the existing alternative(s) you are seeking to displace with your solution. This is the villain in your customer story pitch:

- In the case of CIF, this is the execution mindset (the Analyze-Plan-Execute way of building products).
- In the case of the Powerwall, this was existing batteries.
- In the case of the iPad, this was laptops (Netbooks).

List the problems with your true competition

This is where you describe the problems with the existing alternative(s), now exacerbated by the switching trigger, as obstacles preventing your customer from achieving their desired outcome.

This list should be a mix of familiar pet peeves and workarounds your customers already know, and possibly some deeper problems you've uncovered that make you look like an expert:

- Problems with the old way of building products (execution mindset) are: too slow to market, creating fictional plans, making safe bets versus big bets, and building something nobody wants.
- Elon Musk listed seven problems with existing batteries: expensive, unreliable, poor integration, poor lifetime, low efficiency, not scalable, and unattractive.
- Steve Jobs described Netbooks as slow, with low-quality displays and clunky PC software.

Break the old way

By the end of the second act, you should have broken the existing alternative as a viable alternative for your customer. End this section by summarizing why:

- This way of working (executing mindset) was never built for speed and continuous innovation.
- Elon Musk ended this section by saying that existing batteries "just suck."

• Steve Jobs ended this section by labeling Netbooks as "just cheap laptops and not better than laptops at anything."

Act 3: Resolution (demo your new, better way)

Act 3 is where you reveal your gift (your new way) and demonstrate how it helps your customers overcome the obstacles you've presented and achieve their desired outcome. This is the job of your demo—and remember, this is where the emotional purchase happens.

Your demo isn't intended to be just a collection of pretty screenshots or a working prototype, but rather *a carefully scripted narrative* that helps your prospects visualize your unique value proposition and believe that you can pull it off

It should walk them from their current reality (riddled with existing problems that stem from their existing alternatives) to your envisioned future reality for them (one where these problems are solved with your solution).

Here are some guidelines that can help you script a powerful demo:

The demo needs to be realizable

I have friends at design studios who have special teams in place just to build early user demos. These demos are very much part of the sales process and a lot of emphasis is placed on them, but they often rely on technologies that aren't what the final product is built with. While they are quite effective at making the sale, they make the job of the implementation team quite difficult, with many of the more "flashy" elements being hard or impossible to re-create. This leads to a disconnect between what is promised (and sold) to the client and what is eventually delivered.

The demo needs to look real

I don't like going to the other extreme either, of relying on bare-bones wireframes or sketches. While they are faster to put together, they require the customer to take a leap of faith on the finished product, which I try to avoid.

The more real your "demo" looks, the more accurately you'll be able to test your solution.

The demo needs to be quick to iterate

You will probably get valuable usability feedback during your offer delivery interviews that you'll need to quickly incorporate and test in subsequent interviews. This is where outsourcing your demo to an external team could actually hurt you, if your ability to iterate is driven by their schedule.

The demo needs to minimize waste

Creating a demo in anything other than the final technology in which the product is to be delivered creates some waste. For my own demos, while I start rapid prototyping using paper sketches, Photoshop, and Illustrator, at some point I convert them into HTML/CSS, which results in less waste in the long run.

The demo needs to use real-looking data

Instead of using "dummy data" (*lorem ipsum*), come up with "real-looking" data that will not only help you lay out your screen but will support your solution narrative. As Jeffrey Zeldman of A List Apart says: "Content precedes design. Design in the absence of content is not design, it's decoration."

Imagine the perfect before-and-after ad

Ask yourself, if you could commission a short 30-second ad showing the before and after customer story:

- Who would the characters in the story be?
- How would the story start?
- What problems would the characters run into?
- How would they resolve the problems?

Keep it short, but not too short

Good demos need to arrive at your punch line (your UVP) quickly while setting the requisite context. Aim to deliver your demo in 5–10 minutes.

Pick the best format for your demo

The goal of the demo is to showcase your UVP with the *smallest thing possible* in order to maximize the speed of learning. Don't immediately reach for a working prototype, but consider the best format for showcasing your product. Ranked in order of preference, these are:

- Digital products:
 - Verbal demo
 - Screenshots or mockups
 - Clickable prototypes
 - Working prototype
- Physical products:
 - Verbal demo
 - Sketches or CAD diagrams

- Physical prototype
- Working prototype
- Service products:
 - Verbal demo
 - Process diagram to demonstrate how it works
 - Sample deliverable (e.g., a report)

For example:

- A CIF demo could just be delivered as a presentation with slides.
- Elon Musk used a live demonstration showing that the auditorium they were in was powered by batteries.
- Steve Jobs used a combination of slides and a live demonstration of the iPad to show how it does certain jobs better than laptops.

Act 4: Call-to-action (ask for the switch)

Act 4 is where you clearly articulate the specific next action you want your customers to take. Too many entrepreneurs cop out at this step and simply settle for verbal commitments because it's the easier thing to do. The mindset in play here is one of "lowering sign-up friction." We want to make it as easy as possible for the customer to say yes and agree to take a chance on our product—hoping the value we deliver over time will earn us the privilege of their business.

The problem with verbal commitments is that they are easy to make and just as easy to break. Not only does this approach delay validation because it's too easy to say yes, but a lack of strong customer "commitment" can also be detrimental to optimal learning. This brings us to the guidelines for your call-to-action:

Don't lower sign-up friction—raise it

Your job at this point is finding early adopters who are at least as passionate about the problems you're addressing as you are. The way you do this is not by lowering sign-up friction, but by raising it.

Position your MVP as a prize

Too many entrepreneurs are embarrassed by their MVPs and use labels like *alpha* and *beta* to describe them. Alpha and beta labels frame your product as less than perfect and ask for forgiveness even before your customers get to use it.

If you've done all the work outlined in the previous chapters to meticulously research and define your MVP, you shouldn't be embarrassed by it, but proud of it. In the customer story pitch, your MVP is the gift you give your customers that helps them overcome their obstacles and achieve their desired outcome. You should position it as such.

Instead of using alpha and beta labels, I prefer using *early access*, which communicates that your MVP is a prize and is only going to be released to a select few. When you label your MVP as an early access product, it also signals scarcity, which works to drive up desire—especially for early adopters.

Charge from day one

If you have a direct business model (where the buyer is in the room), you should always include your pricing model in your call-to-action, for all the reasons we've previously discussed:

- Price is part of your product.
- Price determines your customers.
- Price is one of your riskier assumptions.



pricing up front.

In more complex sales where you don't have the buyer in the room, ask the prospect for an introduction to the buyer. If they move forward with the introduction, they are still paying you—not with financial capital, but their social capital.

Don't ever ask customers what they are willing to pay

Can you imagine Steve Jobs asking you what you would have been willing to pay for an iPad before it launched? Sounds ludicrous, right? Yet, you've probably asked a customer for a "ballpark price" at some point.

Well, that's just backward. Think about it for a moment. There is no reasonable economic justification for a customer to offer anything but a lowball figure. They may honestly not know how to answer you, and this question only makes them uncomfortable.

You can't (and shouldn't) convince a customer they have a problem if they don't, but you often can (and should) convince a customer to pay a "fair" price for your product, which is usually higher than what both you and the customer think it is.

Build your pricing story

A lot of people get awkward or feel guilty when delivering their pricing model to customers. But if you've done your research, and followed the customer story pitch until this point, your prospects have already made an emotional purchase of your new way.

Delivering your pricing model is all about making a logical case for how you arrived at a fair price for your product, anchored against the existing alternatives and the value you promise to deliver. There is no need for emotion to creep in. Remember, this is where the rational purchase happens.

Clearly lay out what happens next

Once you've shared your pricing model, clearly lay out the steps for what happens next, and ask for the sale.

Steve Shares His Customer Story Pitch Outline with the Team

Steve posts the following into the team chat window:

Here's what I've got so far:

Act 1: Setup (share the bigger context)

Big relevant change: As a result of the pandemic, people are spending a lot more time at home and upgrading their living and working spaces. This has triggered a surge in new homeownership and remodels.

Raising the stakes: A lot of these new buyers are first-time homeowners. They are also younger than before, and having grown up with Instagram and Pinterest, are a lot more demanding on personalization and design—but they lack home building experience.

Teasing your promise: They want to be able to design perfect living spaces that express their unique identities without breaking the bank.

Act 2: Confrontation (break the old way)

Current artifacts (2D/3D renderings) fall short.

2D floor plans lack depth.

Current 3D solutions are expensive, complex, and not photorealistic (video game–quality renderings).

Act 3: Resolution (reveal your Better new way)

Our solution helps your clients test drive your design concepts in virtual reality exactly as they will look in reality when built. Here, let me show you.

(This is where we have the architect walk through the reference model I'm currently building).

Act 4: Call-to-action (ask for the switch)

Lisa, you're much better at this than I am so I'll defer to you. But I'm guessing this is where we'll talk about early access, the Concierge model, etc., and hope we can close them on \$5k/mo pricing. That would be huge.

Lisa responds: This is great, Steve, and thanks for sending it over. Yes, I've got some ideas for the CTA and I'll try to push them a bit more on pricing:) How's the demo coming along?

Steve: Almost there, I can't wait to show it to you guys. I should have it demo-able by the weekend and turn it over to you and Josh.

Josh: That's great Steve. Based on what you showed me earlier, I can't wait to see the architects' reactions to the demo.

Steve: Me too, but I'll have to get back to getting the demo ready. There's always more work than one thinks, but I'm still sticking to the dates I shared.

Delivering Your Offer

With your offer assembled, you are now ready to deliver it. Both the iPad and the Powerwall pitches were delivered onstage to a room full of people. You aren't going to start there, but as with your problem discovery interviews, you'll first deliver them one on one. Here are some guidelines for preparing your mafia offer pitch:

Choose your targets wisely

Target a mix of old and new prospects:

Use old prospects that match your early adopter criteria

You should have received permission to follow up on your earlier problem discovery interviews. If any of these prospects match your early adopter criteria, these are warm qualified leads. Arrange a follow-up conversation with them to deliver your mafia offer pitch.

Mix in some new prospects

It's a good idea to mix in new prospects with every batch of pitches so that you test all your insights with a "beginner's mind." Your earlier pitches should have yielded some referrals that you can use.

Test new channels

This is also the time to start testing any other channels you identified in your earlier sprints that can help you start building a repeatable customer factory.

Ask for sufficient time

You will still be learning during your early pitches, so allocate enough time for that. I recommend asking for 45 minutes and aiming to be done in 30 minutes.

Record the pitch (if possible)

As with problem discovery interviews, if the prospect is okay with being recorded, record your pitches for learning and training purposes.

Maintain a learning mindset

The mafia offer pitch is all about testing the insights you've gathered from your problem discovery sprints. If your insights are indeed on point, you should see clear signs of resonance throughout the pitch, reflected in the interviewees' body language—nodding heads, smiles, and open feedback are all great signs. If you don't see these, don't brute-force the pitch. Instead, transition into understanding why.

It helps to build in a brief mental intermission between each act of your customer story pitch in order to evaluate whether you've met the objectives of that section. If not, that's your cue to explore why not.

Use a meta-script

In addition to any supporting slides and demos you created in the last section, it helps to write out a meta-script for your offer delivery. This not only keeps you on point but is a great training and documentation tool for when you're ready to hand off and/or optimize your offer campaign. You'll find a sample script with some additional guidelines on delivery in the following sidebar.

The Mafia Offer Pitch Script (30 Minutes)

Welcome (set the stage)

(2 minutes)

Briefly set the stage for how you'll run the meeting.

Thank you very much for taking the time to speak with us today about our [product]. We started building [product] after conducting dozens of interviews with other companies to understand how they perform [job-to-be-done]. Before we dive in, it would be helpful to ask you a few questions on how you currently do [job-to-be-done] to make sure there is a fit.

Is that okay?

Collect qualifying criteria (test for customer/problem fit)

(5 minutes)

Ask some qualifying questions to test for fit. If you've already interviewed/qualified this prospect before, you can skip this section unless there are additional questions you've uncovered since you last interviewed them. Bear in mind that this is not a full-on problem discovery interview but a chance to qualify your prospect on the key distinguishing characteristics that define your ideal early adopter profile.

How do you currently do [job-to-be-done]?

What solutions do you currently use?

(Ask any other qualifiers to determine if they are a fit.)

If you do encounter new insights that weren't uncovered in your earlier problem discovery sprints, stay curious and dig deeper. Problem discovery is only done when you've heard all the stories out there.

If there is a fit, continue on. Otherwise, let the interviewee know there isn't a fit and why. You'll both be 30 minutes richer.

Act 1: Setup (share the bigger context)

(2 minutes)

Share the bigger context for your pitch by:

- Naming the big relevant change (switching trigger)
- Raising the stakes
- Showing winners and losers
- Teasing your promise

In our research, we also found a number of companies, like you, using the [old way] for doing [job-to-be-done].

But we are living in a new world today because of [switching trigger]—the way we do [job-to-be-done] has fundamentally changed.

The [old way] worked reasonably well in the [old world] but no longer works in the [new world].

The [new way] helps you achieve [better desired outcome]. Not doing anything results in [what's at stake].

In order to succeed in the [new world], you need [tease promise].

Act 2: Confrontation (break the old way)

(3 minutes)

Get really specific on why the old way (your true competition) no longer works.

The [old way] wasn't built to handle [switching trigger]. Here's why...

- Reason 1
- Reason 2
- Reason 3

If you did a thorough job during problem discovery, this is where you should see visible signs of resonance and earn your prospect's trust. This also opens up a curiosity gap where the prospect wants to know how you solve these problems.

Be on the lookout for body language and other nonverbal cues. It always helps to be able to see your prospects when pitching. As you walk them through your pitch, pause frequently to check in with them and be on the lookout for any gestures that suggest they aren't following your story. When that occurs, stop and ask them if they have a question.

Act 3: Resolution (reveal your better new way)

(10 minutes)

This is the heart of the pitch and where the emotional buy happens. Remember, the art of a good demo is keeping it short and clear. Lead your prospect through your demo and show them how you deliver on your unique value proposition.

Let me quickly show you how we solve these problems and do [job-to-be-done]:

- Demonstrate feature 1
- Demonstrate feature 2
- Demonstrate feature 3

So that's what our product does. Do you have any questions?

Rather than jumping into the next steps or pricing, pause here and let the prospect take the next step. There is little value in getting to next-step conversations unless the prospect is sold on the value of the demo, so make sure that is in place first:

- If they are unsure about the demo, dig deeper.
- Ask for a referral if they loved the demo but aren't the customer (buyer).
- If they ask about pricing or the next steps, move to the next act in the script.

Prospects will inevitably ask about other features not shown in your demo. Rather than immediately rushing to agree to them, ask your prospects why they might want it and how they would use this new feature. It's perfectly okay to soft-commit to a promising new feature at this stage without outright committing to it in your MVP. As you postprocess these feature requests later, you'll need to weigh them against your MVP's scope and be prepared to eliminate or schedule them for a future release on your product roadmap.

Act 4: Call-to-action (ask for the switch)

(5 minutes)

Let your prospect know that you are early in the launch process and aren't doing a public launch or looking for beta users, but are looking to secure *early access customers*.

Since we chose to take on such a big problem, we decided to use a staged rollout approach and first test our product with a small group of carefully selected customers.

From everything we've discussed so far, you are a perfect fit. And we'd love to have you be a part of our early access group.

This is an optional but highly recommended step that helps increase willingness to buy through framing your product as a prize and introducing scarcity.

Next is price anchoring. This is a well-known tactic, but it's seldom used during pitches. It's best not to skip this step. If your offer includes any risk reversals or money-back guarantees, state them as well.

So, let's talk about pricing next.

In order to determine a fair price for our product we took a look at existing alternatives, and we wanted to align our pricing model with the value we deliver.

Most people spend \$X on existing alternatives and achieve [current outcome]. We have shown you how we can help you achieve [better outcome], which helps you make/save [value]. We wanted to make our product a no-brainer option, which is why we chose to price it not at \$X but at [state your pricing model].

Included in the pricing you get high-touch onboarding, where we'll help you set up [the platform] and get you up and running, along with monthly check-ins. We are doing this only for our early access customers, because we are highly vested in the success of our early customers. Once we open up the product more broadly, we will most likely charge more for these options.

Wrapping up (next steps)

(3 minutes)

After presenting your pricing model, pause and read body language cues. Gauge the prospect's response immediately afterward. This is key for optimizing your pricing. If they accept your pricing, make a note of whether they hesitated or readily accepted, and move on to the next steps for moving the sale forward. If they readily accept, that's often a sign that the perceived value of your product is higher than what you think and you should test a higher price in subsequent pitches.

If they need more time to come to a decision, offer to send them some follow-up materials (like your slide deck) and a target date for a check-in.

If they don't accept your pricing, dig deeper to understand the objection.

Optimizing Your Offer

The first step to optimizing your offer is weekly measuring of your customer factory metrics. From there, identify the key constraint to optimize first. Finally, get to root causes and formulate ways of breaking the constraint, which you'll test in subsequent offers.

Measure Your Customer Factory Metrics Weekly

Map specific user actions to each step in your customer factory. Prior to launch, I recommend defining your customer factory steps this way:

- 1. Acquisition: Number of new leads (prospects)
- 2. Activation: Number of demo calls booked
- 3. Retention: Number of follow-ups post-demo (complex sale)
- 4. Revenue: Number of people that accepted the offer
- 5. Referrals: Number of leads that came through referrals

Post-launch, you'll redefine these steps differently; I'll cover that in more detail in Chapter 12. If you can use third-party tools to measure some of these metrics, that's great, but don't overthink this. It's perfectly okay to manually measure these steps at the beginning.

At LEANSTACK, for every new product we launch, we usually create a slide deck with a slide for each week and manually fill these in every Monday morning (see Figure 10-3).

---- NOTE

You can download a blank customer factory dashboard template from the LEANSTACK website.

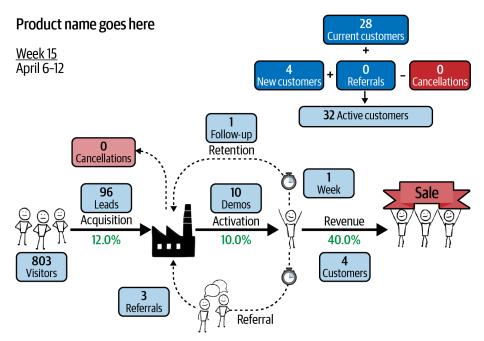


Figure 10-3. Customer factory pre-launch metrics dashboard

Identify Your Key Constraint

Once you baseline your weekly metrics, work backward from your call-to-action step (Revenue) and look for bottlenecks. Bottlenecks are places where you find:

- Lots of people waiting (long cycle times)
- Lots of people leaving (high abandonment rates)

Prioritize your top bottleneck as the constraint to tackle first.

Formulate Ways of Breaking the Constraint

Remember that the constraint only points to the top bottleneck; it doesn't necessarily tell you why it's occurred.

If your constraint is due to lots of people waiting at a step, chances are high that you have a resource (people) constraint. For example, you might be generating 10 leads a week but conducting 5 pitches a week, due to poor follow-up. In this case, look for ways to automate that step (e.g., use a calendar scheduling tool) or get additional help (e.g., a virtual assistant).

If your constraint is due to lots of people leaving at a step, chances are high that this is due to a (sales) process constraint. For example, prospects may not be buying because they perceive your pricing is too high, or people may not be signing up for a demo because your promise (UVP) doesn't grab their attention. In this case, solutions often come from further analysis of these unaddressed objections, which can be done either by actively listening during pitches, postprocessing your pitches, or simply asking your prospects.

Steve Meets with the Team to Review the Results of Their First Offer Delivery Sprint

Lisa leads off the conversation. "The long holiday pushed some of our pitches to next week, so we only got one pitch done."

"I'll take some of the blame for slowing us down on the demo," Steve admits. "I wasn't 100% happy with the quality of the rendering and took a few extra days to tweak things."

"Remember that perfect is the enemy of done," Mary jumps in. "I know, Steve, that you want to showcase the best possible solution here, but speed of learning trumps perfection. You have to recalibrate your definition of *good enough* by measuring against the customer's existing alternative, not your ideal standard."

Steve nods silently in agreement. Mary then asks how the pitch went.

"The architect loved the demo but balked at our pricing," Lisa replies. "We tried anchoring against the cost of 3D renderings, but they don't use them today. He described 3D renderings and VR as a nice-to-have and was really adamant about not incurring more costs."

Mary nods. "Sure. First, don't be discouraged, because this is just one conversation. Early pitches are great learning opportunities, and they're how you iteratively optimize your pitch. My advice would be to pre-qualify the prospect even further. The current pitch is aimed at switching firms from 3D renderings to VR as a service. If they aren't currently creating 3D renderings, you either have to build another pitch or disqualify these prospects as early adopters."

"Do you recommend one approach over the other?" asks Lisa.

"Getting customers to adopt brand new technology is always harder at the beginning, which is why I'd vote for disqualifying prospects that aren't currently using 3D rendering," replies Mary.

"I agree," Josh jumps in. "I think the switching comparison is a lot easier to make when we're asking them to fire a software solution instead of their current processes."

"Good point," Mary responds. "So yes, let's focus on pre-qualifying firms and aim to run a lot more pitches in the next two-week sprint."

"I'm on it," Lisa says. "I'm scheduling demos with seven firms, and I will pre-qualify them before we book the demos."

When Are You Done with Offer Delivery?

You're done with offer delivery when either of these things happens:

- You hit your problem/solution fit traction criteria, as defined by your traction roadmap.
- You run out of time—i.e., reach the end of your 90-day cycle.

In both cases, move to review your 90-day cycle and use your learnings to make an evidence-based decision on what's next.

Run a 90-Day Cycle Review

At the end of the 90-day cycle, irrespective of where your customer factory metrics end up, you need to get your team together for a 90-Day Cycle Review Meeting.

This is where you review what you did and what you learned, and decide on what's next. A common regret many teams have is waiting too long to pivot their idea. They hang on to a failing idea or validation campaign in the hopes that things will eventually turn around, until it's too late. The 90-day cycle review (Figure 11-1) keeps you accountable by forcing you to confront the reality of the present and make decisions for the next cycle—either stay the course (persevere), pivot, or pause.

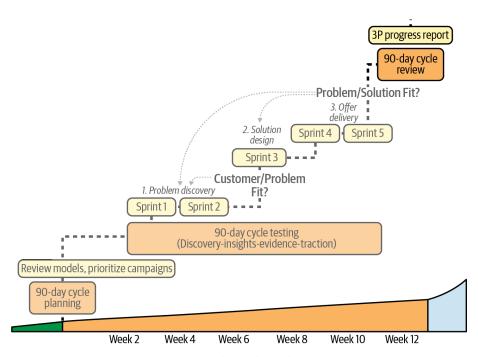


Figure 11-1. The 90-day cycle review

Steve Calls a Pre-Review Meeting Just with Mary

"What happens if we don't hit our 90-day OKR? I know we only need to sign up two customers...but what if no one signs up?" Steve asks Mary.

"First, I want to remind you that you don't just need to sign up two customers, you need to build a system (a customer factory) for repeatedly signing up two customers per month for the next several months," Mary responds.

Steve laughs nervously. "That's right, and that's an even scarier thought. If we don't close any customers, is that OK? Can we extend our traction roadmap timelines?"

"You tell me," Mary says. "Remember that your traction roadmap represents your *minimum* success criteria curve that you came up with, Steve. Think of it as the waterline on a beach. As you walk into the water, what happens when you go below the waterline?"

"You hold your breath?" Steve answers.

"Yes, that's right. But you can only hold your breath for so long. While it's okay to go below the waterline for short periods of time, you should be fighting to get above the waterline as quickly as possible."

"What is as quickly as possible in this case?" Steve asks.

"Well, it's been shown statistically that more than two-thirds of business models require a drastic pivot due to the highly uncertain nature of the early stage. So, it's fairly common for teams to miss their first 90-day OKR and take an additional 90-day cycle to find problem/solution fit."

"Okay, that makes me feel a lot better. So if we don't make any sales, technically we can pivot and give ourselves another 90 days to achieve problem/solution fit?"

"Technically, yes. But remember that a pivot still needs to be grounded in learning. What determines your next action isn't simply hitting or missing the goal, but what you learned during the 90-day cycle."

Mary pauses to take a sip of her coffee, then continues. "Steve, I can sense that you're a bit anxious. Is there more to this conversation?"

"Yeah...I'm trying to prepare as best as I can for the 90-day review. Since I brought Lisa and Josh into this project, I don't want to let them down and see them leave because we didn't hit the goal."

"I get that Steve, but remember they are cofounders in this project and just as accountable. The power of using this framework comes from holding all the players accountable—especially your business model."

Steve chuckles. "I'm being serious. Have you heard of the Stockdale Paradox?"

"Yes, I remember reading about it in Jim Collins's book *Good to Great*. Isn't it about confronting brutal facts?"

"Here, I pulled it up on my phone so I can read it verbatim:

Every good-to-great company embraced what we came to call the "Stock-dale Paradox": You must maintain unwavering faith that you can and will prevail in the end, regardless of the difficulties, and at the same time, have the discipline to confront the most brutal facts of your current reality, whatever they might be.

"This is also the key to practicing the CIF. Challenge your beliefs rigorously, but have faith in yourself and your team that you will prevail in the end."

Preparing for the Meeting

You'll open the 90-Day Cycle Review Meeting by delivering a 5- to 10-minute business model progress report that walks your team through initial assumptions/goals from your Lean Canvas and traction roadmap, what you did during the 90-day cycle, and what's next.

If you've been disciplined about running sprints, documenting your experiments, capturing insights, and measuring metrics along the way, the preparation required for a 90-day cycle review is minimal.

In this section, I'll cover the artifacts you'll need to collect/update in order to assemble a progress report pitch deck, and what that deck should look like. In the next section, I'll cover how to run the review meeting.

Collect/Update Artifacts

For each business model variant that you've been exploring, you'll need an updated elevator pitch, Lean Canvas, and traction roadmap.

Elevator pitch

Revisit and update your elevator pitch based on your latest learnings from your offer delivery sprint(s). As a reminder, here's the template from Chapter 5:

When [customers] encounter a [triggering event],

they need to do [job-to-be-done] in order to achieve [desired outcome].

They would normally use [existing alternatives],

but because of [switching trigger] these [existing alternatives] have [these problems]. If these problems are left unaddressed, then [what's at stake].

So we built a solution that helps [customers]

achieve [desired outcome] by/with [unique value proposition].

You might have noticed already that your elevator pitch is essentially a more condensed version of Acts 1 and 2 from your mafia offer campaign.

The goal of the elevator pitch is to quickly make the case for why your product exists by describing:

- Who it's for (customer segment)
- What's changed (switching trigger)
- What's broken as a result (with existing alternatives) that needs fixing

Your elevator pitch is a powerhouse opener for any conversation, pitch, or business model update, which is why it's important to keep it updated and practice delivering it whenever you can.

Lean Canvas

Make sure your Lean Canvas (Figure 11-2) also reflects your latest thinking, especially on customer segmentation, the problem, the solution, your UVP, and pricing (revenue streams).

Problem List problems worth solving with your true competition	Solution Define MVP	Unique propos List desire outcome Wants ve	ition ed		Customer segments Keep it simple
Existing alternatives List your true competition					Early adopters List one or more triggering events plus other distinguishing characteristics
		Revenue streams List fair price anchored against your UVP and true competition			

Lean Canvas is adapted from Business Model Canvas and is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License.

Figure 11-2. Keep your Lean Canvas updated

If you haven't revisited your Lean Canvas since the start of the 90-day cycle, you may be surprised at just how much has changed in your thinking in a short amount of time. Unlike in traditional business planning, this isn't a sign of weakness, but progress.

Take a snapshot of what your Lean Canvas looked like 90 days ago—this reflects your thinking at that time. During your review meeting, you'll overlay this snapshot with your latest version to highlight what you've learned.

Traction roadmap

Similarly, revisit your traction roadmap. First verify that none of your Fermi estimate input assumptions have changed, such as your pricing model. If they have changed, update your traction roadmap *while keeping your MSC goal the same*. If you change your traction roadmap, first take a snapshot of what it looked like 90 days ago.

Remember, your MSC is a nonnegotiable constraint you impose on your business model that should only be changed with significant deliberation and team/stake-holder input. If a change is required, this is something you can propose during the 90-day cycle review.

Next, plot your actual traction metric—e.g., number of customers signed up to start a trial—and overlay it on your traction roadmap (Figure 11-3). This is the most effective visual for communicating whether you've made progress with your business model. Remember, traction is the goal.

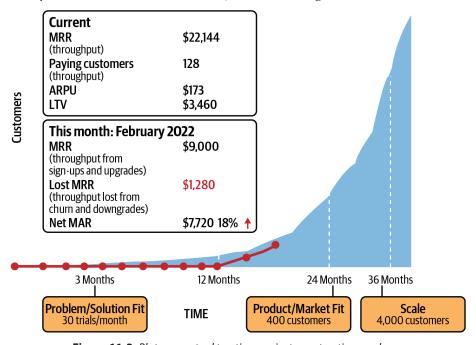


Figure 11-3. *Plot your actual traction against your traction roadmap*

Assemble a Progress Report Pitch Deck

In Chapter 5, I provided a template for a 10-slide business model pitch deck. You'll need to assemble a similar deck for your 90-day cycle review, setting the context for the meeting and reporting on your assumptions from the beginning of the cycle, your actions during the cycle, the key takeaways and results, and what's next. The following sections detail what to address on each slide.

Set context

The opening slides should set the context for the meeting:

Slide 1: Review 90-day cycle objectives

Share the high-level objective of the 90-day cycle (e.g., achieve problem/solution fit) and summarize the number of business model variants you were exploring. If more than one, start with the winning model.

Slide 2: Elevator pitch

Deliver your elevator pitch with supporting visuals.

What we thought

Next, review your thinking from the start of the current 90-day cycle:

Slide 3: Lean Canvas snapshot

Share the snapshot of your Lean Canvas from the start of the cycle and highlight your key assumptions.

Slide 4: Traction roadmap snapshot

Share the snapshot of your traction roadmap from the start of the cycle and highlight the key results you needed to hit to meet your 90-day goal.

What we did

The next slides should address what actions you took during this cycle:

Slide 5: Validation campaigns

Describe the validation campaign(s) you selected at the start of the 90-day cycle.

Slide 6: Experiments

Summarize the experiments you ran—e.g., number of people interviewed, number of pitches delivered, etc.

What we learned

And the following slides should present what you've learned and achieved through those actions:

Slide 7: Insights

Summarize your key learnings. This is where it can be powerful to overlay your latest Lean Canvas and/or traction roadmap updates and highlight what warranted those changes.

Slide 8: Traction

Show your actual traction overlaid on your traction roadmap and summarize the results from your campaign.

What's next

Finally, address your plans for the future:

Slide 9: Current constraint

Share your perspective on the next constraint to tackle (if it has changed) in your business model.

Slide 10: 3P Next action

Use the combination of your traction metrics and assessment of your constraint to propose a 3P next action: persevere, pivot, or pause.

Remember the visual of the Idea Labyrinth I shared back in the Introduction to the book? The journey to product/market fit will be riddled with straight shots (persevere), twists and turns (pivots), and dead ends and backtracking (pauses). Here's how to decide which action to take:

- If you've either met or exceeded your 90-day traction goal, you should *persevere*. Highlight your next 90-day goal from your traction roadmap and describe the key objective for your next 90-day cycle (e.g., build and launch MVP).
- If you did not meet your 90-day traction goal but uncovered some key insights that could potentially fix your business model in the next 90-day cycle—e.g., pivoting to a different customer segment—you should *pivot*. Be wary that a pivot not grounded in learning is simply a "see what sticks" strategy. In order to make a compelling case for a pivot, be prepared to share the evidence behind your recommendation.
- If you did not meet your 90-day traction goal and have either run out of resources or uncovered enough evidence to call this business model a dead end, you should *pause*.

Running the Meeting

The following are some guidelines for running an effective 90-Day Cycle Review Meeting:

Who to invite

Invite your core team, plus any extended team members such as advisors and investors.

Ask for sufficient time

I would suggest scheduling 45 minutes on everyone's calendar.

Use a combination of slides and handouts

As with the earlier business model story pitch, your Lean Canvas and traction roadmap snapshots make for perfect handouts to avoid interruption while leading your audience through the progress update.

Use a 20/80 rule

Plan on delivering your progress update in 10 minutes (20% of the meeting) and use the remaining time to discuss, solicit feedback, and drive decisions.

Solicit advice from your investors (external stakeholders)

Your investors aren't just for money conversations, and if you involve them in the right way, they can be an invaluable asset for unblocking your business model constraints. They see lots of startups and can be a treasure trove of new tactics that could unlock growth in your business model. But they can't share these with you unless they know you need them.

Here's what *not* to do:

- Don't play success theater. Many entrepreneurs tend to share only good news with external stakeholders and hide any bad news for as long as they can. This creates an unsustainable dichotomy over time. Instead, seek to partner with your stakeholders. They want what you want: a business model that works.
- Don't blindly follow what they tell you. Another trap is wanting to follow all the advice you are given, especially when it's coming from someone whom you respect or who is paying the bills. Left unchecked, this does more to distract and derail you than to help.

Here's what to do instead:

- Objectively share your progress update. Plan on presenting the same information to your external stakeholders as you would your core team. When you present skewed or selective data to external stakeholders, their advice will be much less helpful. Try not to seek validation.
- *The buck stops with you*. Always, remember that you are the ultimate stakeholder (investor #1) in your own business. You don't get a gold star for following advice, but for achieving results.

Run a tight agenda

No one wants to spend needless time in meetings, so come prepared and keep it tight. I've provided a sample agenda you can use in the following sidebar.

90-Day Cycle Review Agenda (45 Minutes)

Welcome (set the stage)

(2 minutes)

Set the stage for the meeting by quickly running through the agenda:

• Progress update (uninterrupted): 10 minutes

• General discussion (Q&A): 15 minutes

Solicit advice: 15 minutes3P decision: 3 minutes

Deliver progress update (uninterrupted)

(10 minutes)

Deliver your progress update, using the slide deck and artifacts you put together in the previous sections.

General discussion (Q&A)

(15 minutes)

Attendees can use this time to ask questions about the progress update and seek clarification on how you may have arrived at certain insights, including how and why you selected your winning business model variant if you were exploring multiple variants. Be prepared to pull up experiment details, Customer Forces Canvases, and/or metrics (if needed) to back up any of your claims.

Solicit advice

(15 minutes)

Seek alignment on your assessment of the current constraint and solicit feedback on your next action proposal (persevere, pivot, or pause). Remember that just as in the 90-Day Cycle Kickoff Meeting, the goal here isn't brainstorming new campaigns, but rather aligning the entire team on the current reality of your business model, and starting some discussion on your next 90-day cycle OKRs.

3P decision

(3 minutes)

Wrap up the meeting by summarizing the 3P decision and scheduling your next 90-Day Cycle Planning Meeting. Note that you won't need another 90-Day Cycle Kickoff Meeting to align your team members, as this meeting does that job.

Steve Calls a 90-Day Cycle Review Meeting

"I see smiles, so I'm guessing the cycle ended well," Mary says.

Steve replies with a grin, "More than well. I can't wait to deliver the update."

He begins by quickly reviewing the current cycle's objectives and what the models looked like at the start of the cycle.

"You all know that we moved away from the Software Developers business model and homed in, no pun intended, on Home Construction, with an initial early adopter focus on architects that currently use 3D renderings with clients."

Lisa and Josh smile and roll their eyes.

"While we were off to a rocky start, we made a big breakthrough in just the last sprint. We were pitching Altverse as a way for architects to shorten their design cycle with clients, but we stumbled into an even bigger job: client education."

He pauses to catch his breath, then goes on. "Architects spend 30–40 hours on average to educate new clients. This includes meeting with them to discuss the design, show them material choices, take them shopping, and help them make design choices. They sometimes explicitly bill for this time, but most of the time they don't, which naturally eats into their profits. The way one architect put it is that this time with clients is simply 'the cost of doing business.' It's to ensure that clients make decisions quickly and that any big design issues are caught as quickly as possible to avoid much bigger problems later. He went so far as to tell us that they budget 10–15% of their overall fee for client education. We know a typical engagement is roughly \$100k, so that's \$10–15k."

Steve sees a smile come across Mary's face, and he keeps going. "That's when we threw out this idea for the firm to hire us on a monthly retainer, where we'd ensure that their clients always had access to a photorealistic rendering of their project with the latest design and material selections. While we'll have to test how much of the education overhead it will eliminate, after seeing the realism of our renderings, the architects were convinced it will make a large

dent. We anchored against their overhead and threw out \$1k/client/mo. They agreed to pilot the service with one of their clients about to start the design phase (three months). We took this same mafia offer to other firms, and were able to convert three out of four of them on the same terms."

Steve then summarized the next steps for the team. "Our next step will be moving forward to finish packaging and delivering the Concierge MVP to these four clients. We should be ready to bring them on in four to six weeks, which matches their timelines as well. Any questions?"

Mary jumps in, "Congratulations to all of you for a job well done. I'm curious—how did you uncover this bigger job around client education?"

"It was the architect who brought this up," Lisa answers. "He was completely blown away by the realism of the rendering and told us that he thought showing this to clients would answer so many frequently asked questions they get from all their clients. He was then curious about our catalog of materials. That's when Steve got up and took a picture of the wallpaper in the conference room, updated the model to use that in the rendering, and showed it to the architect. He almost fell out of his chair. He was sold, and the rest was smooth sailing from there. We built that bit into the standard demo."

"That's amazing," says Mary. "Be sure to keep this architect really close and treat him well. He's definitely an early adopter and someone you want on your side. Is there anything else anyone would like to share?"

Everyone shakes their head.

"Okay," Mary continues, "then I'd like to share a couple of things. First, I mentioned this to Steve already but wanted to reemphasize to all of you as well that even though you're going to be shifting focus to launching your MVP next, you still need to keep your customer factory running."

"You mean to keep pitching and closing more architects?" Lisa asks.

"Yes," Mary replies, "but also investing in automating and scaling your efforts on channels and campaigns. Remember that while the hockey-stick curve starts rising slowly, you need to be constantly thinking about 10x'ing your traction. So in addition to launching, you'll need to scale up your mafia offer."

She lets that sink in and then goes on. "Second, I think it would be a great idea for you, Steve, to deliver this same update with a few tweaks to the two angel investors you spoke to earlier."

Josh asks, "Do you think we're ready to raise investment?"

"You can make that determination when the time comes," Mary replies, "but I think you're ready to start socializing your traction story to early-stage investors, especially since you know you'll be raising money down the road. I also think it's time for you, Josh and Lisa, to make a personal go/no-go decision on joining the team full time. While problem/solution fit can be achieved parttime, the road ahead will require the full commitment of a complete team."

PART III

GROWTH

Achieving problem/solution fit is the first significant validation milestone in a startup. From a business model perspective, this indicates that you have successfully demonstrated sufficient initial demand for your product to warrant moving on to the build stage, which sets you off on your journey toward product/market fit (stage 2).

However, be wary that when you first launch an MVP, lots of things can and do go wrong. When that happens, it's easy to slip back into *viewing* your solution as the product. The typical reaction is to want to build more stuff—especially when it comes disguised as a customer feature request. In short order, your simple and focused MVP quickly devolves into a bloated monster.

While listening to customers is key, you have to know how—and blindly pushing features is almost never the answer. You need to continue to holistically *view your business model as the product* (Mindset #1) and use the same process that got you here in the journey ahead.

More specifically, you need to continue running 90-day cycles where you:

- Define 90-day goals using your traction roadmap
- Identify the key constraints holding you back
- Make bets on campaigns for breaking these constraints
- Systematically test your campaigns using sprints
- Make evidence-based 3P (pivot, persevere, pause) decisions

The Journey Ahead

As we've covered previously, the journey from problem/solution fit to product/market fit takes roughly 1–24 months. While that seems like a long time, it's only six to eight 90-day cycles. In that time, if you're using a 10x growth rate, you'll need to 10x your traction twice.

While the thought of having to 100x your traction can feel overwhelming, it helps to think in terms of systems. One 10x jump is roughly doubling three times ($2^3 = 8$). Since you have six to eight cycles to get to product/market fit, you can frame the mission of each cycle as doubling your traction—i.e., finding one 2x lever for growth.

A systems perspective can also help inform the growth strategies (campaigns) you employ within each cycle. The key deliverable of problem/solution fit was getting your customer factory up and running—i.e., establishing repeatable acquisition. As you optimize your customer factory to achieve product/market fit, you can tackle this optimization process in stages.

That is, we can further break the journey to product/market fit into three substages (Figure III-1):

- MVP launch
- Solution/customer fit
- Product/market fit

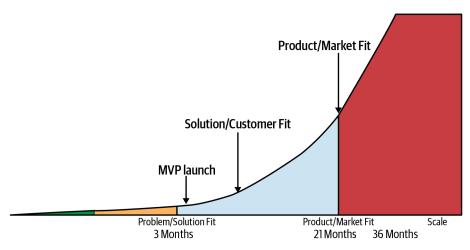


Figure III-1. *Product/market fit substages*

MVP Launch

Your objective here is getting your MVP ready for launch within the next 90-day cycle. This involves not only getting your solution ready for launch, but also laying out a foundation for continually learning from your early adopters.

Solution/Customer Fit

Post-launch, you then focus on validating your value delivery hypotheses—i.e., ensuring that your MVP indeed delivers on your UVP and creates happy customers. The key deliverable at this stage is demonstrating that you can repeatedly activate and retain your early customers.

Achieving solution/customer fit typically takes three to six months for most products.

Product/Market Fit

Once your value delivery hypotheses are validated, your focus then shifts toward accelerating growth. This starts your search for a sustainable engine of growth, which can take another 6–12 months to achieve.

PART III: GROWTH 259

Part III of this book dives into practical steps for navigating these three substages for achieving product/market fit. In these final chapters, I'll show you how to:

- Get ready to launch (Chapter 12)
- Make happy customers (Chapter 13)
- Find your growth rocket (Chapter 14)

Get Ready to Launch

By this time, you definitely understand your customers' needs better than you did just a few weeks ago, and you have a much clearer definition of your MVP. Continue to be wary, though, of the Innovator's Bias. It's still fairly easy to get distracted during this stage and either build too much or build the wrong product.

In addition to staying razor-focused on building out your MVP, you'll need to focus on a few other housekeeping items in order to optimize your product launch for speed, learning, and focus.

Running a big launch campaign or a PR stunt isn't one of those things. Trying to build a lot of buzz or garner media attention for an unproven product is premature optimization. Even if you succeed at generating a lot of traffic to your product, unless you have something compelling to make them stay, that traffic will quickly dissipate.

A much better strategy is to *separate your product launch from your marketing launch*. Your product launch is best implemented as a soft launch to early adopters where your key objective is validating for value delivery (i.e., whether you've delivered on your unique value proposition).

Only when you can *repeatedly demonstrate value delivery* to your customers is a big marketing launch warranted.

This chapter will show you how to optimize your product launch for speed, learning, and focus.

Figure 12-1 shows what this looks like on a 90-day cycle. Aim to build your MVP in four sprints or less (two months), spend a sprint preparing for launch,

and then kick off your early access launch. Note, however, that these are only guidelines, and your mileage could vary based on your specific product.

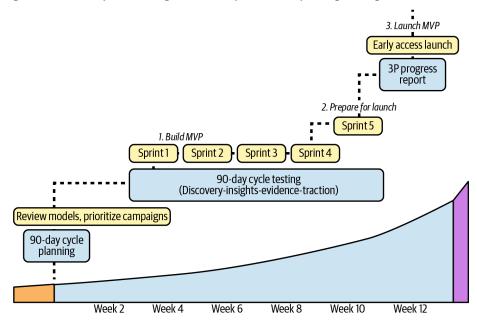


Figure 12-1. Typical 90-day cycle for launching your MVP

The Altverse Team Prepare for Launch

After the last meeting, Steve met separately with Lisa and Josh to start discussions about them joining the company full-time as cofounders. Both were keen to come on board. Steve then presented a stock ownership and compensation plan he had created with input from Mary.

In parallel, he presented an investor pitch to the two angel investors and was in the final stages of raising a small seed round that would allow him to cover payroll for a team of 5 people for the next 9–12 months. Both Lisa and Josh agreed to all the terms and committed to officially join the team.

With his team and runway now secured, Steve kicks off the next 90-day cycle.

"I think we're clear on the two campaigns we need for the next 90 days," Steve begins. "We need to get the Concierge MVP up and running, and continue scaling beyond the mafia offer."

"Given the price point of these deals, I would think that building a direct sales campaign would be the next best campaign recipe to consider," comments Lisa.

"I agree," replies Mary. "You're now ready to focus on systematizing everything you've learned into a repeatable sales process, and I assume you'll own that, Lisa. I would also suggest using some kind of customer relationship management system so that you can qualify and select your most promising early adopters from other later-stage customers."

Lisa nods her head in acknowledgment.

"It goes without saying, but I'll say it anyway: the most important thing for the next several sprints is staying razor-focused on getting the Concierge MVP ready and not getting distracted by shiny objects," adds Mary.

Steve blushes a little while nodding in agreement. "I've locked down the scope of what we'll need. There were a few additional feature requests that came up during the demo, but we can push those to after the launch."

Mary nods. "Sounds good. In addition to getting the MVP ready, you'll also want to start building out a company-wide dashboard. Granted, you'll only be starting with four firms, but including their clients, you'll have 20–30 people using the MVP, and those numbers will grow from here. You'll need visibility into how people are using the MVP to optimize."

"Couldn't we also set up regular check-ins with the architects to get feed-back?" asks Josh.

"That's a given, and the last point I wanted to make," replies Mary. "Simply throwing your solution over the fence to customers seldom works. You'll have to build a systematic process for turning these early adopters into happy customers. That starts with rolling out your MVP in waves or batches, setting expectations up front on success metrics, and establishing frequent check-ins."

"Starting with a Concierge MVP should help with that, I'm guessing?" Josh asks.

"It certainly does as you guys will be the primary customer-facing interface, but you'll still be surprised at how much effort it takes to switch customers from their old way of working to a new way," replies Mary. "But first things first. I'll send you guys some notes on how to get ready for launch. We'll revisit pilot management along the way."

Keep Your Customer Factory Running

Once you've secured your first batch of early customers, it's tempting to completely shift your focus to delivering value to them and wind down your broader customer acquisition activities in order to focus on product development. This is a mistake. Here are some reasons why:

Your customer factory is like a flywheel

It takes a lot of effort to initially get your customer factory up and running, but not as much effort to keep it running. If you bring your customer factory to a halt, you'll have to expend more effort in the future to start it up again, which will cost you time.

Continuously optimizing your customer factory requires a continuous flow of users

Your customer factory is a system of interconnected steps that work together. Optimizing any one part of a system in isolation often ends up hurting your overall system throughput. This is the local optimization trap.

This is why you can't afford to shut off or ignore certain steps. In order to optimize the overall throughput of your customer factory, you need a steady stream of users constantly flowing through the system.

NOTE	
Your goal is establishing "just enough" traffic to support learning.	

Establishing repeatability is a prerequisite for growth

Your customer factory is a system. A key attribute of systems is that they are repeatable. When a factory manager wires up the machines on the factory floor, they first establish a predictable throughput baseline (give or take a small expected tolerance for variability) before undertaking any optimization steps. Your customer factory is no different.

You can't scale a business model that isn't repeatable. Getting to your first 10 customers, while an achievement, isn't repeatable if you don't know where your *next* 10 customers will come from. In order to get to repeatability, you need to keep your customer factory always running.

Look for Ways to Automate Your Customer Factory

An often-underutilized lever for growing traction is automating steps in your customer factory. Too many entrepreneurs focus only on improving conversion rates and ignore another powerful lever: cycle time.

	TIP
Halving your sales cycle has the same effect as doubling your close rate.	Halving your sales cycle has the same effect as doubling your close rate.

Look for opportunities to replace any high-touch interactions in your acquisition and activation steps with more automated touchpoints. Be prepared to

experience a drop in conversion rates whenever you move from a high-touch interaction to a more automated touchpoint, though—your customer factory will require regular tending in order to drive repeatable growth.

Race to Value Delivery

As you transition into product development, it's very easy to get into a state of flow and lose your sense of time. To avoid this, it's critical to be razor-focused on getting to MVP release 1.0 and to fight off distractions. Here are some tips on how to do this:

Set a nonnegotiable launch date and stick to it

Embrace the two-month MVP constraint from your solution design sprint (Chapter 9), and take it a step further: announce a launch date to your early adopters in order to hold yourself externally accountable.

Fight scope creep

More features dilute your unique value proposition. You've gone to great effort to keep your MVP as small as possible; don't dilute it with unnecessary distractions.

NOTE	
Simple products are simple to understand.	

Reduce scope to the first 90 days of usage

An effective way of limiting scope is only building for the first 90 days of usage. Three months is typically enough time for a customer to make a hire or fire decision on any product. Look for other opportunities to defer non-core features to later.

Adopt a continuous delivery strategy

Instead of trying to cram every aspect of your product into your MVP, embrace a just-in-time continuous delivery strategy. Continuous delivery is where you continuously release new features into your product over time using small, short cycles. While this is a commonly used technique in software products, with a little creativity and planning you can implement continuous delivery with non-software products too.

Here are a few examples:

• Tesla shipped its second car, the Model S, without many "promised" features, like programmable seats and autonomous driving. Tesla was careful to ship the cars with all the hardware needed to implement these features and delivered the features later, with software updates.

Playing Lean is a board game that teaches you Lean Startup principles.
The team behind the game implemented continuous delivery by shipping customers new replacement packs and dice as they iterated on game play.

Avoid premature optimization

All your energy needs to be channeled toward accelerating learning. Speed is key. Don't waste any effort trying to optimize your servers, code, database, etc. for the future. Chances are quite high that you will not have a scaling problem when you launch. In the rare event that you do (a great problem to have), most scaling problems can be initially patched with additional hardware, which you can justify because you should be charging your customers—buying you time to address the problem more efficiently.

Get feedback from your early-access customers along the way

Share screenshots and/or invite your customers to live demo events to showcase your progress along the way. This is great for both maintaining interest and gathering feedback from your early-access customers.

Extend Your Customer Factory Metrics Dashboard

A business should be run like an aquarium, where everybody can see what's going on.

-Jack Stack, The Great Game of Business

Now is the time to extend the company-wide dashboard you created in Chapter 10 to include your product metrics as you prepare for launch.

Having a single company-wide dashboard helps your team to align around the most pressing hot spots or constraints in your business model.

Here are some guidelines for how to build out your company-wide dashboard:

Don't drown in a sea of nonactionable data

With the explosion in the number of analytics tools that are available today, it has become significantly easier to measure lots of product metrics.

The common tendency with metrics is to collect and analyze as much data as possible. We live in a world where we can measure almost anything, but instead of getting clarity, we end up drowning in a sea of nonactionable data.

If you have ever used Google Analytics, you know what I mean. Using a tiny snippet of JavaScript code, you can start collecting thousands of data

points. Once you add a handful of other tools to the mix, these numbers quickly explode. Like too much information, too much data is paralyzing.

--- NOTE

You don't need lots of numbers, but a few key actionable metrics.

Start with your customer factory metrics

Revisit your customer factory and remap each step to one or more specific actions your users will take with your product.

For example, here's how we mapped the customer factory for our LEAN-STACK SaaS product:

a. Acquisition: Signed up for a free account

b. Activation: Completed a Lean Canvas

c. Retention: Came back and used the product

d. Revenue: Upgraded to a paid account

e. Referrals: Invited others to their project

As you might have noticed already, all of the steps in the customer factory blueprint are really macro events that mark the most significant actions your customers take. These macro events are usually composed of one or more additional micro events. For instance, before someone signs up for a LEANSTACK account (acquisition), they might click a link on a blog post, visit a landing page, and browse around the site.

The purpose of the company-wide dashboard isn't to capture every substep—just the most significant customer life cycle events. Using fewer metrics not only keeps you from drowning in numbers, but also helps you focus on the right hot spots in your business model (aka constraints).

Macro metrics help determine the general locations of the hot spots, while micro metrics help determine their exact locations (and play a role in troubleshooting).

Don't feed your vanity

One of the reasons measuring the "true progress" of a product is hard is that we prefer reporting good news over bad news. We like charts that trend up and to the right, which isn't intrinsically a bad thing—until we start devising charts that can go nowhere but up and to the right.

Cumulative counts, like the total number of people who have ever signed up for your service, regardless of whether they continue to use it, are the perfect example. While these numbers can flatline, they can never go down. That's the first telltale sign that you have a vanity metric on your hands.

To be fair, there is a place for vanity metrics. They can be used with great effect on marketing websites to build up social proof and ward off competition. But when you use these same metrics as internal measures of progress, they provide only an illusion of progress and prevent you from confronting brutal facts about your business.

NOTE

It is not the metric itself, but how you measure it, that makes it a vanity or an actionable metric.

Strive for actionable metrics

An actionable metric is one that ties specific and repeatable actions to observed results. In other words, you can derive causality. The gold standard for doing this is measuring your customer factory in batches (or cohorts).

The concept of batches is even easier to understand with the factory metaphor. Daily run baselines build on the principle of repeatability and help factory managers quickly detect problems on the factory floor. When a particular batch yields abnormal results, they not only know something is wrong, but can also quickly home in on the problem step.

You can take the same approach to benchmarking a customer factory. You start by grouping your users into daily, weekly, and monthly batches based on their join date (or sign-up date). Then, you measure their significant user actions as they progress through your customer factory.

—— NOTE

Cohorts help you measure relative progress by pitting one batch of users against another.

While measuring your metrics for cohorts is more work than simply measuring them as an aggregate, a cohorts-based approach affords the following benefits, which make it worth the extra effort:

Batches isolate common attributes

If you think of your product as a moving river that is constantly changing, grouping users by their join date groups them into batches that experience your product similarly enough. Together, they establish a baseline or benchmark to beat. This concept of grouping users by a

common attribute can be extended beyond join dates. You can create cohorts by gender, acquisition traffic source, release dates, use of a particular feature, and so on.

Batches make it easier to visualize progress

Comparing the relative throughput of different batches over time provides you with an apples-to-apples comparison. Once you normalize your data and track users as cohorts, numbers moving up and to the right are no longer vanity metrics—they are an accurate measure of progress.

Batches help you home in on causality

If you do see a spike across your batches, it allows you to home in on possible causes by inspecting what changed in the batch. Your next job is to further isolate the effect of that action, possibly by repeating the action and looking for similar results. This is the basis of split testing (also referred to as A/B testing).

Summarize your metrics on a single page

While there are lots of great third-party tools for measuring the various steps in the customer factory blueprint, I haven't yet found a single tool that works across the full blueprint. As a result, we at LEANSTACK end up using a number of different tools to piece together our company-wide metrics dashboard on a single page. Figure 12-2 shows an example.

NOTE

You can download a blank company-wide metrics dashboard template on the LEANSTACK website.

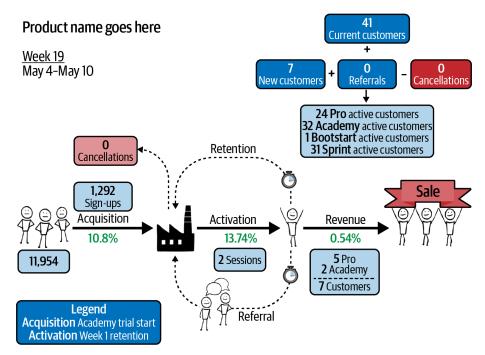


Figure 12-2. Company-wide metrics dashboard

Roll Out Your MVP in Batches

As we've discussed, when you first launch a product lots of things can—and do—go wrong. This is why launching your MVP publicly or to your entire customer list is often a bad idea.

A more effective strategy is soft-launching your MVP in batches, launching the initial version only to your "best" early adopters, then refining it systematically with each subsequent batch of early adopters.

Here's how to formulate a batch rollout strategy:

Handpick your "best" early adopters for the initial batch

If you can't deliver value to your biggest fans, what makes you think you'll be able to deliver value to strangers? Handpick your first batch of early adopters based on who you determined to be the best fit during your mafia offer delivery pitch.

— NOTE -

You don't need a lot of users to support learning—just a few good customers.

It's okay to start with friends or friendly early adopters

Getting a product right is hard, and you don't need to make it any harder. In your first batch, it's okay to recruit your friends or people you already know that might qualify as friendly early adopters, like existing customers from another product. They can help you find and fix any glaring obvious issues quickly, without risk of losing the account.

Recruit your next best set on a motivation scale

Your next best set of early adopters are those that have above-average motivation to use your product. You aren't looking for tire kickers, but those who have a sense of urgency and really want to use your product to achieve a clear and specific desired outcome. Revisit your Customer Forces Canvas notes to determine who these "next best" adopters may be.

Balance your batch sizes against your traction model

Use your traction model to size your batches so that you are always at or above your traction goal while staying within your team's and product's capacity limits—i.e., without compromising on value delivery.

The Altverse Team Launch Their Concierge MVP

Six weeks into the second 90-day cycle, the Altverse team brings its first two architecture firms online. The team has a pipeline of 12 other firms and are steadily signing up 3–4 firms a month for pilots. The team estimates the current capacity limit of its Concierge MVP at 20 firms. They decides to ramp up customers at a rate of one firm per week. This keeps them above their traction goal while balancing their batch size against their current capacity. This strategy will take them out to four or five months from now.

Meanwhile, Steve and Josh will be working on optimizing the slowest parts of the Concierge MVP. Their goal is to double their delivery capacity well before they hit that limit. They are off to a good start and set their sights on meeting their next objective: making happy customers.

Make Happy Customers

All businesses, irrespective of business model type (B2B, B2C, digital, hardware, services, etc.), share a common universal goal: *make happy customers*.

Making happy customers is not the same thing as making customers happy. Making customers happy is easy—just give them lots of stuff for free. But that doesn't lead to a working business model. Making happy customers, on the other hand, is not just about making customers feel good. It's about helping customers to achieve results (desired outcomes).

This chapter will show you how.

The Altverse Team Learns About Behavior Design

Steve kicks off the next team meeting by highlighting their current progress. "At this point, we have eight architecture firms using Altverse, and we've delivered three finished models to date."

"I would have expected more models. Why so few?" asks Mary.

"Some of it is due to delays on their side," Steve responds. "We're waiting for them to get back to us with plans and specs. But while we're waiting, I'm taking advantage of the downtime to build out the pricing module."

"Has anyone pitched the pricing module to the architects, or did they ask for this?" Mary asks.

Lisa and Josh shake their heads.

"Then why are we building this now?" Mary presses.

Steve jumps in. "I thought we'd get ahead of the curve—"

"Demo-Sell-Build isn't just for the MVP," interrupts Mary. "It's how you should validate every major feature that takes on a new JTBD from here on out. But more importantly, until you can repeatedly deliver on the first job you were hired to do, you shouldn't be taking on any additional jobs. This is the Innovator's Bias rearing its ugly head again, Steve. I warned you this would happen."

Mary waits for a nod from Steve, then goes on. "Speed is key, but it's important not to rush into *speed of implementation* without learning. That is the premature optimization trap and a recipe for focusing on the wrong things at the wrong time."

"So is the right thing here to increase the batch size and bring on more customers?" asks Steve.

"No," answers Mary. "The right thing here is understanding why your current customers aren't behaving the way you expected they would. Simply adding more customers is brute-forcing a fix to increase the aggregate number of models and hides the fact that some of your customers aren't engaging with the promise of your product. They'll eventually churn."

"Hmmm...so how do we fix this? We can't force our customers," Steve says.

"Sure, you can't force them, but you can certainly steer them."

"Is this what you meant earlier by managing the pilot?" Josh asks.

"Yes, exactly. Immediately after purchase, customers start out with a high level of motivation to switch, but motivation has a short half-life. Left unmanaged, it dissipates quickly and inertia takes them back to their familiar old way—the status quo."

"I thought inertia applied only pre-acquisition?" Lisa comments.

"No, inertia is simply resistance to changing from the status quo," Mary replies. "Remember your high school physics: an object at rest stays at rest and an object in motion stays in motion unless acted upon by an unbalanced force."

Lisa bursts out laughing. "It's been a while, I can't believe I still remember Newton's First Law of Motion."

"So yes, the first battle is getting people moving toward the top of the metaphorical progress hill, but if this is a job the customer has done before, you have to contend with their past habits built around the old way," says Mary. "That's the status quo."

"Sure, that makes sense. But habits are hard to change. How do we influence them?" Lisa asks.

"The good news is there is a science to behavior design, which is finding its way into product design as well. Acquisition is the first step, but making happy customers requires establishing your product as the new status quo. That means working on activation and retention."

The Happy Customer Loop

Once you've established some level of *repeatable acquisition* in your customer factory, the next most important step is *activation*. This is where value is created for your customers. When you create value for your customers, they reciprocate—allowing you to capture some of this back in the form of monetizable value. But remember that in multisided business models, monetizable value may not be the same thing as revenue.

The activation step is where happy customers are made, and it's often also referred to as the "aha moment" of a product. Notice in Figure 13-1 that the activation step has the most lines leading out of it. This is what makes activation a causal step.

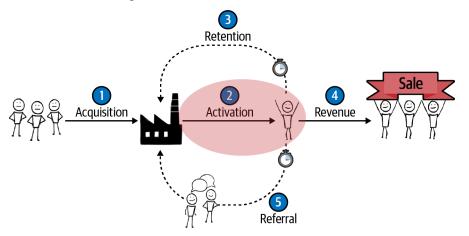


Figure 13-1. Activation is a causal step

Creating happy customers causes:

- More time to be spent with your product (retention)
- More monetizable value to be captured (revenue)
- More goodwill to be spread (referral)

The inverse is also true.

Upon reaching the activation step, the next critical step isn't revenue, but *retention*. Even if you collect revenue upfront at the time of acquisition, unless customers can derive value from your product, they will ask for a refund.

This is why the revenue step is shown after activation in the customer factory figures. Furthermore, delivering value just once usually isn't enough to make your product stick. You need to repeatedly deliver value to customers over multiple interactions to cause a *real* switch.

----- NOTE

Innovation is causing a switch from an old way of doing things to your new way.

A lot of marketers declare victory at acquisition, but acquisition is only the first battle. It's fairly common today for customers to sample multiple solutions simultaneously for a period of time before picking the right solution for them. This is true across every product type, whether it's B2C or B2B, digital or physical.

The activation and retention steps, taken together, form a happy customer loop, as shown in Figure 13-2.

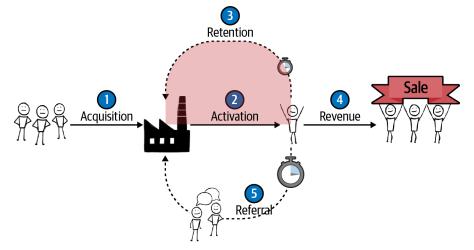


Figure 13-2. *The happy customer loop*

Some products may require just a few cycles through the happy customer loop to cause a switch. Others may need more passes to convince the customer to completely fire their old way of getting the job done and hire your new way. This is the actual *switch moment* when your product becomes the new status quo solution for your customer.

When you first launch a product, optimizing your happy customer loop is where most of your attention should be focused. Figure 13-3 shows what that looks like on a 90-day cycle.

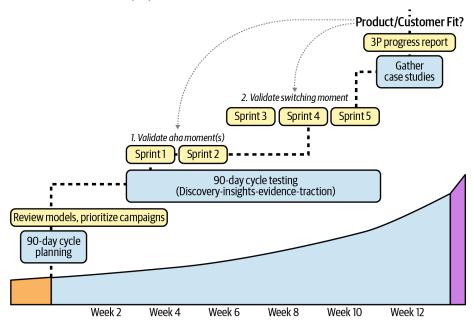


Figure 13-3. Typical 90-day cycle for optimizing your happy customer loop

The initial user experiences that customers have with your product need to get them to activation, or an aha moment. Activating your customers causes subsequent revisits (retention), and these revisits need to continuously reinforce the promise of your unique value proposition and get your customers closer to their desired outcomes. That's when you cause a switch.

Plan on using two sprints to get customers to the aha moment and three sprints to get them to their switching moment, and reserve one sprint at the end to gather your learnings into case studies. Note, again, that these are only guidelines, and your mileage may vary based on your specific product.

In this section, I'll share some tips on how to optimize your happy customer loop—but let's start with what *not* to do.

Don't Be a Feature Pusher

In a great market—a market with lots of real potential customers—the market pulls the product out of the startup.

-Marc Andreessen, The Pmarca Guide to Startups

When you first launch a product, a typical reaction is to want to build more stuff—especially when it comes disguised as customer feature requests. Remember that customers, too, are prone to the Innovator's Bias. Most customer feature requests are solutions disguised as problems. Even when you build exactly what they ask for, they often don't use it because it doesn't solve a real problem.

When you start adding lots of new features to your MVP, you quickly find yourself back in the old world. In short order, your simple and focused MVP devolves into a bloated monster.

Even after your product launch, listening to your customers is key—but you have to know how. Blindly pushing more features is almost never the answer. So how do you balance your natural urge to want to build more?

Implement an 80/20 Rule

A good rule of thumb for prioritizing focus on optimizing your happy customer loop is implementing an 80/20 rule (Figure 13-4). This rule says that most of your time immediately after launch (80%) should be spent measuring and improving existing features, rather than chasing after new shiny features.

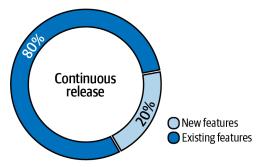


Figure 13-4. The 80/20 rule

Prevent a Switch

Before acquisition, innovation is about *causing* a switch from the existing alternatives to your product. After acquisition, innovation is about ensuring customer activation and *preventing* a switch from your product to existing alternatives.

The best way of preventing a switch isn't by locking in your customers with draconian policies or taxing them with high switching costs, but by getting the job done better than the competition.

What does better mean? During the problem/solution fit process, you used the Customer Forces Model to uncover the axes of better in order to position your product uniquely against the existing alternatives (Chapter 9). Now you need to deliver on the promise of your UVP.

Outlearn the Competition

One of the Innovator's Gift's tenets is that there is no such thing as a perfect solution. Problems and solutions are two sides of the same coin. Even your awesome new solution, once launched, will create problems of its own.

The key to staying relevant to your customers and growing your business model after launching your MVP is not to throw more features at them, but rather to continue to uncover problems within your own product, and address them before your competitors do.



Remember: speed of learning is the new unfair advantage.

Reduce Friction

Use the force, Luke!

-Obi-Wan Kenobi, Star Wars

You uncover problems in your product the same way you did with the existing alternatives—by using the Customer Forces Canvas. This time, however, you study the forces that PUSH or PULL your early adopters toward or away from their desired outcomes as they use your product.

While a common tendency is to double down on those forces, these aren't the most effective places to focus. Your early adopters were motivated enough to sign up for your product, which means the PUSH of their situation combined with the PULL of your product were enough to get them to overcome their INERTIA (i.e., doing nothing).

They are now making their way up the hill in the hopes of achieving their desired outcomes. But going uphill takes effort, and therein lies another opportunity to learn from your customers.

The most effective place to double down on effort after acquisition is reducing the one detracting force that slows your customers down (FRICTION), as shown in Figure 13-5.

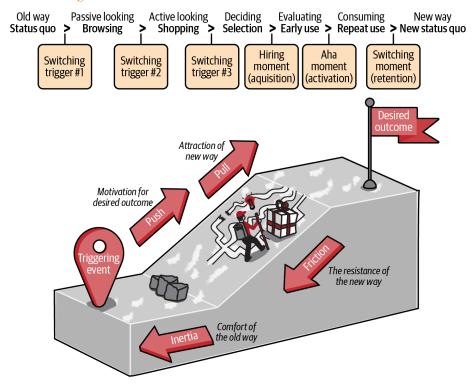


Figure 13-5. Reducing friction

There's more to reducing friction than improving your product's UX

One obvious way to reduce friction is to make your product as easy to use as possible. While investing in a good user experience (UX) is key for any product, that usually is only one part of the solution. Why? When your customers switch to using your product, they go from being *experts* in their old way to *beginners* in your new way. This takes them out of their comfort zone.

At the outset, you have to contend with your customers' anxieties around adopting a new way that is still largely unproven in their minds. You also have to contend with another detractor—their comfort and familiarity with the old way.

Adopting anything new takes effort. Doing things the way they've always been done (the status quo) takes less effort, even if it's riddled with problems. Why? Because your customers have had enough time with the old way to either learn to live with the problems or implement workarounds. In other words, you're up against their preexisting habits with regard to the old way.

Getting customers to switch to your product thus requires simultaneously contending with their anxieties about your new way and their habits with the old way. Taking this a step further, if you manage to get your customers to form new habits with your product, your product becomes their new status quo. This is *the best switch prevention measure* against the competition.

- NOTE -

Getting customers to switch from their old way to your new way requires behavior change.

But if you've ever attempted to make or break a habit, you know that habit change is hard. Motivation alone is seldom enough. The good news is that there is a science to how habits work, which you can use to systematically optimize your happy customer loop.

Learn the Science of Habits

I first learned about the habit loop in Charles Duhigg's groundbreaking book *The Power of Habit* (Random House). He describes the habit process as a loop with three steps (Figure 13-6):

- 1. A cue or trigger prompts you to take action.
- 2. A routine or specific action follows the cue.
- 3. A reward lets you know whether the action worked and is worth repeating in the future.

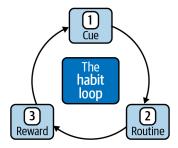


Figure 13-6. *The habit loop*

Ivan Pavlov accidentally stumbled upon the habit loop with his study with dogs that led to the discovery of classical conditioning. Classical conditioning is a type of learning that happens unconsciously, where an automatic conditioned response is paired with a specific stimulus to create a behavior. If you've ever tried to teach your dog a new trick, you most likely used the habit loop.

The habit loop, while simple, leads to some pretty interesting applications beyond pet training. Consider the Pepsodent case study Duhigg shares in his book: did you know that brushing teeth wasn't a daily habit until the 1940s? This wasn't because toothpaste hadn't been invented or because people had healthy teeth—quite the opposite. The state of dental hygiene was so bad in the United States that the federal government declared it a national security risk. It took a marketer at toothpaste brand Pepsodent, Claude Hopkins, to change all that. So what did he do differently?

Like other marketers at the time, Hopkins touted the benefits of clean and healthy teeth, which represented people's desired outcome. But he also recognized that the gap between the current state of dental hygiene and the desired outcome (clean teeth) was too big to bridge with brushing alone—so he introduced an intermediate reward. He had his chemists add mint and citric acid to the toothpaste, which created a cooling and tingling sensation that none of the other kinds of toothpaste provided. This was not only different but, more importantly, provided an immediate (albeit temporary) reward of slightly better breath.

This was the missing *aha moment* that reinforced the action of brushing teeth—the push people needed to come back and brush their teeth again the next day, and then the day after. With each subsequent brushing, their teeth got progressively healthier, and the habit of daily brushing stuck.

While there's nothing magical about the habit loop, deconstructing the habit process into three discrete steps (trigger, action, reward) opens the door to taking control of these steps and designing for behavior change.

Going from the habit loop to behavior design

Behavioral scientist BJ Fogg and his team at Stanford coined the term *behavior design*, and they have been studying human behavior for over a decade. Fogg summarized the key models and methods for behavior design in his book *Tiny Habits* (Mariner).

According to Fogg, a behavior happens when three things converge at the same moment: motivation, ability, and prompt (see Figure 13-7).



Figure 13-7. *The Fogg Behavior Model*

In other words, a behavior happens when a person is prompted with a cue or trigger, has sufficient motivation to take action, and finds the action within their ability.

How does a one-time behavior turn into a habit? Through repetition. Maintaining motivation, keeping the actions within one's ability, and designing the right prompts are all levers at your disposal. A final lever for encouraging repetition is ending the behavior with the right kind of reward—one that signals this behavior is worth repeating in the future.

The Customer Forces Model is a behavior model

You have probably noticed similar terminology across the habit loop, the Fogg Behavior Model, and the Customer Forces Model. That's because the Customer Forces Model is a behavior model. It describes the customer journey as a customer attempts to get a job done.

How it differs from traditional customer journey maps is that it uses a behavioral lens to better understand *why* customers do what they do (e.g., motivation, triggers, aha moment), rather than just capturing what they do.

In the next several sections, you'll use the Customer Forces Model to design an ideal customer journey map with your product and use behavior design principles to optimize your happy customer loop.

Chart a Customer Progress Roadmap

While the promise of a big desired outcome can be motivating at the outset (time of acquisition), once your customers start making their way up the hill, they may find it too high a summit to scale (i.e., beyond their ability). They will also often quickly find themselves in uncharted territory having to learn a new way, which triggers anxiety.

The first step to reducing friction is reconstructing the top of the hill into a series of intermediate summits (Figure 13-8).

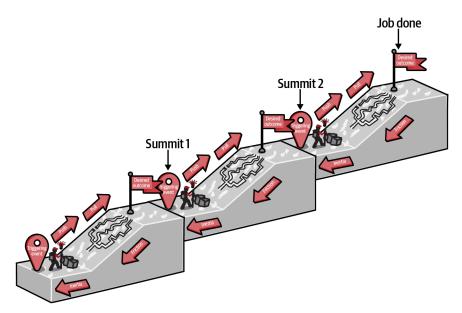


Figure 13-8. Break up the larger job

Each summit represents a smaller desired outcome (aha moment) that reinforces your overall unique value proposition and encourages your customers to continually make progress.

Here are some guidelines for how to establish smaller summits:

Aim to deliver your first aha moment in under 30 minutes

When customers first sign up to use your product, it's critical to get them to their first aha moment as quickly as possible. Pepsodent was able to deliver its first aha moment in under two minutes, which is the dentist-recommended length for brushing teeth. While this may not be practical for all products, aim to deliver your first aha moment in under 30 minutes, which is the average upper limit for how long a customer's first session lasts.

Prefer intrinsic over extrinsic rewards

While a lot of products use badges to gamify rewards, these are short-term motivators. Focus instead on intrinsic, not extrinsic, rewards. Intrinsic rewards come from within, when the customer sees themselves making progress toward their desired outcomes.

Remember, perfection isn't the goal

When defining your first summit, it's common to calibrate it against your ideal desired outcome. Instead, calibrate it based on where your customers

are starting from. The goal of the first summit is to get your customers to do something meaningful that leaves them better off than where they started. Focus on the smallest step they can take.

Prefer doing over learning

Another common tendency is to immediately direct your customers to an instruction manual. Customers don't really want to learn how to use your product; they want results with the least amount of work. Instead of a learning-based first summit, aim for a *doing-based* first summit. Ditch the instruction manual for a cheat sheet or quick start guide that gets them moving up the hill.

Prefer outcomes over outputs

Remember the drill bit example? Customers don't want a quarter-inch hole, they want what comes after. Make sure your first summit delivers a desired outcome, not an undesirable outcome. Aim to satisfy an emotional want, not a functional need.

Progressively level up on desired outcomes with each summit

After your first summit, progressively level up your next set of summits until the overall job is done. A good rule of thumb for designing your summits is using a doubling rule, where mastery of each new summit takes roughly twice the time and effort as the previous one. A good example of this is the martial arts belt system.

Limit what your customer can do at each summit

Features that aren't needed to scale the current summit clutter the path and become cognitive drains (i.e., create friction). Rather than overwhelming your customers with features they don't yet need, limit what they can do, and even better, hide unnecessary features if possible.

Share your customer progress roadmap with your customers

Once you've designed your customer progress roadmap, share it with your customers. Being able to see a clear set of steps for achieving their desired outcomes boosts confidence and helps pull your customers up the hill.

With your customer progress roadmap laid out, let's turn our attention next to how you can utilize triggers, abilities, and rewards to help your customers continually make progress toward their desired outcomes.

Trigger Your Customers

Until using your product becomes ingrained in habit, you can't rely on your customers automatically coming back to use it. You have to explicitly prompt them

Here are some tips for doing that:

Start with setting the right expectations

When your customers first start using your product, it's a good idea to remind them why they signed up, what to expect, and how best to achieve their desired outcomes with your product. This could be done with a short welcome message or quick start guide. If you have a customer progress roadmap, this is the time to share it as well.

Suggest or help customers create calendar reminders

If your product requires regular use, make it easy for your customers to set a reminder on their calendars or help them set up a reminder notification.

Share best practices

Study how and when your best customers use your product and share those learnings as power tips and hacks.

Prompt with the next job to be done as soon as customers complete the previous one

The art of good copywriting is getting the reader to want to read the next sentence. Product retention is no different. If you successfully get your customers to their first aha moment, celebrate their progress (reward), then steer them toward the next summit. This works well with your initial summits as they are smaller, but as you take on larger jobs, you'll need to invest in some additional prompts.

Prompt with regular check-in touchpoints

Out of sight is out of mind. An effective way of staying in-mind is by implementing a regular check-in touchpoint. This could be implemented as a daily or weekly activity report that gets emailed to your customers, or as a weekly check-in call. Whatever the method, make sure to lead with value.

Nudge with behaviorally targeted emails

If you can rely on analytics to determine where your customers are in their journey, use behaviorally targeted emails (life cycle messaging) to nudge them along and help those that get stuck.

Leverage existing routines

By far the most effective way of prompting customers is by integrating your product into their preexisting routines or workflow.

Help Your Customers Make Progress

As your customers get past the initial summits, complexity goes up. You need to step in using additional measures to help your customers continuously make progress.

Here are some tips on how to do this:

Reduce the paradox of choice

It's easy to think that giving your customers more choices with your product gives them more control, but it's quite the opposite. More choice leads to more uncertainty, which leads to anxiety. Be the guide. Give them good starting defaults and recommendations.

Allow them to experiment

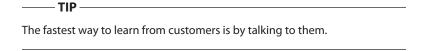
Reduce anxiety and fear of failing by providing your customers with a safe sandbox to experiment with. For instance, a lot of first-time homeowners might more easily drill holes into their pristine walls if the drill had an undo button. Short of that, a drill manufacturer could invite new homeowners to a free workshop at the neighborhood hardware store where they could experiment on practice walls.

Invest in good user experience (UX) design

Our customers don't see what we see because we're too close to the solution. Invest in good UX design best practices and run regular usability tests. Strive to make your product as intuitive as possible—as Steve Krug says, "Don't make me think."

Provide high-touch support

A great way to not only reduce your customers' anxiety but also quicken your speed of learning is offering high-touch support to your first few batches of customers.



When you don't yet have lots of customers, you can afford to provide live training, meet regularly, and be highly responsive to individual customer issues. However, this won't be scalable as your customer base grows, which is why you need to also invest in the next step.

Continuously improve your product

As you uncover issues and problems with your product through your hightouch support channel, continually invest in improving your product's usability and documentation. Make it a policy to tolerate product mistakes only once.

Share customer case studies

Showcasing your customers that are making progress and/or achieving their desired outcomes is a great way to motivate other customers earlier in their journey. But be wary of only highlighting the success path—all hero (and customer) journey stories are riddled with struggle. That's what makes them real and believable.

Make giving feedback easy

Provide multiple backchannels, like online chat, email, phone, etc., for your customers to contact you.

Reinforce Progress

As we've covered already, the best kinds of rewards are intrinsic rewards that help your customers see the progress they are making. Here are a few additional ideas for how to build in other kinds of rewards:

Build progress indicators

Build feedback loops, dashboards, and reports that help your customers experience the progress they are making.

Celebrate customer wins

Take the time to acknowledge major customer milestones and celebrate their successes. Celebration is a type of reward.

Give meaningful gifts

Use meaningful gifts to reward and acknowledge your customers as they make progress. Meaningful gifts aren't about you or your brand, but about the customer. For example, at LEANSTACK we send out a "Love The Problem" t-shirt to customers who complete our Business Model Design course, and a "Practice Trumps Theory" hoodie to those who complete our intensive 90-Day Startup bootcamp. You can't buy these items—they have to be earned. That's what makes them meaningful.

The Altverse Team Calls a 90-Day Cycle Review Meeting

By the end of their third 90-day cycle, the Altverse team has published six case studies, which include numerous testimonials and powerful stories from happy architects and even happier clients.

The team has managed to instill the Altverse VR model as an artifact architects use in all their client meetings to make design decisions.

Already a few architects are starting to ask about more features, and the team is getting ready to pitch the next job-to-be-done: price estimation. This will potentially extend the customer lifetime from 3 months (the initial design phase) to the full lifetime of the project, which could be 9–12 months.

Steve has hired two more developers and made substantial progress on automating the Concierge MVP, reducing model turnaround time from a day to under 30 minutes. Within the next 90-day cycle, the team anticipates that this will be fully automated.

Word of mouth is starting to set in, and the team is fielding inbound demo inquiries from architecture firms around the world. While they need to continue to stay focused on value delivery, they're starting to set their sights on finding a repeatable and scalable engine of growth.

Find Your Growth Rocket

Once you start to see predictable repeatability in your happy customer loop—that is, when your initial customer segments continue to demonstrate regular use of the product and are making measurable progress toward their desired outcomes, as evidenced by customer check-in interviews, dashboards, etc.—it's time to shift some of your focus toward growth. By "growth," I mean building a scalable channel or a growth rocket.

Up until now, you have relied on fairly high-touch (nonscalable) interactions for acquisition and value delivery in order to prioritize speed of learning over scalability. But in order to continue to deliver on your 90-day traction model goals, which should be getting increasingly more challenging, you need to start searching for more scalable paths to customers. While you may have outlined a few possible scalable channel options on your Lean Canvas, you need to identify which ones to double down on in order to get you to product/market fit and beyond.

Identifying your scalable channel or growth rocket can be a multicycle process, which is why I recommend starting early. This chapter outlines the high-level process for doing so.

The Altverse Team Learns About Growth Rockets

At the end of their latest 90-day cycle review, after Steve aligns the team on the next cycle's goal, assumptions, and key constraint, Mary makes the following suggestion. "In addition to focusing on your constraint—continuing to drive retention—during the next cycle, I would recommend allocating 20% of your time to finding your primary growth rocket."

"A growth rocket?" asks Lisa.

"Yes," replies Mary. "We often draw the hockey-stick curve as a smooth curve, but if you chart a startup's actual growth curve, you'll find that it isn't so smooth after all. It's made up of a series of staircase jumps. Since a lot of people draw parallels between startups and rocket ships, think of your mission as sending a rocket ship to Mars. You can't do that with a single rocket. You need multistage rockets that fire at different points in the journey. Each rocket is responsible for getting your ship from one staircase jump in the hockey stick curve to the next."

"I love this metaphor," Steve jumps in. "So if each rocket here represents a customer acquisition channel, where does the customer factory fit in?"

Mary smiles. "I knew you'd like it. If a rocket is designed to create customers, the customer factory describes the inner workings of the rocket's engine. Each rocket contains its own engine and propellant, or fuel. Even though we've been viewing the business model as a single customer factory so far, there are in reality many different customer factories, or rocket engines, at play."

"I can see that," Lisa remarks. "We're currently using direct sales, events, and some referrals to acquire customers. Each of these channels performs quite differently. I'm guessing that each of these are examples of rockets with their own customer factory engines?"

"You got it," responds Mary.

"I see how the engine maps to the customer factory," Steve says. "What's the propellant in this metaphor?"

"The propellant is the fuel that powers the rocket's engine," Mary explains. "All engines require energy to run, and different engines require different types of fuel. The most commonly used fuel at the early stages of startups is founder time or sweat equity, but as you know, this is the most expensive type of non-renewable fuel. Over time, money or capital or even your users and customers can be used to fuel these engines."

"I want to go back to something you said earlier," Josh comments. "You mentioned finding a 'primary growth rocket,' which implies just one rocket. What did you mean by that? Isn't it better to have more growth rockets?"

Mary pauses to see if Josh is done. "Because liftoff requires a lot of energy, you often need multiple rockets to get the rocket ship off the ground. This is done with one or more short-range booster rockets. Think of these booster rockets as the nonscalable channels on your Lean Canvas, such as using warm referrals from your first-degree network to find customers. They have limited range, and once they burn out, each of these booster rockets is ejected to decrease the remaining mass of the rocket ship. Then a new booster rocket takes its place.

You need these boosters to lift off, but they aren't going to get you to Mars. Trying to optimize the engines in the booster rockets past a certain point will start yielding diminishing returns—"

Steve cuts in. "Is the goal of these booster rockets to help the rocket ship achieve escape velocity, and the primary growth rocket is the one that then carries the payload from there to Mars?"

"Yes, although you need to have figured out and tested your primary growth rocket ideally before achieving escape velocity. For a startup, think of escape velocity as the inflection point in the hockey-stick curve, or achieving product/market fit. By then you should have started optimizing your primary growth rocket because it's going to propel you for a while," Mary replies.

Steve throws out a couple of follow-up questions. "Even after escaping Earth's gravitational pull, it's a long way to Mars. Is it reasonable to expect one primary growth rocket to get you there? And how does one even begin picking the right primary growth rocket?"

"There are two different questions there. I'll start with the first," responds Mary. "Yes, when most startups start scaling, they almost always get most of their growth from just one growth rocket. Over time, some may layer on an additional growth rocket, but you always want to start with one for the reasons we've been discussing: limiting the number of campaigns you take on during a 90-day cycle, to align your team and focus."

Mary pauses to let that sink in, then continues to address Steve's second question.

"What makes finding a primary growth rocket particularly challenging for startups is twofold. First, all that startup founders usually see is an array of possible rockets or growth hacks to deploy. Like a kid in a candy shop, they think that surely more is better and start stacking rockets. But remember that too many rockets increases the mass of the rocket ship. This makes achieving escape velocity harder, not easier. The second and more important reason that startups stumble with growth is that they often fail to recognize the key characteristic that distinguishes growth rockets from booster rockets: sustainability."

"By sustainable, do you mean renewable?" asks Steve.

"Yes," says Mary. "Remember *Star Trek*? The starship *Enterprise* was powered by a antimatter warp drive, which was a highly efficient way of traveling through space, and these starships had the ability to gather fuel from space and to even generate antimatter on board. Leaving the science of all this aside for a moment, the takeaway here is that your primary growth rocket needs to have a flywheel or growth loop in its engine that allows it to sustain itself."

"A growth loop?" Lisa wonders. "Would that be like reinvesting revenue from existing customers to buy ads to acquire new customers?"

"That's exactly right," responds Mary. "However, there are certain conditions you'll have to meet to deem the loop sustainable, like making more money from your customers than you spend on ads."

"How about our original idea of launching a publicly browsable directory of client projects?" Josh asks. "I guess the high-level concept would be creating a Houzz or Pinterest for VR models."

"Yes, that's a great example of a user content-powered growth rocket, and it too could be potentially sustainable since you're leveraging the work from existing customers to drive new customer acquisition. This one in particular is also a great example of an initiative that could easily take multiple 90-day cycles to develop and test, which is why you want to start early—as in now," Mary adds.

Steve looks at his watch, then jumps in to wrap up the meeting. "I guess we're out of time. This has all been very enlightening, as always, Mary. I guess we all need to go away for a couple of days and additionally come up with some primary growth rocket proposals. We'll place our bets on the most promising one to take on during the next 90-day cycle...and I'm guessing we'll start testing it using some smaller campaigns and sprints? Do you have some additional guidance here, Mary?"

Mary smiles. "I sure do. It's on its way to your inboxes."

The Rocket Ship Growth Model

The Rocket Ship Growth Model likens launching a new product to launching a rocket ship. Let's start with some anatomy. A rocket ship is made of three basic parts:

- A *payload* that carries the crew or cargo. Think of this as your core product.
- One or more *booster rockets* to get the rocket ship into space. Think of these as your initial nonscalable customer acquisition channels.
- A *spacecraft*, powered usually by a single growth rocket, that then carries the payload to its destination. Think of this growth rocket as your primary scalable customer acquisition channel.

Each rocket, irrespective of whether it's a booster rocket or a growth rocket, contains its own engine and propellant (fuel). Since the job of a rocket engine is to gain altitude (traction), its inner workings are described by the steps in a customer factory (AARRR). Powering a rocket engine takes energy, which comes from the propellant (fuel). Different types of rockets use different types of propellant (time, money, content, users, etc.).

The range of a rocket is determined by the efficiency of its engine and type of propellant. While it's tempting to load up on propellant, be wary that additional fuel adds weight to your rocket ship and can often slow you down. This is why, given a certain type of propellant, the best approach to maximizing the range of a rocket is to start by optimizing engine efficiency (the customer factory).

But optimizing engine efficiency has its limits, which means that beyond a certain point a rocket's range will be dictated by the amount of propellant. Every rocket will eventually burn out...unless you devise a way of regenerating propellant. This is the key difference between growth rockets and booster rockets.



Growth rockets utilize a flywheel (growth loop) in their engine design that regenerates propellant, which drives sustainable growth (traction).

Launching Rocket Ships

As with product launches, rocket ship launches are multistage, including steps for design, validation, and growth. Let's walk through each of these stages, and clarify where we are at this point in the journey (Figure 14-1).

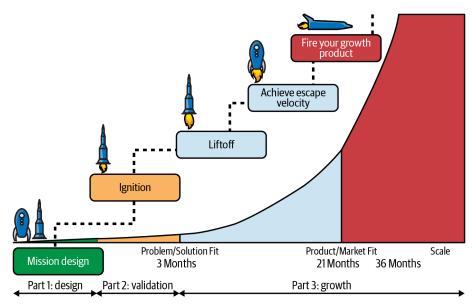


Figure 14-1. The stages of launching a rocket ship

Part 1: Design (Mission Design)

This is where you define your mission (we discussed this in Chapters 1 through 5): where you're headed (e.g., Mars), what your payload is (UVP), how many multistage rockets you'll need (nonscalable channels), how you'll power your spacecraft (scalable channel), etc. Mission design shapes the kind of rocket ship you'll build, much like business model design shapes the kind of product you'll build.

Part 2: Validation (Ignition)

Before attempting liftoff, you need to validate your design assumptions to ensure that:

- If you build it, people will come (desirability).
- It is worth building (viability).
- It can make the trip (feasibility).

To do this, you first reduce the scope to achieve liftoff (MVP), then start learning about, designing, and testing different rocket ship specs (using an offer) with your first booster rocket (the mafia offer campaign). This booster rocket is driven by a customer factory engine and powered primarily by sweat equity (founder time).

Your goal here is establishing repeatable ignition (acquisition)—i.e., achieving problem/solution fit.

Part 3: Growth

There are three substages during the final growth stage: liftoff, achieving escape velocity, and firing your growth rocket.

Liftoff. After validating booster rocket ignition, you prepare your rocket ship for launch. As liftoff requires the greatest amount of energy, you often need to layer additional booster rockets to get your rocket ship off the ground. These booster rockets are also primarily powered by sweat equity in the early stages, and help you accelerate traction for short periods of time.

Examples of booster rockets include things like:

- Early direct sales
- Events
- PR

Achieve escape velocity. Once your rocket ship has liftoff, you then need to turn your attention toward optimizing your booster rocket engines (customer factory) in order to maximize their range (traction) before they burn out. You focus first on optimizing your core happy customer loop, then layer additional booster rockets as needed, and repeat the process. The goal here is achieving escape velocity (i.e., product/market fit).

Fire your growth rocket. As you start achieving escape velocity, you need to prepare for the longer journey ahead. This is when you begin the search for your primary growth rocket that will power the rest of your trip using a sustainable flywheel or growth loop. In the next section, I'll cover the three types of growth loops.

The Three Types of Growth Loops

According to Eric Ries, author of *The Lean Startup*, sustainable growth is characterized by one simple rule:

New customers come from the actions of past customers.

It's easy to see how this works by revisiting our earlier definition of a business model as a description of how you create, deliver, and capture value from customers. Sustainable growth comes from reinvesting part of the value you capture back from your existing customers into new customer acquisition.

There are generally three types of value (assets) you capture from existing customers:

- Money (revenue)
- Content and data (byproducts of retention and engagement)
- Referrals

By reinvesting these assets into new customer acquisition, you build a growth loop that can sustain itself. Let's walk through the different kinds of growth loops.

The Revenue Growth Loop

A revenue growth loop reinvests revenue generated from existing customers to drive new customer acquisition (see Figure 14-2). Money or capital is the propellant here, which is used to buy ads or hire people to run these campaigns.

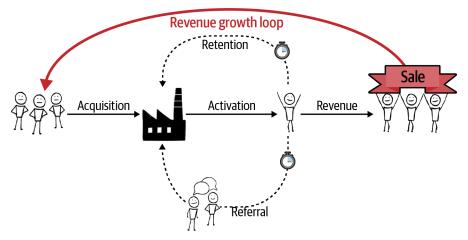


Figure 14-2. *The revenue growth loop*

Some common ways of building out this growth rocket include:

- Performance marketing (e.g., Facebook ads, Google ads, print ads, TV ads)
- Sales (e.g., outbound sales, inbound sales)
- Company-generated content (e.g., newsletters, social media posts)

The money used to drive this growth rocket may come from growth capital (investors), but it needs to be payable over time through customer revenues for the engine to be sustainable.

There are two conditions typically used to test the sustainability of this engine:

- 1. $LTV > 3 \times CAC$
- 2. Months to recover CAC < 12 months

where:

- LTV = lifetime value of customers
- CAC = cost to acquire customers

The first condition aims to allow for enough margins in the business model to enable profit and other operating expenses. The second condition addresses cash flow. If you are unable to recoup the cost to acquire customers within a reasonable time period, you will not have cash on hand to reinvest toward growth.

The Retention Growth Loop

The core retention loop in the customer factory, or the happy customer loop, is used to drive customers back into your customer factory (Figure 14-3). While this is critical for making happy customers and maximizing your customer lifetime, that alone doesn't create a sustainable growth loop.

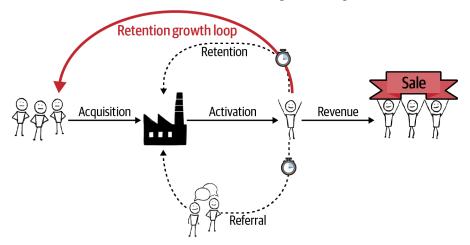


Figure 14-3. The retention growth loop

You can turn the retention loop into a sustainable growth loop if you are able to utilize derivative assets created through usage by your existing customers to attract new customers. Content and data are typically the common propellants here. Some ways of building out this engine include:

- User-generated content (e.g., YouTube, Pinterest)
- Reviews (e.g., Yelp)
- Data (e.g., Waze)

The Referral Growth Loop

The final type of growth loop is built on referrals, where you use your existing users to drive new users into your customer factory (Figure 14-4). Happy users/customers are the propellant here.

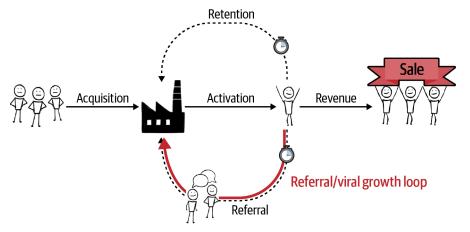


Figure 14-4. The referral/viral growth loop

Building a referral growth loop can be done in many ways, such as:

- Word of mouth
- Referral programs
- Inviting friends/team members

Some people use the term *virality* to define this type of loop, but that's actually a special case of the referral growth loop that makes it sustainable.

In order for a product to be considered *viral*, it needs to have a viral coefficient (K) greater than 1, which is the same as an average referral rate of over 100%. In other words, every user should on average be referring at least one other user into your customer factory. It's easy to see how going viral is the fastest way to grow and also the hardest to build.

There are two metrics used to measure the referral growth loop:

Viral coefficient (K)

This is measured as the number of new users each user refers, on average. When K > 1, the product grows virally.

Viral cycle time

This is the average time it takes for a referral to be made. Your goal is to make this as short as possible.

Products that use the referral growth loop to drive their primary growth rocket are typically inherently viral—that is, sharing is an intrinsic aspect of the product, as in the case of Facebook, Twitter, or Snapchat.

That said, while many products don't go viral, they still leverage this growth loop with great effect through high referral rates as an additional growth rocket to supplement their primary growth rocket.

Can You Have Multiple Growth Rockets?

As you've probably figured out, it is theoretically possible to have more than one growth loop in a business model. But building a single growth loop that works is challenging enough. While it's fine to consider and even test multiple growth rockets in parallel, doubling down on a single growth rocket will give you the highest return on effort.

Finding Your Primary Growth Rocket

What's stopping your business from growing 10x?

—David Skok, General Partner at Matrix Partners

Finding your primary growth rocket is typically a multicycle process that, like a validation campaign, typically involves:

- Short-listing growth rocket candidates
- Validating your growth rocket
- Optimizing your growth rocket

The first two steps can typically be fit into a 90-day cycle, after which you either invalidate the growth rocket and search for another one, or commit to doubling down on the growth rocket.

Let's walk through these steps.

Short-Listing Growth Rocket Candidates

Remember that building a growth rocket requires two things:

- A renewable propellant
- An efficient engine

Start picking possible growth rocket candidates by:

Selecting a renewable propellant

Revisit the three types of propellants (revenue, content/data, and referrals), and select the one that you can use to build a sustainable growth loop.

For instance:

- If you have a direct business model (your users are your customers), you could reinvest revenue into performance marketing.
- If the price point of your product is high enough, you could reinvest revenue into building a sales team.
- If your users create interesting or valuable content that could be used publicly, you could use this content to attract new users.
- If your product has inherent virality built in, you could use referrals to drive growth.

Analyzing your current engine's efficiency

Analyze your current customer factory metrics and use the gap between where you are now and where you need to be to select an appropriate growth rocket candidate that is up to the task.

For instance:

- For a revenue growth loop, start by measuring your unit economics (LTV and CAC). Check that you are within striking distance of meeting the margin and payback period conditions, covered earlier, to make the growth rocket sustainable.
- For a content growth loop, try to assess the value of this content to new users using tools like Google's Keyword Planner to understand search volume for certain keywords.
- For a referral growth loop, look for evidence of high organic word of mouth (>40%) already happening with your product.

Validating Your Growth Rocket

Over the remaining 10 weeks of your 90-day cycle, design experiments and test your key assumptions over sprints in order to validate the feasibility of your selected growth rocket.

For instance:

- If you selected performance marketing, run a few ad campaigns and validate your CAC and payback period assumptions.
- If you selected sales, hire one account executive and validate your ramp-up time, CAC, and close rate assumptions.
- If you selected user-generated content, design an experiment to feature or showcase some of this content publicly and measure engagement.
- If you selected virality, run a few experiments where you reduce sharing friction and see if it drives up your viral coefficient and/or reduces your viral cycle time.

After 10 weeks, make a 3P (persevere, pivot, pause) decision on your growth rocket.

Optimizing Your Growth Rocket

If you successfully validated a possible growth rocket candidate, double down on optimizing your growth rocket engine.

Since many growth rockets require extensive optimization (customer factory tuning), training (e.g., for direct sales), and even product building (e.g., generating content pages automatically, launching referral programs, etc.), you may want to form a small, dedicated team for this initiative.

Measure and report your progress in your 90-day progress reviews.

Steve Makes Mary an Offer She Can't Refuse

It's been 18 months since Altverse launched, and the team is within striking distance of achieving escape velocity (product/market fit) as per the traction roadmap. They were successful at leveraging customer content (VR models) to build a sustainable growth rocket that is driving lots of new homeowners and architects onto their platform. At Mary's suggestion, Steve has been pitching the company to VCs. He's meeting with Mary to give her an update.

"Here, let me show you," Steve says as he walks over to the Eames chair in his office and starts taking a few pictures. A few seconds later, an Eames chair appears in the VR model of Steve's office projected on the big screen.

"Wow, that's impressive," Mary remarks. "It's even in the exact same spot."

"Yup. We use a bunch of tricks to geospatially match real-world objects into the VR metaverse," Steve replies with a smile. "This is the same demo I showed the VC firm yesterday. There was a term sheet in my inbox within an hour of them leaving the office."

"I can see why," Mary responds. "This plays nicely into your second act of moving beyond home construction and bringing retail furniture stores into the business model. There's easily a 10x growth story here."

"Yeah. But you know me. I still have butterflies in my stomach and don't think I can do this alone."

"Hey, don't undersell yourself. I remember when you were talking about pricing your platform at \$50/mo for unlimited projects with an ARPU of \$600/yr. What's your ARPU up to now with architects?"

"Our typical deal size is \$60k/yr, with a number of them that are starting to trend into the six figures."

"That's what I thought. You've come a long way, Steve. I'm really proud of what you've accomplished here."

Steve laughs. "Yeah, I guess. But bringing on a VC is serious business, and I think I'll need to build a seasoned management team."

"Oh, that goes without saying. You're at a stage of the company where—"

Steve interrupts Mary for once. "That's why I'd like you to take over as CEO."

"What?" Mary blurts out.

"We wouldn't be here without you. Looking back, I can't believe how patient you've been with us—and equally ruthless, mind you—calling out our BS along the way."

Steve sees Mary smile and blush a little, and continues. "I could pick your brain on how to build an A+ management team, but I think it'd be much easier if I just ask you to build one instead."

"Well, I'm speechless. I didn't see this one coming. But I'd be lying if I didn't admit that I'm flattered and excited to be considered. I've watched your progress in awe from the sidelines and would love to be a part of this," Mary says.

"It's settled then," Steve says. "We can work out formalities later. I'll forward you the term sheet and let the VC know we have a new CEO."

"You mean a new CEO and a new CTO," Mary corrects him.

Steve laughs. "I guess you're right, boss."

Epilogue

I started this book by stating that no methodology can guarantee success, but I promised a repeatable and practical process for building products—one that raises your odds for success.

I hope you feel I have delivered on that promise.

This book is only the beginning. For more tactical techniques, tools, and in-depth how-to content, join the community of like-minded entrepreneurs and innovators at LEANSTACK Academy.

There's never been a better time than the present to act on your "big idea." Thanks for reading, and here's to your success!

I've summarized the key takeaways from this book as a manifesto, below.

The BOOTSTART Manifesto

1. Entrepreneurs Are Everywhere

While its inhabitants may look different and speak different languages, the world is flatter than it's ever been. We are living through a global entrepreneurial renaissance that can be witnessed in the worldwide explosion of university entrepreneurial programs, startup accelerators, and corporate innovation incubators in just the last five years.

We all want the same things, and fear the same things.

2. The Persona of the Garage Entrepreneur Has Changed

Entrepreneurs are no longer just "guys in a garage." They can be found in all walks of life. The reasons for this sudden spike can be attributed to a few key factors, such as:

Rising student debt

Total student debt in the United States recently crossed the \$1 trillion mark. We are still training the next generation to be workers at an everincreasing tuition cost, but good work has gotten harder to come by. More students are instead seeking out entrepreneurial education and experiences while in college (and even high school)—some with aspirations to build the next Facebook, while others simply want to better equip themselves.

No lifelong employment

With the security of lifelong employment and pensions gone, more people are looking to get in the driver's seat and take control of their destiny. Side-business startups are on the rise.

The need for large companies to innovate, or be disrupted

The pace of disruptive innovation has been accelerating over the last decade. Even previous disruptors are starting to get disrupted by newcomers. This has magnified the increasingly important role of intrapreneurs.

3. There Is No Better Time to Start

What has really accelerated the uptake of entrepreneurship globally is that for the first time in history, we all, more or less, have access to the same tools, knowledge, and resources, thanks to the internet, globalization, and technologies enabled by open source and cloud computing. It is cheaper and faster than ever before to launch a new business, and there is no better time than the present to start.

This represents an incredible opportunity for all of us—but there may still be a dark cloud on the horizon.

4. Most Products Still Fail

While we are building more products than ever before, the sad reality is that the success rate of these products hasn't changed much. The odds are still heavily stacked against starting a new business, and most of these products unfortunately still fail.

And that's a real problem. We pour a lot of our time, money, and effort into these products. Especially for a first-time entrepreneur, these failures can be a real setback, both emotionally and financially.

5. A Dozen Reasons Why Products Fail

Here are 12 reasons we commonly cite for the failure of an idea:

- Lack of funds
- Poor team
- Poor product
- Bad timing
- No customers
- Competition
- Lack of focus
- Lack of passion
- Bad location
- Not profitable
- Burnout
- Legal issues

6. The Number One Reason Why Products Fail

But underlying all of these is one core reason for failure: we simply build something nobody wants.

All the others are secondary manifestations or rationalizations of this brutal reality. Why does this happen? I attribute the entrepreneur's singular passion for their solution as the top contributor to this cause of failure. It's the Innovator's Bias that causes us to fall in love with our solution and makes "bringing our baby to life" our sole mission.

We rush into building, but a build-first approach is backward. It's backward because you can't brute-force a solution without a preexisting problem.

7. The Number Two Reason Why Products Fail

Failing at something requires starting. The number two reason why products fail is that they never even get started. We spend too much time analyzing, or planning, or making excuses for not starting—we wait to first write a business plan, or find investors, or move to Silicon Valley.

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8. You Don't Need Permission to Start

Going back just a decade, starting up was expensive. Getting software licenses to build your product, or office space to meet with your team, required capital investment. The world has changed. Today, all these things are free.

The question today isn't "Can we build this?" but "Should we build this?"

You don't need lots of money, people, or time to answer this question. Instead, you need to keep the following points in mind.

9. Love the Problem, Not Your Solution

It starts with a fundamental mind shift. Your customers don't care about your solution; they care about achieving their goals. Identify the problems or obstacles that get in the way of their goals, and you identify the right solution to build.

Having more passion for your solution than for your customer's problem is a problem.

10. Don't Write a Business Plan

Business plans take too long to write, and nobody reads the whole thing anyway. Create a 1-page business model instead. It takes 20 minutes, rather than 20 days, and people can't help but read it and share what they think. That's a win.

Spend more time building and less planning your business.

11. Your Business Model Is the Product

There is no business in your business model without revenue. Revenue is like oxygen. While you don't live for oxygen, you need oxygen to live. Your world-changing idea is the same. Before rushing to build, make sure that the underlying problems you identified in the previous steps represent monetizable problems worth solving.

The best evidence of monetizable pain is money being spent on an existing alternative.

12. Focus on Time, Not Timing

You can't control the timing of your idea, but you can control how long you spend on your idea. Unlike resources like money and people, which can fluctuate up or down, time only moves in one direction.

Time is your scarcest resource. Spend it wisely.

Time-box everything. The power of a deadline is that it comes due—provided, of course, that the world doesn't come to an end first. Set an appointment with your team to share your results and discuss how you move forward from wherever you end up by the deadline. Set another deadline and go. This is the best way to hold yourself accountable.

13. Not Acceleration, but Deceleration

Optimizing for time does not mean going fast on everything, but rather slowing down to focus on *the right thing*. Pareto's 80/20 rule applies here. Your biggest results will come from just a few key actions. Your job is to prioritize what's riskiest first and ignore the rest, until it becomes what's riskiest.

14. Not Faux Validation, but Traction

The number of features, size of your team, or how much money you have in the bank are not the right measures of progress. There is only one metric that matters—*traction*. Traction is the rate at which you capture monetizable value from customers.

Don't ask people what they think of your idea. Only customers matter. Don't ask customers what they think of your idea. Measure what they do.

15. Remove Failure from Your Vocabulary

The fail-fast meme is all about embracing failure as par for the course. However, the taboo of failure is so crippling that most people work really hard to avoid, sugar-coat, or run away from it. This is counterproductive—what you need to do is instead remove "failure" from your vocabulary. Here's a three-step approach to sidestep big-bang failures and instead replace them with iterative learning:

- Break your big ideas or strategies into small, fast, additive experiments.
- Use staged rollouts to implement your ideas from small to large scale.
- Double down on good ideas, and silently discard your bad ideas.

When you do these three things, you aren't failing, but course-correcting toward a larger goal.

Be brutal with your ideas, but have faith in yourself.

16. It's Time to Act on Your Big Idea

There's no shortage of problems in the world. As an entrepreneur, you are wired differently from most people. You are wired to seek out solutions. All you have to do is channel your attention toward the right problem, and you'll

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leave the world better off than when you entered it. Isn't that all that really matters?

Don't waste this moment. It's time to dust off the ideas deep in the recesses of your mind and take action. It's time to reboot, level up, and start.

Join us at LEANSTACK Academy.

References and Further Reading

The following books (in no particular order) have been instrumental in shaping my thinking on the Continuous Innovation Framework and many of the ideas presented in *Running Lean*:

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- Atomic Habits by James Clear (Random House)
- Tiny Habits by BJ Fogg (Mariner)
- Hooked by Nir Eyal (Novato)
- The Goal by Eliyahu Goldratt (North River)
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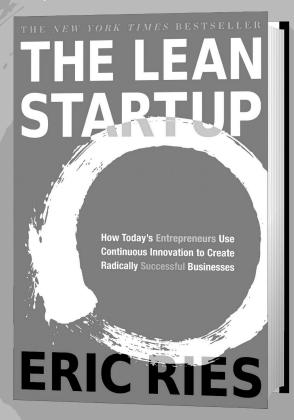
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