











# MARKET VALIDATION ESSENTIALS

A Startup's Guide to Discovering and Evaluating Market Opportunities



NAME	PHONE

### **HOW TO USE THIS WORKBOOK**

This workbook will take your business idea through the market validation process to increase your chances of success as an entrepreneur. Everything within these pages will help you objectively evaluate the market opportunity of your product or idea while giving you the tools to help engage potential partners and investors in joining your venture.

The content of this workbook was created by seasoned professionals who know how to research, organize, evaluate, and present information that validates new market opportunities. Throughout this workbook, you will learn how to find and effectively articulate what your customers want, why your value proposition is in demand, how you will beat the competition, and ultimately what your product could be worth. The outcome of this workbook will be a market validation pitch deck that will prove invaluable to moving your startup forward.

Whether you are going through this workbook by yourself or with a facilitated group, we encourage you to review every module and take time to complete each exercise. Many entrepreneurs get the most out of this workbook when they complete one module per week, as some sections require extensive research and reflection.

This book will guide you through six modules: each module features activities, challenges, and private reflection designed to further develop your thinking around your idea. The results of the activities and challenges are to be shared publicly with your group or partners, while private reflections are designed to be an individual activity.

It takes hard work and exceptional character to take an idea and turn it into a viable business. Validating your idea not only proves to you how great it is, but is also proven to reduce risks and increase your chance of success. The modules ahead will walk you through a methodical approach to achieving something great.

Let's get started.

### **MARKET VALIDATION ESSENTIALS**

KNOW YOUR MARKET

STARTING YOUR RESEARCH

COMPETITIVE ANALYSIS

MARKET OPPORTUNITY ANALYSIS

TESTING YOUR VALUE PROPOSITION

RISK & FUNDABILITY

APPENDICES

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# 1 KNOW YOUR MARKET

"He who begins is half done.

Dare to know, begin!"

## 1 KNOW YOUR MARKET

### 1.1 INTRODUCTION TO MARKET VALIDATION

eld annually in Las Vegas, the Consumer Electronics Show (CES) is one of the largest, most-watched technology events in the world. The event draws thousands of companies who all sell their wares into the consumer technology market. Companies who have been around for decades showcase their new releases and concept innovations. Meanwhile, brand new companies and startups try to find a slice of attention among the nearly 200,000 people in attendance (not to mention the millions of eyeballs, tech and mainstream journalists, and bloggers) hoping their product offering will strike big.

Every entrepreneur who attends trades shows like CES has *ideas*. Some ideas are just mockups and in their infancy; others are fully-formed products with elaborate packaging and large marketing budgets. Every entrepreneur at CES is confident they have the best idea that is sure to shake up the industry like never before! Yet, few of them have bothered taking the time to prove how their idea is not only worth taking to market, but that the market is ready to devour their offer and adopt it at scale.

As an entrepreneur at the helm of a startup company, your goals are simple: define a problem and create a better solution than what might already exist. At this stage, you have a general idea for a solution you want to bring to the market. But how do you know if your idea is one that can survive through the startup phase, disrupt an industry, find a sizeable market share, and ultimately result in the successful sale or acquisition exit of your company?

Most ideas are not as inventive or original as we want to believe them to be. Of course, entrepreneurs will never openly admit this fact. Everyone thinks their ideas are the best because of their own confirmation bias. When left unchecked, confirmation bias can result in wasted time, millions in lost budgets, burned reputations, and customers who never buy the product the way you thought they would.

Confirmation bias is the unconscious process of relying on perspectives that fuel and support our pre-existing viewpoints and preferences, even in the face of adverse and contradicting information. Bias blinds us to the best real-world decisions that may lead to a profitable outcome. Confirmation bias is the difference between what you think is best and what the evidence says is true.

The bigger the decision, the more costly your confirmation bias can be. Every investor wants to know you have done the groundwork, collected the evidence, and validated the need in your market before they think about backing your idea. This workbook is your guide through the market validation process, leading you to build a presentation that builds objective evidence about how valuable your product can be to the market. Investors like seeing a thorough market validation because it shows you have viewed your idea from the market's point of view, with your confirmation bias no longer blinding you.

Again, the goal of market validation is to conduct extensive research, ask pointed questions, listen to what the market (and its customers!) are telling you, and develop a strategy to deliver what the market needs. This workbook will take you through the process and keep you engaged every step of the way.

As an example, if you wanted to create and sell a wearable device, you would do extensive research on the products and companies currently in the wearables market to evaluate the solutions your competitors are offering. Then you would ask guestions like:

- How are customers engaging with your competitor's products?
- How big is the market based on current and potential customers?
- What companies are preparing to enter the market with potentially disruptive new technology?
- What would your strategy be to successfully place yourself among the different competitors?



THE GOAL OF MARKET VALIDATION IS TO CONDUCT EXTENSIVE RESEARCH, ASK POINTED QUESTIONS, LISTENING TO WHAT THE MARKET (AND ITS CUSTOMERS!) ARE TELLING YOU, AND DEVELOP A STRATEGY TO DELIVER WHAT THE MARKET NEEDS.

As you take a step back from your idea and start researching the customer and the market, you not only find answers to what you don't know, but you discover what you don't know you don't know. Between the number of competitors out there, how they approach the market, or even how many other opportunities you discovered you haven't thought of before (likely because of your confirmation bias), the market validation process provides you the opportunity to become an expert on your industry. Furthermore, markets are continually changing. To stay competitive, you must develop the ongoing habit of gathering data, reviewing competitive landscapes, analyzing existing market opportunities, routinely testing your value proposition, and identifying risks.

This workbook is divided into functional modules that will walk you through how to navigate the market validation process.

MODULE 1: Know Your Market

MODULE 2: Starting Your Research

MODULE 3: Competitive Analysis

MODULE 4: Market Opportunity Analysis

MODULE 5: Testing Your Value Proposition

MODULE 6: Risk & Fundability

Upon completion of this workbook, you will have developed a market validation presentation deck to serve as the basis of your strategy and story. This deck will be useful when presenting your ideas to investors, potential partners, and customers as it clearly outlines why your ideas, without bias, will win.



### **Small-Group Activity: Confirmation Bias Scenario**

Failing to recognize your confirmation bias about your business idea could end up costing you time and money down the line. It is essential to take a step back to check for potential flaws in the decisions you are making about your product's viability. Common types of biases that entrepreneurs have might include:

- ▶ Pro-innovation bias Just because it is new or "cutting-edge" doesn't mean it has found its value. Some innovations need to change shape to determine value in the market. Other times, an innovation uncovers gaps in the market that need new solutions.
- ◆ Overconfidence Audiences tend to listen to what experts and industry leaders have to say because they assume they have done the research and have a comprehensive understanding of their field. However, some experts are so confident in what they know

within a very vertical scope, they often assume they are correct even though there may be contradictory information available.

- ▶ Survivorship bias Does it feel like only the winners make the headlines? The companies with billion-dollar valuations and award-winning products might lead you to think your idea or company will be just as successful. If they won, so will you! However, what about the majority of companies who failed that you've never heard about?
- ▶ Blind-spot bias It is rare to hear someone say, "I am probably biased." However, we are often quick to point out the biases in other people. Everyone has a cognitive bias it's how we are able to operate our day-to-day life.

Choose one of these scenarios to discuss.

Imagine a group of cardiologists who have an idea for a new diagnostic test. What biases are they likely to have? What research would they need to do?	Imagine software developers with an idea for a new social media platform. What would their biases be? What would they need to find out?

What biases could interfere with your objectivity about your venture?	What research will you need to do?	Who else can you discuss ideas with to help challenge biases?

### 1.2 WHAT YOUR CUSTOMERS WANT

### "The customer rarely buys what the company thinks it's selling."

PETER DRUCKER

Ideas are only useful to investors when they become products that are valuable to the market. Determining if customers will buy a product starts with an understanding of *why* customers buy products in the first place.

Business consultant/Harvard Business School professor Clayton M. Christensen was hired by the fast-food chain McDonald's for a seemingly simple task – find out how to improve the sales of their milkshakes. Christensen conducted extensive research on customers who both did and didn't buy McDonald's shakes. His team learned that customers who bought shakes in the morning were commuters needing a portable breakfast – competing with bananas, donuts, bagels, and candy bars – while afternoon customers were often parents with children, buying milkshakes as a way to connect as a family.

Some business owners might have asked people what they liked about the milkshakes, and then tried to improve the features based on their responses – different prices, sizes, flavors, etc. Christensen asked questions to discover *why* they bought milkshakes, out of every other option out there, and found the customers had a need to be filled, a problem that needed resolution.

The same product was serving two different purposes for two entirely different customer segments. McDonald's didn't need to come up with a new feature to sell more milkshakes; they needed to understand that the milkshake was solving a specific customer need. Some customers required a portable, enjoyable source of calories in the morning. Others needed a reason to relax and spend time connecting with their family.

Christensen's research resulted in the Jobs Theory, which stated that customers "hire" products to do a particular job. Customers hire products to either fulfill a need or solve a problem somewhere in their life. If a product fails to fill the need, the customer will "fire" the product and hire another one.

No matter how good of an idea you think your product idea is, your customer will not buy in if it does not solve a problem somewhere in their life. The market determines if your idea is good by how well it solves customer problems. No matter what your product idea is, you should be asking:

### "What job would a customer hire my product to do?"

The challenge – your customer doesn't look at the world in terms of "the market." They only know the needs and challenges they have day-to-day. As an entrepreneur, it is your

job to understand customer problems better than they know them so you can deliver on a solution they will be eager to buy. Targeting, understanding, and refining a specific customer problem is the foundation of the value proposition — which is the solution you are looking to provide with your product.

### "Your market already exists."

AS AN ENTREPRENEUR, IT IS YOUR JOB TO UNDERSTAND CUSTOMER PROBLEMS BETTER THAN THEY KNOW THEM SO YOU CAN DELIVER ON A SOLUTION THEY WILL BE EAGER TO BUY.

Since most ideas seem to be a product of our imaginations — as if they just popped into our heads from out of nowhere — we like to think they are entirely original. This assumption is our confirmation bias at work. A quick Google search will likely reveal several other people not only share your ideas, but someone might have already built a company or product around your idea.

The market you want to serve with your ideas and products already exists. The jobs consumers need done, the problems they need solutions to, the needs they want fulfilled all tend to be universal and unchanging. The available options customers have to solve these problems...Those are always changing. Can your product offer a better solution than what is currently available?

Take long-distance communication as an example. Today, you can talk with someone from anywhere in the world with a handheld device and a wireless connection. This is a seemingly simple solution built on the back of an extensive amount of technology that has continually developed over 150 years. As we all know, long-distance communication wasn't always so simple.

The Ancient Greeks used long-distance runners to carry messages from town to town. The Pony Express carried letters across the American frontier on horseback, only to then be replaced by the telegraph. Later, telephone companies tried to expand the use of long-distance calls by lowering the price of the service at certain times of the day or having special rates while dialing certain countries. Companies like Skype leveraged internet connections to put the concept of "long-distance rates" into the past. Today, you can talk to someone on the other side of the world, for free, through WhatsApp, Facebook Messenger, and Zoom.

Through it all, the job was the same, but the market offered different and improved solutions as the technology advanced, and consumer needs shifted. Customers had new products to hire every time there was a shift in how they needed to communicate over a distance. Companies either had to find ways to meet these needs or risk becoming obsolete.

Market validation is finding out how to be the next product they hire. Continuing to validate your position in the market is how you prevent becoming obsolete.



### **Activity: Products You Have Recently Hired**

What is a technology purchase you made recently?	What was the problem being solved by the purchase? In other words, what did you hire it to do?
Share	

Take turns sharing insights.

Insights to remember

### 1.2.1 What Happens When Companies Misunderstand the Problem

Products fail when companies focus on the features of the product, instead of the problem the product should be solving. Some companies misunderstand the problem or fail to adapt to the changing importance of how the customer perceives the problem.

The example of long-distance communication in the previous section highlights the changing landscape of how the customer hires products to solve a problem they have. Though the problem to be solved remained the same - people needing to communicate with other people - the method of solving this problem has changed over time. In some cases, innovation drove the demand - who could deliver the message faster? Other times, needs drove innovation – how can I deliver this message securely?

When you try to present a solution to a problem that doesn't exist, or a product that doesn't solve a problem clearly enough, customers won't buy. Or, if they "hire" an ineffective product, they won't rehire it in the future – ultimately putting you out of business as they then choose to buy from a company that solves their problem better.

You have to know not only your customer but also the needs your customers face and the problems they need to resolve. Product attributes, customer characteristics, and demographics don't mean a thing unless you understand the true problem people are willing to pay money to solve. These problems, and how the customer wants these problems solved, will influence their buying behaviors and motivations; when and where they buy, and especially why. Applying the Jobs Theory keeps your customer's real problem (a problem they may not even be able to identify themselves) in mind while you create the value proposition they are looking for.



### **Activity: Switching Services**

Whether it is switching your phone plan or the manufacturer of the devices you buy, we sometimes find ourselves needing to go from one solution to another. Why do you make the changes you make?

### When was the last time you switched from one product or service to another?

Product or Service	
Why did you switch?	
What was your problem to be solved?	
What was your job to be done?	
Were there obstacles to switching?	
Are you satisfied with that decision?	
Insights to apply	

## 1.3 DEFINE YOUR CUSTOMERS AND THE PROBLEM TO SOLVE

A value proposition is a statement of how your product/solution solves a customer problem. Creating an effective, marketable solution starts with fully defining the problem your product aims to solve. This section will guide you through the process of creating your value proposition and how to test and refine the proposal as you continue through this course.



### Who Are Your Customers and What Do They Really Want?

These questions will help you focus your research to determine where your product aligns with the market while demonstrating the value to current stakeholders and potential investors.

What is the real problem to be solved?	
What is the job to be done?	
Who needs this solution? Who needs it most?	

If you are working with a partner or a team, have everyone do these brainstorming exercises individually and compare notes. Gaining as much insight as possible from other individuals will help you resolve the confirmation bias you may have about your company while seeing the opportunity in a new light.



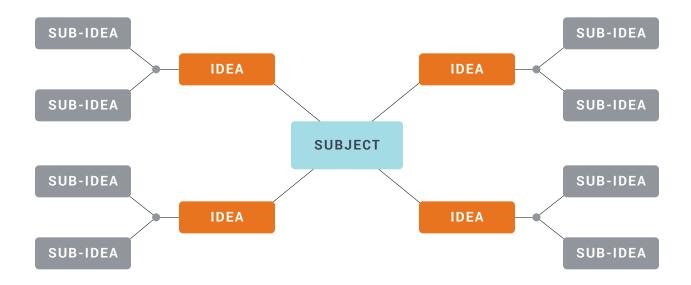
### **Activity: Brainstorm Related Value Propositions**

A note about brainstorming: Classically, a "brainstorming session" involved several people in a room throwing out as many ideas as possible and saying things like "there are no bad ideas!" However, a genuinely effective brainstorming session is much more than tossing in every thought, speaking freely, and bouncing concepts around with others. In fact, studies have concluded that when people brainstorm in a group, they produce fewer ideas, participation is unequal, and rarely challenge the leadership. Overall, group brainstorming sessions result in fewer ideas that are less innovative.

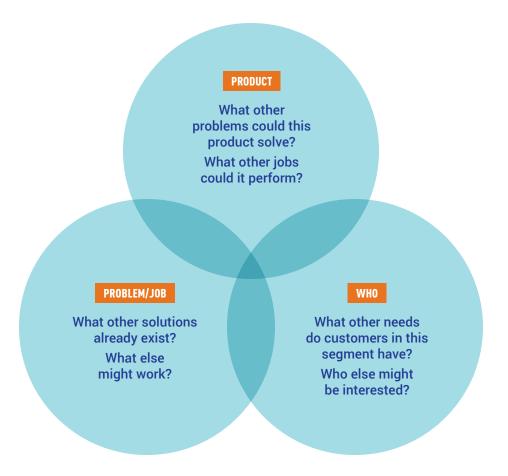
To host a productive brainstorming session, ask team members to record their thoughts independently, and share them with the group in a structured environment. Aim for **quantity** over quality. Collecting numerous ideas that may be impractical, impossible, or even laughable may lead to your next innovation.

As a group, grow, expand, and shape these ideas. Collaborate with a mind map to help everyone visualize your collective thinking. Mind mapping is a simple diagram that connects one idea to another. Each branch of the map connects more detailed and intricate ideas. The detailed branches can sometimes connect in ways you hadn't foreseen, and may even be the source of your next big move.

Remember that ideas are a dime a dozen, don't get hung up on withholding your idea because you think someone might steal it. Seasoned entrepreneurs know that if you are unwilling to share and experiment with your ideas openly early on, you may find yourself with additional, unforeseen struggles later on in the process.



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### **Private Reflection**

What is the most important thing you learned from your brainstorming/mind-mapping?

What is the most important thing you need to do in your business? How do you plan to accomplish this? A strong value proposition allows you to compete in the market for the specific customers you want to serve. Your value proposition highlights why your solution uniquely solves the problem in such a way that customers will want to spend more with your company and less with your competitors — something investors love to see.

### "Your customers are the judge, jury, and executioner of your value proposition. They will be merciless if you don't find fit!"

ALEXANDER OSTERWALDER

Compare these value propositions from competitors in the laptop computer market:

- Microsoft Surface Pro X − "Built for web-first experiences, Surface Pro X is ultra-thin and always connected... 2-in-1 versatility and edge-to-edge, ultra-slim touchscreen."
- ▶ Apple MacBook Air "Incredibly light and thin, and now more powerful than ever... With all-day battery life, our most popular Mac is your perfectly portable, do-it-all notebook."
- ▶ Google Chromebook "If you want a computer that is smart, secure, and ready when you are, it's time for a Chromebook."

From a distance, most laptops look the same. With research, you see that each one performs different tasks, has a different operating system, a different price point, and often has a completely different type of customer at the keyboard. The value proposition each laptop brand offers determines what makes it different and essential to the customer who buys it. Value propositions are not merely marketing slogans or descriptions of retail channels. They define the underlying benefits their customer can expect from the product and company.

Your value proposition should be distinctive in the market. It should highlight the benefits of your solution and your company. It might focus on the problem solved, how the solution outperforms others, how it is delivered, and or how your company beats the competition. Your value proposition should align with the different way you will approach and solve the customer's problem, rather than the various features or pricing structures.

By the end of this course, you will hypothesize and test your value proposition amongst your potential customers, strengthening your messaging that will compel customers to adopt your solution.



### **Private Reflection: Draft Your Value Proposition**

Draft your initial value proposition in the space below. To guide you, use the following value proposition format:

For [your target customer]	
who [needs, requires, demands]	
we provide [solution name/description]	
that provides [benefit(s) or value(s)]	
Unlike other [industry/competitor]	
who provide [solution, features, functions, etc.]	
our company provides [improvements, better features, functions]	
that offer [this customer value]	
	1

Now, create your own statement:

The statement you have just created is the first of what will be many drafts you will create as you continually adjust and rewrite your value proposition. The more you research and explore, the more you will understand your customers, their problems, and how the market is currently trying to solve these problems. Later in this workbook, you will learn how to test the value proposition with customers before an official launch.

As you research, you will come across information that is interesting and worth remembering, even if there is no immediate use for it. We're calling these "Aha!" moments. We recommend creating a separate file or notes folder for this information, so it is readily accessible later in the process.



### Challenge!

Before the next module, continue learning, observing, and discussing the concepts of confirmation bias and viewing your idea as a potential solution to a problem.

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Ask someone to do the brainstorming exercise about your value proposition with you.
Review your notes and see how many ideas you can add.
Begin a list of "Aha!" moments.
Come prepared to report whether you completed all challenges and share at least one "Aha!" moment.



# 2 STARTING YOUR RESEARCH

### **Module 2 Challenge Reports**



### **Private Reflection**

Did you complete the challenges in module 1? What is your goal for next week?	List your most interesting "Aha!" moments:



### **Informal Reports**

Take turns quickly reporting whether you completed the Challenge actions and share one of your most important "Aha!" moments.

Insights to remember

What kept you from finishing your challenges from last week?

## **2** KNOW YOUR MARKET

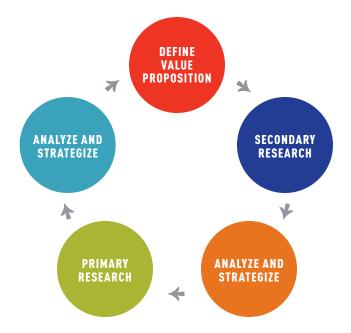
n the previous module, you gained a deeper understanding of what your customers are expecting and a better idea of the problem you want to solve for them. From these insights, you have an initial draft of your value proposition, a draft that will continue to evolve as you progress through this workbook.

With the information gained through market research, you will either prove or disprove the assumptions you made with your initial value proposition. This research will give you clear insights as to what is happening in your market today and possible clues as to where you can maximize your value.

Market research begins with secondary research and then transitions into primary research. As your understanding of the market matures, you will frequently alternate between secondary and primary research as you analyze, strategize, and ultimately narrow in on a strong value proposition.

This module focuses on the processes used by professional researchers to improve your abilities of secondary research, primary research, and testing your value proposition.

Here is a diagram of a general market research process for entrepreneurs:



### 2.1 TRACK AND ORGANIZE RESEARCH

As you begin your research, you will quickly discover the potentially overwhelming amount of information and data that is available. To keep yourself from getting discouraged, following data to the wrong conclusion, or losing vital information, take the time to create a tracking spreadsheet of your work. Record everything you discover or learn that is relevant to your value proposition, and be sure to cite every source. Hard numbers, statistics, and resources about your market and value proposition are particularly essential and persuasive to investors and other decision-makers.

An Excel template is provided with this workbook, but you can easily create your own with the table headings we suggest below. This file has color-coded headings — one for solutions, one for companies — in the same spreadsheet. The types of information you are going to want to collect are provided in the column headers of the sample table below.

#### Solutions/Products **Companies** Product Market Company Status (Private/Public) **Product Description Total Funding** Value Proposition Revenue Indication/Problem Solved Are they a Market Leader? **Device Status** Year Founded Cost or Differentiation ASP/Pricing/Customer Cost Differentiator Other Cost Details Customer Communications/Promotion Customer Convenience/Distribution Mergers and Acquisitions **Customer Ratings** Reviews Subsidiaries Additional Info Company Website Links to product-related information Sources

It is also a good idea to keep a worksheet to record notes from your interviews. Start with the template below and modify it with additional columns as you see fit.

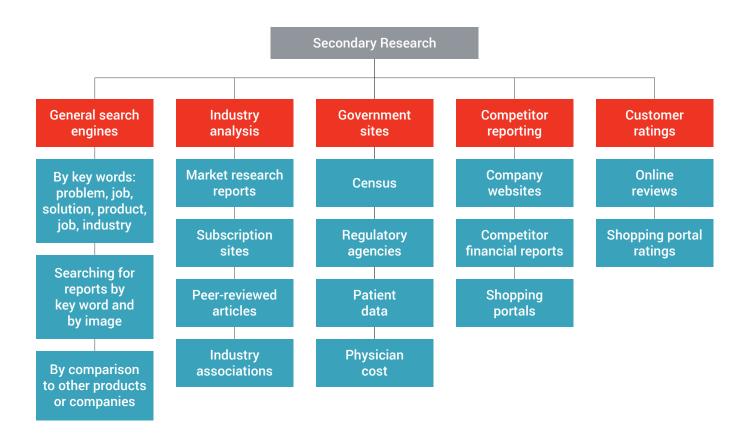
	Name, Contact	Segment/Role	Problems/Needs/Jobs	Solutions/Wishes	Advice	New Questions
1						
2						
3						
4						
5						

### 2.2 START WITH SECONDARY RESEARCH

Secondary research focuses entirely on existing information. This type of research typically starts with extensive internet searches, but can also extend to journal articles, data from

market research firms, and any number of informational sources. Gathering market intelligence begins by reviewing and processing all solutions that are even remotely similar to what you plan to offer the market. Taking the time to gather comprehensive insights based on existing information will help you determine how the market already views the problem you are addressing.

Here is a general list of secondary research sources and tools to help you expand your research methodology. TAKING THE TIME TO
GATHER COMPREHENSIVE
INSIGHTS BASED ON
EXISTING INFORMATION
WILL HELP YOU DETERMINE
HOW THE MARKET ALREADY
VIEWS THE PROBLEM YOU
ARE ADDRESSING.



### 2.2.1 How to Improve Search Engine Results

Online search engines, such as Google, are the first place to begin exploring the map of your market and competitive landscape. Search in terms of what your customers might use. What terms would they use to search to meet a specific need or hire a product to perform a particular job?

Searching as your potential customer will lead you to companies who are working on solutions to the problem you are attempting to solve with your value proposition. Consider searching with the following:

- · Your specific value proposition
- The problem(s) your solution aims to solve
- · Features and benefits
- The job(s) your product performs
- Each industry or market your product fits into

Searching as your potential customer is only a part of the puzzle, and researching as an industry analyst will help you gain a deeper understanding of the market. Customers can tell you what they need today, while an industry analyst assesses data to determine what will be valued in the future.

**Search like a customer** looking for your value proposition: the problem, need, job, specific solutions, industries, and brand names of known solutions. Useful search modifiers include:

- Best
- Recommended
- Top 10
- Rated
- [Brand] Versus
- Alternatives to [Brand]

**Search like an industry analyst** looking for existing reports and new developments. Useful search terms include:

- · Market forecast
- · Market report
- · Market size
- Industry trends
- · Innovative, Innovation
- · Disruptive, Disruption
- Advantages
- Disadvantages
- In development
- Developing
- FDA-approved (for medical)
- · Company reports
- Market research reports for your product and/or industry can be valuable but may also be very expensive. Some may be free or available through library subscriptions. Some reports behind paywalls often have publicly-available executive summaries and press releases that can help you map customer segments, major competitors, established products, products in development, and industry trends and forecasts.
- Try using "Search by Image" to pull up additional insights from images, charts, and graphs. This may also lead you to reports with additional information on your market.
- ▶ If you're working on a medical product, search for competing products through resources such as the US Food and Drug Administration (FDA). Learn reimbursement details by consulting *The Centers for Medicare and Medicaid* or competitors' websites for

reimbursement guides for similar products. You can search the *US Healthcare Common Procedure Coding System* (HCPCS) code for the diagnosis or procedure. If your research reveals reimbursement pricing, it will likely demonstrate that others have already gained regulatory approval for a product.



### 2.2.2 Activity: General Search

- Perform a general search using the suggestions above.
- Record your findings in your data tracking spreadsheet.
- Track new questions that arise as you search.



### 2.2.3 Discuss in Small Groups

- What did you search for?
- What did you find on your topic?
- What did you learn? "Aha!" moment
- Listen for useful keywords and add them to your list of search terms.
- Did you find an existing solution that exactly matches your idea?

## 2.3 DISCOVER YOUR CUSTOMERS THROUGH PRIMARY RESEARCH

With secondary research, you will have an extensive list of additional questions. Your primary research aims to find answers to these new questions. Primary research is the process of learning details about your customers, what they are looking for, and what they expect from the products they buy.



Your secondary research helps you understand how to talk to your customers; the primary research reveals the details behind what customers, and other industry participants, may or may not already know. We recommend learning all you can about your customers before conducting primary research. Your goal is to understand their world as completely as possible *before* you interview them.

Primary research helps you understand how your customers perceive the problem to be solved, as well as what they are doing today to address it. This interviewing process, usually called *customer discovery,* is where you find out who your customers are, the needs they do or don't have (the job the product will accomplish), what they value, and what it would take to deliver that value to them.

Later in this program you will conduct interviews to understand how your customers perceive your value proposition. However, these interviews come much later on in the market validation process. Before you talk to customers about your idea, no matter how awesome it is, you need to understand their mindset of how they are currently managing the problem your solution solves.

Through interviews, you will try to understand the mindset of the individual you are speaking with by asking questions about how they did something in the past, or what they do currently. Research has shown that people are very poor predictors of their future actions, especially when purchasing products. While interviewing your customers, try not to ask them what they think of your idea. Be very careful not to sell them, or even mention, your idea at all. Ask questions that are discovery-oriented to help you understand their worldview and how they make problem-solving decisions.

Some questions to help you get started. (Additional questions are available in the Appendix.)

- When was the last time you encountered [the problem]?
- What did you do to solve the problem?
- Why did you make that choice?
- Were your needs met?
- ▶ What did you wish the [solution/product] could do that it didn't?
- Next time you encounter the same problem, are you likely to use the same solution? Why or why not?

The questions above are qualitative – as they require answers that may not be multiple-choice, yes/no, or in numerical form. Answers to these questions will likely lead to more research and insights, and are essential to developing a strong foundation to continue your discovery. Later, you may benefit from quantitative research which uses things like surveys and questionnaires to gather information that can be observed, graphed, and compared.

You will alternate between secondary and primary research throughout the research process. Provided you have a large enough sample size, primary research is a great way to verify secondary research results. Be sure to interview enough prospective customers to learn which customer subset is most interested in your solution before you spend too much time and resources expanding your research activities into ineffective audiences.

As you continue with primary research, be sure to:

- Extensively prepare and continue with secondary research.
- Use interviews to validate and refine your secondary research, explore gaps in the available data, and gather real customer perspectives.
- Never lead with your product or value proposition.
- Focus on the problem to be solved.
- ▶ Focus on your interview subject's needs and wishes.

Conduct as many customer interviews as possible. In addition to the direct customers who you first consider, keep relevant industry customers in mind as they may provide valuable insights from their roles, needs, and processes.

Which of these are relevant for your solution and industry?

Buyers – the individual or group that evaluates the product from a financial perspective
<b>Decision-makers</b> – higher-level executives or boards that must see the value of a solution holistically
<b>Influencers</b> – key opinion leaders who influence decision-makers and buyers (could be inside of a company)
Payers – insurance companies or government agencies responsible for ultimately paying for the services (e.g., medical reimbursement)
<b>Distributors</b> – third-party entities responsible for reselling your product to end-users through established distribution networks
Other partners applicable to your industry or business model
<b>End-Users</b> – the person who will be using the product. For example, a manager may have authorized the purchase of your solution, but it is the sales people who have to use it every day.



### 2.3.1 Activity: Practice Interviewing

Pair up with someone and practice interviewing as though you are each other's customers. Practice asking open-ended questions (e.g., who, what, where, how) to understand how they feel about the problem and how they would solve it or would want to solve it. Practicing the interviewing process will help you get comfortable with speaking to strangers about their needs and the problem to be solved, while helping you interview in an unbiased fashion.



### 2.3.2 Discuss: Interviewing

- What did you learn from this exercise?
- Have you already conducted some customer interviews?
- How will you improve your interviews?

Insights to remember

### 2.3.3 Additional Primary Research Skills



We strongly recommend you interview a substantial number of customers about their thoughts related to the problem that your solution solves. How big of a "pain" is the problem for your customers? Find out what – if anything at all - they are doing today to solve the problem. You might be surprised to learn some of them aren't bothering to solve the problem at all. This discovery is essential to the success of your venture.

This information should help you refine your messaging and help you develop a product customers will want to buy. Primary research can be conducted either in person or by phone. We recommend using a qualitative approach before you conduct primary research from a quantitative approach (i.e., surveys).

### See Related Resources in the Appendices

Interviewing Skillfully
A -l -liti l lti 0

### ☐ Additional Interview Questions for Customer Discovery

### ☐ Understanding Your Customer

### Remember:

▶ Interviews: Stay focused on the customer's needs, problems, the job they need done, and ideal value propositions. It is premature to discuss your value proposition at this point.



### **Private Reflection**

What are the most important things you learned from your initial research?

Has your initial research revealed any particular challenges or limitations of your solution? If so, how do you plan to resolve this?



### Challenge!

Before the next module, continue learning, observing, and discussing secondary and primary research concepts.

	Conduct a general search of your product, problem, and industry to seek out market research reports. Record your findings.
	Conduct at least five interviews about the problem you are looking to solve without discussing your own solution or value proposition. Record your findings, including what you learned about customers, your market, and the interview process.
	Discuss your research with a mentor or subject matter expert.
	Teach one of the concepts from this module to someone else.
П	Continue your list of "Aha!" moments

☐ Come prepared to report whether you completed all challenges and share at least

one "Aha!" moment from your research process.

# 3 COMPETITIVE ANALYSIS

#### **Module 3 Challenge Reports**



#### **Private Reflection**

Did you complete the challenges from module 2? What is your goal for this next week?	What are the most important things you learned from your secondary research and interviews this week?



#### **Informal Reports**

Take turns quickly reporting whether you completed the previous module's challenge actions and something you learned from your research.

**Insights to remember** 

What kept you from finishing your challenges from last week?

# **3** COMPETITIVE ANALYSIS

our future competitors already have a proven value proposition that not only works but is also keeping them in business. They have already established what the problem is and are delivering a solution to their customers. Your competitors are working with the information they gathered and are already acting upon it. To gain and maintain a competitive edge, you will need to do the same.

Just like an attendee of the CES trade show, you want to be aware of every potential competitor in your field. Competitors who have already taken their solutions to the commercial stage have an understanding of what customers want, how to reach them, where they will buy the product, and how much these customers are willing to pay for it. You need to have just as much detail about the market and how your product fits into it. You must understand not only who operates in your market, but also be familiar with the services and solutions competitors are providing so that you can make strategic decisions. Studying competitor behavior will rapidly expand your knowledge of other value propositions and help you determine the best position to take within the market.

There are countless questions entrepreneurs keep in mind when they are assessing the strength of their competition, including:

- With the value proposition they have established, how effective are they in acquiring market share?
- Where are they currently positioned, and where are they heading next?
- What territory have they left unserved, and why?
- > Study their strengths and weaknesses and learn all you can from them.

This module will guide you through the process of collecting information to analyze your product's market and summarize the competitive landscape to develop a highly competitive strategy.



The slide template included with this workbook has several useful slides to help you present information about your competitors. Select the slides that highlight the most meaningful information for understanding your competitive landscape and how you can position your offering to compete. You can record significant findings directly on the slide templates as you discover them, provided you are willing to revise the slides as you gather more information. Or, you can store all notes in the spreadsheets and prepare slides at the end of each module.

#### 3.1 GATHER AND ORGANIZE DATA

In Module 2, you started collecting data through secondary and primary research to determine how the customer might respond to your value proposition. Now, your research continues so you can build a database about the competition that is already in your market. Who is offering similar solutions to the problems you're solving? What kind of products are they making? How are these solutions being delivered to the market?

Researching your competitors may also reveal companies that failed to deliver something similar to what you are working on. Learning from their mistakes and seeing where they went wrong could prevent mistakes as you prepare to launch your solution. As you develop your idea and start to share it with others, you will want to remove as many of these surprises as possible. Thorough competitor research gives you a clear view of what you can expect from the market moving forward.

Be mindful of indirect competitors who offer variations of products or services that solve the same problem. For example: smartphones, tablets, and laptops come from three very different markets, but all indirectly compete with one another in solving similar problems (computing, long-distance communication, entertainment, etc.).

Add all of these competing solutions to your research tracking spreadsheet. At the end of this module, you will use the information in these spreadsheets to create tables and graphs for your slides to visually convey what your competitors are offering.

Start your research with keyword searches to find more details about specific products and companies. Crunchbase.com is a free platform (with some paywalled content) that compiles information about companies, making it an excellent resource for researching details about known and unknown competitors, including information about their investment or commercialization.

Some additional resources for researching competing products and companies include:

- General search engines by need/problem, product, industry
- Market research reports
- Company websites and marketing materials

- ➤ The Wayback Machine at archive.org: learn how a corporate site's value propositions and marketing messaging have evolved over the lifespan of the internet
- Competitor and industry press releases
- Sites selling products: pricing, customer ratings, customer communications
- Competitors' social media accounts
- Social media comments about a company or a product
- ▶ If medical peer-reviewed studies evaluating/comparing solutions

#### 3.2 ANALYZE COMPETING SOLUTIONS

Once you have gathered as much information on your competitors as possible, you will need to organize this information in a way that helps you visualize how each company positions themselves in the market

Tables, charts, graphs, and other visuals are more than decorative breaks from words and statistics. Visualizing data helps the reader process complicated data sets quickly. As you conduct your research, consider how to visualize data in a chart or graph to convey your conclusions in the best way possible. There is a wealth of online resources that can guide you on how to create graphs and charts with spreadsheet software (such as Microsoft Excel or Google Sheets). Later in the workbook, we will demonstrate additional chart options that are particularly useful for market research analysis and reporting.

#### **Classify Solutions**

Hierarchy charts are great for comparing different types of a particular solution, or conversely, applications for the same solution. We recommend creating one to analyze the most competitive alternatives to your solution. Figure 1 features a hierarchy chart that classifies solutions by:

- Job (city transportation)
- · Sector (public, private, and rental)
- · Solution categories

Once you understand the available solutions in your competitive landscape, and which sector and solution you want to compete in, you could create a similar chart beginning with the sector or the solution at the top and again working your way down to a more granular hierarchy.

Figure 2 demonstrates the opposite direction of classification – by jobs that a solution could perform. It focuses on medical indications addressed by a solution (digital therapeutics).

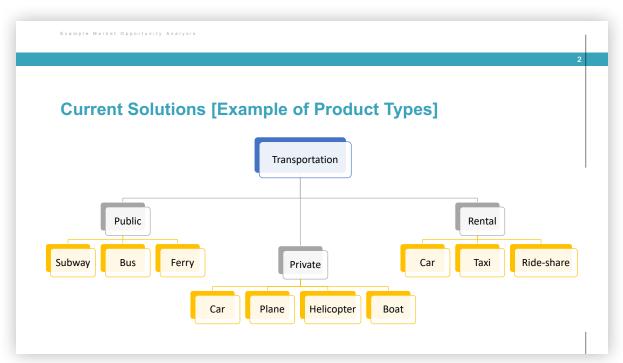


FIG. 1

These types of charts help visualize your market and where your solution could potentially be positioned. For example, digital therapeutics can be classified into three types of products: a coaching/behavior modification service, therapy enhancing product that improves the effectiveness, or a prescribed digital therapeutic that replaces a pharmaceutical. Seeing this information in a hierarchy chart can help you intentionally position yourself into a specific segment/category.

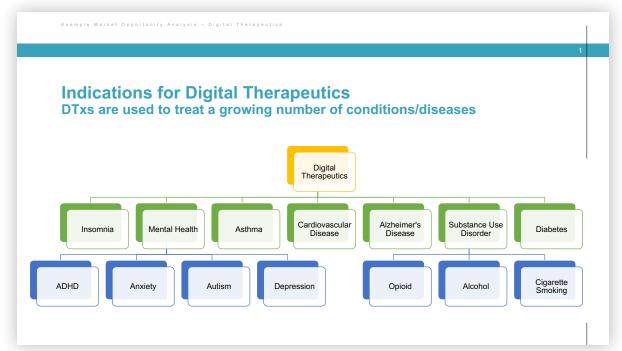


FIG. 2

Which is a more relevant org chart for your solution or industry: (1) solutions for the problem or job, or (2) uses for the solution?

#### 3.2.1 Compare Marketing Strategies

Winning companies manage their marketing strategy with a healthy balance of the "4Ps" or Robert Lauterborn's more customer-conscious "4Cs." By evaluating the following four elements, you can learn from current market leaders to better understand how they are being used in the market today.

An excellent resource for viewing the evolution of company messaging is The Wayback Machine at archive.org. The Wayback Machine stores old versions of websites throughout the years – including your competitors! This information can help you see the process market leaders have gone through while developing their current offerings.

4 Ps	4 Cs
Product	Customer value (how they solve the customer's need, problem, or job to be done)
Price	Customer cost
Place (distribution)	Convenience (customers have more power to affect where they want to buy)
Promotion	Communication (this is more commonly two-way communication now rather than one-way promotion)

#### **Compare Customer Value (Product)**

Successful startups differentiate themselves by producing a better product or solution than what is currently available. Furthermore, the solution must solve a significant problem while providing key advantages for a large market of potential customers. With this in mind, evaluate competing solutions and try to understand how your competition is currently differentiating their products.



How do the products in your list of solutions differentiate themselves?	How do you plan to differentiate your solution from the list?

Note: We highly encourage that you perform the above activity for every competitor that you identify.

#### **Compare Customer Cost (Pricing)**

Price is a crucial indicator of the value customers are currently placing on the solution and can help you determine where you might fit in. You will need to understand how competitors are positioned so you can price your solution in alignment with what the market will be willing to accept. This does not mean you are competing by offering the same solution at a lower price.

Some markets are more difficult to analyze than others. Medical devices, for example, have reimbursement prices set by insurance companies and government agencies, which determine what you can charge healthcare providers for your solution. A unique device can always ask for a higher reimbursement allotment, but this request may leave you subject to proving the clinical benefit or long-term economic benefits for the healthcare provider who is footing the bill. A hospital and its respective purchasing group will purchase products/devices within a set price. Everything hospitals purchase must

fall under this set price. If a product is too expensive, the administrators will require the company to demonstrate the added benefits of the increased cost.

However, not all medical devices are going to be restricted by this framework. The cost of medical devices for elective/cosmetic procedures is often passed through to the patient. In elective procedures, a physician may be inclined to offer a premium product or device as a way to increase revenue and profits.

Comparing competitors' prices with your product's proposed price will help you determine how your offering needs to be different while ensuring your business costs are covered. If the price your market will bear is too low to produce a healthy margin, it is worth rethinking your position.



What is the average sale price for competing solutions?	Where does your proposed price fit into the market?

Note: We highly encourage that you perform the above activity for every competitor that you identify.

#### **Compare Customer Convenience (Place/Distribution)**

How are customers currently purchasing the solutions offered by your competitors? Understanding how competitive solutions are being sold and distributed will determine your distribution strategy, including how expensive it is to deliver your product to the market.

What distribution channels and revenue models are your competitors using? How many times do your customers purchase? Is there a subscription opportunity to maintain a customer base and ensure revenue flow?



How do competing solutions distribute their products?	What distribution channels and revenue models do you plan to employ?

Note: We highly encourage that you perform the above activity for every competitor that you identify.

#### **Compare Customer Communications (Promotions)**

Sometimes you can find out how your customers might feel about your product long before you conduct primary research. Online stores typically have customer reviews for their products available to anyone, and unfavorable reviews can reveal market opportunities or competitor shortcomings. This could be an opportunity for you to compete by improving on currently available products.

If you are developing a solution or product for a medical-related market, your secondary research may come from reviewing clinical studies that evaluate similar products. Clinical studies determine the safety and effectiveness of medical solutions both before and after they have gone to market. This information may not only reveal insights about the effectiveness of competitor solutions but can also give you clues about healthcare providers' perceived advantages and disadvantages of what the study is evaluating.



How do competing solutions communicate with customers?	How do you plan to communicate with customers?

Note: We highly encourage that you perform the above activity for every competitor that you identify.

#### 3.2.2 Compare Positioning

It is useful to visualize the positioning of your solution compared to your competitors. Doing so reveals new insights, such as a identifying "white spaces" where a new opportunity may exist. Comparing positioning can also be used to develop your strategy. Rather than operate in a vacuum, the positioning of your product should be influenced by studying your competitors.

While you could position yourself anywhere, crowded markets require your product to be more competitive, while sparse markets are often full of uncertainty. Visualizations, such as bubble charts and quadrant charts, are ideal ways to see where your competition is, and isn't, so that you can determine your best position.

**Bubble charts** utilize three quantifiable variables in a spreadsheet to create a visual map of data. Figure 3 maps the size of competitors with their product's price and the number of features.



FIG. 3

This chart maps competitors' associated price versus the number of features to reveal how the two largest companies offer more complicated and expensive products. The white space between the sets of bubbles is worth considering: could there be a product that has middle-of-the-road features?

Creating bubble charts like this raises additional questions worthy of research: What are the most popular features? How do the sales of each product compare? How do their target markets vary? What are the sizes of those markets? What else would you need to learn?

Creating bubble charts can help you understand and convey what is available in the industry as you seek effective positioning for your product.

What are three quantifiable factors that would be most significant for your product and industry?

**Quadrant charts** clearly express competitive relationships to help you compare products or companies. They are often used to show the relative quality and pricing of brands within an industry and help develop your positioning. You can use quadrants in interviews to find out whether customers agree with your competitor placements, whether those features matter to them, and whether there are other features they prefer. You can use quadrants to explain your product or company positioning to your team and potential investors.

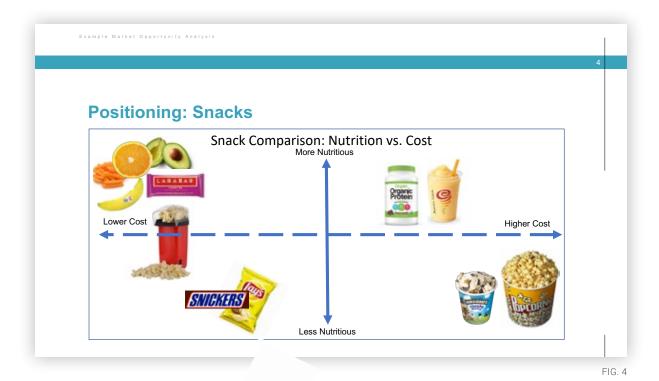
There are several ways to create quadrant charts:

- Formally graphing quantitative data
- · Assigning relative, subjective rankings and entering those as numerical ratings
- · Placing them manually on a chart

A quadrant chart is a useful tool for visualizing where similar products are positioned based on two variables. Depending on the market, you may want to position yourself in a "white space" where competing products are scarce or not present. However, the presence of white spaces raises the question: Why are no products currently in this position?

In some cases, white space may not be a tenable position for your solution. If a product is positioned in a heavily commoditized market where similar products are competing on price, it may be beneficial to reposition the product in another space.

Figure 4 demonstrates how a quadrant chart compares snacks based on nutritional value and cost.



Positioning: Metal Detector Features

Metal Detector Portability vs. Simplicity

Most Portable

Maxwell XT02

Most Complex

Horizon Z5

Goldstar G17

FIG. 5

Figure 5 was created by manually positioning products on a chart. It compares competing products based on portability and simplicity, with an association between complexity with portability versus simplicity with less portability. It is worth asking: is it worth pursuing metal detectors that are simple and portable? Or, perhaps, does the market need something more complex which needs to be installed in a set place?

What are the most important features of current solutions to help you evaluate competitors' positioning and decide where to position your product?

#### 3.2.3 Identify Disadvantages and Unmet Needs

Based on how you visualized your data in the last section, you can ask two essential questions: What are the unmet needs? Where are available products falling short?

A great way to identify disadvantages and unmet needs in your market is to conduct additional secondary research. Try doing a web search that includes keywords such as "disadvantages," "unmet needs," or "compared to" alongside key market terms to discover limitations and unmet needs you could potentially improve upon.

#### **Disadvantages and Unmet Needs**

#### **Disadvantages**

- May not be immediately obvious how healthcare providers can implement and benefit from utilization
- Technological barriers DTxs may be too complex for some demographics (e.g. the elderly) to properly utilize
- The "too much data" conundrum –
  healthcare providers may not have the
  capabilities to utilize all the data
  accumulated by digital therapeutics and
  other patient monitoring systems
- Difficult to distinguish from digital health/mHealth applications

#### Considerations for Products in Development

- Easy-to-use for patients and providers
- Affordable DTxs that are intended to replace traditional pharmaceutical therapies should cost less than the pharmaceuticals being replaced
- Actionable/useful patient health data
- Clinically validated makes adoption and reimbursement compelling for physicians and payers
- Holistic chronic conditions are often interconnected and an all-in-one platform/therapeutic would be distinguished from platforms that focus on a specific condition

What are the disadvantages and unmet needs in your market?

Have you revised any previous assumptions or plans?
What else do you need to know about succeeding in this industry?

## 3.3 ANALYZE COMPETING COMPANIES

Thorough competitive research can reveal deep insights about the competitors within your market. Market leaders and emerging competitors are indicators of what is currently working in your market and how you need to compete against them.

Similar to the way you gathered and analyzed information on competing products, you are going to continue the process when analyzing the companies that offer these products.

#### 3.3.1 Compare Revenues

Tracking your competitor's estimated revenues is an effective method for objectively identifying market leaders, and it will help you understand why they are market leaders.

Comprehending your competitors' revenue also gives you insight into the "health" of the market. For example, declining revenues may be a red flag for potential headwinds or restraining factors that could negatively impact your startup. In the next module, you will

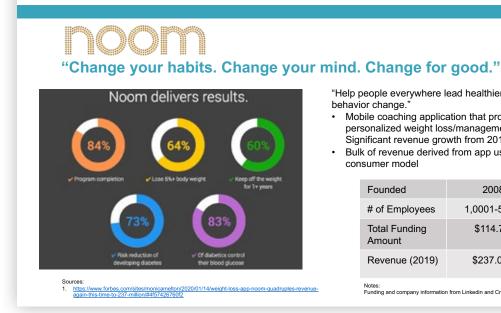
learn how to use the revenue information you are collecting about your competitors to estimate the size of your market, i.e., the amount of money being spent by customers who are currently trying to find a solution to their problem.

Privately held companies usually keep financial records confidential, but public companies must report detailed financials. In these public documents, you can find their sales revenues, COGS (cost of goods sold), profits, marketing expenses, and more. Large companies usually consolidate the sales and costs of all their products within these reports. Still, some companies - often those with only a few products - might provide financial reporting you can tie to specific product revenues.

Public financial reports may outline a strategy, investments, forecasts, risks, sales, distribution, and supply chain information. This information can shape and refine your knowledge about the industry and help you develop your strategy for approaching the market.

If applicable, classify companies as Market Leaders, Failed/Struggling, or New/Disruptors. Learn everything you can about each company and analyze why they seem to be succeeding or struggling.

Who are your current and potential competitors, and what are their competitive advantages?



Example Market Opportunity Analysis - Digital Therapeutics

"Help people everywhere lead healthier lives through behavior change.'

- Mobile coaching application that provides personalized weight loss/management to users Significant revenue growth from 2018 to 2019
- Bulk of revenue derived from app users direct-toconsumer model

Founded	2008
# of Employees	1,0001-5,000
Total Funding Amount	\$114.7M
Revenue (2019)	\$237.0M <sup>1</sup>

Notes: Funding and company information from Linkedin and Crunchbase

#### 3.3.2 Research M&A and Fundraising

An excellent way to measure the level of investor interest in your market is in the number and volume of merger & acquisition (M&A) activity and recently completed fundraising rounds.

High M&A activity in an industry can be a sign of growth and opportunity, or it can suggest consolidation and increasing barriers to entry. If market leaders are acquiring startups, that might be an exit opportunity for you.

Investment activity is an important clue for understanding the health and trends of an industry. Consider the past two or three years of fundraising within a respective industry and note the extremes of where investors either avoid certain trends entirely or where they make substantial investments. Where does your industry fit in the spectrum of fundraising activity?

What did you learn about recent M&As? What does that suggest about the health of your industry?

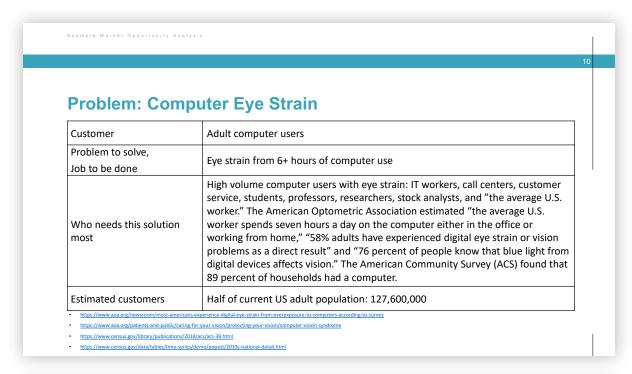
What did you learn about fundraising? Does fundraising activity raise new insights into your industry?

## 3.4 SUMMARIZE THE COMPETITIVE LANDSCAPE

Compile your research and analysis to determine the most significant factors of your competitive landscape. Organize your insights into digestible elements to create the slides of your market validation deck.

Review previous assumptions and any slides you created earlier, evaluating them according to what you have learned in the progression of this workbook. Revise if needed.

For Competitive Insight slides, combine company and product information to provide well-rounded portrayals of each solution.





### 3.5 DEVELOP YOUR COMPETITIVE STRATEGY

After researching and finding additional competitor information, re-evaluate your value proposition to determine a stronger position within the market. Now that you know more about your competitors and their current strategies, what have you learned about what it takes to compete with them? That is your competitive strategy.



The competitive landscape is always changing. The competitive analysis you just completed is just a snapshot of what is happening *right now* – you will soon discover how essential continued research is to the success of your venture. Maintaining and updating information on your competitive landscape will keep you abreast of what your customers want and, if necessary, allow you to course-correct.

As you complete the research on your competitive landscape, select the most relevant slides from the template to express your findings clearly and insightfully:

Where can you compete or disrupt? How can you differentiate?

Why would a potential customer switch to your product from their current solution?

What did you learn? What will it take to compete? What is your competitive strategy? Have you adjusted your original plan?



#### **Final Private Reflection**

What is the most important thing you need to do this week to validate your market?

Schedule actions on your calendar or set a reminder for yourself to stay on track and revisit necessary ideas.



#### Challenge!

Before the next module, continue learning, observing, and discussing your ideas.

- Complete the secondary research suggested in this module and record your findings in your database.
   Continue conducting interviews.
- ☐ Determine your competitive strategy.
- ☐ Complete your Competitive Landscape slides.
- $\hfill \square$  Discuss with a mentor or subject matter expert and revise as needed.
- ☐ Come prepared to report whether you completed all challenges and share at least one "Aha!" moment from your Competitive Analysis.



# MARKET OPPORTUNITY ANALYSIS

#### **Module 4 Challenge Reports**



#### **Private Reflection**

Did you complete the challenges from module 3? What is your goal for this next week?	What are the most important things you learned from completing the previous module? Have you learned anything new from interviews this week?



#### **Informal Reports**

Take turns quickly reporting whether you completed the Challenge actions and something you learned in your research.

#### Insights to remember

What kept you from finishing your challenges from last week?

# MARKET OPPORTUNITY ANALYSIS

s with the competitive landscape analysis, you will use both secondary and primary research to conduct your market opportunity analysis.

You have already researched the problem/need/job to be done, whether customers are already paying for a solution, what they buy, and what gaps might exist in the market. You, and your potential investors, will need to know the number of customers in the market and what the opportunity could be worth. There is a vast difference between starting a lifestyle company - which can make a good living for an entrepreneur and their employees - and founding a scalable startup in a market large enough to provide considerable returns to investors. Each type of company has its advantages and disadvantages, and you probably have some assumptions about which type of company you hope to build. Knowing the size of your market helps you be realistic about the kind of opportunities available.

Investors and market-research firms utilize numerous calculations from a wide variety of data to understand market opportunities. These calculations estimate the size of your immediate, serviceable, and total markets. It is beneficial to you and your potential investors to know how big of a potential market there is for your solution. In this module, you will calculate the value of the various markets and also evaluate market dynamics to predict future opportunities and risks to your venture.

In this module, you will work on defining the size of your market and identifying the headwinds and tailwinds influencing the market.



## 4.1 DEFINE YOUR MARKET: TAM, SAM, IAM

You may have heard entrepreneurs or investors talking about "billion-dollar" market opportunities, but what do they mean by it? In most cases, they are referring to the Total Addressable Market (TAM). That total addressable market is all of the money currently being spent on solutions for a particular problem – a good thing to comprehend as it helps you determine the total value of the market you are entering.



#### **TAM (Total Addressable Market)**

The total amount of money spent on an annual basis in your general market.

#### SAM (Serviceable Addressable Market)

The amount of money spent on a subset of the TAM that more closely aligns with the customers you can reach with your concept.

#### IAM (Immediately Addressable Market)

The immediately identifiable customers of your specific value proposition. This is the portion of customers within your SAM you can realistically reach first.

When calculating a market size, analysts ask questions like:

- ▶ Are there enough willing buyers to support your business?
- ▶ Is that market large enough to attract investors?
- Will your concept need to attract new people to the market?
- Will your concept require stealing market share from somewhere else?
- Where will the market share come from?

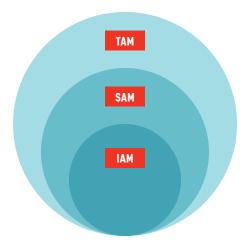
Knowing the TAM is a good starting place, but competitive startups need to refine their focus. If you have a device to solve acne problems, it is not enough to know how many billions of dollars are spent on all acne treatments. You would also need to know how much money customers are spending on devices for acne treatment. Even then, you need to be able to define how much money could immediately shift to your value proposition.

Similarly, in evaluating how much your market could be worth, it isn't enough to say, "taking just 1% of the TAM would be amazing." You must also be able to say, "1% of a subgroup of specific individuals are ready to pay for the value proposition we will provide, and we know how to reach them." The more you know about your specific market opportunity, the better.

Consider the following examples:

If you are selling an over-the-counter acne treatment device, your TAM might be a

\$5 billion market that includes competitors like pharmaceutical products and in-office treatments. However, you happen to be selling an over-the-counter acne device. Your SAM would be the amount of money being spent specifically on over-the-counter devices; let's call it \$500M. These are the customers who have already bought into the "over-the-counter device" solution. Then, you further refine your results based on your value proposition. If the value proposition of your devices is that it solves acne problems more quickly for an



"immediate result," and you have determined that of the \$500M, \$300M represents the subset that values the number one priority of "immediate results." The \$300M subset estimate is your resulting IAM.

At the outset, your goal is to acquire and control a significant share of your IAM. Once you find success in your IAM, the focus might shift to capturing more of the SAM before ultimately moving your focus into the larger TAM. Typically, the larger the TAM, SAM, and IAM, the better the market opportunity.

To estimate your TAM, SAM, and IAM, first define the terms for each market that are relevant to your solution. Here are a few examples:

## **TAM:** acne treatments

# **SAM:** over-the-counter acne treatment

# IAM: customers that would choose the "immediate results" value proposition over existing options

devices

#### TAM: mobile apps

#### SAM: mobile healthcare apps

#### IAM: mobile healthcare apps for young bodybuilders

# TAM: pet food

# **SAM:** dog food

IAM: puppy food

Initially, your business strategy should focus on capturing your IAM, and then how you plan to expand to compete in the SAM and TAM.



#### 4.1.1 Activity: Define Your TAM, SAM, and IAM

Consider the previous examples that breakdown the TAM, SAM, and IAM. It is beneficial for you to define these categories for your own market. By completing this exercise, you will start to understand the type of information you will need to collect in order to calculate the size of your market.

How v	vill you define your market?
TAM	
SAM	
IAM	



#### 4.1.2 **Discuss:**

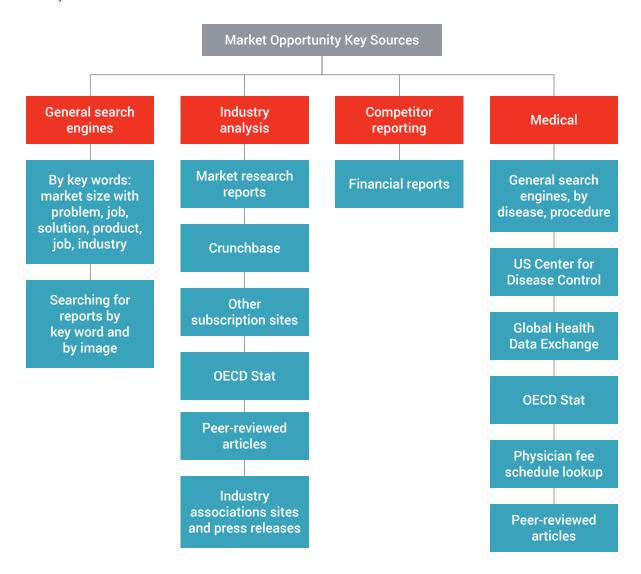
Share your definitions with your group, mentor, or an associate who can help you accurately define your market sizes.

#### Insights to remember

### 4.2 ESTIMATE TAM: TOTAL ADDRESSABLE MARKET

Your goal when estimating the TAM is to find three to four different estimated market values and arrive at the most substantial market estimate. Take the commonly discussed values you discovered in your secondary research, and then validate those numbers with averages, calculations, and possibly additional primary research. You want to find out the total amount of money being spent today on the problem you are trying to solve. If you are creating a particularly novel product, you may consider looking at the total number of people with the problem your product sets out to solve.

You might consider the following resources to help you in your search for an estimate of your TAM.



#### 4.2.1 Industry Reports

Whether reporting on a product or an industry, the reported market size depends on a particular scope. Figures in pre-existing market research will help you determine TAM, but the numbers might be skewed. These figures might include products that aren't relevant to your specific market, and revenue statistics in reports can often be incomplete or misleading. Take the time to understand the context of the report, and where the report data is aggregating from, especially if a traditional sales data collector lacks access to an emerging sales channel. Analysts who compile reports estimate the market size by reviewing SEC filings, volumes of sales, revenues, industry reports, and interviews with industry leaders to create, at best, an estimate - just as you are doing. Do what you can with the information available, but be prepared to explain to investors any unknown variables in your assessments.

#### 4.2.2 Calculate TAM by Multiplying ASP by Customers

#### **Average Selling Price (ASP)**

Estimating the ASP is particularly useful when calculating the size of the market for products like medical devices, where the number of procedures and the ASP of devices can typically be determined. The total market size then becomes the ASP times the number of annual procedures or potential customers with a clear need. However, try not to interpret this estimation too loosely. If your acne device is going to sell for \$100, and you claim anyone with skin can use it, your TAM will not be credible or useful. The more specific you can get with your customer segment, the more accurate you can be in determining the share of the market most in need of your product.

Calculating your ASP is easier if it is sold directly to consumers through retail or online outlets. Other ASPs can be more difficult to estimate. Companies might negotiate different prices depending on the type of customer (such as company size, nonprofit vs. corporate, wholesale vs. retail), on quantity, or by bundling with other offers. There might be price variations for one-time versus recurring purchases. The cost can also be diffused by a subscription model, such as a device that regularly needs replacement supplies or an initial app price with an ongoing monthly fee. Each of these ASPs is worth considering as you are calculating your estimates.

#### **Number of Customers**

How many people have the problem you are looking to solve? Customer counts are best estimated from calculations based on industry reports and census data.

For example, for a solution addressing screen-induced eye strain, you might narrow down customers by referring to an optometry industry survey. If the survey concludes: "58% of adults have experienced digital eye strain or a vision problem as a direct result" of

computer use, you could then use US Census estimates to determine how large "58% of the adult population" is.



Remember to provide citations for your sources!

Problem: Com	puter Eye Strain
Customer	Adult computer users
Problem to solve, Job to be done	Eye strain from 6+ hours of computer use
Who needs this solution most	High volume computer users with eye strain: IT workers, call centers, customer service, students, professors, researchers, stock analysts, and "the average U.S. worker." The American Optometric Association estimated "the average U.S. worker spends seven hours a day on the computer either in the office or working from home," "58% adults have experienced digital eye strain or vision problems as a direct result" and "76 percent of people know that blue light from digital devices affects vision." The American Community Survey (ACS) found that 89 percent of households had a computer.

#### For Medical: Number of Patients

For medical products, identify the number of patients using epidemiological data such as disease prevalence, incidence, and the number of procedures. In this example, for

#### Example Market Opportunity Analysis **Medical Need: Cardiac Arrest Diagnosis** Deaths: 647.457 Disease Deaths per 100,000 population: 198.8 prevalence in US Rank in cause of death: 1st Coronary artery disease, Sudden cardiac death Number of adults with diagnosed heart disease: 30.3 million (12.1%) Percent of office-based physician visits with coronary artery disease, ischemic heart Indications disease, or history of myocardial infarction indicated on the medical record: 6.7% Percent of visits to emergency departments with coronary artery disease, ischemic heart disease, or history of myocardial infarction indicated on the medical record: 6.1% Annual number Emergency room visits with chest pain and related symptoms: 6,523,000 (standard error 540,000) of procedures

solutions diagnosing cardiac arrests, we gathered information from the US Centers for Disease Control and included the source in the footnote. You will notice from the data compiled that 30 million people are diagnosed with heart disease every year. If you multiply this number by your ASP, you could potentially have your TAM. Then you should probably calculate your TAM by using the number of patients who have this disease reported in physician visits each year.



#### **Activity: Begin to Estimate Your TAM**

What does secondary research say your TAM is?

What additional ways can you calculate your TAM?

# 4.3 ESTIMATE SAM: SERVICEABLE ADDRESSABLE MARKET

The SAM is the specific product segment for your solution, such as customers who buy the over-the-counter acne treatments (not just people with acne), mobile healthcare apps (not any app), or dog food (instead of any pet food).

When calculating SAM, apply the same research and calculation techniques used to find your TAM.

#### 4.3.1 Estimating the Opportunity For a New or Niche Market

There are two options to consider if your product is entering a completely new market or solving a problem that does not yet have a comparative solution:

- (1) Reflect on the problem to be solved to find relevant and related markets where customers are already spending money and/or
- (2) Learn intimately about the number of people who share the problem or need you are looking to address.

In most cases, the job customers hire by purchasing a product doesn't change. The first rideshare app was new to the market, but many solutions already existed to fill the job of transportation. To determine the size of the market, it would have made the most sense to research market sizes for taxis and rental cars.

Sometimes, creative estimations are necessary. For example, to estimate the market for flights to the moon, you could combine data on the money spent on extreme adventure activities, such as skydiving and bungee jumping, with those who take luxury vacations. From there, your primary research would discover the demographics of interested customers and then estimate the percent willing to buy a ticket to the moon.

Estimating the value of niche markets is particularly relevant for unsolved health conditions. If you have a cure for Alzheimer's disease, you might first consider the money customers are spending to manage Alzheimer's disease today. Not necessarily the cost of treating the disease, but the amount spent to manage the symptoms. You might also consider the number of patients who would be candidates for your cure. This number multiplied by a hypothetical ASP compared with the amount being spent today would give you an estimate for the TAM and/or SAM.



#### **Activity: Estimating Your SAM**

What does secondary research say your SAM is?

What additional ways can you calculate your SAM?

# 4.4 ESTIMATING IAM: IMMEDIATELY ADDRESSABLE MARKET

The IAM is the size of the market opportunity of customers specifically interested in your product's value proposition. This is the market where you will first pursue selling your product. Calculating your IAM is an initial gauge of what revenues your product might earn early on, which then helps you estimate your future revenue.

Calculating the size of the IAM typically requires primary research, so you can estimate the volume of customers who would buy. You may need to revisit this estimate after you test your value proposition.

As you conduct primary research, continue to learn more about your customers and their problem to solve or job to be done. As you do, be sure to revise your calculated IAM based on the new data.



#### **Activity: Begin to Estimate Your IAM**

How do you define your Immediately Addressable Market segment?

How will you determine the percentage of the market opportunity that is currently willing to buy your value proposition?

## 4.5 EXPLORE MARKET DYNAMICS

Consider all the changes that could affect your industry, from a demographic group that either grows or shrinks, regulatory barriers, or the potential for disruptive technologies to emerge.

A growth factor might include an aging population requiring more healthcare, driving demand for a medical device for a surgical procedure. A factor restraining potential market growth might be the lengthy regulatory process or risk of lawsuits over patent infringements. It is crucial to understand how dynamic your market is and how it might impact the growth of your business.

Other common market risks worth summarizing might include:

- Anticipated disruption risks
- · Obstacles to market entry
- Current competitive landscape
- · Other obstacles

Your investors will need to see that you have developed a plan to mitigate these risks.

US Market

• Used as an alternative to traditional therapeutics, particularly pharmaceuticals

• Factors driving market growth include:

• increasing incidence of chronic diseases/conditions that can be managed by digital therapeutics

• opioid epidemic

• Shortage of healthcare providers in the future (e.g. doctors, nurses)

• potential therapy area/indication expansion

• increased access and utilization of smartphones/smart technologies

• Factors restraining market growth include:

• onboarding providers, patients, and payers - DTx are "uncharted waters"

• adherence to digital treatment programs still unclear - lacks long-term outcome data

• regulatory pathway for prescribed DTxs still being developed¹

Risk Analysis

Risks

Mitigation Plans

Anticipated disruption risks:

Obstacles to market entry:

Current condition of the landscape of the market:

Other obstacles:

What are the potential growth factors in your industry?	What are the potential restraint factors in your industry?	What are other risks relevant to your industry?

### 4.6 EVALUATE YOUR OPPORTUNITY

Report your data and conclusions from this module. Review previous slides and update anything that has become clearer with your new findings. Have you redefined the problem, job to be done, and customer? Have you discovered additional competitors?

Make sure your primary research findings show a story of real customers, their needs, and how they want these needs met. Include quotes from the interviews you conducted to illustrate the thoughts and behaviors of potential customers.

With the conclusion of this module, you have completed a competitive landscape and a market opportunity analysis. However, to complete validating your market, you need to hypothesize, test, and confirm your value proposition. All of the research you've done up to this point will help you effectively execute a value proposition test.

What did you learn from your Market Opportunity Analysis about the size of your market? Do you need to make any adjustments to your plans?



### **Private Reflection**

What are the most important things you have learned?

What is the most important thing you need to do for your business at this point?

Schedule any actions or tasks into your calendar, or create a reminder to revisit any ideas or thoughts you may have.



### Challenge!

Complete the primary and secondary research suggested in this module and record your findings. Use primary research to investigate, evaluate, and reflect on secondary research findings. Analyze and adjust plans if needed.
Continue conducting interviews.
Create your Market Opportunity slides.
Discuss with a mentor or industry expert and revise as needed.
Come prepared to report whether you completed all challenges and share at least one "Aha!" moment.

# TESTING YOUR VALUE PROPOSITION

### **Module 5 Challenge Reports**



### **Private Reflection**

Did you complete the challenges from module 4? What is your goal for next week?	What are the most important things you learned in completing your Market Opportunity Analysis and other program activities this week?	



### **Informal Reports**

Discuss with your mentor, friend, or group what you learned from your efforts in the previous module, including successes, difficulties, and any questions that may have come up.

### Insights to remember

What kept you from finishing your challenges from last week?

# **5** TESTING YOUR VALUE PROPOSITION

"What air is to the body, to be understood is to the heart."

STEPHEN R. COVEY

inning companies are devoted to understanding their customers' hearts and minds: what they want, why they want it, how to speak to them, and what

to offer them next. You have started this relationship with customers through your interviews, and you have analyzed primary and secondary research to develop a strong value proposition. Now you're going to test your value proposition by sharing it with others. If your Minimum Viable Product (MVP) is affordable and straightforward enough to launch and sell, then you have a very direct way to test your value proposition.

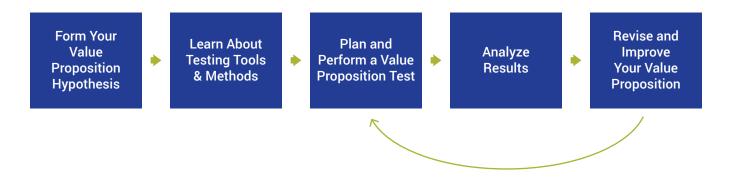
WINNING COMPANIES
ARE DEVOTED TO
UNDERSTANDING THEIR
CUSTOMERS' HEARTS
AND MINDS: WHAT THEY
WANT, WHY THEY WANT
IT, HOW TO SPEAK TO

THEM. AND WHAT TO

OFFER THEM NEXT.

However, there are many ways to test your value proposition; each requires focusing on discovering potential customer behaviors in as real a setting as possible. This process will be the foundation of your "proof" – that you know what your customers want, and you can provide it – in the absence of actually selling the product.

Testing your value proposition is done through a process similar to the Scientific Method. You will hypothesize, perform tests, analyze results, and potentially revise your value proposition based on the results of your testing.



### 5.1 FORM YOUR VALUE PROPOSITION HYPOTHESIS

At the end of the first module, you drafted your first value proposition. This draft has likely changed several times as you learned more about your customers and the market. Secondary and primary research gave you a clear view of what your value proposition should be. Startup companies have the advantage of being nimble and can pivot their value proposition and offerings as they gain more information and a better understanding of their customer.

Now your job is to determine whether your value proposition is resonating with a large enough percentage of potential customers to continue moving forward with your solution.

The more details of your value proposition, strategy, and business model you can test before officially launching your business or seeking investment, the more likely your venture will be successful. We focus here on your value proposition, but you can also test other aspects of your business model and include those findings in your presentation for investors.

### 5.2 TESTING TOOLS & METHODS

Many primary research methods can test your value proposition on a larger scale. The following methods are just a few of the many ways you can test your value proposition. Keep in mind that the goal is to learn how potential customers will react to your value proposition in as close to a real-world context as possible.

### 5.2.1 Prototypes

Through prototypes, individuals can interact with the proposed features and functions that the final solution would deliver. Prototypes can be very simple or fully functional. The idea is to use it as a conversation starter with your customer about how the product delivers on the value proposition you have in mind. Consider how you might evaluate your position with prototypes, from simple paper drawings, a clickable wireframe that mimics software programs, or even a 3D-printed prototype someone can operate.

Focus on how the customer responds to the prototype. Does it align with the problem they are looking to solve? The online shoe retailer Zappos had an unprecedented value proposition: would customers purchase shoes online? Rather than building up warehouses of inventory they might never sell, they designed a cheap website, took photos of shoes at a nearby shoe store, and made product listings to sell on their site. When a customer bought shoes through their site, someone would visit the store to purchase and ship them

to their customer. This process was labor-intensive and likely didn't yield any profits, but they gained tremendous value in knowing first-hand that their value proposition could work. Their online prototype ultimately resulted in Zappos selling to Amazon for \$850 million.

What kind of prototype could you build that would help you validate your value proposition?

### 5.2.2 Interviews and Observations

There are two primary objectives for conducting interviews. The first is to understand the problem to be solved. How do customers feel about the problem today? Is it a serious "pain" or issue for them? If so, is it a significant enough of a pain to motivate them to purchase a new solution?

The second objective is to see how customers would respond to elements of your value proposition. For example, if your solution is a more effective iteration of an existing solution, is it enticing enough to attract your target customers? Interviews focused on testing your value proposition can yield valuable insights into what resonates with your potential customers.

### **INTERVIEW GUIDES**

### **Problem Interview**

### Understand customer worldview

- How do customers rank the top 3 problems?
- How do they solve them today?
- · Is this a viable customer segment?

### **Solution Interview**

### Test "demo" before building

- How do you identify early adopters?
- · What is the minimum feature set?
- · Will people pay? How much?

In addition to asking questions, you can learn a great deal through observation. If possible, interview your subjects in person while they interact with your product. If it is a software prototype, observe how they navigate the platform, what features they want, and what questions they ask. If the product is a physical prototype, hand it to them, be quiet, and watch: will they guess what it is and how to use it? What questions arise? Inperson observations and conversations are great for catching potential oversights and discovering new opportunities.

How could you use interviews or observations to help you validate your value proposition?

### 5.2.3 Sales Testing by Website or Crowdfunding

Human beings are terrible predictors of their future behavior, which means their promised actions are unreliable. People can get excited at the prospect of doing something right up to the point of actually doing it. Will they really buy your product? You won't know – and neither will they – until customers have a real-life opportunity to buy. For that purpose, it can be beneficial to set up a sales test for gauging customer interest, willingness to buy, and the price they are willing to pay.

Everyone claims they would love to own a Tesla, but how many people are ready to pay over \$30,000 on a brand-new car (plus the garage equipment needed to recharge the battery) and especially since the car wasn't even built yet? Tesla forced the hands of the customers who claimed they wanted their product by taking "reservations" on cars they had yet to make. All the customer needed to do was put down a \$3,000 deposit – 10% of the estimated end value and a much easier upfront commitment than the full \$30,000 MSRP.

Many companies set up an opportunity to test-sell products to learn what direction they should take their MVP in. They might set up a website to test language for their value proposition and allow potential customers to click "buy now." When customers click through to buy, they receive a message explaining the experiment, and an offer to entice them to come back when the product is ready for sale.

Crowdfunding platforms, such as Kickstarter and Indiegogo, are another option for testing the value proposition of your startup before having an actual product to sell. You can walk through a full presentation of your venture's benefits, then presell the product to fund your ability to deliver that value proposition. These crowdfunding sites require you to go through the steps of presenting the value your solution offers to the customer's problem. You have to be meticulous about your promise and be able to deliver a solution to your "backers" or investors. When you take on an investment, whether it be through crowdfunding or investment groups, you must have a strategy in place to deliver what you promise.

How could you test the sale of your value proposition without having an actual product ready to sell?

### 5.2.4 **A/B Testing**

A/B testing is a technique to gain valuable feedback from potential customers about features, design, or messaging related to your solution while also collecting audience data. A/B testing involves comparing respondent impressions towards two slightly different representations of the same experience, such as websites, landing pages, or ads. These differences can include product features and benefits, customer messaging, or color variations. These different representations launch simultaneously to determine which one the sample audience prefers. With A/B testing, you learn which version of your product or message is more compelling to potential customers. Once you have a clear winner, you might test again with new changes to continually refine your messaging or product.

Is your value proposition ready for nuance testing on a larger scale? What are two or more variables you might want to test using A/B testing?

### 5.2.5 **Surveys**

In-person interviews are great for gathering qualitative information about your customers and for gaining insights into individual behaviors and thinking. However, at some point, you may want to obtain data on a larger, quantitative scale. With surveys, you can ask specific questions about current behaviors, needs, or opinions of a larger audience. Consider using consumer marketing survey companies, such as Centiment or Qualtrics, to develop your survey and gather data from a defined audience. There are niche companies that can send surveys for specific industries — such as medical or high-tech verticals. These companies issue surveys to highly targeted individuals — such as physicians, healthcare providers, or technology developers — so you can receive honest and candid responses.

How you want to present your results and findings can influence how you build your survey and write productive questions. For instance, if you wanted to state to an investor: "9 out of 10 diabetics are dissatisfied with today's glucose monitoring solutions they have tried, and are looking for a more accurate device." Then your survey should go to individuals who have tried multiple glucose monitoring solutions in the past but haven't received the results they were after.

When creating your survey, include questions to help you understand the type of people you are surveying. How have they tried to solve the specific problem in the past, and what will they do in the future? You might consider explicitly stating your value proposition in a way that allows them to respond with specific opinions about it, rather than merely telling you whether or not they like the idea.

For more details, see the Appendix, "Creating Effective Surveys." Here's a summary:

- · Make it conversational.
- Balance quantitative data with qualitative explanations.
- Handle personal questions sensitively and with tact. Don't request private information you don't need, especially if you can't protect it.
- · End effectively, inviting respondents to stay connected.
- Respond to complaints and criticisms, correcting problems where possible, and thanking them for helping you improve as you grow the product and business.

What do you feel potential investors would want to hear on a quantitative level to prove that your value proposition will win?

### 5.3 PLAN AND PERFORM A VALUE PROPOSITION TEST

Choose the most relevant testing option for validating your value proposition, and start building the survey tools and questions you need to test with your customers effectively.

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$\alpha$

# Which testing method are you going to utilize? What types of questions are you planning to ask? What are you hoping to learn from your value proposition test?

### **5.4 ANALYZE RESULTS**

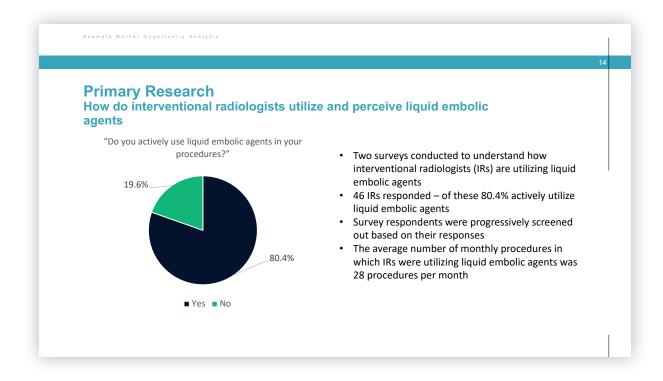
What were the results of your value proposition test? Your data should give insights into your potential customers' current behaviors. Were they receptive to your idea, or were the results not what you were hoping for? Don't be discouraged if your test audience does not understand your solution immediately. Learn from the experience and consider how to clarify what you're trying to do or what problem you are trying to solve.

"Sometimes you win. Sometimes you learn."

ROBERT KIYOSAKI

### **Continually Revise and Improve Your Value Proposition**

The process of testing your value proposition and learning more about your target customer is never finished. Continually repeat the hypothesis, testing, and analysis process to ensure that you are aligning with your customer as efficiently as possible. Always strive for product-market-fit that creates a "must buy" scenario as early as possible. After launching your product, develop a habit of continually testing and fine-tuning the results as you seek to win over a larger share of your market.



### **5.5 COMPLETE YOUR PRESENTATION**

Form conclusions supported by the data you have gathered to develop your presentation, tell the story of your customers, their needs, and why your product is the one the customer will hire to solve their problem. Determine which data matters most and why. Add your research findings and analysis to the relevant slides in the presentation template, remove or create duplicate versions and eliminate unrelated topics as needed. While the suggested order of the slides will make sense for most presentations, we advise consulting with your mentors and industry experts for the best results.



### Challenge!

Before the next module, use one of the above methods to test and analyze the state of your current value proposition.

Prepare slides reporting your Value Proposition Testing methods and conclusions Consider what this means for being able to predict your market opportunity.
Review slides from previous modules in light of everything you have learned. Make any updates and finalize your presentation.
Discuss with your mentors or industry experts and revise as needed.



# 6 RISK AND FUNDABILITY

### Module 6 Challenge Reports



### **Private Reflection**

Did you complete the challenges from module 5? What is your goal for this next week?	Is your presentation ready? What are the most important things you have learned during this program?		

# 6 RISK AND FUNDABILITY

# "When you cross the finish line, no matter how slow or fast, it will change your life forever."

DICK BEARDSLEY

s an entrepreneur, your job isn't just to have a great value proposition; you also need to persuade others to join your team and help you launch your idea to the market. Using the information you have developed in this workbook, you are now better prepared to convince others (cofounders, customers, and investors) to join your venture.

Whether you have been risk-conscious all along or focused only on wild possibilities, it is time to evaluate your market opportunity as objectively as an investor would. Venture investors primarily seek scalable opportunities with a large potential for return and are calculating risks right alongside the opportunities. You can put your venture in a better position by objectively evaluating these risks ahead of time and taking measures to reduce risks as quickly as possible. The market validation process in this workbook is the best way to evaluate your opportunity; now it is time to determine your risk profile and take steps to reduce those risks.

In this module, we will walk through all the information you have compiled to objectively review the risks that remain for your venture while creating a plan to address them.



### **Presentations**

At this point, it makes sense to share your information with like-minded mentors and individuals. If you are going through this workbook as a group, you might consider taking turns presenting your competitive landscape, market opportunity, and value proposition testing to others. If you are going through this workbook by yourself, we encourage you to present your information to your mentor or someone you can trust. In any case, it is beneficial to find individuals who will critically question your information to ensure you are taking the best approach.

### 6.1 KNOW YOUR FUNDABILITY SCORE

There are many ways to evaluate fundability and risk. Completing a scoring matrix will evaluate key criteria investors consider when determining the future of your idea. Everything you have built to this point will help you answer the matrix questions. Once you know the true market opportunity of your idea, you are competing with thousands of concepts other entrepreneurs are also working on – each of them looking for the same investment you are. The idea is to evaluate how you might fare when compared to all of the other investments competing for funding.

This is where the fundability criteria matrix comes in handy. It allows you to summarize all the information you have gathered and score your opportunity so you can compare it with others.

In addition to the information you have gathered, there is another element investors focus on: the team. Whether you have a lifestyle value proposition or a value proposition that investors will flock to, you need a team who is specially qualified to work through unexpected situations and deliver results. Investors bet on teams. Investors back teams who are experts in their field and prolific problem solvers. Experience and versatility matters. Teams who have proven their value in the past will always have an edge with investors over new entrepreneurs who are just starting out.

Applying all you have learned from your competitive landscape, market opportunity, and value proposition testing, objectively score your opportunity using the Fundability Criteria Matrix listed below

Complete the applicable matrix for your product, preferably with a mentor or facilitator who has seen the materials you have compiled thus far.

### Fundability Criteria Matrix - General

	Criteria	Score	Rank	Description
<b>→</b>			0	This is the team's first startup, or this is a new market for a majority of the team
			1	Team has some experience in industry and startup but has gaps in key management positions
			2	Team has strong sales, some experience in the market, but with a few gaps in management
	TEAM		3	Experienced & proven management team with extensive experience in this market
		Evidence to support your score:		
		What would be required to reach the next higher score?		

Ī	Criteria	Score	Rank	Description
,	CUSTOMER		0	No demonstrated customer excitement to purchase
			1	Hesitant interest to purchase OR Not enough customer feedback to date
			2	Growing customer base has expressed an immediate interest to purchase
			3	Significant customer base is engaged and have agreed to purchase and/or are already buying
	VALIDATION	Evidence support score:		
		What wo be requi reach th higher s	red to e next	

	Criteria	Score	Rank	Description
→ CUSTOM ACCESSIB	CUSTOMER		0	Unknown path to reach customers
		Evidence support score:	1	New market segment will require educating customers and finding new paths
			2	Access to customers is known but acquisition is long and/or costly
			3	Clear, straightforward path to reach customers
	ACCESSIBILITY			
		What would be required to reach the next higher score?		

•	Criteria	Score	Rank	Description
-			0	Less than \$80M
			1	\$80M-\$200M
			2	\$200M-\$500M
			3	Over \$500M, but preferably over \$1B
→ MA	MARKET SIZE (SAM)	Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
•	COMPETITION		0	Competitor(s) own the market, adoption is not evident or value proposition insufficient to compete
			1	Crowded market space so differentiation will be difficult
			2	Competitors exist, but improvements are still being sought by customers
			3	The value proposition solves continuing problems and can displace the competition
		Evidence support score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Physics would have to be bent
<b>→</b>			1	Will require large investments/research, Development may be cost prohibitive
			2	Some challenges but will be overcome with time and within a reasonable cost
			3	Simple and straightforward design with known materials and methods
		Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	No evidence of patentability or Freedom to Operate (no analysis to determine infringement)
			1	No patents or Provisionals only, no second review on strength of patent
			2	Non-provisional(s) filed and pending OR issued patent claims have been determined as weak
<b>→</b>	IP POSITION		3	Strong, issued patents
·		Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Unknown regulatory requirements
			1	Long and expensive regulatory requirements
			2	Straightforward regulatory requirements
			3	No regulatory challenges
<b>→</b>	REGULATORY	Evidence to support your score:		
		What would be required to reach the next higher score?		

### Fundability Criteria Matrix - Medical Technologies

	Criteria	Score	Rank	Description
			0	This is the team's first startup, or this is a new market for a majority of the team
			1	Team has some experience in industry and startup but has gaps in key management positions
			2	Team has strong sales, some experience in the market, but with a few gaps in management
<b>→</b>	TEAM		3	Experienced & proven management team with extensive experience in this market
		Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
-			0	No demonstrated customer excitement to purchase
			1	Hesitant interest to purchase OR Not enough customer feedback to date
			2	Growing customer base has expressed an immediate interest to purchase
<b>→</b>	CUSTOMER		3	Significant customer base is engaged and have agreed to purchase and/or are already buying
	VALIDATION	Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Reimbursement unlikely, no cash-paying incentives
	REIMBURSEMENT AND MARKET ACCESS		1	Application for new reimbursement code required
			2	Reimbursement likely under existing code, but new code required for business model
<b>+</b>			3	Reimbursement readily accepted or patients are very incentivized to pay cash
		Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Less than 80M
			1	80M - 200M
			2	200M - 500M
			3	Over 500M, but preferably over \$1B
<b>*</b>	MARKET SIZE (SAM)	Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Competitor(s) own the market, adoption is not evident or value proposition insufficient to compete
			1	Crowded market space so differentiation will be difficult
			2	Competitors exist, but improvements are still being sought by customers
<b>+</b>	COMPETITION		3	The value proposition solves continuing problems and can displace the competition
_		Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Clinical success unlikely. Others have tried and failed
			1	Clinical success is unclear. Large patient volumes or long time-frame trials required
			2	Clinical success is likely but will require special expertise and/or research
<b>&gt;</b>	CLINICAL		3	Clear path to clinical success, others have been clearly successful
	FEASIBILITY	Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Physics would have to be bent
			1	Will require large investments/research, Development may be cost prohibitive
			2	Some challenges but will be overcome with time and within a reasonable cost
<b>+</b>	TECHNICAL FEASIBILITY		3	Simple and straightforward design with known materials and methods
	LAGISIETT	Evidence to support your score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
<b>→</b>			0	No evidence of patentability or Freedom to Operate (no analysis to determine infringement)
			1	No patents or Provisionals only, no second review on strength of patent
			2	Non-provisional(s) filed and pending OR issued patent claims have been determined as weak
	IP POSITION		3	Strong, issued patents
		Evidence support score:		
		What would be required to reach the next higher score?		

	Criteria	Score	Rank	Description
			0	Unknown regulatory requirements
			1	Long and expensive regulatory requirements
			2	Straightforward regulatory requirements
			3	No regulatory challenges
<b>→</b>	REGULATORY	Evidence to support your score:		
		What would be required to reach the next higher score?		

Total Fundability	
Score (Product)	

Once you have scored each row, multiply each row together to arrive at your total Fundability Score.

If anything on your list is a zero, then your score automatically falls to zero, meaning you aren't likely ready for funding. This isn't necessarily a bad thing. The point of the matrix is to help you determine, based on the data you have compiled thus far, where the risks are and where you should focus additional efforts. If your regulatory pathway score is low because you don't know your strategy, conduct more research to see how competitors have gone to market. If your market size score is low because your market isn't big enough, find ways to bring your market size up. Wherever your score is low, consider ways to lower the risk and increase your chances of being funded in the near future.

Regardless of your score, your venture might still be fundable. Remember that you are competing with other startup ventures for funding. Below is a general layout of scores and how they might compare with other startups in the market for funding.

Score	Description
0	You are probably not ready for funding. Focus on the categories that scored a zero and determine what you need to do to bring them to at least a 1.
1-400	You are tracking with about 80% of startups. With additional effort on your key criteria, you could be ready for funding soon.
400+	You are probably ready for funding. Consider any final de-risking activities you can perform. Otherwise, focus on presenting the evidence to get others on board.

### **6.2 EVALUATE RISKS AND PLAN IMPROVEMENTS**

Now that you have a snapshot of your fundability score, what can you do to de-risk these categories further?



List the three categories you scored lowest in:	What can you do to de-risk these categories further?		

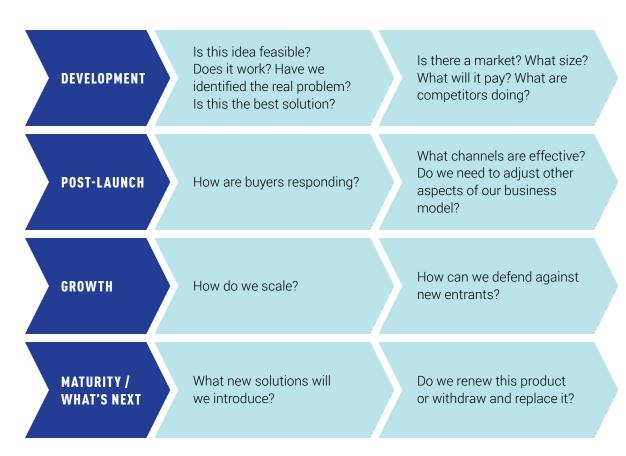


Is your venture idea fundable? Is it a lifestyle company? Or is it time to go back to the drawing board? Consider what the market validation process and the scoring matrix has taught you about your venture.

# 6.3 CONTINUE TO VALIDATE THROUGHOUT YOUR PRODUCT LIFECYCLE

Market validation is never really done. Whether you are the new entrant or the market leader, you need to know what is happening so you can compete throughout the product lifecycle. It is wise to continually research your customers, the competition, the potential market opportunities, and to test your value proposition throughout your product's lifecycle, so you can grow, innovate, and win.

As you continue your journey and plan your next steps, consider the following stages of your company and think about how you can apply the processes in this workbook along every stage of your company.



## 8

### **Next Challenge!**

- ☐ Make a plan for how you are going to de-risk your venture further to build a company that is worthy of investment
- ☐ Make a plan for continued learning, mentoring, and peer support.

Many ideas fail to take-off. Ideas fail when they do not understand the customers' requirements. With the conclusion of this workbook and the activities within its pages, you have taken an important step towards validating your market and proving the feasibility of your idea. You have taken your idea and proven its value from several angles. The information you have collected throughout this workbook is essential evidence to prove the vitalness of your business idea to those who need proving - your investors, partners, and your future employees.

Your market validation deck shows where your ideas are the strongest and what measures you've taken to bridge any potential pitfalls. Just by asking the right questions and taking the time to do the research, you have a better understanding of what your customers want when they are looking to solve a specific problem – making you much more informed about your market and primed for success.

This may be the end of the workbook, but it is only the beginning of the market validation process. As the owner, it is your job to continually monitor the pulse of your market. Conduct new tests, research new markets to grow your business, and find new ways to refine your value proposition to resonate louder with your customers.

Start taking steps to put your product into action. If you have a prototype, test it with your potential customers - refining your product based on what the testing data shows you. Keep your updated market validation report on hand to present to financial backers and potentially valuable business partners.

Having a complete and updated market validation deck proves how committed you are to ensuring the success of your venture. The market validation process backs the confidence you have in your venture with data. You have done the work to prove its value and why it will work within the target market. Because you have taken yourself seriously in this process, others are ready to do the same. Investors don't back ideas, they back teams, and products that align to an amazing market opportunity. Your market validation deck proves you and your product is something they can support confidently.



# 7 APPENDICES

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### 7.1 INTERVIEWING SKILLFULLY

e well prepared. Don't waste a busy interview subject's time by asking anything you could have learned through secondary research about their roles, the problem, available solutions, and the industry.

Use interviews to validate and refine secondary research, explore gaps in the data available, and gather real customers' perspectives. If your interviews confirm secondary research findings, then you have additional justification to trust those conclusions. If interviews contradict expectations, try to figure out why. Was your sample too small compared to a published report? Was that report based on an inaccurate assumption? Is the market changing? Are you discovering a new insight? Is your region responding differently that the general market? What else could be happening?

Don't lead with your product or value proposition. That makes the conversation about you, your needs, your product, and your sales. It can easily turn into a sales pitch. If criticizing your value proposition seems like criticizing you, some interviewees will be hesitant to tell you what they really think. On the other hand, some can be so eager to help you, they offer only encouragement, omitting advice that could save you from a wreck.

Focus on the problem or job and your interview subjects' needs and wishes. Learn about problems they want to solve, jobs they need to perform, and how they would achieve that in an ideal world. Ask unbiased questions rather than leading questions: "What do you think?" rather than "Isn't this a good idea?" Assume they have observations and wishes you never considered. If you interview enough customers, they will design your ideal solution, your value proposition, and your marketing messages.

If you want to ask their advice about your specific value proposition, request that only after they have exhausted all they want to tell you about their problems and needs, why they buy, and what they wish for.

Get expert help with your interviews if needed. It is usually best for the founder to lead the customer discovery process, but some situations call for compensating for your

weaknesses or having an interview expert coach you through them. A few examples: If you have a highly technical mind and have trouble discussing concepts with laypeople, you might need help keeping things general. If you are talented at sales, you might have trouble staying neutral, wanting to lead the customer to buy your point of view, which blocks discovering what they really think. Or you might simply be new to the interviewing process and feel hesitant to start. Having a mentor or consultant lead a few interviews and then assist you in the first few of your own could be great training.

# 7.2 ADDITIONAL INTERVIEW QUESTIONS FOR CUSTOMER DISCOVERY

In consultation with mentors and subject matter experts, prepare for your interviews by customizing questions relevant for your industry and solution.

When it comes to this need/problem/job, what keeps you awake at night?  Notice if they have a pressing problem you had not considered. Maybe there is another related problem that would be more profitable for you to solve.
How are you solving this problem now?  Recognize that they might be doing nothing to solve their problem(s), and "doing nothing" could be a serious competitor you would need to overcome.
What are the advantages and disadvantages of current solutions? Which are most important?  Ask follow-up questions to completely understand, especially if this is different than you expected.
In an ideal world, how would you solve the problem? What's your dream solution? Let them design your product!
Are there features you want that you can't find? They might have value propositions, solutions or feature ideas you had not considered or details that could improve upon yours.
How do you make buying decisions?
Who makes the buying decision for this solution?
Who influences the decision?
What are the most important criteria and considerations?
What is the purchasing process?

	What do you wish that your suppliers and potential suppliers would do?  Are their reasons, influencers, thought processes, or buying activities different than expected?
	How does your current solution continue?
	How long does it last?
	Is there a contract?
	Would you change anything about that? Is there a hidden switching cost you need to help them overcome?
	How do you receive the solution?
	Do you like and if so, where did you buy it?
	Do you like how it is delivered?
	Would you change anything about that? How do you want to receive the product?
	What services do you expect to be included?
	If features can be priced separately or all-inclusive, which do you prefer?
	If implementation consulting services are needed, would you prefer that those be included – or would you hire a consulting firm? If the latter, is there one you already work with?
	Do you like the way you pay for it?
	Do you like the price? What is the price?
lf t	his is late in the process, where are you testing your value proposition:
	If there were a solution that offered [what your solution does], would that matter to you? Yes: What else would you want to know about it? No: What would be more important to you?
	How would you find out about a new solution?
	What would a new solution have to be for you to want to switch?
	What would have to happen for you to be able to switch?

### 7.3 UNDERSTANDING YOUR CUSTOMER

### 7.3.1 Who Are Your Customers? What Do They Need?

The more specifically you define your customer, the easier it is to find and sell to them. If your target customer is the mother of preschool children, you are likely to find her on social media or at a preschool. If your target customer is a surgeon, you might visit their office or meet them at a medical conference. In reality, the mother and the surgeon could be the same person, but she makes buying decisions for different areas of her life in different settings with a different mindset.

Analyze everyone connected to the buying decision. Along with actual buyers, you might also need to persuade influencers, decision-makers, and end users. Who are all the customers who need to believe you have the best solution? Research each group's needs and jobs to be done.

For example, the procurement officer of a large multinational firm buys a software solution, but the end users in several countries must be satisfied with its functionality and user friendliness, and what they tell their bosses will influence the decision, which is made by the CIO. The users need to accomplish functional jobs without frustration. Their bosses and the CIO need the software to work functionally so they can achieve corporate goals, and the decision-maker has social reputation and job security at stake, which could make this a functional, social, and emotional job.

In another case, a parent subscribes to a video game platform (influenced by the other parent), to please teenagers (who were influenced by peers and advertising), to keep the teens busy, and seem culturally current among their own friends. The children continue the subscription or abandon it depending on their experiences and whether their friends continue. The parents' job to be done might be emotional (pleasing their children), functional (keeping the children busy) and social (connecting with their own peers). The children's jobs could be emotional (enjoying the game) and social (connecting with peers and gaining status). The teens are influencers and end users; both they and their parents must be persuaded to make the purchase.

So interview customers in each of the roles applicable to your solution and industry.

- Buyers
- Influencers
- · Decision-makers
- · End users
- · Other industry partners

Each type of customer might have different answers:

· Problems, needs, job to be done

· Solutions: what they buy, what they want

· Motivations: why they buy

· Behaviors: what, when, where, how they buy

And you want to know more about where to find them:

· Career: role, income, education

· Demographic

Geographic

• B2B: company type

### 7.3.2 What Are the Segments?

Many products appeal to multiple customer segments. A medical product might help patients with several different diagnoses. One software program might be applied in education, home, and business markets. Interviews can help you determine how to segment your market. Segments might involve different products, different needs and uses for the same product, or messaging that appeals to different customers using the same product for the same need. And they might fit some of these classic segmentation categories:

- Behavior: lifestyle, product usage, purchasing
- Psychographic: lifestyle, values, principles, beliefs, attitudes, opinions, interests, activities, personality traits, social class
- Geographic: climates, regional variations in needs, preferences, and interests, urban/suburban/rural
- ▶ Demographic: age, gender, income, education, occupation, nationality, race, marital status, family size, religion
- ▶ B2B if applicable: industry, company revenue, employee count

### 7.3.3 Who is Your Ideal Customer or Persona?

Many industries create personas – detailed profiles of ideal customers that explain their needs and goals with relevant demographics. These might include customers' roles and even personalities. They can be based on actual customers or be fictional composites from your customer data. The process of creating personas helps your team empathize

with customers, come to consensus about who your customers really are, and stay focused on solving their specific problems and performing the job they hire you to do. It also helps you figure out where to find your customers and how to market to them as personably as if you were speaking to a friend. This creates consistency across your organization from product creation to marketing and sales.

Typically, a persona is assigned a name, gender, age, a career or situation, and as much detail as you want to include. During customer discovery, collect quotations that help you define your customer(s): what customers say about their needs, goals, and motivations, and what they say about your industry and the solution they are looking for.

### 7.4 CREATING EFFECTIVE SURVEYS

A survey is a conversation, like a written interview, so the more it seems like a real conversation, the more likely it is that those you invite will respond, and that respondents will complete the survey and provide usable insights. Apply what you have already learned about interviewing: be prepared, ask unbiased non-leading questions, focus on the interview subjects' needs and wants.

A well-designed survey balances quantitative data with qualitative explanations.

Quantitative questions help you measure, rank, and compare whatever you are assessing.

- Rating (such as 1-5 stars, numbers 1-10)
- Likert Scale (strongly agree to strongly disagree, extremely satisfied to extremely dissatisfied)
- Ranking (most important to least important, best to worst)
- Checkbox (multiple choice)
- Radio buttons (single answer)

Qualitative questions explore reasons behind the ratings.

Text box (open-ended responses)

In quantitative questions, be sure to include N/A (Not applicable) and/or Other, with a blank to explain, especially if you make a question required. If respondents cannot find their answer among options, they either drop out, reducing response rate, or settle for an inaccurate option, invalidating your data.

Inviting respondents to explain quantitative responses with a follow-up text box can yield important insights. **Be conversational**: "Would you tell us more about that?" "We would

appreciate hearing about your experience." "We would love to know why." They will often share insights you never thought to ask, so make sure they feel welcome to do that.

Near the end, ask a **simple concluding question** such as, "Is there anything more you want us to know?" That is often where respondents will share important feedback and brilliant suggestions.

Handle personal questions sensitively. Save demographic questions for the end. After respondents have invested time in answering your whole survey, they are more accepting, even generous, about letting you know who they are. They might already see themselves as helping you to help others. Address them in that spirit, perhaps asking permission to ask about demographics so you can help others like them.

Respect privacy. Don't request private information you don't need or don't have the cybersecurity to protect. Respondents who participate in rewards-based survey databases are used to providing detailed demographic information, but in most surveys, you will get more responses if you keep your questions as general as possible. Don't request information that could be abused for identify theft such as birthdates when age range decades would answer your question. One way to ask an age question is by asking the genders and ages of each person who have tried a product, who might or might not be the survey respondent.

**Be tactful.** Use a style and tone appropriate to the audience and industry, considering how you would ask the question in person. You would be graceful about asking someone's age, educational level, or income in a personal interview, so apply similar etiquette in your surveys.

**End effectively.** Invite respondents to stay connected. At the end, ask if they are willing to be contacted for any follow-up questions or future surveys. If they are, treat them as future customers and advocates, welcoming an ongoing relationship with them.

To conclude the survey, include a **thank you** page with a few more words of appreciation, just as you would in a phone or in-person interview. Survey platforms default to ending on their own launchpage. It's more welcoming to send respondents to a page on your website instead, inviting them to continue to connect with you.

Respond to complaints and criticisms. Like a real conversation, whenever possible, respond appropriately. If a customer satisfaction survey reveals dissatisfaction, take the opportunity to correct the problem, improve their experience, or at least thank them for the information you need to improve as you grow the product and business.

