

EBOOK

# A Guide to Practical **Product Thinking**

A lean approach to product thinking that will help you understand your product and set your work apart from competitors.

## Practical Product Thinking

Building digital products professionally and working with clients over the decades, there's never a lack of passion amongst teams. However, passion doesn't always translate to the right approach. When organizations become feature factories, it quickly leads to cluttered applications, unsatisfied users, and wasted development cycles.

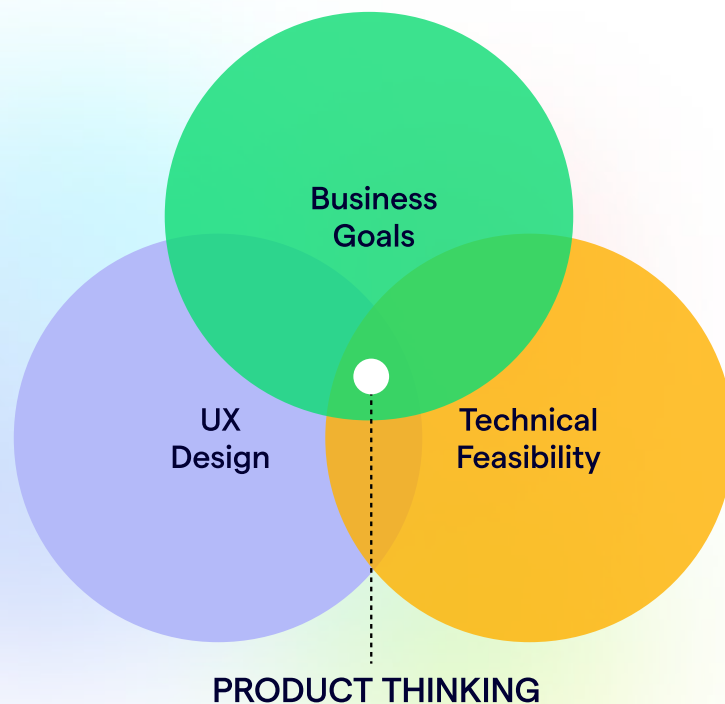
At Quantum Mob, we believe in building products with a vision and the right intention. Ruthlessly prioritize for outcomes, validate hypotheses, and measure success.

We hope this short ebook exposes exercises and processes that are easy to follow to achieve the understanding and validation necessary to bridge Problem-Solution fit on the way to Product-Market fit.

Eric Kim, CEO

## Product Thinking

The process of evaluating and launching products is probably the most important part of any business. This is the engine at the heart of your company, a machine that helps you grow, build, and constantly improve.



Whether you are a startup with a billion-dollar idea or a product owner at an established business, Product Thinking is vital when it comes to growth. Product Thinking translates ideas into reality. In short, it gives you the justification to build a product and the peace of mind to know it will be competitive and even successful. By understanding the market and validating with technology MVPs, companies are able to obtain concrete evidence of demand and ultimately, Product-Market Fit.

# Table of contents

|                                             |    |
|---------------------------------------------|----|
| Before We Begin .....                       | 05 |
| Real World Example .....                    | 07 |
| The Challenge .....                         | 09 |
| Methodology .....                           | 13 |
| A. The Lean Canvas .....                    | 13 |
| 0. PRODUCT DESCRIPTION                      |    |
| 1. CUSTOMER SEGMENTS                        |    |
| 2. THE PROBLEM                              |    |
| 3. SOLUTIONS                                |    |
| 4. REVENUE STREAMS                          |    |
| 5. UNIQUE VALUE PROPOSITION                 |    |
| 6. CHANNELS                                 |    |
| 7. KEY METRICS                              |    |
| 8. CHANNELS                                 |    |
| 9. COST STRUCTURE                           |    |
| 10. UNFAIR ADVANTAGE                        |    |
| B. Finding The Value Proposition .....      | 21 |
| C. Finding PSF (Problem-Solution Fit) ..... | 24 |
| 1. USER PERSONAS                            |    |
| 2. ANALYZE THE HYPOTHESIS                   |    |
| D. Competitor Analysis .....                | 29 |
| E. Build Your Early-Stage MVP .....         | 31 |
| F. Building Technology MVPs? .....          | 33 |
| 1. CLICKABLE DESIGN PROTOTYPE               |    |
| 2. NO-CODE/LOW-CODE PROOF OF CONCEPT        |    |
| 3. TRUE SOFTWARE MVP                        |    |
| G. Get Early Validation .....               | 36 |
| G. The Design Sprint .....                  | 37 |
| H. Roadmap .....                            | 39 |



## Before we begin, consider this example.

A baker is considering adding products to her display case. The bakery down the street is doing chocolate chunk cookies and she doesn't have that kind of offering and instead offers delicate French pastry aimed at a different audience. A beloved cookie could encourage new customers to come in, right?

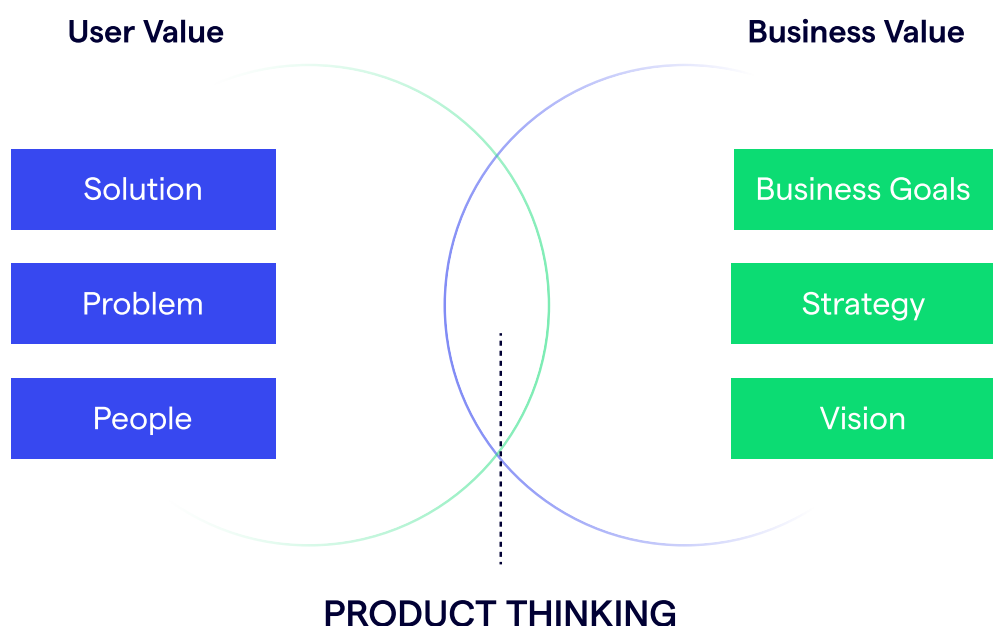
But our baker doesn't just dump a box of cookies into her display case and hope the world buys them. The investment needed to add another type of cookie versus the investment needed to maintain her current selection is disproportionate with the risk associated with adding another product to her case.



# How does she add a new cookie, then?

She creates a new recipe, bakes a few dozen cookies, and shares them with friends, family, and customers. She watches their reactions, gauges their preferences, and tweaks the recipe until she gets it right. She also speaks with customers and begins to understand that they visit her not because she is selling humdrum chocolate chip cookies but because they love her madeleines and the like. In fact, none of them even like the chocolate chunk cookies from down the street but would love her to riff on her current products to make them a little more interesting to first-time buyers.

**This is Product Thinking.** This process of trial and error. Just as bakers might taste test and iterate their product with future customers & friends, through free samples, coupons, and blind taste tests, organizations have a multitude of tools and processes at their disposal to ensure they discover, prove, and iterate their digital products.



# A Real World Example

One company recently learned that Product Thinking could fix errors in their launch plan. The company, a 400-person financial services provider based in Vancouver, found itself in the same position as our baker. They thought they needed a new mobile app. But they had a problem: they wanted to be everything to everybody.

The team originally looked at its competitors and decided they would add every feature they saw. Their reasoning? If competitors had these features, then their users would want them as well. Without Product Thinking, the team listed a bucket-full of features and set out to slather them on the app. They didn't test the features with potential customers, they didn't even ask their core knowledge experts whether or not they ever used the features. Instead, they used the "spray and pray" method of app design and hoped that a mix of everything would encourage a positive experience.

The client never asked the simple question "What do our customers need?" They never thought hard about the product they were building and instead focused on the products their competitors built. By switching their point of view, they were able to create a product that was at once usable, concise, and extremely popular.

In this document we will outline an iteration of the Product Thinking process and offer multiple strategies for you and your team to follow when thinking about how to build your next offering. These strategies are deceptively simple but vitally important.



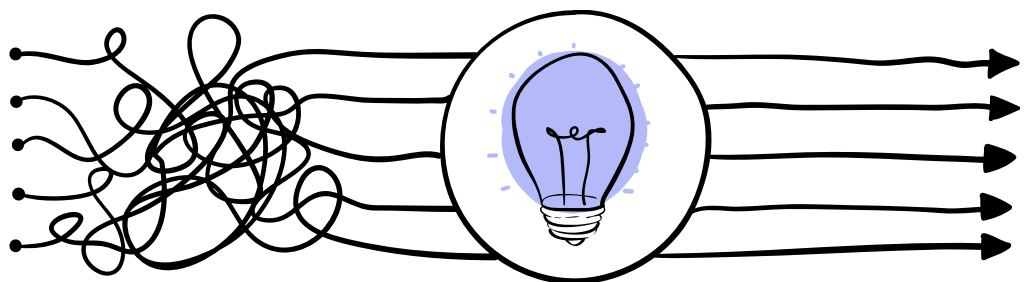
Our product process

In this document we're offering the best processes we've discovered during product launches in hopes that it helps you be as successful as both that Vancouver-based finserv company and our imaginary baker. And the first step to success is understanding the challenges faced by new products in a constantly shifting market. In many cases, the extent of product preparation for most businesses consists of a simple equation: we have a budget so we should build. By applying Product Thinking, we reduce risk, expenditure, and uncertainty while increasing the possibility of a successful launch.

# The Challenge

The primary challenge in any business is finding clarity. The risks associated with blind thinking are too great and, simultaneously, the processes available often offer unclear or even opaque answers. The result? Analysis paralysis, a feeling of helplessness in the face of complexity, and, in some cases, a tendency to make snap decisions without sufficient information.

Further, the process of idea capture is often considered second to action. As the old saying goes, 90 percent of all success is preparation. The remaining 10 percent is success built on that preparation.



Startups often talk of Product-Market Fit. This concept, which consists of successfully finding a buyer for what you believe you can sell, is at the heart of most product decisions. But too many projects find themselves never solving a more pressing earlier issue: Problem-Solution Fit.

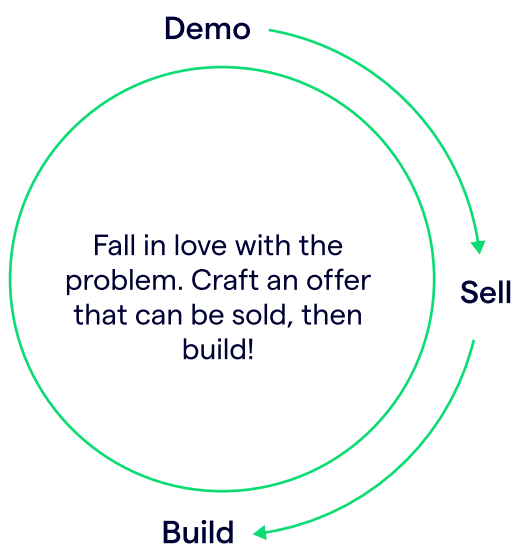
Product-Market Fit suggests that there is some product that can be sold successfully to a certain market. The baker in our example can find early sales with a good-looking but overly sweet cookie but will find her customers abandoning the bakery after tasting a product that looks appealing but does not match their desires. The baker may have received requests for a sweet cookie, but rushing to market without the necessary validation will prevent the cookie from achieving Product-Market Fit.

### Tip

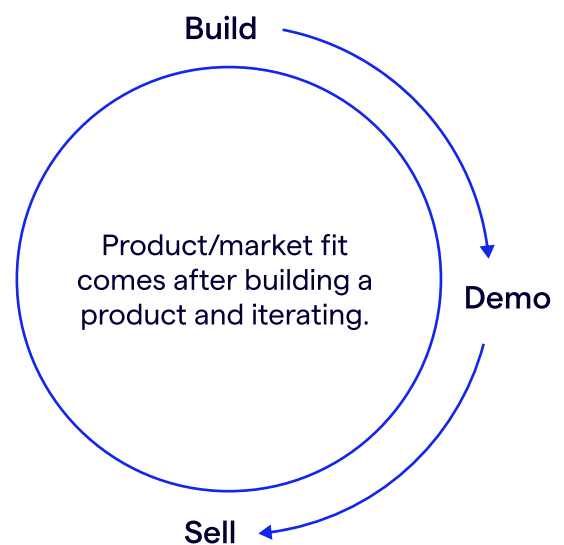
Aim for Problem-Solution fit before Product-Market fit to get started.

Before we can think about Product-Market Fit, it's necessary to validate and achieve Problem-Solution Fit. This is achieved when you have concrete evidence that you are solving your target market's problems with your product. We want to know that the product has the potential to become an integral part in your users' lives. You don't just want your users to want any solution, you want them to need your solution.

## Problem-Solution Fit First



## Product-Market Fit First



# Before We Begin

This process assumes a few things about you and your business. First, it assumes you can iterate successfully and that you have the resources to build at least a very basic early-stage MVP. This MVP can consist of a working web app, a no-code prototype, but you must at the absolute least be willing to codify your ideas on paper. The more realistic the MVP, the more confident you can be with the validation received.

Further, you cannot work in a vacuum. In order to sell your product, you must test your product. This means you'll be contacting customers, reaching out to strangers, and cold-calling experts. It's a scary but rewarding experience and shyness or insecurity are almost a given but we as product owners have to put aside those feelings and jump right in. In fact we've discovered that many subjects we've talked to are more than willing to help out nascent entrepreneurs, especially if their input will help change the state of the art.



When you build a product, you are solving a problem. The industry can have the problem, your users can have the problem, or you can have the problem. But even though we see the problem, we often have no idea what steps to take to make the solution a reality. You should be able to move through the first few steps of the Problem-Solution Fit roadmap without a developer or other expert. However, that definitely doesn't mean that your final product won't cost time, money, and require extreme expertise. These tools give voice to your complex idea.

The result of this process is simple: you will be ready to hire or work with a team of experts at the end of it. You will save time, money, and effort. As we said at the outset, a plan is 90 percent preparation. The last 10 percent, if you follow this framework, is far easier once that preparation is in place.

In fact, **service providers should want people's products to be successful.** That's why they want to build them. By going through this process you will be ready to go to market immediately and you will, in theory, have a product someone wants.



# Methodology

## A. The Lean Canvas

Time for step one: the Lean Canvas. To find Problem-Solution Fit we begin by breaking down the business into nine (plus one) parts. Click this link to download and follow along:

**Download: [Lean Canvas](#)**

With the Lean Canvas, your goal is to develop your product idea into concrete components that are critical for a new product or business. Follow along and use the examples provided in blue to understand each component from various perspectives.

### 0. PRODUCT DESCRIPTION

Product Description – The product description is what you intend to build. Think of this as a one-line pitch for your product.

Example:

#### Did you know?

The Lean Canvas is frequently referred to as a 1-page business plan.

#### **Startup:**

We are building a mobile-first app for fans of K-Pop who can use it to connect to bands and get early access to content, direct connections with the stars, and earn fan points to win tickets, merchandise.

#### **Commercial Banking:**

We are building a personalized mobile banking application to allow our customers to attend to their digital banking needs including complete banking transactions, see your assets, and access and review reports, without going to the bank or waiting on hold to connect to a customer rep.

**Bakery:**

We are making a new type of seven-grain bread aimed at lovers of our baguettes.

 **Tip**

You shouldn't spend too much time on creating the Lean Canvas. 30 minutes should allow you to get your thoughts down and think about multiple parts of a product.

## 1. CUSTOMER SEGMENTS

Identify who you're creating value for. Who are your potential users? Be descriptive and specific here. "Adults between 20-65" is meaningless to supporting your Problem-Solution Fit.

If you're selling to businesses, what is their headcount, industry, years in business? If you're selling to consumers, what is their income, age, hobbies, lifestyle? Understanding your customer segments is the start of your journey to empathize with your potential users. Write a biography for your ideal user.

Additionally, think about which individuals would care enough about their problems that they'd be willing *early adopters* that would pay for an unpolished product. Then think about what your user looks like for the mass market. This way you'll know who target to identify Product-Market Fit, and who to target when you're scaling (see related **Section C1**)

Example:

**Startup:**

Our ideal user is a Gen-Z fan of K-Pop with low to medium income. They are technologically savvy, frequent users of online platforms and networks, have an interest in many things around Korean culture, are heavily embedded in the 'instant' culture, and usually associate themselves with people with similar interests.

**Commercial Banking:**

Our ideal user is between the ages of 30 to 45 with medium to high income, working in an upper management position or on

their own business, and living in a large city. With their very busy lifestyle, they want access to get things done very quickly. The only apps they have on their phones are the ones they frequently use.

**Bakery:**

Our buyer is someone who loves wheat bread and is hoping to get healthier thanks to the enhanced fiber in our new whole wheat recipe. They also love hard, crusty bread with a twist to it.

## 2. THE PROBLEM

What do you know to be your customer segment's top 3 problems? By narrowing your set of problems to 3, you're forced to prioritize your assumptions, allowing you to make the most impact while remaining lean. Additionally, list how these problems are being solved today and whether they're being solved through specific competitors or through alternative processes.

### Startup Problems:

- Our customer wants to get first-hand updates from their favorite K-pop band without waiting for them to be publicly available.
- Our customer wants to get the latest and exclusive K-pop merchandise as soon as possible.
- Our customer is not happy with the limited access they have to K-pop cultural content in the market and the number of sources they need to use to consume this content.

### Existing Solutions

- Our customers follow their favorite K-pop artists and bands on social media channels to get updates.
- Our customers pre-order merchandise when they are available across various websites.
- Our customers follow YouTube channels and specific online forums to get updates on K-pop culture.

### 3. SOLUTIONS

Describe a feature for each problem, in which your product will be able to solve each listed problem. Keep in mind that you're creating hypotheses, none of which have been confirmed. You will need to validate your hypotheses through a combination of tests and experiments.

Startup Solutions:

- Our platform will provide a place where our customers can get K-pop-specific content first.
- Customers can create their own profiles and interact directly with their favorite K-pop stars and bands.
- With a low monthly/annual fee, our customers can interact directly with their favorite K-pop stars and get the latest updates from them directly and exclusively before they go public.
- Our customers will get discounts on the latest and limited merchandise, discounts on concert tickets, exclusive contents, by making purchases directly from the app.
- Dedicated sections for the latest updates and news on K-pop culture, our customers can rely on one application for all things K-pop.



#### Tip

Early revenue generation is recommended by some experts. You need to see that people are willing to pay for your solution.

### 4. REVENUE STREAMS

How will you make money with this product? Many product plans omit this part to their peril. While the proposed product doesn't have to create revenue initially, it is necessary to understand when and from where. Identifying revenue streams are an important part of this process.

Example:

**Startup:**  
K-Pop app: Targeted In-app Advertisements, Multi-tier subscription, Merchandise/tickets

**Commercial Banking:**

Banking products (ex: Credit cards) and fees

**Bakery:**

In-person sales, wholesale products, discounts on bulk purchases, subscription box

## 5. UNIQUE VALUE PROPOSITION

What makes this product special and different? Arguably the most important section of this exercise, your Unique Value Proposition connects your solution to the market. Your Value Proposition is a clear and compelling message that states why you are different and worth buying. It should be able to capture the attention of unaware visitor to an interested prospect. At this stage, your Value Proposition is an assumption that will also need validation.

**Basic template:** Our product helps segment who want to perform a job by avoiding a pain and enabling a gain. (See **Section B** for more)

Example:

**Startup:**

Our mobile app helps Gen-Z fans of K-Pop who want to keep in touch with their favorite bands and artists and get hands-on merchandise and tickets first by cutting down on the wait time and enabling direct access.

**Commercial Banking:**

Our mobile app helps people with high incomes and busy with their day-to-day work to get their banking needs to be done with no delays or unnecessary steps by allowing all the required features in a single mobile app.

**Bakery:**

Our new seven-grain bread helps the fans of our baguettes who want to get the best and the healthiest bread in town without worrying about the quality of ingredients and the product.

**💡 Did you know?**

Everyone will ask you for your value proposition. There's a reason why it's situated in the center of the Lean Canvas.

**High-level Concept:** Additionally, you can simplify your product into a high-level concept by finding popular and similar business models for a different market. This high-level concept is NOT your Value Proposition, but can help others understand your product quickly, through brand recognition.

**Basic template:** We are existing business for our market.

Example: “Think of us as Tinder for raising venture capital.”

Example:

**Startup:**

We are a combination of Facebook Groups and Patreon for K-Pop entertainment.

**Commercial Banking:**

We are like Amazon for business banking.

**Bakery:**

Our product is a more nutritious alternative to baguettes for our market.

## 6. CHANNELS

Where are the channels you intend to distribute your goods or services?

How will your team reach out to and connect with your audience?

Example:

**Startup:**

Mobile app stores, app review websites, influencers, word of mouth, referral program

**Commercial Banking:**

Mobile app stores, Bank’s website, in-store pamphlets, targeted advertising

**Bakery:**

Pop-up events, in-store promotions, wholesale distributors, local influencers

**Tip**

Focus on leading indicators for your key metrics, as this will show you that you're on the right path before you see results in your lagging indicators.

## 7. KEY METRICS

How will you measure the success of your solution? How will you know it's working as expected? Metrics can be qualitative or quantitative.

What are the leading indicators vs lagging indicators?

Example:

**Startup:**

Number of daily active users, number of weekly active influencers, downloads per week, merchandise purchase for a month, LTV:CAC ratio

**Commercial Banking:**

Number of transfers, banking report views, revenue reports, number of newly signed credit card customers from the app, support requests, new user sign-ups

**Bakery:**

Foot traffic, online orders, website visitors, online reviews, weekly sales

## 8. COST STRUCTURE

What are the most important costs inherent in our business model?

Which key resources are most expensive? Which key activities are most expensive? Try to include fixed and variable costs.

Example:

**Startup:**

Influencer advertisements, promotion costs, app maintenance fees, market discovery fee, content creation costs

**Commercial Banking:**

App maintenance fees, government fees, marketing material printing cost

**Bakery:**

Ingredients, utility bills, salaries, rent

## 9. UNFAIR ADVANTAGE

What is your unique or unfair advantage that helps you stand out from the competitors? This could be the unique experience or expertise of your team, ownership of data, specialized machine learning models, access to technology, etc. It's something that can't be copied or bought easily.

### Did you know?

Warren Buffet refers to this idea as an "economic moat".

Example:

**Startup:**

Industry connections will give ease of access to K-Pop influencers, close connections with K-Pop band management agency

**Commercial Banking:**

Existing web and in-person customers, government-regulated certifications, or permission, existing loyalty (rewards) programs

**Bakery:**

Unique recipes passed down through generations, formal culinary education, existing loyal customer base

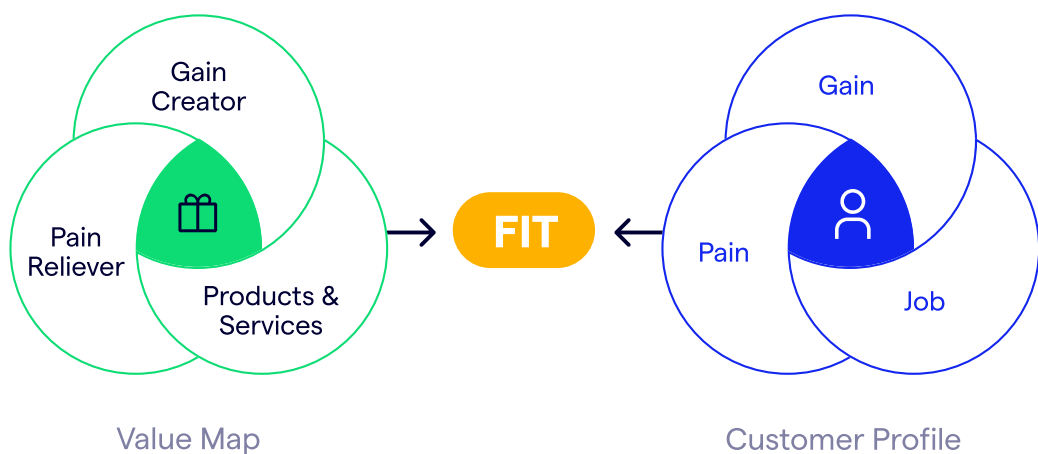


## B. Finding the Value Proposition

“Learning is useless. Validated learning is everything.” - Eric Ries

We begin exploring our Problem-Solution Fit (PSF) by defining our value proposition. Creating a value proposition allows you to centralize around a singular goal, a North Star that allows you and your team to know what the product is and where the product is headed.

The value proposition should define what makes your product different. It is an amalgam of the lean canvas we described above but distilled to its essence. Our goal is to create an early version of this value proposition before we spend a cent on design, programming, or marketing.



The Value Proposition Canvas above, developed by Strategyzer, attempts to understand the user and maps your solution to the user's pains and gains. By mapping between the Value Map and the Customer Profile, we are learning assumptions and early validation that things are heading towards Problem-Solution fit.

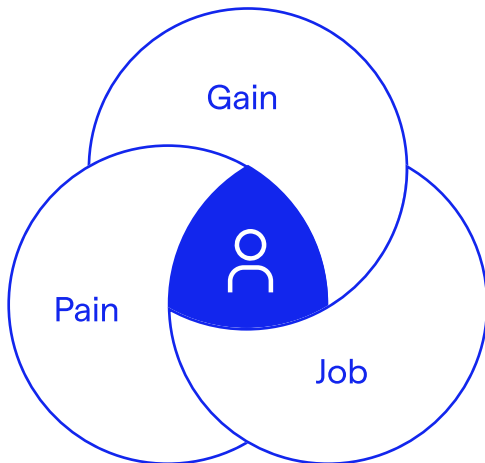
The Value Proposition Canvas is composed of two parts: a Customer Profile and the Value Map. Ideally you should do this exercise for important customer segments/personas identified in the Lean Canvas.

### The Customer Profile consists of three sections:

**Customer jobs** - What is the customer trying to perform and complete? How do they want to be perceived? What are the supporting roles they play?

**Gains** - What are the benefits for a customer? Think about the basic needs, nice-to-haves, and even one level up. What are some unexpected things that might delight them?

**Pains** - What are some of the annoyances that cause negative emotions when customers are performing their jobs? The pain can be functional, social, or emotional.

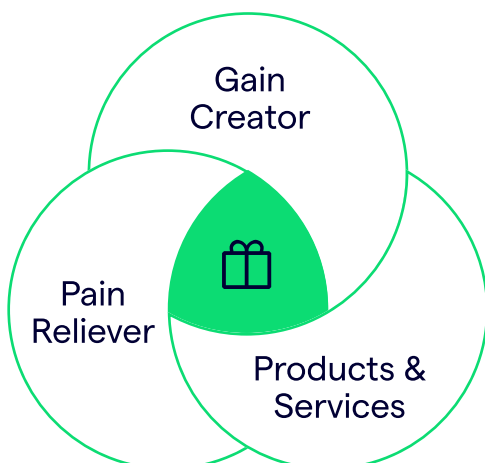


### The Value Map consists of three sections:

**Products and services** - These are the specific products and services that you offer that will help your customers complete their jobs.

**Gain creators** - What does the product or service do to enable/create the customer gains mentioned?

**Pain relievers** - What does the product or service do to reduce/eliminate customer frustration and pain? In most cases, you will not address every pain with your product or services.



After filling out the Value Proposition Canvas, we have some information necessary to take a step towards defining a value proposition. Use the template below to map multiple iterations of potential value propositions.

**Basic Template:** Our [product] helps [customer segment] who want to [perform job] by [avoiding a pain] and [enabling a gain].

What we can also learn through the Value Proposition Canvas are some of the assumptions that we have of our customer as well as the gaps that our product/solution might have. Identifying risks and assumptions that need further validation will only lead to strengthening our product.

This is the path to ensure the greatest likelihood of success with a product. Most product owners have ideas, and these ideas are simply transient plans unless focused by PSF. Further, the biggest danger in product design is confirmation bias. In this case, confirmation bias describes the experience of finding and using information that points to an incorrect conclusion even though all of the information supports your original thesis. In many companies there are no objective team members who are simply saying “this isn’t right.” Without a dissenting opinion or someone playing devil’s advocate, a PSF is very difficult.

Too often have we seen founders who barrel ahead with an idea without stopping to even validate its potential. This process will save them time, money, and even their mental health. We’ve met founders in the past who have come to us after spending hundreds of thousands of dollars over the years with developers, yet they have nothing to show for the work. Because they believed their feature set was desirable and robust, they decided to take the “build it and they will come approach” to product creation. Most of these efforts are, in short, a waste of time. While failure and experimentation are key, failing because one doesn’t identify PSF or validate assumptions is wasteful.

## C. Finding PSF (Problem-Solution Fit)

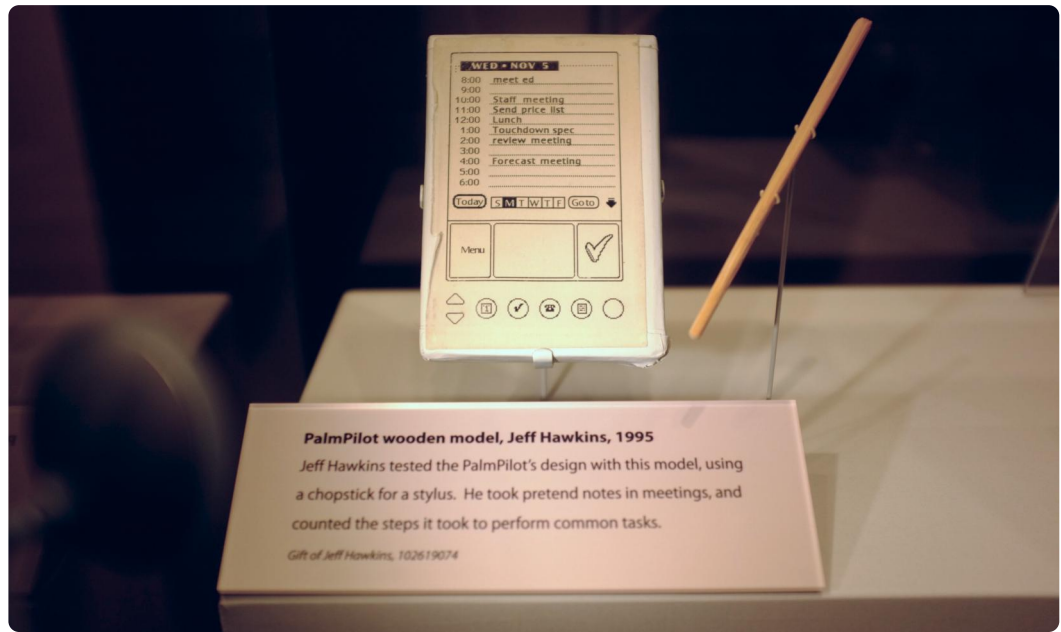
Now that we have our Lean Canvas and our value proposition, we're ready to experiment. PSF entails a number of individual steps that will call back to our original work in our Lean Canvas. The first step is to define a hypothesis and a user persona.

Why do we do all of this? Why don't we just spend hundreds of thousands of dollars on a working product and release it into the world? Because we are biased towards our own ideas. There is nothing worse than an entrepreneur who is enamored with his or her idea and blind to all its shortcomings. We've seen countless founders and product owners go through numerous iterations of their product because they were sure that the market wanted what they had to offer. All they needed was a marketing budget – which they planned to raise from investors – and they'd be in business.

Many entrepreneurs point to Steve Jobs as an example of this kind of singular vision. "Some people say, 'Give the customers what they want,'" he said. "But that's not my approach. Our job is to figure out what they're going to want before they do. I think Henry Ford once said, 'If I'd asked customers what they wanted, they would have told me, 'A faster horse!'" People don't know what they want until you show it to them. That's why I never rely on market research. Our task is to read things that are not yet on the page."

But Jobs said this at a point when he and his team could afford to iterate. When the first Apple computer launched, Jobs and Wozniak had already tested it in front of the Homebrew Computer Club in Menlo Park. They showed it to their customers, asked them what they wanted, and built something that satisfied those needs. By the time Jobs was able to

abandon “customer satisfaction,” he had a team of hundreds who could iterate so fast they could reach manufacturing goals in a few months. And, remember, the first iPad was a block of wood, a nod to the original “pretotyping” process begun with the Palm Pilot back in the mid-1990s.



Your first hypothesis should be simple. Your customers are “hiring” your product to do something in their lives. For example, they might be hiring you to find them a date – Tinder – or hiring you to make them happy – a new cookie recipe. You should define a simple hypothesis: our customers want a new type of product that will change their lives in a very specific way. If you’re in construction, you’ll want to reduce their building costs. If you’re in education, you’ll want something that will improve material retention. If you’re a baker, you’ll want something that no one can resist. This first hypothesis is the simplest because it asks the first and most basic question: why will my customers buy this?

## 1. USER PERSONAS

Next, we need a user persona. The user persona is a character used to represent a user that might use your product. Maybe the user persona is part of a segment of a population or maybe it's a specific person within an organization. Perhaps it's even a specific person. In this case, the thinking is that if we can please that one person we'll probably be able to appeal to the persona. Build upon the customer segments identified earlier.

When creating a user persona, you will need to define behavioral patterns, goals, skills, attitudes, and even personal details. Name your personae and give them as much personality as possible. See below or Google for examples.



### Tip

User personas can be imaginary, but are way more useful when they're based on analytics or data from your market.

### Claire



|               |                     |
|---------------|---------------------|
| AGE           | 29                  |
| EDUCATION     | Masters in Business |
| STATUS        | Married             |
| OCCUPATION    | Sr. Manager         |
| LOCATION      | Capetown            |
| TECH LITERACY | High                |

#### Needs

Claire needs to feel reassured that no matter what she chooses at bakery, she won't be disappointed in the quality.

#### Goals

- Needs to have fresh & warm pastries available.
- Feel confident about making a good choice, no matter what she tries.
- Regularly support a local business.

#### Frustrations

- Price is high relative to the quality boutique bakeries provide.
- Long lineup and wait time at the bakery.
- Sometime her favorite item is sold out when she gets to the bakery.

#### Brands



#### Payment medium




Cash/Cheque      Digital Payment

#### Platform



Website

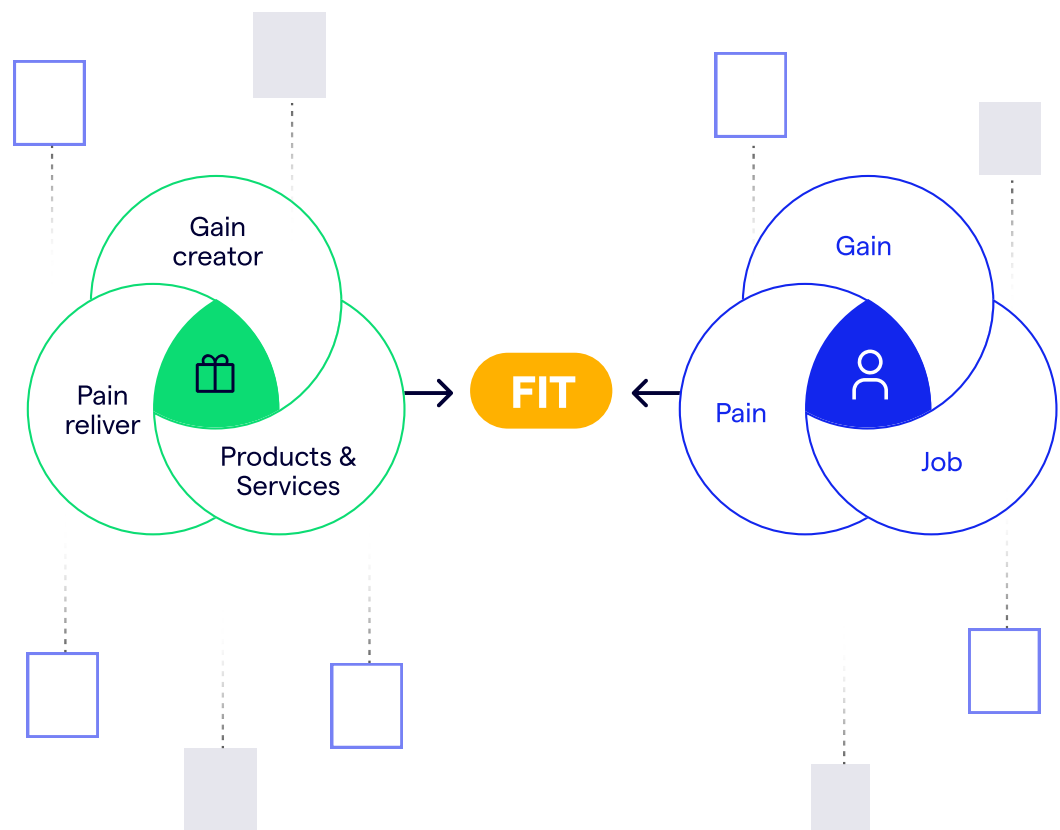
#### Personality

Introvert
Thinker
Judging

“Visiting the bakery is always a special little moment in my day, no matter why I'm there.”

## 2. ANALYZE THE HYPOTHESIS

Once you've filled out the Value Proposition Canvas, you can rank the points in the gain creators, pain relievers, and products & services sections from "nice to have" to "essential" in terms of customer value. If all of the points in the product profile match the gains and pains in the customer profile, you're starting to approach fit.



Entrepreneurs like to think of their startups as hypothesis-testing machines. This is because most entrepreneurial journeys are open-ended. We do not know how any of these things will end and ultimately we need to be prepared to turn on a dime when evidence does not turn out in our favor.

The easiest way to begin the hypothesis testing process is to make note cards containing each hypothesis. For example:

- ✓ We posit that our customers will like our new brownie recipe.
- ✓ We posit that our customers are looking for a new way to interact with their bank accounts.
- ✓ We posit that our customers are interested in local news with a non-partisan twist.

 **Tip**

Test cards should outline your hypothesis to validate, a quantifiable measurement, and a success criteria.

Create a few of these hypotheses related to your business. Then go and verify them. Ask current users and customers. Create Google surveys and spread them around the world. Cold call potential clients and ask them what they think of your offering. In all of these cases direct one-on-one client interaction is absolutely necessary.

These testable hypotheses can be written into test cards. The test cards should outline the hypothesis, method of verification, quantitative measurements, and a threshold indicator of hypothesis verification.

Once you have tested these hypotheses, pick the ones that stand up to scrutiny. Remember: do nothing - don't write a line of code - until you know that your customers will want to buy or at least interact with your product. This is vital quite simply because to do anything else could waste time and money.



# D. Competitor Analysis

Whether you are working on a new product or adding features to an existing product, you need to know what you are competing against. Whatever the problem you are trying to solve with your product, there's a high chance that someone else had a similar problem and created a solution to resolve that. By doing a competitor analysis, you are investigating your competitors and trying your best to get an understanding of their product or service and how the market has reacted.

Competitor analysis helps you to understand your competitors, allowing you to find their strengths and weaknesses and compare them against your features. This will help you to create a strong and unique position in the market. In other words, to gather the intelligence necessary to find a line of attack and develop your go-to-market strategy for your product, service, etc. Along with getting a better understanding of the product, if you are a product company, doing a thorough competitor analysis, will help you to get a better understanding of your organization's vision and marketing playbook so that you can position against the most important competitors in your industry.

A common misconception about competitor analysis is that it is to figure out what features to include in our product or what to build next. The reason why this is incorrect is, you should perform the competitor analysis against the competing products to learn. What the competitors are doing best and what are their pain points. With this understanding, you can make decisions about your product and figure out what are the problems you are trying to solve.

Follow these simple steps to complete your competitor analysis:

## Understand the market

When planning a product, you rarely compete with one competitor. Among your competitors, you must understand who has similar conditions and what are they are doing to rise from their competition. Sometimes it could be difficult to figure out who are your direct and indirect competitors. This is why you should have a good understanding of the market you are competing against.

## Identify strengths and weaknesses

Before looking at your competitor's strengths and weaknesses, you should have a good understanding of your strengths and weaknesses. You need to know with your product or the solution, what are the problems you are trying to solve. Having this knowledge will immensely help you when you compare your features against competitors.

## Go to market strategy

Based on your findings from your competitor analysis, now you can design or adjust your existing go-to-market strategy. Now you know what to do and what not to do. This new knowledge will help you in planning the rest of the product life cycle.



### Tip

A competitor analysis table helps you compare information visually and identify gaps and expectations.

|                     | COMPANY A          | COMPANY B              | COMPANY C              | COMPANY D         |
|---------------------|--------------------|------------------------|------------------------|-------------------|
| Unique Capabilities | Clean & Modern     | Industry Experience    | Vast Features List     | Multiple Accounts |
| Best Capabilities   | Comfortable UX     | Multi-Language Support | Client Service         | Strong Mission    |
| Same Capabilities   | Product Quality    | Product Volume         | Security               | Accessibility     |
| Poor Capabilities   | Supply Disruptions | Service Speed          | Not Enough Advertising | Product Price     |

Competitor analysis table example

## E. Build Your Early-Stage MVP

Now we have two parts of our PSF process. Because we have a hypothesis – our customer will want this product for a specific reason – and a user persona – the customer in question – we are able to begin the process of early validation. We refer to this as an Early-Stage Minimum Viable Product or MVP. A minimum viable product is a version of a product with just enough features to be usable by early customers who can then provide feedback for future product development. An early-stage MVP is not yet a “product”, but aims for gather similar feedback. In this document we will use early-stage MVP interchangeably with experiment. In real terms an MVP is a product that you sell to a customer with the assumption that it is far more complex than we describe in this section.

Although it's mentioned that some tech skills may be required for your early-stage MVP, not everyone might have the ability to run through these. Pick the early-stage MVP that works for your particular product and technical level. Obviously coding up an entire product might be impossible at this stage so feel free to aim for non-engineering solutions where appropriate.

The first part of early validation is the simplest. When attempting to find early validation you will want to perform something like the pen and paper MVP. This process is quite simple: you draw your envisioned product on a piece of paper and ask users, including users that match your personae, to try your product by looking at it and describing what it does.

For example, a startup called VoxUp drew their process and product on a piece of paper.

### 💡 Did you know?

Paul Graham of YCombinator says “do things that don’t scale” in early product development.

The team talked to a number of stakeholders & potential users and asked them what they thought. The results, which were as simple as a drawing on a piece of paper, were easy to understand and easy to use.

In fact, you can simulate your minimum viable product with this pen and paper test. If you have some tech skill, you can also try one of these early MVP styles. These experiments can be run to confirm hypotheses and validate various assumptions about the product, which in turn gets you closer to Product-Market Fit.



Examples of various early-stage MVPs

# F. Building Technology MVPs

At Quantum Mob, we've found that the most pragmatic and reliable MVP is one that balances time, cost, and actual validation. Depending on your needs, there are three Technology MVP approaches that get as close to the real thing as possible, providing a more comprehensive solution from the early-stage MVPs.

## 1. CLICKABLE DESIGN PROTOTYPE

A clickable design prototype is a set of screen designs stitched together to simulate a functional product. The prototype triggers screen transitions based on interactive components created in design applications such as Figma. By designing and connecting the core paths and user flows for a targeted persona, your potential users can interact with this mockup and provide feedback as if they were using a real product.

### Pros:

- Quick to create (within a week)
- Easy to modify
- Can simulate a website or app

### Cons:

- Only works with hard-coded data for demo purposes
- No integrations
- Only viewable in a sandbox

### When to use:

A clickable design prototype is a valuable tool in your arsenal for lean testing of design and direction, particularly for brand new UI concepts, features, and high-level validation. This is useful when you're earlier in the validation process and most of the validation you require is focused around the design and user experience. It is the fastest way for experimentation and feedback. If there's a need to validate an integration, library, or technology you should consider other options.

## 2. NO-CODE / LOW-CODE PROOF OF CONCEPT

The advent of no-code tools has boosted the capabilities of organizations and entrepreneurs with less access to technical expertise, enabling them to create and validate their own digital products. With the variety of tools available, you can now build a web or mobile app with basic out-of-the-box integrations and API calls and without a full engineering team. However, it's not recommended to build a full-scale application on a no-code platform due to the inevitable limitations you will encounter.

### Pros:

- Relatively quick to build (weeks to months)
- Display of dynamic data
- Presentable as web or mobile app

### Cons:

- Throwaway - cannot extend into a full-fledged application
- Limited integrations
- May require some coding knowledge

### When to use:

While no-code platforms can perform the majority of the heavy-lifting, you should only choose this type of technology MVP if you're comfortable with having to deprecate what you've built in the end and you have no need to validate any underlying technologies required in the future software build. It's useful for validating real data and integrations with early adopters outside of a sandbox.

### 3. TRUE SOFTWARE MVP

The true software MVP is everything you might find in a traditional MVP. The expectation, however, is to remove as much unnecessary engineering as possible. Most projects don't require a custom server early on. We can encourage you to work with serverless functions, integrate with 3rd party providers, or work with a vendor that has the experience and toolset of building-blocks that can scaffold the majority of the application. The outcome is a product that should be designed and built within 8-10 weeks while providing a foundation of code to expand upon with minimal rewrite.

**Pros:**

- Relatively quick to build (weeks to months)
- Validates technology, features, and design
- Provides foundation for re-use

**Cons:**

- Not the cheapest option
- Coding knowledge is required

**When to use:**

If your validation is more complicated or you require validation of the actual underlying technology for a specific use-case, you should build a true software MVP. However, you can only accomplish a true software MVP if you have access to the technical expertise needed to deliver. This type of technology MVP balances time and actual validation without the cost of a full product build. The added benefit is the ability to re-use most of what is created after you have achieved your validation, lowering the gap to launch a final product.

# G. Get Early Validation

Now it's time to test. Once your MVP is in place, you will need to validate the assumptions you made in the earlier stages.

## Tip

Ask the questions from your hypotheses during this validation if you haven't already.

The easiest way to do this is through user testing. Giving your product to a user, be it a single piece of paper or a Smoke Test, is the best way to record their reactions and understand their needs. Many entrepreneurs avoid this step but think, again, about our bakery example. Does our baker make a sheet of cookies and then eat them all? Probably not, although that does sound pleasant. Instead, she passes them out to people who visit, saving a few for repeat customers. These customers give her feedback that she's able to take back to the kitchen in order to make improvements.

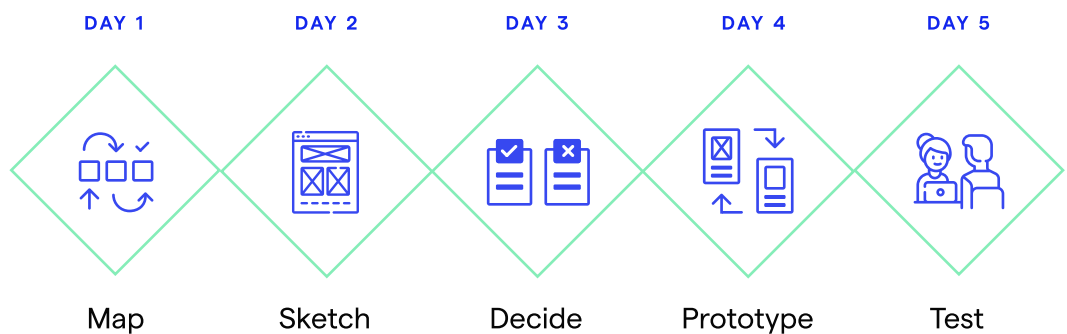
Once this early data begins coming in, you're ready to iterate on the hypothesis.

Because we spent so little on the initial MVP it's easy to accelerate the iteration process at this step. You should be ready to pivot and refine your MVP at any time and because you've created a simple web page. Because you've tested this page with actual customers, you're going to be able to break the prototyping cycle that traps most entrepreneurs. In fact, now you can start the Design Sprint.



# H. The Design Sprint

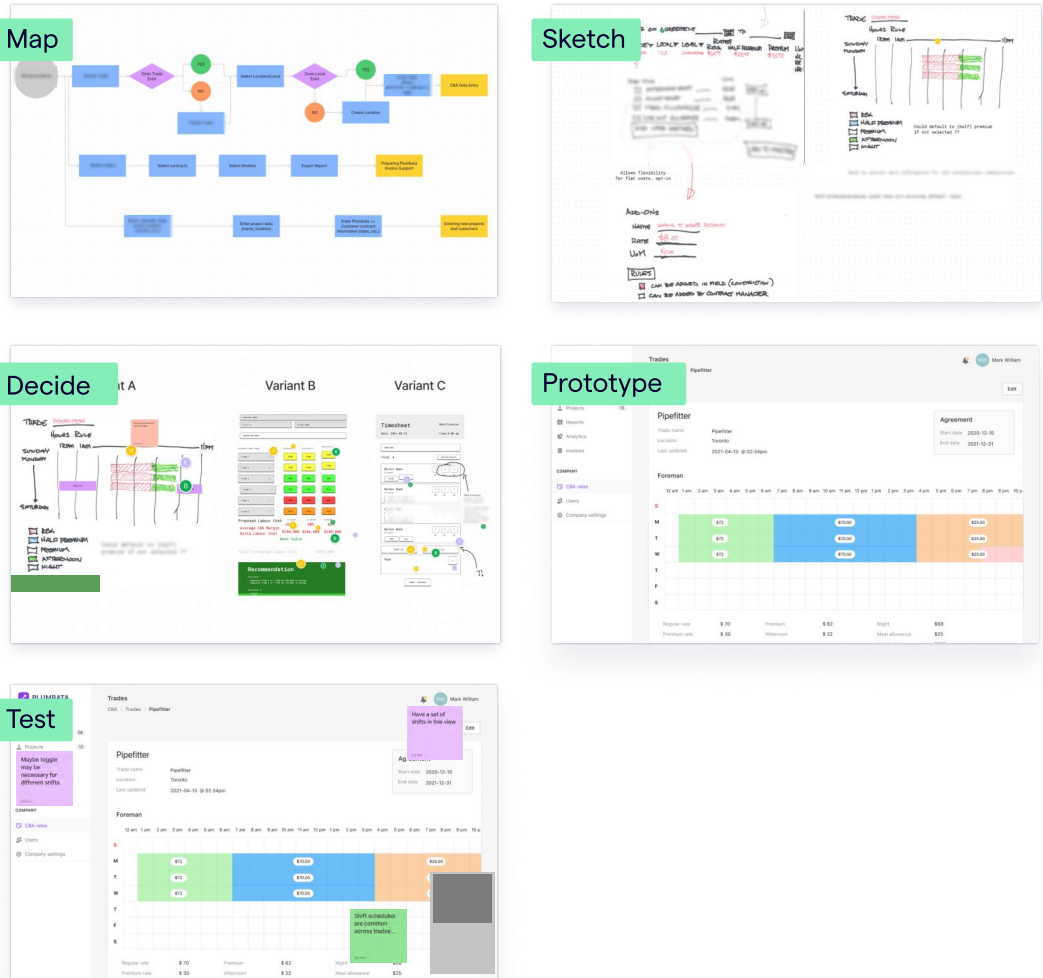
The design sprint basically helps you ideate and prove certain flows of your MVP. In most cases, a Design Sprint lasts for about a week, and you test the prototype, tweak it, and test it again. The purpose of the Design Sprint prototype is to test the product again and again with actual users. These users should be either compensated for their time or understand that they will have early access to the product as soon as it's available.



One of the questions you should ask in this stage regards competitor analysis. As you approach users about each iteration, we recommend a thorough competitor analysis at each iteration. Because your product may not be specifically unique, you will need to check with your user on two fronts: whether the product meets or exceeds the expectations of current competitors and whether it improves upon those products. This allows you to develop a unique value proposition that no one seems to be offering. Why? Because it allows you to position yourself uniquely in the market, gain initial leverage, and solve a very particular pain point that no one is clearly solving.

In this stage of the game, you are getting closer and closer to a final, validated product.

Output examples of a design sprint with Quantum Mob.

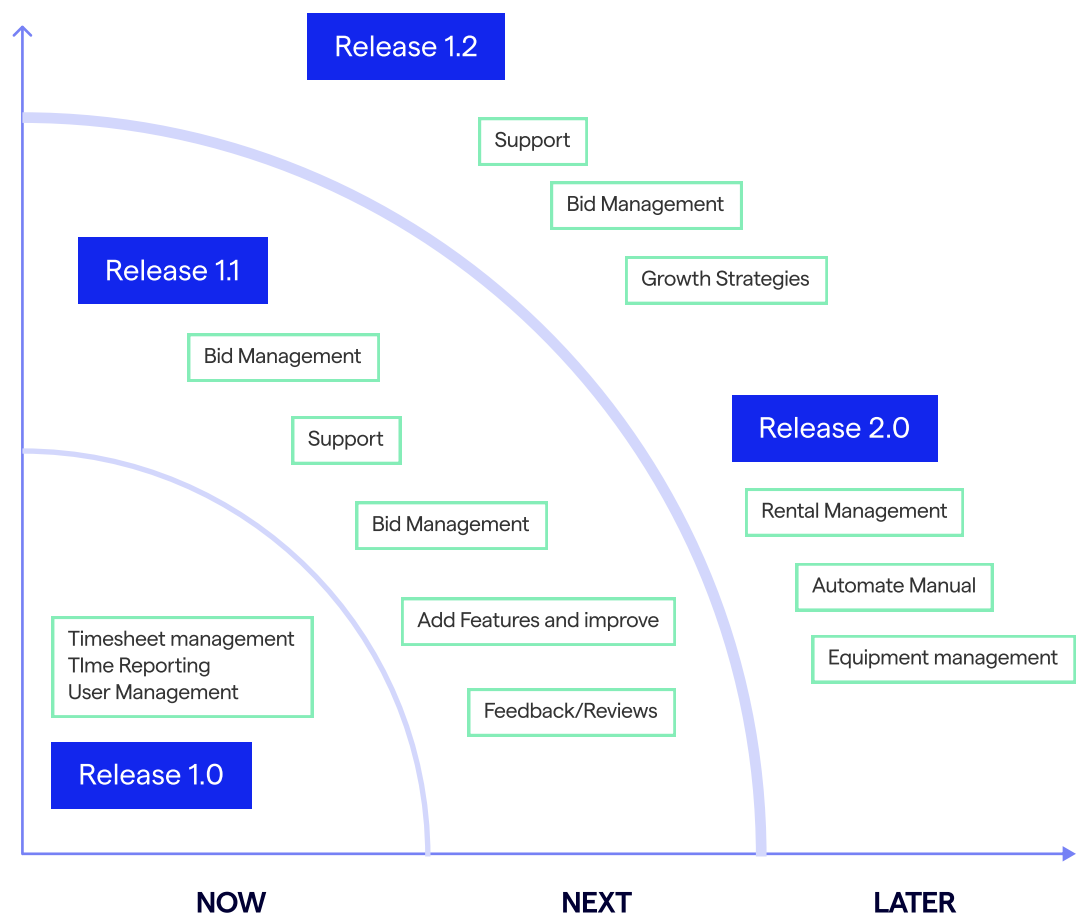


If you want to learn more about Design Sprints, check out the official book by Jake Knapp:

<https://www.thesprintbook.com/the-design-sprint>

# I. Roadmap

At this point we are ready to define our short, mid, and long term goals based on the validation we did during the previous exercise. Further, we will also want to begin testing the revenue hypothesis as definite in our Lean Canvas. This hypothesis doesn't have to put cash in your pocket immediately but you should be able to bring the proposed product to a current or potential customer and ask, simply, "Would you pay for this?"



Further, we need to understand how to scale our product. For example, some investors require a certain number of users before they'll write a check or follow-on investment. Or perhaps you have to hit a certain number in order to unlock cash in a bootstrapping scenario. Be ready to use these documents to assign dates and numbers to your growth and revenue plans.

Once the roadmap is cut into chunks, we can assign features to each subset that match with the revenue and user goals. Perhaps in the first section we assume we want X thousand dollars of revenue with X thousand users. To get this, we must introduce three specific "must have" functions during this time period. Your goal is to get a rough idea of future phases with additional features and product direction. We call this rough simple because early adopter feedback is absolutely essential to product iteration.

Perhaps you can also cut the roadmap into platform or OS segments. When will you launch on iOS and when will you launch on Android? Or, if we're working on a physical business, when will we launch in one geographic location versus another?

Now we're ready to create a product requirements document, a document that outlines exactly what features will appear in each segment. This document is usually completed by your engineering partner or a product manager on the engineering team but once you have all of this data gather together you can imagine how simple it will be for anyone -- including a technical partner -- to take your requirements and build your product.

# Next Step

Quantum Mob has helped countless startups complete products that match the Problem-Solution Fit. It is imperative that you start moving through this process before spending a single penny on development. A good development partner should tell you exactly that: you must prepare to succeed.

Many entrepreneurs don't feel they have the skills necessary to define a problem and build a simple version of their product. This is simply not true. You are a creator, a problem solver. You know your customers intimately and no one except you can use these tools to make the best product for them imaginable.

Quantum Mob offers our clients a Product Sprint, which is an intensive 3-4 week process that condenses these concepts, allowing our partners to land on a clear Phase 1 MVP featureset with a product direction including strong Problem-Solution fit.

Our Technology MVP offerings can also help you build and validate early on before having to create a large-scale application.

Contact one of our experts to learn more!

[hello@qmo.io](mailto:hello@qmo.io)

# Ready to Work With Quantum Mob

Let's set up a call or grab a coffee, whether you're looking for an amazing team to build your competitive advantage or simply looking for an expert opinion.

Get in Touch!



## Contact us

[hello@qmo.io](mailto:hello@qmo.io)

[www.qmo.io](http://www.qmo.io)

+1 647-983-6622

## Office address

312 Adelaide Street W, Suite 800

Toronto, ON M5V 1R2