Fixing climate change one start-up at a time

ClimateLaunchpad Workbook

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ClimateLaunchpad



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Preface

Congrats

So here you are. You are accepted into ClimateLaunchpad - you made it.

Ready to tackle climate change and conquer the world with your own start-up. This is a courageous step that calls for congratulations. So: congrats. Well done. ClimateLaunchpad was developed for one simple reason: to help make your dream come true and build a successful start-up that tackles climate change.

Now that the congratulations are out of the way, get ready for the turbulence. It's going to be a bumpy ride. Yes, it will be overwhelmingly interesting, filled with fun and you'll get to dream bigger than you ever thought possible. But it will also be bumpy. Becoming the next Elon Musk is no picnic. You will learn more and work harder than ever before.

Starting a successful start-up is not just about having a good idea or developing a smart product. Actually, one of the things you learn in ClimateLaunchpad is that the idea is the single most overrated element of a successful start-up. You will see that it's much more about knowing the market and finding yours. It is about your customers and why they would pay for your product or service. It is about making money. And last but not least, it is about your team. Managing all that and more is your job. Our job is to teach you how to do that.

Use this workbook to keep you on track. We're happy to help every step of the way.

So join the games. Fixing climate change one start-up at a time.

Team ClimateLaunchpad

Running a start-up is like being punched in the face repeatedly, but working for a large company is like being waterboarded.



Introduction

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Boot Camp

ClimateLaunchpad kickstarts with a business Boot Camp. During this fast track training, you'll learn the fundamentals of successfully starting a business. During the Boot Camp you get to build your basic start-up business case in the format of a pitch deck. This pitch deck covers the main elements for any start-up business case and will be the basis on which the jury will select the winner of the ClimateLaunchpad competition.

By the end, you'll have a basis for your business case and your own pitch deck. You'll present the results of what you've learned to participants, trainers, and coaches. They will provide valuable feedback and input that you can incorporate in your own time.

During the Boot Camp we introduce topics along with exercises.

Module 3: Market Segmentation

The very first market you enter is what is called your Beachhead Market. It is a learning opportunity before conquering your first market. Not the biggest, but the first. We are looking for a market segment, a niche, where you can become a dominant player. So, you develop a track record, and become a leader in a clearly defined niche, that we call the Beachhead Market. The work in this module helps you define your Beachhead Market.





It all begins with a vision, an idea, a dream. This module is a reality check. We dive into your motivation and want you to look beyond your dream. Why do you want to be an entrepreneur? Have you got a clear sense of what it takes? Do you know what you want to achieve and what success looks like for you? You'll learn to translate your dream into a business model.

Module 2: The Deal

Can you explain what you're selling and to whom? Excellent. Now try it in one short and simple sentence. That is the essence of your business and what we call The Deal. It sounds simple, but it is one of the hardest things to get right. This module focuses you on your deal.

Module 1: Founder's Dream

Module 4: Customer Value Proposition

Once you have figured out the job your product is doing for your customers, you'll get a sense of the value you are creating for them. It's crucial to find out what value your product offers, as well as the risks a customer takes when buying it. In this module you start to quantify your value for customers in your chosen Beachhead Market.

Module 5: Financials and Key Value Drivers

You probably have a rough idea of the costs to build your product, but most beginning entrepreneurs forget a lot of the other costs that affect their profit margin. You'll construct a financial tree to get insight into profit possibilities and margins. You'll also identify the main drivers that influence that margin.

Module 6: Climate Impact

As you know, ClimateLaunchpad is all about solving climate change with scalable, commercial solutions. Most of the teams join the program exactly for that reason. You need to be able to show that your business idea has substantial climate impact if you want to be one of the winners of ClimateLaunchpad. In this module you will calculate your climate impact, and we have a pretty cool tool for you to do that.

Module 7: Customer Discovery

To validate your business assumptions, you need to talk to potential customers as soon as possible. Actually, before the National Final you need to interview at least 20 potential customers. Who are these people and where can you find them? And how do you talk with them? The trick is to ask the right questions. If you don't, you might end up with what we call 'false positives' and that will kill your business.

Module 8: Pitch your Deck

After finishing all the modules, you now have the first draft of your pitch deck. It's your opportunity to try out the new structure and practice what it's like to pitch in the National Final.

Good luck



Follow-up modules Tip: Find the Follow-up modules wit

more exercises at the end of the book, starting from page 96.

Boot Camp overview modules







Final words before you kick off

Product-oriented vs. service-oriented

The program focuses on product-oriented companies, as they are most common in cleantech. Most exercises also apply to services, apart from the financials (in which case we'll provide you with a specific financial template for service-oriented companies).

Please make mistakes

This is the time when mistakes are still safe, so make them and learn from them. If we ask you to take a wild guess, just do so. Don't be afraid your answer will be too far off. You're here to learn. We're here to help you.

Make wild guesses

We often ask you to make wild guesses while filling in numbers. The main objective during the Boot Camp, is that you learn to understand the reasoning of each step. To do this, you need to make some initial guesses. You will validate the numbers by doing your homework and talking to potential customers after the Boot Camp.

Ask questions

There is no such thing as a silly question. We never think a question is not smart enough. Not asking your questions and continuously wondering about something, now that's not too smart...



Worksheets: Please find the numbered exercises in the worksheets document.



Last but not least

Have serious fun.

Have serious fun. You're going to work your butt off during one of the most exhilarating rides of your life: you're on your way to starting your own business. Make sure you have some serious fun along the way. We know we will.

Excel templates: Please ask your coach for the excel templates you'll need to complete marked exercises.

You have to trust in something — your gut, destiny, life, karma, whatever. This approach has never let me down, and it has made all the difference in my life.

- Steve Jobs

Describe your Dream



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The Founder's Dream:

What Makes You Tick? What is Your Drive, Your Dream?

So why do a start-up? As you probably know, it is a bumpy road. It involves hard work, regular failure and rejection, and constant stress about cash flow. When the 'going' gets tough, nobody will tell you what to do. You need to motivate yourself. Of course, the downsides aren't the complete story. You get to build a business from scratch. You're in charge. Again, nobody is telling you what to do. It is your business.

Founding a start-up is an exhilarating ride. When things go well, nobody needs motivation. But when you hit a wall and hit it again and again, things get difficult. Your friends may have a decent income, while you still live in your cheap rental apartment. Or your partner, the one who makes sure the mortgage gets paid, may start asking difficult and probing questions.

At these moments you need to know why you are doing what you are doing. Not only as an individual, but also as a team of cofounders. In order to succeed, you need to keep on going and you need to be able to support each other. To be able to support each other, you need to be aligned. This does not mean that you need to have the same motivations. You don't. What is important, is that your drive is not at odds with those of your co-founders.

What is a typical Founder's Dream?

Any dream can be a Founder's Dream, as long as it's a dream that you desperately want to make come true.

Your drive can be solving a problem that you encounter in daily life. You may wonder why nobody has ever come up with a solution. Or you're concerned about the future of our planet, and you need to make a difference. Perhaps you've developed some great technology to potentially change the way we do things, and your dream is to have as many people as possible using that solution.

It can be any dream, as long as you really want to make it come true. It has to be a dream that gives you the drive to keep on going. People will tell you your goal is impossible. You'll come across numerous hurdles on your path. As a founder you have to keep faith and keep going, no matter what. Importantly, you have to be able to convince others to join you.

Exercise: The personal dream

Describe your personal dream

The most important thing at this point is that you can describe your dream. Try to write it down and make it as specific as possible. Make it about you. What are your personal goals as a founder? Why form this start-up?

Now ask your team members or co-founders to do the same

It's crucial to understand each other's personal goals and ambitions. As you are about to embark on this adventure together, you need to have similar dreams or ideas about where you want to go. If not, this is the time to talk about it. If you have different views or conflicting dreams, it's better to discover that now.



Did you know that team conflicts are an important reason why start-ups fail? That's why we focus on your personal dreams first. You will find out that you may (and most likely will) have a different personal dream than your cofounder(s). You need to be aware of your own and your cofounders' dreams and see if they align. If you find out later that they are at odds with you when an investor is knocking at the door, it might be too late to bridge these differences and this may lead to conflict. My dream is...

Quantify the dream

We get to see a lot of dreams here at ClimateLaunchpad. One of our team's dreams was to clear the oceans of plastic rubble. That's a great dream, but you need to be a little more specific. What does that dream mean? Do you personally want to clean all the oceans? Or are you happy when you manage to fish a few tons of plastic out of the seas?

Sometimes people tell us that their dream is to get rich. That's perfectly fine, but what does being rich mean? Is that really all that makes you tick? Is this motivation enough to keep you going when the going gets tough? Because it will get tough. Doing a start-up is like running a marathon, it's an endurance race. Are you in shape for that? Most start-ups need more than 5 years to build a successful business. In our experience, doing it just for the money is not enough. Our most successful teams have a bigger goal.

We've heard people say they want to be financially independent. Fair enough, but what does that entail for you? Is it enough money in the bank so that you never need to work again? If so, how much would you need? Or does it mean that you earn a certain salary? And what would that salary be? Another thing we often hear founders say, is that they want to invest in other start-ups. Putting a number to your dream will make your dream more tangible. Tangible dreams are easier to achieve.



Exercise: Quantifying your dream

Make your dream as quantifiable as possible.

- What exactly do you want to achieve? Be as specific as possible.
- When does it need to be achieved? Think about your timeline and define a timeframe.
- What will you need? Think about some of the circumstances and prerequisites you will need to make your dream come true.
- How will you know you have realised your dream?
- What can you see happening because of the fulfilment of your dream?

When will you	achieve it?			
What will you	need?			
When is your	dream realise	2d?	 	
		- 6 11 2		
What will hap	pen because	of it?		

Personal dreams and company goals

After you have described and quantified your personal dreams it's time to translate them into a company target.

Sometimes this is pretty straightforward, as when you develop a machine to clear the oceans of plastic waste and your dream is to do just that. Perhaps you specified your dreams with the goal to reduce plastic waste in the oceans by 10% by 2025. That boils down to a pretty clear target for your company. With it, you can calculate the number of machines you need to be able to sell. This will give you a revenue target.

Most of the time it is not that clear cut. Let's use the example of the ocean team again. In fact, they did not invent a machine to clean the oceans. They developed a technology to recycle plastics. Their plan is to make enough money with their company in 10 years to be able to set up a foundation that will finance initiatives that actually clean up the oceans. This gives them a target for their company. The profits from the technology should enable them to set up this foundation and realise their dream. Let's elaborate on this example. Say you would need 5M to set up this foundation in 10 years. First of all, you'd need some sort of exit to be able to get that amount of money. Exit means you'll need to sell (your share of) the company for a particular value. In this case the exit is 5M.

Depending on what share of the company you own at the time of the exit, will also determine the value the company needs to have. A company's value is often determined by its profit (5x the annual profit is a rough indication of the value). So you see, the Founder's Dream directly translates into a profit target for the company.



Figure 1 explains this example of a founder who expects to have 25% of the company's shares at the time of the exit. The founder wants an exit value of 5M. This means the company value needs to be 20M. With a multiple of 5 this translates into an annual profit of 4M. Assuming a margin of 40% this leads to a required revenue of 10M per year.

Note:

This quick calculation is based on a lot of assumptions. In fact, all of it is assumed. This is not a problem at this stage. You'll work out most of these assumptions during Boot Camp. Right now it's important to understand the reasoning by working with a best guess. After each module, we will return to this calculation and check it against the new insights to see if it is still valid.



Figure 1: Example of how an exit target links to revenue.

The potential of your current dream

The ocean example shows the need to translate your dreams into a revenue target. The more successful your company is, the more likely you'll be able to make your dreams come true. This exercise is also a reality check. Does your start-up actually have the potential to realise your dreams? Maybe your company will never be able to become big enough to fulfill your dreams. It's best to find this out up front. At this point you still have the chance to do something about it by looking for an alternative way to make your dream come true.







Exercise: Create your founder's dream

Put all the parts of the exercises in this chapter together into one founder's dream slide.

On the slide:

- **1.** Determine your personal dream and motivation in a qualitative way.
- **2.** Make it quantifiable. What exactly do you want to achieve and by when?
- **3.** Check with your team to see whether you all have similar dreams.
- **4.** Translate your dreams into a quantifiable target for the company.
- **5.** Show your team.





The Founder's Dream of Bio-Alkanol Gel (Kenya)

Bio-Alkanol Gel is a fuel made from fermented biowaste that can be used for cooking and lighting. It is cheaper, way cleaner and reduces CO₂ emissions by 80%. Bio-Alkanol Gel was the winner of ClimateLaunchpad 2017.

TEAM & FOUNDER'S DREAM











We

Dream

Diana Kwanyi Sales Manager Dr. David Musyimi Pro Technical Director Ar

Prof Joseph Chacha Advisor



• To achieve € 4 Million valuation by 2022.

• To provide access to clean and affordable energy for the growing rural population

Module 1

The Founder's Dream of Simple Liquid Batteries

Simple Liquid Batteries (Armenia) offers cheap and portable battery banks which function on almost any type of household liquid such as salt water, buttermilk, vinegar and so on. SLB was finalist in ClimateLaunchpad 2016.



If you really understand something, you can say it in the fewest words, instead of thrashing about.

- Paul Graham



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The Deal

Imagine you are in an elevator with someone interested in what you want to do. Can you describe your idea in a clear and compelling manner before the elevator stops and that person gets out? You can't pull the emergency stop. And the elevator is not going to get stuck between floors. context in one single sentence. Tell your audience what it is that you do. Save details and explanations for later.

What's The Deal?

The Deal is that single, clear and compelling sentence that describes what you sell to whom and at what price. It is the

(start-up) (product) We

You need to be able to explain the essence of your business in one simple sentence. What are you selling, to whom, and at what price? Sounds easy, but it's not. In an attempt to explain what they do, many aspiring entrepreneurs talk about the endless possibilities their technology offers. Or they elaborate on the climate challenges we all face. They forget to simply tell what they're selling, often leaving their audience guessing. Or worse, they lose their attention. Always start by clearly setting the simplest pitch you can imagine. It contains the most important information a customer needs. Making it this explicit ensures your audience knows right off the bat what business you're in. It provides context to anything else you need to tell them.

It's just one sentence and seems so easy to write. Give it a try and you'll soon realise how hard it is to be specific about what you're selling or to whom. Let alone at what price.

Customer: business or consumer?

Your customer can be a consumer who buys the product for personal use. This is called Business-to-Consumer (or B2C). You can also sell your product to another business. This is called Business-to-Business (or B2B).

(customer)

Note:

for

Sometimes a third type is distinguished: Business-to-Government. It shares many characteristics with B2B, so for simplicity's sake, we keep it at B2B for now.

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The Dea

Main differences between B2B and B2C

Selling to businesses is very different from selling to consumers. A significant difference is that businesses almost always buy for economic reasons. Also, the sales process usually takes a long time and regularly more than one person is involved on the client side. Consumers can have many reasons to buy, economic and emotional. Simplified: in a B2B context, think profit. Your customer will do business with you because that will somehow increase their profit. In a B2C context, think better or less expensive. Your customer will buy your product (or service) because it is less expensive, or better. Better can refer to any number of things. It can mean more beautiful, easier to use, better for the environment, etc.

(price)

Product or service?

What you are selling can be a product or a service. The most distinct difference between products and services is that you need to produce a product up front, something a service typically doesn't require. A product is usually something tangible (although it can also be a digital file). A service is usually something intangible, such as training, advice, consulting. In most product situations the customer owns the product after the sale.

The distinction between product and service is relevant because we often see deals where both come together: the start-up sells a machine plus a service contract. For your financials the distinction is also important. We will come to that in module 5.

Note:

During ClimateLaunchpad we focus on product oriented companies, as they are most common in cleantech. Most exercises also apply to services, apart from the financials (in which case we'll provide you with a specific financial template for service oriented companies).





Quantifying price

This may be the hardest part of your deal. At this stage it doesn't really matter what the exact price will be. We just want you to think about it and come up with your best guess. You probably have an idea whether it will be a couple of euros, a thousand, or a hundred thousand.

If the price is low, you need to sell a lot to build a serious business. At a high price, you'll probably sell less as it's harder to find customers. Another thing to take into account is whether it will be a one-off sale (like a car) or a recurring product that customers buy on a regular basis (like razor blades or printer cartridges).

There are two ways to quantify your price:

1. Cost plus

You calculate the cost to build your product and add a certain margin to set the price.

2. Value pricing

Your product might be relatively easy and cheap to make, but provides a huge value for your customer. In that case, using the cost plus method would be selling yourself short. Instead, with value pricing you set the price based on the value that you create for your customer. We advise you to use value pricing.

Two-sided markets

In some cases The Deal is a bit more complicated. Your start-up could be in a two-sided market.

Example: Nerdalize

Climate-KIC start-up Nerdalize sells cloud-computing services. As you can imagine if your smartphone has ever burnt a hole in your pocket, CPUs (the processors) generate a lot of heat.

Nerdalize sells the heat generated by computers to consumers. In other words, Nerdalize sells heating to consumers while at the same time selling cloud computing to businesses. In this case there is a two-sided market with the start-up in the middle. Both sides are needed to make the business model work. Both sides pay.

heating



Start-up (Nerdalize)

The Deal

Exercise: The Deal

Construct your deal with this exercise.

- **1.** Determine what product you sell.
- **2.** Determine who your customer is.
- **3.** Determine the price and the quantity you aim to sell.
- **4.** Fill in The Deal template.



Remember, this is just a first shot. You'll keep iterating your deal as you gain new input and insights.

Exercise deliverable:

One slide with your deal described on it. Use the format indicating what you are selling to whom and at what price.

Your product: Your customer: The quantity you sell (q): The price you sell at (p): The target: $(p \times q)$

The Deal



The Deal of Unfrozen

Unfrozen (Israel) is a super-hydrophobic ice repellent coating for airplanes. It is a more ecological solution compared to traditional de-icing liquids. Unfrozen made it to the top-10 of the ClimateLaunchpad 2016 Global Final.



The Deal of Vienna Textile Lab

Vienna Textile Lab (Austria) makes natural, biodegradable fabric dyes made by bacterias. They won the Audience Award at the ClimateLaunchpad 2017 Global Final.



Most phenomenal start-up teams create businesses that ultimately fail. Why? They built something that nobody wanted.

- Eric Ries


Module Three

B Market Segmentation

Market Segmentation

Do you know who your customer is? Are you sure you're looking for the right one(s)? Can you serve all your customers with the same product? Or do they have different requirements, and do you need to segment the market? How do you identify your targeted segment of the market? And what is your total addressable market? Paying customers are the essence of any business. Ask yourself why anyone would pay for your product. In B2B, buying your product is mostly a rational decision that needs to result in a larger profit for customers. In some businesses, ethical criteria are part of their buying decision. Companies like Nike, Unilever and Apple consider ethical criteria and try to find partners in their supply chain that work carbon neutral.

In B2C, buying your product can be the result of a rational decision. It can also be the result of ethics, esthetics and emotions. Delighting customers (think: a beautiful design, a nice buying experience, a sense of status or exclusivity) or supporting a healthy planet through buying a certain product or service can result in sales.

Module 3

Creating value for customers

There are various ways to create value for customers. Maybe your product or service decreases costs for your customer. Or your product increases value, allowing them to sell their own products for a higher price or capture a larger portion of the market. By exploring different options, you'll identify types of possible customers and you'll gain insight into your total addressable market.

Find your first customers

Let's take Eternal Sun as an example. Eternal Sun is a start-up that was founded in 2011 by two Delft University of Technology students. Their product simulates sunlight continuously with over 99% accuracy. There are many potential markets for their product: testing of solar panels, testing of deterioration of lubricants and paints, car manufacturers that want to test the resilience of the materials they use, and algae production, just to name a few.

Now as a start-up, you don't have the luxury of going into all these markets at the same time. You don't have the budget to hire twenty-five salespeople that can start selling your product into each of these markets. And you don't have enough engineers to tweak your product to meet the different demands of all these markets. Start-ups have limited resources. That is why you need to focus on that slice of the market that is most likely to actually become a customer. Make sure there are more customers out there in need of the exact same product, so you can sell it again and again. Look for customers with the same sales cycle, so your sales process can grow fast. You'll also want to find customers that are in the same region, so you don't lose too much time and money on travel.

Don't forget that as a start-up you have no reputation to build on. Your customers don't know you. They don't know if you'll be able to deliver what you promise. They don't know if your company will be in business six months from now. You have no credibility. Yet. So it's extra hard for a start-up to make sales.

Why would a potential customer actually buy from you? The only reason to buy is that the potential benefits or value of your product outweigh the risks. Your first customer needs to be in a market segment that has a major problem for which your product offers a true solution. Alternatively, your product opens up an enormous opportunity that could not be realised without you. If your product or service is only a marginal improvement (like 20%), your chances of success are very small. What you need to find is a market where your product is an order of magnitude better than the current solution. Think 10x better. That's how you will get to TGDIYCMN (Ken Morse, 2011).

Market Segments: TGDIYCMN

We like to say that a start-up must achieve TGDIYCMN: Total Global Domination In Your Chosen Market Niche. You are looking for a market segment that will be your starting point for conquering the world. That's the only way that you will get noticed. Once you have become an important niche player, with a good reputation, you can go into other markets. These four elements guarantee a scalable sales process for your small start-up team. Your customers can serve as compelling and high-value references for each other in that market.



- a. customers buying similar products;
- b. with similar sales cycles;
- c. with similar expectations of providing value in similar ways and;
- d. there is word of mouth between customers in the market. (Bill Aulet, 2013)





Exercise: Generate market segments

Start by identifying all possible customers who could benefit from your product or service. Remember: no restrictions here. Try to come up with as many ideas as possible, as long as you can identify a potential value for a potential customer.

Now try to order them into market segments where buyers have the same reasons to buy, the same product requirements, the same sales process, and word of mouth. You can present the resulting market segments in a mind map.

Exercise deliverable

An overview of possible addressable markets grouped into market segments.

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Remember: we're looking for potential buyers and not potential applications of your product. Why would someone buy your product?

Why should your customer care about your product being better or cheaper?

What types of businesses can benefit from your product?



Make a mindmap (see example on next page) **Market Segmentation**



Market Segmentation of BinBang (formerly Urban Seeds)

BinBang produces well designed, stackable waste separation boxes to households. Their market segmentation shows segments based on waste separation habit, with or without garden, income level and age.



Buyer Households (direct)

urbanseeds 🧭

Find your Beachhead Market

Now that you have your list of potential customers in different market segments, it's time to figure out the Total Global Domination In Your Chosen Market Niche-thing. We call this your Beachhead Market. This is the market that you conquer first on your way to taking over the world.



Module 3

Image: Construction

Check: Did you identify actual market segments?Before we start, let's check. Did you identify actual market segments? Remember, we are not looking for product applications. We are looking for groups of customers that buy the same product, with the same product requirements, and with a similar sales cycle. Your customers communicate with each other. They read trade journals, meet at conferences, communicate via LinkedIn groups, and have the occasional coffee with one another.

How to find the ideal beachhead

So now that you have your longlist, the next step is to narrow it down. To do this you want to look at many different criteria. Here are the eleven criteria we suggest:

1. Can you identify a buyer?

Meaning, can you identify someone in the company who would actually make the decision to buy your product? Is this person an early adopter? Meaning, is this customer willing to take the risk of working with a start-up without a track record?

2. Does this buyer have the necessary funds to purchase your product?

In some cases you might identify a customer that could really use your product, like a university research lab. That does not necessarily mean they can pay for it. Any salesperson will tell you that this is not the best market segment to start with.

3. Is there a clear customer pain?

Does your customer have a headache that your product solves? Can you provide sufficient value for the customer to take the risk of actually buying from you?

4. Is the customer accessible?

Can you get to your customer? To be able to sell, you should be able to reach your customers. The easier you can get to them the

better. For instance, it is a tremendous advantage to have worked in a certain industry and know its ins and outs.

5. Cost of customer acquisition?

How much time and money is it going to take you to sign up a customer?

6. Lifetime value?

How much do you earn over the lifetime of your customer? This depends on how long the customer will be your customer and what you will be able to sell him or her during that period.

7. Can you deliver a whole product?

Ask yourself whether your product provides a whole solution for your customer. In some cases your customer may need to buy additional products from other companies to capture real value. Or your product needs to comply with certain standards or needs to have certain certifications.

8. Competition?

Are there other competing products that offer the same value for the customer? Or is there not much competition?

9. Next segment?

The Beachhead Market is only the first market segment you will address. Will this market segment make it easier for you to conquer other market segments?

Take your Founder's Dream into account. Perhaps some segments do not align with your Founder's Dream.

11. Do you like the customer?

We suggest that you pick a market with customers that you enjoy being around. You will have many, many meetings with your customers in the coming five to seven years. At conferences you'll have drinks with them. It will really help your business if you like your customers, because you will be comfortable around them, and people are simply more likable and fun when they are at ease. Imagine the opposite: the next five years you're going to spend hours a day with people that annoy you. It's a recipe for disaster.

If you are missing criteria that are relevant for your start-up feel free to add to the list.

About market size

Although it kind of follows from the matrix, there is something we have to stress. Entrepreneurs have a tendency to pick the largest market segment. We advise against that. You want to pick a market that is large enough to generate some cash, and small enough so you can achieve a meaningful market share. The market segment you are aiming for shouldn't be smaller than 20M and shouldn't be bigger than 200M. Your market share should not be less than 20%. In your Beachhead Market you can demonstrate that you can deliver, while building a name for yourself. It should give you the opportunity to prove yourself as a company by dominating that market. Because your customers are connected in some form, you can build the reputation and credibility you need to enter other market segments. That's why we want you to aim for a market share of at least 20%. In a market of 20M that is a company with a revenue of 4M per year. If your company is three to five years old, that is a great number. If the case of a market segment of 200M, your 20% market share will give the company a revenue of 40M. That would truly be an amazing achievement.

Once you have grown to a 20% or higher market share in your Beachhead Market, you are ready to go into the next market segment.

Exercise: Beachhead Market selection

Use the table on the right to score all of your market segments. Use a scale of 1-5, 1 being low or bad and 5 being good. Done? Add up the scores per segment and you'll have a pretty good idea of your top three potential Beachhead Markets.

Exercise deliverable:

One slide describing your selected Beachhead Market. Specify the reason you chose this market.



Remember, this is just a first shot. Keep working on your market research in the coming months. You'll keep iterating as you gain new input and insights.



Exercise: Beachhead Market selection



	Segment A	Segment B	Segment C	Segment D	Segment E	Segment F
Market Segment						
Buyer?						
Well-funded?						
Buying reason?						
Accessible?						
Cost of Customer Acquisition?						
Lifetime Value?						
Whole Product?						
Competition?						
Next Segment?						
Founder's Dream?						
Like Customer?						
Total						



Market Segmentation of SolarSack

SolarSack (Denmark) is bringing low cost water purification to developing countries. SolarSack can contain 4 liters of water, and with 4 hours in the sun, the water will be pasteurised, and ready to drink. SolarSack was a Global Finalist of ClimateLaunchpad 2017.



Market Segmentation of ACRAI

ACRAI (Germany) rents machines for non-chemical weeding to farmers and charges a fixed amount per hectare. Its goal is to shape the sustainable future of agriculture. They were a finalist in the ClimateLaunchpad 2017 Global Final.



One of the first tests of your value proposition should be, is it emotionally compelling? Do customers' heart rates go up after they hear it?

- Steve Blank



Module Four

Customer Value Proposition



What is the customer's advantage?



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Customer Value Proposition

So now you know your Beachhead Market. You have a pretty clear idea about the job your customers are going to hire your product for. The next step is to quantify the benefits you actually deliver. In this section, you're going to put a number on the value your product creates for your customer. We call it the Customer Value Proposition.

To be able to determine the customer value proposition you need to find out what will make that customer willing to buy your product. What exactly is this customer's problem and how does your product solve it? Are they even aware of the problem or opportunity? If so, why haven't they solved it yet? The best potential customer is one who is aware of the problem, has an urgent need to solve it, but is unable to do so internally. If you can help, they'll be interested in buying.

The economic effects for your potential customer

First you need to really get under your customer's skin. Not in a creepy Silence of the Lambs way, but with research and empathy. You need to know the core of their business: what they currently sell and to whom? At what price? What are the costs of building the product or running the business? You need to know all this and more to get a feel for the economic effect your product can have. There is little you do not want to know about your customer. The list of questions you can ask is endless.

For example, if your product reduces your customer's maintenance costs, you need to figure out how much they currently spend on maintenance. What are the causes for their high maintenance costs? Is it a labour intensive process? Are the service contracts expensive? Do they have regular breakdowns and repair costs? How big a percentage of their total cost is related to maintenance? If it's a very small number, it's going to be hard to convince your customer to change, even though you may have a much better alternative for them.

In a B2C situation you also need to figure out the value you provide for your customer. This value can be economic too, as it is in the B2B case. Often it needs to be emotional as well.

Is your customer in a very competitive market?

Your customer might be in a very competitive market. Any chance to reduce their prices could give them a huge benefit over their competitors. You need to be able to specify how much your product lowers your customer's costs. You even need to specify the actual benefit. How much more will they be able to sell? More importantly: how will this affect revenue and profit? In the end it's all about profit.

It's not just about the value you think your product creates. You need to verify what your customer thinks the added value will actually be. A customer will only buy when convinced your product creates enough value. Take the effects and possible risks of switching from the current solution to your product into account. Are there costs involved? There may be a current contract that needs to end. Or perhaps internal processes that need to change to accommodate your product. Are there possible warranty issues? Certification issues? In a B2B environment switching costs can be high, so dive deep into this subject.

Quantify the value for your customer

You need to quantify the increase in profit your product will realise for your customer. You need to know the benefit that you bring to your customer. If you do not know this, how can you sell effectively? You also need to know this because it helps you understand your optimal price point. If you ask too much, your customer will not buy. If you ask too little, you leave money on the table. Your customer might be happy (if they do not mistrust you because of your low pricing).



Remember two things:

- It is far easier to decrease your price than increase your price.
- Early adopters are usually willing to pay more than mainstream customers will later on.





Exercise: Segmenting the segment



Do you need to segment your Beachhead Market further?

As you look at your Beachhead Market in more detail, you may find you need to segment it further to find a homogeneous set of customers. The value your product creates for one customer might differ from the added value for other customers in the same Beachhead Market. In that case a more specific segmentation is necessary. Use the same criteria as before. The actual size of your Beachhead Market may alter because of further segmentation.

	Segment A	Segment B	Segment C	Segment D	Segment E	Segment F
Market Segment						
Buyer?						
Well-funded?						
Buying reason?						
Accessible?						
Cost of Customer Acquisition?						
Lifetime Value?						
Whole Product?						
Competition?						
Next Segment?						
Founder's Dream?						
Like Customer?						
Total						

Exercise: Customer Value Proposition

Fill in the bar chart below for your product

Indicate what profit the currently used product offers your customer and then compare that to the profit your product would offer. The difference should be significant. Why? Because your customer is going to take a substantial risk in going into business with you.

0	50	100	150	200	250

Money 🔿 %

Note:

If you do not know the exact value your product brings your customer, or you do not know the relevant metric to express it, use an index. Say the current solution is 100 and you can bring costs down to an assumed 30%. Or say your paint lasts twice as long. For now that is fine. But don't fool yourself (or us). It is easy to lie with statistics. But you can't fool your customers. Express your customer value proposition in a metric that is relevant to that customer. That is very likely not a paint-metric, but could be a maintenance cost-metric. If you do not know what that metric is yet, you have to find out after the Boot Camp and improve your value proposition.

For now, remember this is just a first shot. You'll keep on iterating with new information and insights.

Exercise deliverables:

- One slide with the quantitative value proposition described.
- One slide with a picture or drawing of your product.



The Customer Value Proposition of Evlogia

Evlogia (India) makes organic straws from coconut tree leaves. The team was a Global Finalist in ClimateLaunchpad 2018.



The Customer Value Proposition of V-Chiller

V-Chiller (Hungary) sells cooling machines based on a vacuum technology that use 70% less energy and saves its customers around €1.000 per year per refrigerator. They were one of the Global Finalists of ClimateLaunchpad 2017.



Free is not a business model.



Module Five

Financials and Key Value Drivers



Financials and Key Value Drivers

You have identified who your customers should be. You roughly know the value you can create for them and at what price to sell your product. You even have a feel for the number of customers in your Beachhead Market. The thing you still don't know is if you'll actually make a profit. To figure that out, you need to look at your costs.

You probably have a pretty good idea how much it costs to build your product. But beginning entrepreneurs often don't realise what costs are involved with actually getting customers to sign for a sale. It takes time and money to talk to potential customers and not every sales effort leads to an actual sale. These oftenoverlooked costs need to be taken into account, because they have a direct effect on your profit.

Why calculate future profit?

Calculating your profit based on the early days of your company is not a good idea because your business is not yet financially stable. The cost to build your first products is typically relatively high, just as the costs and efforts to acquire your launching customers are also high. You will probably need to invest to develop your product and market, as well as your production and sales processes. Future revenues need to compensate for these investments. That's why you need to be able to predict a significant profit in the future. To calculate your future profit you should look at your business in a stable situation, meaning a few years from now. Your product is fully developed and in production at a certain scale. Tools, machinery, and a sales structure are in place. Your business is pretty solid at that point. A calculation of your business in that situation, takes the advantages of maturity and scale into account.

Reality check

It is not a good idea to develop a product when a simple calculation on the back of the envelope shows you'll never be able to make money with it. You'll always be losing money in the early stages. That is why you need to find subsidies, bootstrap, borrow money, or attract investors. The only way to do that is by knowing and showing that your product will be profitable in the (near) future. What you need to do now is check if your product will provide sufficient value to sustain a healthy business.

Figure 2 shows the typical cash flow curve for a start-up. The first years usually show losses and no income. Once sales take off, income increases and the cash flow becomes positive. All products have a limited product life cycle, that's why sales decrease at some point. This can also occur when competitors enter your market.

Calculate profit per year

How do you calculate what you'll earn (your profit) per year? The financial tree structure in Figure 3 helps you do just that. It uses parameters like the number of products you sell and your costs to build those products. It also takes your sales price into account. These factors determine your profit and are linked as shown in the financial tree. There is a tree for products and a tree for services.



Don't panic

The financial tree may seem complex, but it will soon make sense. Just dive in and take one step at a time. When you need a break, pick up a copy of the Hitchhiker's Guide to the Galaxy. We find that helps when we feel a panic coming on.

Use the tree as a condensed and schematic tool to calculate how much money you can make on a yearly basis with your product. As you don't know all the numbers yet, it is very helpful to use a model like this one. The tool lets you play with best guesses and see the effects on your profit. This way you get insight into whether your idea is feasible and which numbers are most important.

As you can imagine, the price point has a direct effect on your profit. But did you ever think about the costs of convincing a customer to buy your product? There's a huge cost difference between selling online or through a sales team that flies around the world. The Financial Tree shows you what really influences your earnings.

Figure 2: Typical cash flow over time for a start-up.

Are you ready? Let's begin.

On the left you see the margin you realise in a year (*Profit/Year*). It is calculated by multiplying your margin per product (*Profit/Product*) by the number of products you sell per year (*Product/Year*).



Figure 3: Financial tree as you need to fill it out in the Excel sheet.

Before you start

The Financial Tree is a simplified tool. It looks at your Beachhead Market in a stable situation, say 3-5 years from now. By doing this exercise, you will become aware of key drivers in your business model (see below). And you will get a first indication whether your business will be profitable. In reality, in 5 years you may have entered other markets, because your Beachhead Market is small. For the purposes of this exercise, you can forget that now. Focus only on your Beachhead Market.

Financial tree for products: Are you ready? Let's begin.

On the left you see the profit you realise in a year (*Profit/Year*). It is calculated by multiplying your profit per product (*Profit/Product*) by the number of products you sell per year (*Products/Year*).

Let's take a look at how to calculate Products/Year in the lower branch of the tree. This number is determined by the number of customers (*Customers*) multiplied by the amount of products a customer buys per year (*Products/Customer/Year*). You'll find the number of customers by multiplying the market size (*Market*) by the market share you can achieve (*Market Share*). The amount of products a customer buys in a year depends on the amount purchased in one order (*Products/Deal*) and the time a product lasts before needing replacement (*Life Product*). Now let's take a look at Profit per Product in the upper branch. This number is determined by the costs associated with the product (*Cost/Product*) and the price you sell it for (*Price/Product*).

Your product costs are composed of the costs to build (*Cost Make/ Product*) and the costs to sell (*Cost Sell/Product*). The costs to sell per product are calculated by taking the costs to acquire a customer (*Cost Sell/Customer*) and dividing this by the number of products a customer buys until you need to convince them again to buy from you (*Products/Customer*).

The number of products a customer buys depends on the amount of products purchased in a single order (*Products/Deal*) and the amount of orders the customer places before you need to sell to them again (*Deals/Customer*). This final number is determined by the time a customer remains a customer without you needing to make another sales effort (*Life Customer*) and the time a product lasts until it needs to be replaced (*Life Product*).

If you sell a service, the tree looks slightly different (and is easier). Just read on and at the end of this chapter we will get to the tree for services.

That's the entire tree. Now let's get to work with it.

Input parameters: Financial tree for products

Fill in the empty boxes, the other parameters consequently follow these inputs. In the end you'll find your profit per year.

Parameters to pay extra attention to:

1. Cost Sell/Customer

The cost to acquire a single customer can be calculated easiest by estimating how many successful deals a single salesperson could make in a year. You divide the costs of the salesperson by the number of deals closed. This, of course, assumes that you're in direct sales. You could also consider selling through a distributor, in which case you'd probably pay your distributor a percentage per product sold. In that case your tree will look a bit different, as the sales costs will then be part of the price per product.

2. Life Customer

The Life of the Customer is the period of time a customer remains a customer without the need for additional retention costs. Typically, this is the duration of your sales contract. It's comparable to a 2-year contract for your mobile phone. That makes you a customer with a 2-year life after which the provider needs to make you a new offer. Unless, of course, the contract is automatically renewed. Tricks like these can extend customer life and reduce the cost of sales.

3. Life Product

The example assumes a one-off payment for a product. In reality you'll often aim for recurring sales. Well-known examples are razors or printer cartridges. You buy a razor or printer once and consequently need to keep buying razor blades and cartridges regularly. Selling the razor holder or printer at a low price assures recurring sales to the same customer. The customer needs to keep on buying razor blades and cartridges for the entire life cycle of the product. In this scenario you need to build the machine and supplies to be able to operate the machine.

4. Market Share

Market share is the percentage of the Beachhead Market that you aim to capture. As a start-up, you have to establish a name for yourself. You can do that by dominating a market. If you think of capturing a market share of 5%, think again: did you delineate your Beachhead Market well? Is it not too broadly defined? How can you dominate a market with 5% of market share? We encourage you to be specific in your targeted Beachhead Market and aim for a high percentage. It signifies that you want to dominate that market and by doing so build a brand that allows you to enter other markets. And it shows that your sales effort will be more focused: you're not unnecessarily wasting time, effort, and money on prospects that will not become customers.

Key drivers: Inputs with a big effect on margin

The input parameters are the drivers for your profit. Changing one of them has a direct effect on your profit. Varying the parameters shows how big their effect is on your profit. The input parameters with the biggest effect on your profit are your key drivers.



Remember: this is a back-of-theenvelope calculation. Many of your

input parameters will most likely be estimates. Their exact value is simply not clear yet. This is fine for now. Hopefully you are aware of all your assumptions and your key drivers. You have your work cut out for you: get more information and calculate exact value.

Assumptions

Facts

Exercise: Financials and key value drivers

- Use the financial tree Excel template to calculate your profit per year. Only fill in the input parameters (the empty boxes). The template will calculate the other numbers.
 Remember: we are looking for your best guesses at this point in time.
- Identify your key drivers by varying the input parameters and the effect they have on your profit. The range of the parameters you vary depends on the bandwidth of your guesses. The parameters that affect your profit most are your key drivers.
- Indicate whether drivers are facts or guesses. Some
 parameters may already be known (for instance, the costs to
 build the product). Others will likely still be assumptions (the
 price you can ask). It's vital to keep track of which are true and
 which need to be validated. This is especially true when one
 or more of your key value drivers are still guesses. In that case
 you'd better find a way to validate those numbers.



Keep in mind that this is a first shot. You'll keep on iterating with new information and insights.

Exercise deliverable:

One slide with a simplified version of your financial tree. On the right hand side: summarise your key drivers.



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Excel template:

Please ask your coach for the Excel template to fill in this financial tree.





The Financial Tree of Waveco

Waveco converts wave energy using turbines that hang below the wave zone, shielded from the beatings on the surface. Their key drivers are the cost of the product, the price they are able to sell it for and their number of customers. Waveco was a finalist at the ClimateLaunchpad Global Final in 2016.



The Financial Tree of Sponsh

Sponsh (Netherlands) has developed a smart textile from plastic that captures water vapor. The material absorbs water during the night and releases it during the day, to water for instance trees or crops. Sponsh was a Global Finalist in the 2018 edition of ClimateLaunchpad.



Addendum Financial Tree for Services

Fill in the white boxes, the other parameters consequently follow these inputs. In the end you'll find your profit per year.

Figure 4 shows the financial tree structure for a service business. It basically follows the same logic. The difference between products and services calls for a slightly different set-up of the financial tree. On the left again is your profit per year. In this case that number results from the number of customers multiplied by the profit per customer, per year (*Profit/Customer/Year*). The amount of customers is the result of market size multiplied by your market share. Calculate the profit per customer by dividing the profit per customer (*Profit/Customer*) over the lifetime of the customer (*Life Customer*). To get your profit per customer you deduct the cost per customer (*Cost/Customer*) from the revenue per customer (*Revenue/ Customer*). The revenue per customer is the price a customer pays per year (*Price/Year*) times the lifetime of the customer (*Life Customer*). The cost per customer is the sum of the costs of sales per customer (*Cost Sell/Customer*) and the costs to deliver the service per customer (*Cost Deliver/Customer*).

Again, the input parameters are indicated in blue and their effect on your margin can be explored by varying values.



Excel template: Please ask your coach for the Excel template to fill in this financial tree.



Figure 4: Financial Tree for services.

If we did not take action to solve this crisis, it could indeed threaten the future of human civilisation. That sounds shrill. It sounds hard to accept. I believe it's deadly accurate. But again, we can solve it.

- Al Gore




Climate Impact

Calculate how much tCO₂e you will save

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Climate Impact

As you know, ClimateLaunchpad is all about addressing climate change with scalable, commercial solutions. Most of the teams join the program exactly for that reason. You need to be able to show that your business idea will have a substantial impact on the climate if you want to be one of the finalists of ClimateLaunchpad this year. So in this Module 6, we look into that. But before we do, let's talk a little bit about polar bears.

Polar bears

Imagine a picture of a beautiful polar bear mother with her cute polar bear pup. They are standing on a small floating ice shelf. What is the problem that the polar bear mother has? What is your answer to that question?

When we ask this question in the Boot Camp, we always get a wide range of answers. "Too much CO₂!" "The climate is warming, so her habitat is threatened." "Not enough food." "Global carbon emissions are through the roof." "The sea's ecosystem is collapsing." "Over-fishing." You get the picture, right?

Although those answers might be correct, it's not the biggest problem facing the polar bear mother and her pup. Their biggest problem is that they don't have money. They can't pay you for a solution to their problem. As a result, the polar bear is not your customer. Protecting the planet and its wonderful species may be a strong motivation for you to start your company, but you should not forget the most important rule of business.

The most important rule of business

Over the past ten years there have been many studies on the success of start-ups. We are lucky to have all this rich data on start-ups. For instance, Noam Wasserman's great book, The Founder's Dilemmas, examined data on more than 5,000 startups. And that's just one book.

All that data has given us crucial insights on the many factors that influence the chances of success of a start-up. The founding team, the technology, the product, the business model, intellectual property, market size, and on and on. The interesting thing is that of all those different factors, in the end there is only one that is truly crucial for the success of a business. Which one do you think it is? Do you know? Can you guess?

Here it comes (drumroll, please). The only truly crucial thing you really need for a business is: **a paying customer**. (Duh)

So although your Founder's Dream may be to have a huge positive impact on climate change, your start-up's primary goal is to make sure its customers are happy. There can be no climate impact without happy customers.



And you might be surprised to learn that the climate impact of your product or service might not be relevant at all to your customer. Say you have a product that reduces the cost of energy bills because of the energy savings your product delivers. Of course, it doesn't hurt that it's greener. But your customer's motivation to buy is likely to be the reduction in costs. So in your pitch to your customers, you certainly want to avoid talking about polar bears. You might not want to tell them how the earth is warming because of CO₂ emissions or how sea levels will rise because of greenhouse gas emissions. You'll likely be wasting their time and yours if you do so. More importantly, you will be hurting your start-up's chances of success.

Similarly, when you pitch to investors, lowering carbon emissions is probably not that interesting to them. Again, it doesn't hurt. But their investment decision will be based on the business case, not on a happy green earth saving-feeling.

So make sure that you focus on the customer pain. Never use a polar bear slide (or images of sea level rising, a freak hurricane storm, a city flooded with water, dead trees, crying babies or a picture of earth from space, we've seen it all). What you can talk about is how your customers will contribute to tackling climate change, showing factual data. And that's what this module is about.

Climate impact in Your Beachhead Market

There are two ways to create positive climate impact. Firstly, the creation of your product is much more environmentally friendly than the product it substitutes (for example: replacing concrete as a material with an environmentally friendly mineral composite). Secondly, the use of your product by your customer is more environmentally friendly than the solution your product replaces (replace a gasoline powered car with a Tesla). It can also be both.

Calculation

That's not too complicated, right? Now onto the difficult part: data. We are going to focus on CO_2 emissions. You need to figure out the CO_2 emissions of the current solution your customers are using and the CO_2 emissions of your product. Do you replace or reduce the use of diesel? Do you store CO_2 ? Do you increase crop yield? Every calculation will look different.

Within the scope of ClimateLaunchpad it is not possible to do a

complete Life Cycle Assessment. Carbon footprint calculations quickly become very complex. It is helpful though to think in terms of the life cycle of your product. You probably have an idea where your product makes the biggest difference. You can focus on that area.

Roughly, you can think in the following steps:

- Input: the raw materials required;
- Manufacturing your product: Manufacturing your product: energy, water, fuel, etc. being used in the production process;
- Packaging;
- Distribution: getting your product to your customer;
- Use and disposal: use by your customer and disposal after use.





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To return to some of our examples above: we can safely say that the biggest CO₂ impact of an electrical vehicle compared to a gasoline-powered car is in its use. So that's where you should focus. For cement and mineral composites, the biggest impact will be in the production phase.

Other resources to calculate your impact

Here we include a list of resources you can use to calculate your CO₂ footprint. Of course, a little Google goes a long way.

 Climate-KIC trainer Bram van der Grinten made Climate Impact Forecast: LCA for start-ups and impact entrepreneurs. LCA stands for Life-cycle assessment or analysis, and it's a powerful tool to figure out what your impact is.
Note: You may need to purchase a license for this tool

https://impact-forecast.com/

- The European Environmental Agency keeps an overview of the CO₂ intensity of electricity in European countries:

https://www.eea.europa.eu/data-and-maps/indicators/ overview-of-the-electricity-production-3/assessment

- A beautiful open source project with data on carbon intensity of electricity production around the globe:

https://www.electricitymap.org

- Here is a carbon footprint calculator offered by the USA's EPA: http://www3.epa.gov/carbon-footprint-calculator
- This is a really nice Carbon footprinting guide made by the Carbon Trust:

https://www.carbontrust.com/resources/guides/carbonfootprinting-and-reporting/carbon-footprinting

 This is a pretty comprehensive list of CO₂ released when making & using products:

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http://www.co2list.org/files/carbon.htm

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Unit: Carbon dioxide equivalent or tCO2e

In some cases, your climate impact will not be measurable in CO₂. This could be because you focus on some other greenhouse gas, such as methane or nitrous oxide. We have a solution for that. It's called carbon dioxide equivalent. It expresses the greenhouse impact of different types of gasses in terms of the amount of warming CO₂ that would be created. If this is the case for you, present your climate impact in Tons of Carbon Dioxide Equivalent, or tCO₂e. You can use the US Environmental Protection Agency calculator for this:

https://www.epa.gov/energy/greenhouse-gas-equivalenciescalculator

Note:

What if your impact is not on greenhouse gas production? For example, because you save a lot of water with your proposition? It is simple: make the same bar chart, but replace "CO₂ production" with "water use", and calculate the total amount of water saved in your Beachhead Market.

tCO2e bar chart

Remember your Customer Value Proposition bar chart? Along these lines you can now make a tCO₂e footprint bar chart of your product and compare it to the CO₂ footprint of the product you replace. Focus on the area where your product has the biggest impact. The more complete your calculation the better, of course. Next, based on your assumptions in the financial tree you can calculate the total tCO₂e saved in your Beachhead Market.



Exercise: tCO2e production calculation

Draft one slide with your tCO₂e production calculation.

The slide should have two components:

- Bar chart of tCO₂e with 2 bars showing the savings per product.
- A number showing the total tCO₂e saved in your Beachhead Market.

In a footnote, refer to the sources of information you used to make your calculation, so everybody (including the judges in your National, Regional, and the ClimateLaunchpad Global Grand Final) can verify your data.



Module 6



Climate Impact of ACRAI

ACRAI (Germany) rents machines for non-chemical weeding to farmers and charges a fixed amount per hectare. Its goal is to shape the sustainable future of agriculture. They were a finalist in the ClimateLaunchpad 2017 Global Final.



Climate Impact of Yased

Yased (Spain) makes an organic fluid for the recycling of polystyreen that is 60% cheaper and 6 times faster than the current chemical-thermal recycling process. Yased was the winner of ClimateLaunchpad in Spain and finalist at the ClimateLaunchpad 2017 Global Final.



Great entrepreneurs are often great listeners and they can spot patterns and pick up on small details in customer stories.

- Alexander Osterwalder

Ask questions even your Mom will answer straight. Module Seven

Customer Discovery

Talk to your customers



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Talking to Potential Customers

You've come a long way in this Boot Camp. You came in with a business idea. By now you have an idea about your market and your first market segment, the Beachhead Market. You have looked at your business model (The Deal) and you did some basic financial math. You started working on the climate impact your idea can have.

So, it seems you have your work cut out for you: time to get to work. But... Right now, what you have is in all honesty nothing more than a set of assumptions. Assumptions that you have thought about long and hard. But all that thinking doesn't make assumptions true. It is time to validate your assumptions, so you can build your business on facts instead of opinions.

Validate your assumptions in the real world

The way to validate your assumptions is surprisingly simple. The only thing you have to do is get out of the building/your lab/your office/your home and talk to your potential customers directly. You can even do it via the phone or Skype.

Just beware: the outcome might not be what you'd like. Reality rarely matches our best guess. Sometimes reality differs by a long shot. But it is great to learn this early in your start-up journey. You are just getting started. Imagine working for months or years to build your product and launch it into the market, only

Listen

One of the key things you need learn while you do your customer interviews is NOT to talk about your product. Your job is to listen, and not try to sell your product. Don't worry, we've all been there. The good news is that becoming a good listener is a skill that everybody can train, simply by doing it. And the next exercise is all about that.

to find out it doesn't solve a headache for your customers. It will kill your company. You will have wasted an enormous amount of resources. It's much better to figure out what your customer really needs before you put in a lot of time, energy and money. That's why we want you to do at least 20 customer interviews before you present your start-up at the National Final.

So let's make a list of the customers you want to talk to. Focus on your Beachhead Market. If you still have two or three options for you Beachhead Market, you can spread your interviews over these options. Be specific: don't write 'Big Company X' or 'Government'. You want to identify the right person to talk to, so include their name and their job title. Hint: social media platforms are a great way to find the right person to talk to, and to get introductions to them through your existing network.

Talk to customers

Talking to customers will help you see that some, many, or even crucial assumptions you made are false. At this stage, potential customers are the people that are going to help you find the way to a plan that you can actually execute. If you want people's help, they must be willing to help you and spend some of their valuable time with you. Keep in mind, there is a chance that they might say no. Don't be offended by this, remain friendly (remember, you still want them as your customer somewhere in the future), and keep looking for someone else who is willing to make some time for you.

Don't talk about your product

The good thing is that people are generally willing to help. Avoid giving customers the feeling you only want to talk to them because you want to sell something. If they get the impression you're selling, they'll simply say no. In fact, they would have been perfectly willing to help you out.

So don't talk about your product. Yes, in the end you want to turn potential customers into real customers. But at this stage you leave everything that has to do with your product at home. There's one way to prevent them from getting the feeling you're trying to sell them your product. Ask if they want to help you. Tell them that they are the experts and they have knowledge that could help you. Assure potential customers that you're not going to sell anything during these interviews. You'll discover that people are more willing to say yes to such an appointment.

Exercise: List potential customers

Let's start with a list of customers you want to talk to. And be very specific. So don't limit it to company name. You want the name of a person you want to interview and their role.

The 20+ customers to talk to

	name	job title	company			
1				16	 	
2				17	 	
3				18	 	
4				19	 	
5				20	 	
				26		
15				30	 	



WARNING:

Ask the wrong questions, get false information.

Once you find potential customers to talk to, the talking itself is not without risk. The danger is not in revealing confidential information that they might take advantage of. The real danger is getting false information when you ask the wrong questions. False information will lead to a business built on invalid facts and consequently a big chance of failure. It is all about asking the right questions. Questions that deal with facts and facts only. Facts are what you need to build a viable business.

Another thing to keep in mind is this: are you good at reading

people? Do you know when they are bored, excited or tired? If not, you need a partner who is. Before going into the meeting, agree on who will do what. Make sure you have signals for each other. For instance, an ear tug could mean: time to listen, not talk.

Mom-test

Your mom will always tell you your business is a good idea. Several books have been written on how to talk to customers in such a way that they will give you valuable information. Two examples are Talking to Humans by Giff Constable and The Mom-Test by Rob Fitzpatrick. In essence their message is the same: make sure that you ask your questions in such a way that people cannot unintentionally give you false information. In this program we use the Mom-test.

Deal with facts, not opinions

The Mom-test is all about asking questions in such a way that even your own mother would not be able to lie to you just because she wouldn't want to hurt your feelings. The essence of the test is that you should only ask questions that deal with facts and not with opinions.

Dig in the past, not the future

You shouldn't ask people what they would do, but rather ask what they have done in a specific situation. It is very difficult to predict what someone will do in the future, but it is very easy to talk about a specific situation in the past.

Avoid would

An easy rule is to avoid questions that contain the word would. Such as: "Would you buy this product?", "Would you pay for this product?", "How would your ideal product look?". All these questions are about hypothetical situations. It is very likely that people give you a positive answer. The potential customer might answer: "Yes I would," while actually thinking: "Yes I would... if I had all the money in the world and I was sure your product was the best, but I'm not sure yet."

What are good questions to ask?

Ask about current solutions and past behaviour. Look for actual facts, frequency, and details. Ask questions that give you a true insight into what a customer really needs. That way you can come up with the product they really want.

Good questions are questions such as:

- Did you have this problem before?
- How often did it occur?
- How much did it cost?
- When was the last time it occurred?
- Talk me through how you dealt with the problem?
- How did you acquire the budget to solve the problem?
- What else have you tried?

Get commitment

We know we told you that this type of meeting is not a sales meeting. But it is an opportunity to get some kind of commitment from the customer. When you talk to a potential customer always try to leave the meeting with some kind of a commitment. This can either be a commitment in time, reputation, or money.

Money is the best of course, but not easy without a finished product. Your customer might be willing to (partly) bear the cost of a demonstration. A commitment in time involves your potential customer committing some more precious time for a follow-up meeting, giving you access to expertise in the organisation, or making time available within the organisation to work on a collaborative project. Commitment in reputation can be shown by introducing you to other relevant people in their networks. An important question you should ask at the end of a customer interview is: "Who else should I talk to?".

Don't get excited too soon

Be careful with misinterpreting compliments. When a potential customer tells you that they love your product and would definitely buy it, this doesn't really mean anything. Don't get all excited before there is an actual business deal.



Exercise: Talking to potential customers

In this exercise you form a group of three people from different teams There are three roles: interviewer, interviewee and observer/timer.

As the interviewer, you define the job/company that the interviewee is working. As interviewee, your job is to play your role as well as possible, answering questions to the best of your ability. And as observer you keep the time, and you observe how the interviewer is doing. What types of questions get the most interesting answers?

The interviewer has 5 minutes. They start with a short introduction of their company, and then dive into asking questions. Every 5 minutes you switch roles, until all three of you have played all roles.

What's next?

Now go on. Shoo. It's time to get into the real world. It may be a bit scary but this is what it's all about. Go out and validate. We suggest that for the first ten interviews you go with two team members, so you can give each other feedback, it will make you better listeners.

Make sure you have interviewed at least 20 customers in your Beachhead Market, and share the results of that in your Customer Discovery slide.

Number of customer interviews: Key Assumptions tested: **Biggest learning:**

Number of customer interviews: ...

+

3 Key assumptions tested

+

♦

3 Biggest learnings

Slide



Make a slide for your deck as a placeholder.

Make sure that by the time you pitch in the National Final you have done at least 20 customer interviews, so you have real data to share. You'll find that the jury members will find this very interesting data.



Don't be afraid to get out of the building



Customer Discovery of SAGAR

Sagar produces LED lights and solar panels for small fishing boats in Tanzania as an alternative for kerosene lamps. They were one of the winners of the ClimateLaunchpad Global Final 2018.

Interviews	Key Assumptions Change desired
30 Boat Owners	Modern design High expenditure
200 Fishermen	Key Learnings Clean alternative Modern-design 40% more income
	40% more income

Customer Discovery of Swiss Fault

Swiss Fault (yes, you guessed it, from Switzerland) sells a data storage system that uses 90% less energy. They were a finalist in the Global Final of ClimateLaunchpad 2018.



Your understanding of the audience is directly proportional to the trust the audience will give you, and to their willingness to being convinced by you.

- Frans Nauta

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Module 8

Module Eight

Pitch Your Deck



Pitch Your Deck

Pitch Your Deck

Congratulations, you made it to the last module of the ClimateLaunchpad Boot Camp #Yay

Now is the time to put it all together, so you can pitch your deck as the final module of this ClimateLaunchpad Boot Camp. Which (we know) feels kind of crazy. It's has been a lot of stuff to process in the past few days. There are so many assumptions in your deck, so many uncertainties you need to figure out before you can say 'these are the facts'. But we still want you to pitch at the end of this Boot Camp. Every team that is part of the ClimateLaunchpad Boot Camp will pitch, and we'll cheer for every one of you.

There are several reasons why we make you pitch after less than two days of work. First of all, with pitching the old adage 'practice makes perfect' is very true. The more often you practice, the better it gets. The first time pitching a new deck feels super awkward, so often people postpone practicing. Not in ClimateLaunchpad: we'll starting using the deck for practice at the end of the session. Because you will use the same basic structure of this slide deck during the ClimateLaunchpad National, Regional, and the Global Grand Final.

Another big reason why we make you pitch a very imperfect deck, is to let you get used to what it's like running a start-up. You're constantly improvising, constantly making decisions on imperfect data. Simply because you don't have the time to get more data, don't have the budget/staff to look for more data, or maybe because the data is not there at all. You'll be selling products that are (according to your standards) not (yet) perfect and still need to evolve, but are necessary to start selling in order for your company to get its first sales.

It's the same for this pitch: it's impossible to give a great pitch. You have to improvise, and present a story that has many assumptions in it. Better get comfortable with it. This is what being an entrepreneur is like.

Structure of the Deck



As you know, your deck has 9 slides. You will be working on perfecting these slides in the coming months. Make sure you use the support of your National Lead and all the coaches to make it great. There are follow-up modules to help you improve the deck, and also improve your pitch.

Have fun pitching :D

Follow-up modules overview





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The most important thing in communication is hearing what isn't said.

- Peter Drucker



Follow-up Module One

Customer Discovery

Customer Discovery

Remember the **customer discovery** module in the Boot Camp, about talking to customers? Let's take that to the next level.

Hollywood

Have you ever seen a Hollywood movie about an entrepreneur? Probably. They all seem to have the same plot. It goes something like this: the protagonist is a brilliant, somewhat awkward person that has a brilliant idea that most people around her consider to be a crazy idea. She pursues nevertheless, and the company gets some traction - against all odds. And then disaster strikes, everything seems to be lost. A struggle follows. And after a long struggle there is this climax moment, when our hero improvises an amazing sales pitch out of the blue at some crucial event. Suddenly everybody wants to be a customer, and the brilliant pitch saves the company. Happy smiles, champagne, fade out.

Reality

In reality, this scenario never happens. First of all, start-ups are not one-woman-shows. They are a team effort. For Hollywood that is complicated, because somehow American movies require a single hero that is saving planet earth on their own. In the real world, work, having a big impact, making a big difference, requires the efforts of many. As far as start-ups are concerned, through ClimateLaunchpad and in the Climate-KIC Accelerator, we have worked with more than 3,000 start-up founders. The Hollywood scenario has never, ever, happened. Believe us: building a company on brilliant, charismatic pitches is not the way to go. If you don't believe us: try it. When you're finished with your ego trip a few years from now you're very welcome to apply again to ClimateLaunchpad.

Listening instead of talking

What does work? Try listening. To truly understand your customer, you need to become a very good listener. And you have to become very good in asking the right questions.

Remember the Mom-test exercise in the Boot Camp? It's very easy for people to give us pleasing answers, answers that give us a happy feeling.

Many people think start-ups are cute, like a Labrador puppy. Everybody wants to be nice to puppy Labradors. But a lot of that well intended positive feedback will result in what we call 'false positives'. You will think you have an interesting value proposition for your customer, you'll think you have found an interesting Beachhead Market, but once you start selling your product it all collapses. So we need to ask questions that prevent people (including your mother) from being nice to us.

Good questions

Remember the key criteria for a good versus a bad question? We are looking for facts, not opinions. Facts are only in the past and the present. Any statement about the future is an opinion.

Here are some good questions:

- Did you have this problem before?
- How often did it occur?
- How much did it cost?
- When was the last time it occurred?
- Talk me through how you dealt with the problem?
- How did you acquire the budget to solve the problem?
- What else have you tried?
- What solutions are you using at the moment?
- Etc.



20+ Customer Interviews

As you know, we expect you to do at least 20 customer interviews. So you have to get really serious about listening and asking the right questions. You already made a list of people you wanted to interview. Given with what you've learned the past weeks, we're sure that you need to update that list. So let's get to work.

Exercise: Share your lessons



During the Boot Camp you have made your list of customers you want to talk to. You should have spoken with some of them by now. So make a group of 3-4 people and share what you've learned so far. Take turns so everybody gets to share. Take 20 minutes for this.



Good Questions

Remember the key criteria for a good versus a bad question? We are looking for facts, not opinions. Facts are only in the past and the present. Any statement about the future is an opinion.

How did you acquire the budget to solve this problem?



Did you have this problem before?

Please talk me through how you dealt with the problem

How often did it occur?

How much did it cost?

When was the last time it occurred?

What else have you tried?

Exercise: List potential customers

Make a list of 20+ people that you want to talk to about your product or service. Yes, they should be in your Beachhead Market. Don't limit it to a company name. You want the name of a person you want to interview and their role. If you don't know who you want to talk to, take some time to figure it out. See if you can find profiles of company employees on social networking sites like LinkedIn.

Be prepared for a lot of work, because you will need to do many interviews. Once you have done around 10 face to face interviews you can try to do them by telephone. This will save you valuable travel time, and it allows you to connect with potential customers at a further distance from your hometown. The next thing we need to work on is what you will ask these potential customers. For that we have the next two follow-up modules.

The 20+ customers to talk to

name job title company name job title company 1 1 16 11 11 11 11 11 11 11 11 11 11 11 12 11 12 12 11 12 12 12 12 12 12 13 13 13 13 13 13 13 13 13 13 14 13 14 13 14							
2		name	job title	company			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1				16	 	
4 19	2				17	 	
5 20	3				18	 	
6 21	4				19	 	
7 22	5				20	 	
8 23	6				21	 	
9 24	7				22	 	
10 25 11 26 12 27 13 28 14 29	8				23	 	
11 26	9				24	 	
12 27 13 28 14 29	10				25	 	
13 28 14 29	11				26	 	
14 29	12				27	 	
	13				28	 	
15	14				29	 	
	15		<u></u>		30	 	

No business plan survives first contact with the customer

- Steve Blank



Assumptions



Assumptions



Assumptions

Through the Boot Camp you have created your ClimateLaunchpad slide deck. This deck is a coherent framework about your business, your business model, your customer and your value proposition.

As you are well aware, most of this is based on a lot of assumptions, guesstimates or in some cases maybe even wild guesses. You will need to move from assumptions to facts. In the process you will learn a lot. And your plan will change, because, as we all know: "No business plan survives first contact with the customer". In fact, it is likely that so much will change, that it can be hard to see the forest for the trees. We have a few tools to keep you moving ahead in a systematic way, working on the right priorities and making progress in the areas that matter.











Analogs and Antilogs

You now have a long list of assumptions. You cannot work on them all together, you need to prioritise. To do this we will rank the assumptions on the basis of two criteria:

- How certain or uncertain are you that the assumption is true?
- What is the impact of the assumption on your business?

To help you with the first question it can be helpful to look for examples that make it likely that your assumption is true (we call that an 'analog') or proof that your assumption is false (antilog: a company tried this and failed miserably). In your search for analogs and antilogs, don't restrict yourself to your own relevant cleantech business environment. Many businesses are successful with leveraging proven models and insights to new fields. In your search for relevant analogs and antilogs it helps to tap into your network and talk about your search for answers.

After this step you are left with assumptions that are more or less uncertain. You can rank them now on the second criterium: if that specific assumption is false, what is the impact on your business? High, moderate or low?

Exercise: List assumptions

Think of all the assumptions that you have made. What are you not sure about, but needs to be true for your business to work? You can think of many things:

- Is the problem you solve a real priority headache for your customer?
- Do you really understand the market?
- Can you really charge this amount for your product or service?
- Can you find the new needed team member with the right skill set?
- Can you decrease production costs really to the required level?
- Etc.

List all your assumptions.

Exercise: Charting assumptions

Chart your assumptions on a two axis chart:

Uncertain – certain Impact high – low.

The result will look something like this:


Priorities

You now know which assumptions are most uncertain and have a high impact on your business: the top-right quadrant. So those are the most important assumptions that you should start to work on: go from assumptions to facts. Over time you will gain insights that will result in new assumptions, or the impact of existing assumptions might change. It is good to review this chart on a regular basis. But for now: your work is carved out for you. How to go about that is the topic of the next module.

Focus on customer discovery

During ClimateLaunchpad we focus on assumptions about the market and the customer. We use the customer discovery process to validate these assumptions. First of all, you may want to check if you have written down all the assumptions related to customers and your Beachhead Market. Good places to look for this are the Deal, the financial slide and the Customer Value Proposition. Add them to your longlist, and then create a sub-list with the assumptions about your customers and the Beachhead Market.

Exercise: List assumptions about customers and your Beachhead Market



Assumptions

Most people do not listen with the intent to understand; they listen with the intent to reply.

- Stephen R. Covey

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Experiment design

Experiment design

So how you do test your customer and Beachhead Market assumptions? It's what we call an experiment. In this follow-up module we look at experiment design. And at the end we'll put it all together so you can do your 20+ customer interviews in a way that will turn your assumptions about customers and Beachhead Market into facts. Facts you can present in the National Final in your country and at **the Regional and Global Grand Final.**

Experiments

From assumptions we move on to what we call experiments: systematic activities to check assumptions and turn them into verifiable facts. It is a relatively simple process; but a lot of work may be required to do the experiments. Before we start: remember we are not doing a Ph.D. here. We don't have the time and budget to work like that. We do not need our results to be published in an academic journal. You need evidence that guides you in one direction or another, so you can move on.

Now look at the template for experiments below. On the left hand side you see all the thinking you do before you start your experiment.

Step 1

You start with your most important assumptions and you formulate your hypothesis: "We believe that ..." (Example: "... our mineral composite will dry faster than normal cement" or "... Township households are willing to pay the same for our biofuel as for paraffin".)

Step 2

Next you design an experiment: "To verify that we will ..." (Example: "... together with our pilot partner apply our composite in three common repair situations and apply cement in those same repair situations" or "... sell our biofuel during one week to potential customers in")

Step 3

Now you define the relevant metric: "We will measure ...?" Example: "... drying time" or "... the percentage of buyers that buys our bio-alkanol gel instead of paraffin").

Step 4

Lastly you define your success criteria: "We are right if ..." This is the tricky part. You have to define success criteria that are relevant. Consider several elements to come up with relevant criteria: Does this entail an order of magnitude improvement your customer seeks? Does it present a conversion rate that you need

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Follow-up Module 3

1. Hypothesis

Define the assumption you want to validate. We believe that ...

to scale? Will it keep you happy as founders? You will probably

(Example: "our composite dries 33% faster" or "... 1 out of 10

2. Experiment design

have an idea where this will bring you to.

customers buys bio-alkanol gel").

Define how you are going to test the hypothesis. To verify that we will ...

3. Metric

Define the metric you are going to use and measure. We will measure ...

4. Success Criteria

Define the criteria to validate the hypothesis as true? We are right if ...

Step 5 - 7 On the rig

On the right hand side of the template you see room for recording the results, the interpretation of the results and the next actions based on your learnings.

5. Results

What are the results obtained? We observed ...

6. Learnings

What can we learn from the results? From that we learned that ...

7. Next steps

Decisions and actions. Therefore we will ...

Exercise: Formulate experiments

Use the template and design three experiments around your most critical assumptions for customers and Beachhead Market. There may be a logical sequence in performing those experiments. If so take that into account.



Putting it all together

So now we can put it all together. You have:

- **a.** Trained yourself in the art of listening, and in asking questions that give you facts instead of opinions;
- Identified the high impact/high uncertainty assumptions on your potential customers and your Beachhead Market;
- **c.** Defined experiments to test these assumptions and turn them into facts.

The next step is to create a list of questions for your customer interviews. They don't have to be limited to your experiments – quite the opposite. Also, keep in mind that you want to be open and curious in the interviews, so don't use the list with questions as the structure for the interview.

You want to create an open conversation and get customers in your Beachhead Market talking about what they care about. Allow yourself to ask follow-up questions: be like Sherlock Holmes and improvise.

At the end of the interview you can use the list with questions that you quickly go through to check if there was anything you forgot.

Exercise: Create list with questions

So go ahead, and create the list with questions you want to ask in your 20+ customer interviews.



Exercise: Create your Customer Discovery slide

Once you have finished your 20+ interviews you can create your Customer Discovery slide.

Number of customer interviews: ...

3 Key questions of customer discovery:

3 key insights from customer interviews:



You can use an image in this slide to illustrate your most important learning.

The company that consistently makes and implements decisions rapidly gains a tremendous competitive advantage.

BIG CORP

- Steve Blank

Follow-up Module Four

Competitive Advantage

Competitive Advantage

Let's assume that three years from now your company is doing really well. Your team has expanded to over 25 people and you are making a small profit. Your market share in your Beachhead Market is over 10% and growing. Life is good. What will happen next? Right, competitors will come after you. Which brings us to the subject of this follow-up module.

Any open market knows competitors. Other entrepreneurs will aim to sell to the same customers you're addressing. Their product might even be better or cheaper. If you are in a lucrative and profitable market you'll encounter a lot of competition. As a young company you can be a vulnerable player, so you need to be aware of your competitors and make sure you have a competitive advantage over them.

Barriers to entry

There are many ways to look at the competition. Often entrepreneurs compare their product to that of other companies and then explain why theirs is so much better or cheaper. This is tricky.



If price is your only argument, established companies with enough cash in the bank will temporarily lower their prices. They'll easily take you out of the market. We prefer to look at competitive advantage as ways to create barriers to entry for others. You make it impossible or very difficult for the competition to enter your market, even if they have ample funds. You can create barriers by focusing on your customers, on hindering competitors, or a combination of both.







Competitive Advantage through customers

- Customer lock-in or barriers to switching providers. Look for ways to make it difficult for your customer to switch to your competitor. Gillette razors use a particular type of blade that only they provide. HP printers use particular cartridges. Take a look at Apple's app store, as well. Your Apple addiction is cemented by the apps you've purchased.
- 2. Customer agreements. Try to sign long-term contracts with your customers. Energy providers do this all the time by trying to sign customers for 2-5 year contracts. Offering benefits that increase as contracts lengthen are a way to make sure customers stick with you. The benefits of having longterm customers should outweigh the reduced income caused by offering the discount.
- **3. Customer loyalty through branding.** Building a brand that customers want to associate themselves with creates customer loyalty. Apple is once again a good example of a brand with extremely loyal customers. As a start-up in (most likely) a B2B environment the equivalent could be delivering exceptional service to your customers.

Competitive Advantage through warding off competitors

1. Intellectual property such as patents, trademarks, copyrights and trade secrets

The best-known way to protect your (technical) invention is to file a patent. This gives you the exclusive rights to commercialize your invention for at least a period of 20 years. (Read more about patents on the next page)

2. Supplier agreements

This is similar to customer agreements, but now your goal is to achieve long-term agreements with key suppliers. The way to get a long-term commitment from your suppliers is the same as with customer agreements: you guarantee revenue.

3. Distributor agreements

These are similar to the long-term agreements with customers or suppliers, but now with distributors.

4. Government regulations

Sometimes regulations require companies to have certain licenses or permits to enter a specific market. Having such a permit or license can be a competitive advantage over other parties that don't (yet) have such a permit.



Execution and speed

The honest truth is that as a start-up, you rarely have a strong competitive advantage. Yes, you may have a great patent. But when a large company is coming after you with a lawsuit, they can hire ten lawyers full time, while you would be lucky if you can afford one lawyer one day a week. Even if you survive the legal onslaught, you will lose a lot of time and money in the process. Likewise, building a brand takes a long time and is very expensive. Long-term contracts sound great, but if a large company is targeting your customers, they will offer to compensate for the penalty in your long-term contracts. Etcetera.

In the end, the strongest competitive advantage a start-up has over a large company is good execution. Strong execution might allow you to build a successful business that generates a nice return for the investment in time and money. An important part of strong execution is fast decision making, so that you keep outrunning the competition because it's very hard for a large company to make fast decisions. And then, with the wisdom of hindsight, you might say that strong execution was your competitive advantage.

More about patents

Filing a patent is very expensive. Another thing to keep in mind with patents is that your invention will be made public, which creates the risk of people finding ways to circumvent your patent. If a large, established player violates your patent, you could be in for years of litigation. You'll end up losing even if you win the case in court.

In biotech or electronics, patents are very common and you probably need to file a range of patents if you want to enter such a market. Chances are that you are using technology that is already patented by others, which means that you need to get a license from them. Patents can also lead to costly lawsuits when companies accuse each other of using their patents. You probably heard about the patent war between Samsung and Apple? If not, Google it. Apple lost a lot of talented engineers that were fed up with spending days in court to give a testimony.

Filing a patent requires serious knowledge and expertise, so make sure to talk to your coach if you think this applies to you. The alternative to a patent: just keep it a secret. This is something you typically do with a process or a recipe. Coca Cola is probably the best-known example of a trade secret: their recipe is not protected, but simply kept a secret. At this point, the secret recipe has become more of a brand identity than an actuality. With a little Googling you can find the recipe online.

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Exercise: Competitive Advantage



Think of as many ways as you can. Be creative. Make them specific to your situation. If, for example, you're thinking about long-term customer agreements, explain the value to a customer and how you would convince them of that value.

After coming up with a list of possible competitive advantages, be hard on yourself and critically examine it. Are these really competitive advantages? You have a contract with a supplier, but how many suppliers are there? You want to become a brand, but you are not a brand now. Meaning: becoming a brand is a possible outcome, once you have conquered a market. It will not help you conquer that market now. And don't forget: building a (consumer) brand is very expensive. Does your know-how really give you an advantage of 3 years? Could a competitor with an accomplished and capable team and enough budget get even with you in 3 months? The purpose is not to have a long list of competitive advantages that are weak, but to have 1 or 2 that are strong. If you cannot come up with a strong competitive advantage from the traditional list, just put 'Execution' on your slide.

Exercise deliverable:

Result: add one or max two real competitive advantages on your product slide





Product siide of Evoglia

Evlogia (India) makes organic straws from coconut tree leaves. The team was a Global Finalist in ClimateLaunchpad 2018. Here you can see the product they developed and their competitive advantage.



Product slide of Biokind

Biokind (United Kingdom) makes sustainable protein feed for shrimp. Biokind was one of fifteen finalists in the ClimateLaunchpad 2018 Global Final.



Competitive Advantage

People don't want to buy a quarter-inch drill, they want a quarter-inch hole.

- Theodore Levitt

'There are many advantages to a customer-centric approach, but here's the big one: customers are always beautifully, wonderfully dissatisfied, even when they report being happy and business is great. No customer ever asked Amazon to create the Prime membership program, but it sure turns out they wanted it, and I could give you many such examples.'



- Jeff Bezos



5 Jobs To Be Done



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JTBD

Most companies roughly define competitors as 'doing similar stuff to us'. When they are producing a certain type of battery, they believe they are competing with other battery manufacturers. When they produce a filter to clean wastewater, they compete with other producers of wastewater filters. Etcetera. And yes, to a certain agree this makes sense.

But this is ClimateLaunchpad, and as you may have noticed by now, we tend to do things a little differently. Because we think there are smarter ways to look at markets, customers and competitors than the traditional way. So from now on, the way we want you think about competition is what we call 'JTBD'. The JTBD acronym stands for 'Jobs To Be Done'. And after we have explained it to you, it will make perfect sense, trust us. Let's start with watching a <u>video we recorded for this</u> with Frans Nauta, the founder of ClimateLaunchpad. He's a fan of the JTBD perspective and is a trainer for FranklinCovey on JTBD.

The 'Job To Be Done'

The video you just watched gives a very powerful example of a JTBD: Intuit's QuickBooks. As you heard, the company stumbled into an enormous business opportunity after they found a strange data point in their survey of the Quicken software for families. It took them five years (!) to figure out this business opportunity. In



the end, the job that they got done is to make bookkeeping for a company so simple that you didn't need to understand accounting. The company's market share is more than 75%, which is amazing for a product that has been on the market for more than twenty years.

Another example in the video is from Frans' experience of running a cinema. When he started working there, he figured that the competitors were other art house cinemas in Amsterdam. But as it turned out, his cinema got many different jobs done, for many different market segments. 'A fun night out in the city with friends' was one, 'Ideal first date location' was another.

The cinema team developed special packages to improve the job it did for those market segments. And it discovered a new 'movie nerd' segment that turned out to be a real money maker on what traditionally was a quiet night in the week.

The cinema team learned through the JTBD-lens that their market potential was a lot bigger than simply trying to attract movie visitors from other cinemas. By looking at jobs like 'a night out', 'dating location' and 'meeting other movie nerds', and making sure they got those jobs done better than the competitors, the revenue of the cinema doubled in four years.

The perspective that JTBD teaches you, is that you should think very hard about the jobs your customer wants to get done. If you nail that, it can open up market segments you never imagined.

Now keep on the JTBD glasses, and look at your own business. What is the job that you are getting done for the customer in your Beachhead Market?



Exercise: JTBD in your business

Make a list of at least 10 (ten) jobs that your product or service can do for your customers.



What are the jobs that your product or service is doing for your customers? 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Exercise: Translate 3 job hypotheses into experiments

Select the top 3 jobs that you think present the biggest business opportunity for your company. Formulate them in experiments using the design you learned in Follow-up Module 3, so you can test whether there actually is a real business opportunity for you.

1. Hypothesis

Define the assumption you want to validate. We believe that ...

2. Experiment design

Define how you are going to test the hypothesis. To verify that we will ...

3. Metric

Define the metric you are going to use and measure. We will measure ...

4. Success Criteria

Define the criteria to validate the hypothesis as true? We are right if ...

5. Results

What are the results obtained? We observed ...

6. Learnings

What can we learn from the results? From that we learned that ...

7. Next steps

Decisions and actions. Therefore we will ... If an entrepreneur can't convince you in less than two minutes to invest more time, and take a meeting with you, then they simply don't have a business.

- Ken Morse, former director MIT Entrepreneurship Center



Follow-up Module Six

Fitch preparation for the National Final

(and the Regional and Global Grand Final of course) 133

Pitch preparation for the National Final

Woohooo, you made it to the last follow-up module of this year's ClimateLaunchpad programme. Congratulations on that. It means you are ready to prepare for your pitch at the National Final. In this chapter we'll give you some tips to prepare.

Practice makes perfect

First of all: practice makes perfect. You can practice your pitch on your parents, friends, special one, cat, mirror, anything really. The more you practice, the more comfortable you will become.

What's it like?

For your preparation, it's a good idea to watch a compilation of videos we made of the Global Grand Final in Cyprus in 2017, Edinburgh in 2018, Amsterdam in 2019, and the online event in 2020 so you get a sense of what it's like. Honestly, it's not that hard. If you have figured out your Beachhead Market, if you have done your work on financials, basically, if you have done your 20 + customer interviews, you know your stuff. No one in the world knows more about your start-up than you. So try to relax, and just enjoy the attention of the room, listening to how you want to turn your idea to tackle climate change into a business. Everybody will be interested to hear what you have to say. Because that's how we tackle climate change, one start-up at a time.



Practical tips

We have collected some resources on digital pitching and also made a video with practical tips for live pitching, and with many of the things that people can do wrong. Watch it and check if you need to improve your pronunciation, stop picking your nose, take your hands out of your pockets, stop looking at the slides and look at your audience instead, and so on.

A really great tip is to record a video while you pitch. Yes, it's awkward, but the hard truth is the best medicine for improving your pitch technique. And it does matter: part of the scoring in ClimateLaunchpad is the quality of the pitch.

A Make sure you use the right format & structure

Last but not least: make sure you use the right format structure. You can only use the nine slides that are described in this workbook. You cannot use animations to change information on slides - we count that as an extra slide. Make sure you use the right metrics, as they were explained to you in all the different modules.

If your slide deck does not comply with the rules of ClimateLaunchpad you will lose a lot of points in the jury scores. So if you care about winning ClimateLaunchpad (and let's face it, who doesn't?) make sure you stick to the format. Your national coach has the guidelines you need to follow in order to comply with the rules.

And with that, we wish you lots of success with your National Final, and hopefully we see you on the stage at the Global Grand Final. #gogogo #wootwoot

Acknowledgements

Designing the curriculum and workbook for ClimateLaunchpad would not have been possible without us being able to tap into the thinking of great academics and entrepreneurs who were so generous to share their insights through books, articles, lectures and stories from the trenches. We feel incredibly lucky that in the past ten years so much great research and teaching methods have become available. Without that this workbook would not be what it is - not even close. Module 1, on the Founder's Dream, is heavily inspired on the thinking of Noam Wassermann. Wassermann developed a great framework for the dilemmas founders run into while starting and developing their start-up.

Module 2 The Deal is something that was created by the authors of this workbook. Especially Joachim Blazer has been an advocate of the need for start-ups to be able to explain in the simplest of terms what it is that they are doing. And in the end that is: selling a product or service to customers.

Module 3 Market Segmentation is heavily influenced by Bill Aulet's Disciplined Entrepreneurship approach. Hope is not a strategy. A start-up should be able to explain based on data why they are aiming for a certain market segment. Aulet also makes it abundantly clear that start-ups should be laser focussed on what he calls the Beachhead Market. So the start-up can become a strong player in a small market niche, and grow its reputation and brand.

Follow-up Module 5 Jobs To Be Done is based on work that Clayton Christensen and others did at the Harvard Business School, published in 'Competing Against Luck'.

Lastly, Module 7 Customer Discovery, is inspired on the book 'The Mom Test' by Rob Fitzpatrick. We have been inspired by many more authors. In the appendix you can see a selection of books, essays and online resources that we have found incredibly helpful for designing the ClimateLaunchpad curriculum. That being said, start-ups and entrepreneurship are still young fields of research, with a relatively low research volume compared to the great impact entrepreneurs are making on society. There is still is a lot of stuff we need to figure out, and we highly appreciate any suggestions in terms of literature, tools and methods. So if you have any suggestions, please get in touch. You know how to find us.

Another great source of inspiration and learning are the teams that participate in ClimateLaunchpad. Being trainer and coach of a new generation of green entrepreneurs is one of the greatest privileges we can imagine. Every year we are inspired by your energy, vision, brightness and courage. And by your rich questions and feedback, which allows us to make ClimateLaunchpad better every year.

Lastly we have used the experience in training and coaching green start-ups from all the ClimateLaunchpad trainers in designing this workbook and all the follow up modules.

Glossary

B2B • Business to Business: a business is selling to another business.

B2C • Business to Consumer: a business is selling to a consumer who buys the product for their own personal use.

Barriers to entry • This is linked to competitive advantage. What barriers can you create to prevent others from successfully entering the same market?

Beachhead Market • This is the first market you enter with your product. It is the first step in conquering your total addressable market. It does not have to be the largest market segment, but it should give you the possibility to prove yourself as a company.

Branding • Branding has come a long way since ranchers burned their own marks into cattle. It is visual and experiential now. It can refer to a number of aspects of your product from the way you run your business to the way your product looks. It refers to building something that customers want to be associated with and that is undeniably yours.

Buyer • A buyer is a person who pays for your product or service. In the case of B2C this can be the same as the end user.

Capital expenditures • This refers to the cash that you spend on physical assets such as buildings and machines. Generally, if an item lasts for more than five years, it is considered a capital expenditure.

Cashflow • How much money can you actually get your hands on at any one time? Cashflow is an overview of the cash coming in and going out of your organisation.

Competitive advantage • This is the advantage that you have over others trying to sell to the same customers.

Consumer • This is the person who actually uses your product or service.

Cost of customer acquisition • This refers to the costs of gaining a paying customer.

Cost of product • How much does it cost to make or build your product.

Cost plus pricing • This refers to setting a price on your product based on what you think it would cost to build and then adding a certain margin to it.

Cost of sales • How much is the cost of selling a product or service.

Cost to deliver service • The calculation of the cost you make to deliver your service.

Customer • This is a person or entity you sell your product or service to.

Customer lock-in • This term refers to the way you make it difficult for customers to switch to another supplier.

Deal • This is the single sentence that describes what you sell, to whom, and at what price.

Exit • Exit refers to a situation in which you can sell your shares in the company. For instance, when the company is sold to another buyer or you sell your shares to your partner.

Founder's Dream • This refers to your personal drivers for starting the company.

Key drivers • These are the inputs that have a big effect on your profit margin.

Life of customer • This term refers to how long a customer remains a customer once acquired. In other words, once someone is your customer, how long will they remain a customer before you need to convince them to buy something again?

Life of product • How long will a customer use your product before needing to buy a new one.

Lifetime value • How much net profit will you make from this customer over the complete period he or she is your customer?

Margin • The difference between the price the customer pays you for your product and the costs you earn after making, selling, and delivering the product.

Market pull • This term refers to identifying a need in the market and looking for a product or technology that can address that need.

Market segment • This refers to a portion of the market with similar characteristics. These characteristics can include similar needs, similar use, and similar sales cycles.

Market share • This is the percentage of the market (segment) that is your customer.

Operating expenditures • These are the costs to run your business other than investments in assets. These are the costs that are not capital expenditures.

Price • This is the amount the customer pays for your product or service.

Product • This is the item you are selling.

Profit • This is the surplus remaining after total costs are deducted from total revenue.

Revenue • This is the income. It is calculated by multiplying the price at which goods or services are sold by the number of units or amount sold.

Supplier agreements • These are similar to customer agreements, but in this case your goal is long-term agreements with key suppliers.

Technology push • This refers to a technology or application that is often developed without actually identifying a market need. This might be because the market doesn't yet understand its own need. When this happens, you need to find the a market and customer who will benefit from the technology.

Total addressable market • This term refers to the total possible market that you could address with your product or technology.

Two-sided market • When a business requires two different types of customers to make their business work, this is called a two-sided market. For instance, a real-estate broker needs both people who want to sell their house and people who want to buy a house in order to earn a living.

Value driver • This is the input that has a (large) effect on your margin. It adds perceived or real value to your product in the eyes of its customers.

Value pricing • Value pricing refers to setting a price based on what you think is the value for your customer rather than what it actually costs. The high-end art market provides a perfect example of value pricing.

Recommended Reading

During ClimateLaunchpad you will learn and experience amazing things. We aim to give you the knowledge and insights you need to be successful as a beginning entrepreneur. In **a few** days and a few coaching sessions, we can't provide all the information needed. That is why we are sharing this list of our favourite books on the subject of entrepreneurship. They are the sources we used to develop the ClimateLaunchpad curriculum. Read them and give yourself an even bigger competitive advantage.

Disciplined Entrepreneurship: 24 Steps to a Successful

Startup • *Bill Aulet*

Bill Aulet provides a step-by-step guide to how to start a new business. This book is often used to help entrepreneurs increase their chances of success.

The Startup Owner's Manual • Steve Blank & Bob Dorf The Startup Owner's Manual guides you in a step-by-step manner, as you put the customer development process to work. Renowned Silicon Valley start-up expert Steve Blank created this proven approach.

Talking to Humans • Giff Constable

Talking to Humans is a practical guide. It deals with the qualitative side of customer development: an important skill for vetting and improving any start-up or innovation. This book teaches you how to structure and run effective customer interviews, find candidates, and turn your learnings into action.

The Mom Test • *Rob Fitzpatrick*

Talking to customers is a foundational skill for successful entrepreneurs. This book illustrates how customer conversations go wrong and how you can do better. It's an easy read, you'll be done in an evening and (we promise) it will save you enormous amounts of time.

Competing Against Luck: The Story of Innovation and Customer Choice • Clayton M. Christensen, Karen Dillon, Taddy Hall and David Duncan

How understanding the answer to the question "what job is our customer trying to accomplish?" is central for your start-up's success. In this book Christensen explains the Jobs To Be Done approach and gives you tools on how to spot these jobs.

The Hard Thing About Hard Things • Ben Horowitz

Finally a book that doesn't just tell the reader a great and victorious start-up success story, but discusses how to overcome the nitty gritty difficulties faced every day by start up owners. This book is by Ben Horowitz, of the famous VC firm Andreessen Horowitz.

Running Lean • Ash Maurya

Ash Maurya's book helps you develop your strategy for achieving a product/market fit. It is based on his own experience. He challenges the idea that start-ups should plan based on gut, intuition, and luck. Instead he applies a systematic process for rigorously stress testing your Plan A until you get to a plan that works.

Crossing the Chasm • Geoffrey A. Moore

This bestselling guide created a new game plan for marketing in high-tech industries. It explains how you can successfully bring cutting-edge products to progressively larger markets.

Slicing Pie • Mike Moyer

This book is a simple model to help you properly slice the pie. Each slice needs to be flexible and fair. By fair, Moyer means it needs to give each founder what they deserve. And by flexible he means it needs to adapt over time to re-allocate the equity so that the distribution stays fair until the fledgling company takes flight.

The Customer-Funded Business: Start, Finance, or Grow Your Company with Your Customers' Cash • John Mullins How to finance the growth of your business with your customers' money instead of venture capital.

Getting to Plan B • John Mullins & Randy Komisar

Another great book on finding your way to a business plan that works is Getting to Plan B. It's full of tools, practical insights, and examples. The book provides a framework for thinking about the different components of your business model.

Business Model Generation • *Alex Osterwalder & Yves Pigneur* A strategic management and entrepreneurial tool. It allows you to describe, design, challenge, invent, and pivot your business model.

Value Proposition Design • Alex Osterwalder, Yves Pigneur, Greg Bernarda & Alan Smith

This book forces you to be explicit about how to create value for your customers. It helps you design products and services your customers actually want.

The Lean Startup • Eric Ries

The bestselling book lays out the foundation of the lean start-up methodology of validated learning by systematic experimentation. Ries developed his ideas based on what he learned from his mentor Steve Blank.

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Online sources

Essays by Paul Graham • Graham is an English programmer, venture capitalist, and essayist. He founded Y Combinator, the world's most successful start-up accelerator. Find more than 150 of his essays about entrepreneurship on his site **paulgraham.com/ articles.html** (yes, that design probably hasn't changed since 1995)

Chris Dixon's blog • Dixon is a personal investor in technology start-ups including Kickstarter, Warby Parker, Stripe, Pinterest, Foursquare, Flatiron Health, Bloom-reach, Optimizely, Skype, and Oyster. He is also venture capitalist at Andreessen Horowitz. Find his posts on https://cdixon.org/blog

Mark Suster • Suster is a prominent start-up blogger and venture capitalist at Upfront Ventures. You can find all his blogs and more at **www.bothsidesofthetable.com**.

Feld Thoughts • Brad Feld is an entrepreneur and VC at the Foundry Group. Author of many great books. His blog is at www.feld.com.

Fred Wilson: A VC • Fred Wilson is a prominent VC at Union Square Ventures in New York City. Writes at <u>www.avc.com</u>.

Founder's Dilemmas • Noam Wasserman

This book is all about the early decisions entrepreneurs make that can make or break a start-up and its team. Noam Wasserman reveals the common pitfalls founders face and how to avoid them.

Amazon 2016 Letter to Shareholders • Jeff Bezos

Amazon is famous for being obsessed about customers. In this letter to shareholders, the CEO Jeff Bezos explains why. It's probably the most productive 15 minute read for every entrepreneur in the world. And it's free.

https://blog.aboutamazon.com/company-news/2016-letterto-shareholders







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