Find Your Next Startup Idea

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[1] Module 1. Introduction

Welcome to the course! 😎

The whole point of this course is to give you tools and tricks to come up with more, and better, ideas for your next startup.

This course will bring you a mix of theory, tools, and challenges. It will try to stay away from the dull flavour of typical business books, and instead give you the occasional jolt of the unexpected that is required for creativity.

Once you're through, you'll have a kickass toolkit under your belt that you can use to come up with great business ideas.

But first, ask yourself: 'Why?'

Why start a business? Why start anything? Why go through all this effort ant try to change the world around you?

Part of it is that it is human nature to try new things. Part of it can be you want to build a flourishing business. Or that you want to learn how the game is played.

But you need to ask yourself the question and find your own answer.

> We’re here to put a dent in the universe. Otherwise why else even be here?
>
> – Steve Jobs

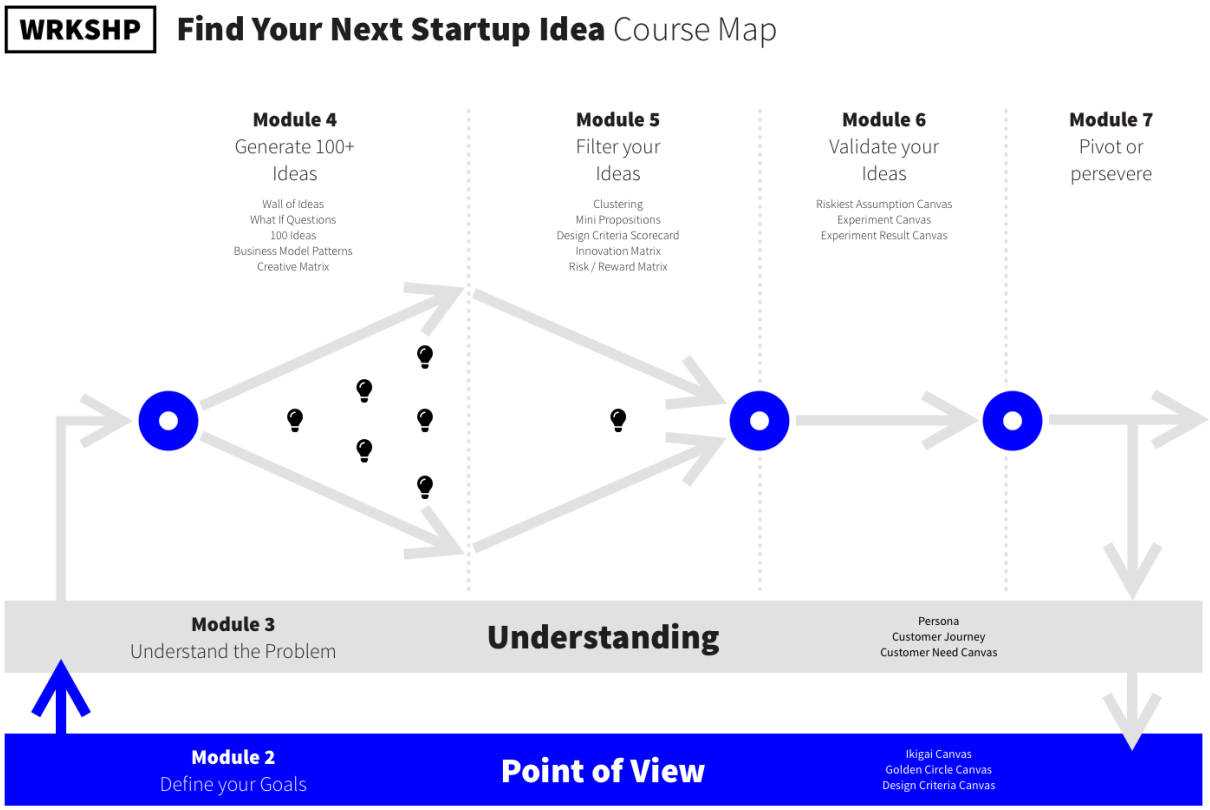
The goal you set for yourself will have a big impact on what you will get out of this course. Becoming better at ideation will require you to update some of your own mental operating system and change habits you have practiced for years. What is your answer?

After all,

> If you don't know where you are going,
> you'll end up someplace else.
>
> – Yogi Berra

Start your engines!

[1.1] Course Overview



This image gives you a visual overview of the entire course with the tools that are included for each module.

[1.2] Innovation: Going from 'Zero' to 'One' (*)

Look around you, right now. Realize the following: once upon a time, everything you see around you did not exist. Computers, cell phones, chairs, clothes. Everything had to be created first. Think about it.

Such acts of creation are what is driving change in the world around us. They are the raw source of innovation. But what makes such an act of creation possible?

How does something go from a ‘zero’, nonexistent, ‘impossible’, crazy idea, to a ‘one’, something that is so obvious we take it for granted, affecting the daily lives of millions of people?

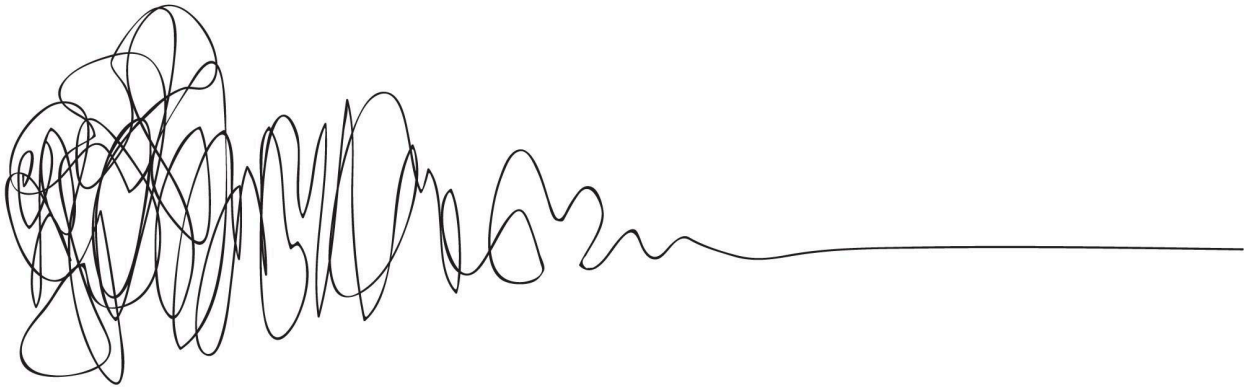
*) See 'Zero to One' by Peter Thiel

> Everything around you that you call life, was made up by people that were no smarter than you. And you can change it, you can influence it, you can build your own things that other people can use.
>
> — Steve Jobs

Video: Steve Jobs's vision of the world

[1.3] The Startup Journey

Let's dive deeper into the Startup Journey. It's all about innovation, and the first thing to understand about innovation is that it is a journey of discovery. There is no straight line between idea and realization. If it was that easy, other people would already have built your idea a long time ago. Instead, it is a journey into unknown territory, where you will learn that your ideas and assumptions about the world are incorrect.



The 'squiggle' image is what a design process looks like according to Damien Newman. Starting at the left, moving to the right, the process looks first like a chaotic search before settling into a clearer, straighter line at the right. It turns out, that this is exactly the same for an innovation process. It's chaotic, and if you treat it like an execution problem, you will get in big trouble.

For example, if the scribble above described the way DHL delivered your Amazon order, you'd be horrified. To most managers in establishing businesses, thinking of their business processes as the scribble above would mean sleepless nights at the very least.

And that's an important realization.

The process of figuring out a new startup business is completely different from running an established company efficiently.

> Startup companies are not smaller versions of big corporates.
>
> — Steve Blank

So, not treating it as an execution problem, what does that mean? Well, for starters, it means

you need to throw away standard ‘efficiency’ thinking. We’re so used to trying to think ahead and optimize that we forget we don’t know what we’re optimizing for yet.

> Premature optimization is the root of all evil
>
> — Knuth (Creator of the C programming language)

Another big one is: don’t try to make it scalable yet. Sure, in order to become a successful business, you’ll need to make it scale at some point. But before you know what to scale, it’s a waste of time that may very well block you from finding that magic first customer.

> Startups should do things that don’t scale
>
> — Paul Graham

[1.4] Why it is hard: Inertia and Uncertainty

So, why is it so difficult to go from ‘Zero’ to ‘One’? What is stopping us from innovating like crazy? Two things: inertia and uncertainty.

Inertia

The first, inertia, is just a nice word for all the day-to-day stuff that is interfering with our desire to change. There is always something else that needs taking care of. You are fighting the pressure of a world that is not aware yet of the change you want to make. Things tend to run their course, and today looks much like yesterday.

Uncertainty

The second, uncertainty, is even more powerful. It comes down to this: you can’t know your efforts are going to pay off. Every fiber of your being wants you to make the safe bet, to stop investing in an uncertain outcome. It is crazy hard to stake your future, your reputation, your personal life on ideas that haven’t been proven. So most people won’t bother.

The combined powers of inertia and uncertainty are still more apparent in organized groups (read: companies). The members of these groups engage in various behaviours that have no clear benefits other than ritualistically bringing the collective uncertainty of the group down to manageable levels. Examples of such behaviours include: long meetings, office politics, and 100 page business plans. After all, these are all activities that have a clear, certain outcome, making them immensely more appealing than actual innovation, which is scary, unclear, and uncertain. In most organizations, anything that increases uncertainty is actively discouraged.

Still, some people seem to have a much easier time than others innovating. How do they manage that? A hint (we’ll get back to it): they have a completely different mental picture of the risks and rewards involved. If the act of creation is its own reward, it becomes much easier to overcome uncertainty.

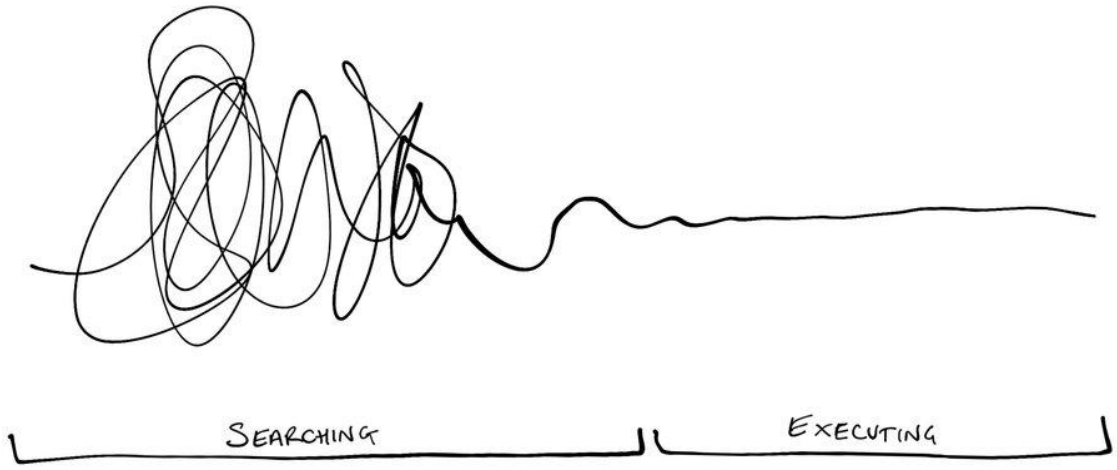
> “Life shrinks and expands on the proportion of your willingness to take risks and try new things.”
>
> — Gary Vaynerchuk

[1.5] Search vs Execute

As we've just seen, in our culture, and in big organizations especially, we're trained to be uncertainty-adverse, which can hamper innovation. But it's also very important to notice something else.

Big organizations are big because they are very good at what they do. And what they do is execute. They are execution rockstars.

To become an innovator, you need to leave that execution mindset behind. Execution is still super important, in fact in the end it is the key differentiator for success - but it's only important after you have a clear idea of what you're doing. You need to find that first. And that's why innovation is about **search**.



Startups should be rockstars at search. Once they graduate from startup to big business it's time to become stellar at execution.

> “You can’t execute your way to innovation”
>
> — Steve Blank

So, how can you become a rockstar at search? How do you learn that? For starters, you'll need to change your mindset - and in the next blocks we'll give you an idea how you can do that.

Besides a mindset change, you'll need to start learning. That means, you'll need to build a feedback loop in your life and in your business: Based on your assumptions you'll do experiments, see how they pan out, and change your assumptions about the world. That's the basic cycle of learning. It means failing fast - not because you aim to fail, but because you find out that your first best guess was wrong. And fast is good, since it means you can learn sooner, and your next best guess is better than the last one. This cycle of experiments, learning, and pivots is at the core of becoming a search rockstar.

> The fundamental activity of a startup is to turn ideas into products, measure how customers respond, and then learn whether to pivot or persevere. All successful startup processes should be geared to accelerate that feedback loop.
>
> - The Lean Startup

[1.6] Nine Key Ingredients for a Successful Innovator

In the previous part, I talked about inertia, uncertainty, and efficiency thinking as enemies of innovation. How do innovators deal with those? What are the 'character traits' they develop to be able to go against the flow?

Let's have a look at several key ingredients that you need to develop in order to become a better innovator. To become a rockstar at search, you need to breathe innovation. Integrate these into your entrepreneurial operating system.

Key ingredients

- Be a Rebel.
- Be Relentlessly Curious.
- Data is King.
- Keep it Stupid Simple
- There is no Single Right Solution
- Don't fly solo
- Done is better than perfect
- Fake it until you make it
- Compromise is the enemy

> Innovation comes from those who see things that others don't.
>
> — Steve Blank

Every idea that becomes a reality does so because it has help from people that dare to think different. We call them Rebels. They are rebel enough to believe that it is possible. Rebel enough to want to make it work. Rebel enough to carefully wrangle the idea through its first difficult contact with reality towards success. And, ultimately, rebel enough to develop and maintain their own vision, their own unique Point of View. Rebels generate their own 'reality distortion field' that allows them and others to let go of their fear of the unknown. It allows them to start changing the world.

Key ingredient #1. Be a Rebel

To bring an idea to life successfully, you will need to find your inner Rebel. That does not mean you need to become a totally different person, running around like the next Steve Jobs. But it does mean you need to know why you want to change the world, and find a way to get others excited to join you. A big part of being a Rebel is to find something in the world that you think is

an opportunity, but others think is a risk. Being a Rebel means having a vision.

> Great entrepreneurs are revolutionaries. They speak truth to power. They change the status quo. They rebel against what exists. If you want to see what country will create the next Steve Jobs or Elon Musk, see how they treat their dissidents.
>
> — Steve Blank

Being a Rebel with a powerful vision all on its own is not enough. The line between visionary and mental case can be very thin. When your vision does not resonate with the world around you, when your idea does not solve a problem, it becomes very hard to convince anyone. There is only one remedy: Relentless curiosity.

Key ingredient #2. Be relentlessly curious

To succeed, be relentlessly curious in the world around you. Open your eyes, and with every new piece of information, try to figure out how this can fit with what you want to achieve. Follow your curiosity. You never know what opportunities lie around the corner until you look.

To make solid business decisions means that you need to go beyond mere curiosity and anecdotal evidence. Sure, you need qualitative input and design thinking to figure out which bets you can make. But you need more than qualitative input to place the right bets.

> A founder's skill is knowing how to recognize new patterns and to pivot on a dime. At times the pattern is noise, and the vision turns out to be a hallucination.
>
> — Steve Blank

In the end, data is the only way you can truly distinguish a vision from a hallucination.

Books like the Lean Startup have generated a lot of interest, bringing a sense scientific empirical, rational decision making. The power of design, bringing new ideas and creating new options based on insight in a qualitative, rich worldview, is matched and amplified through the power of experiments to validate and test these options in the real world, with real customers. In the next Levels we'll dive into prototyping and validating, using real data to make better decisions.

Key ingredient #3. Data is king

The truth is out there. It is pointless to have discussions about who has the better idea, the only rational course of action is to go out and get data. Create experiments that give you the information you need to make your decisions. Never allow yourself to have discussions about things that you can't back up with data.

> There are no facts inside the building, so get the hell outside.
>
> — Steve Blank

We humans are suckers for features. We can get overwhelmed by possibilities, options, add-ons. But the best solutions are usually simple.

So, how can we keep it simple? Even more than simple: how can we keep it stupid simple, the kind of simple that is so obvious it feels like a McDonalds Happy Meal.

Key ingredient #4. Keep it stupid simple

It all comes down to making choices. What is the absolute minimum you can get away with. We are wired to want to add more options, to include more features. Every single one of those features and options will suck energy and time out of your idea like a vampire. Your job is to prevent that from happening. Focus. Anything you can avoid or remove that does touch the core of what you want to achieve has got to go.

> Adding features is like sex. One mistake and you'll have to support it for the rest of your life.
>
> — Anonymous

Single Right Solution Thinking is a paralyzing condition that is all too common.It's perfectly natural for a team to develop tunnel vision, especially when you're working hard and are constantly under the gun, trying to make ends meet. There also is a natural tendency to do what is accustomed, to follow habits, and to do things in the same way they have always been done. That is not bad in itself, just make sure you are not missing some awesome opportunities.

Key ingredient #5. There is no single right solution

As an entrepreneur, it's your job to be able to recognize tunnel vision, take a step back, and see if there is maybe another, easier, simpler solution. Dare to question if you're on the right track every now and then. And if there is a situation where it seems there is only one 'right' way to progress, make sure you check if it is actually true that you have only one option. Sometimes you need to go off the beaten track.

> Creativity involves breaking out of established patterns in order to look at things in a different way.
>
> — Edward de Bono

Just as important is that toy don't fly solo. Doing things on your own, a lone wolf locked in a dusty attic, working on world domination, is not viable. The world is too big and complex for one person to have all the answers.

Key ingredient #6. Don't fly solo

You're not smarter than everybody else. There are more than seven billion people on the planet, more than ever before. That's a huge amount of brainpower. The odds of one vs the world have never been this bad. So instead of fighting against that, make use of it. Build partnerships and relationships, and build on the strengths of others. You never know what you might learn. Try to think win-win.

> The Silicon Valley culture is “I can win and you can win” - it isn’t a sum-zero game.
>
> — Steve Blank

Perfectionism is one of the guises of uncertainty-adverse behaviour. By keeping what you're building a secret, hiding it from the world, you may feel more secure, because you avoid any negative feedback - and you justify it by 'it is not finished enough, people won't be able to give honest feedback'. By doing that, you're falling into the trap of perfectionism. In the time it takes you to polish up your idea, the next team has already done three feedback loops, thus learning from obvious mistakes. Mistakes that you could still be unwittingly polishing to a shine.

Key ingredient #7. Done is better than perfect

In the end, the proof is in the pudding. When your idea is not out in the world, in the hands of customers, it still has zero value. It could be totally wrong. It is super important to get something out there - even if it is something you're still unhappy with - so you can get feedback. Making it 'good enough' is important, but avoid the trap of perfectionism where things are never finished.

> There’s no such thing as perfect. Chasing ’Perfect’ is the shortest road to not achieving it.
>
> — Gary Vaynerchuk

When you're building something, it's easy to think that in order to have people give feedback, the entire thing needs to be there, and it needs to totally work. It is a variation of perfectionism.

Key ingredient #8. Fake it before you make it

Making things that totally work and take into account all the edge cases and exceptions is very hard. It is usually much easier to 'fake' i first, so that you can get the feedback that justifies spending the effort making the complete version. Get proof first, before you spend the effort. Not that this is not a plea for lying to your customers: at some point, you'll need to deliver the goods. Otherwise there will be hell to pay. It just pays off to be sure that they really want the goods first. And that starts with the fist.

> Your number-one job is to tell your story to the consumer wherever they are, and preferably at the moment they are deciding to make a purchase.
>
> — Gary Vaynerchuk

The last one is a bit 'meta'. When there are conflicting opinions, data is unclear, and there are several possibilities, it sometimes is easy to grab the first available compromise to get the ball rolling again. The warning is, that a really great solution is never a compromise. A great solution doesn't treat the symptoms, but it makes the problem obsolete.

Key ingredient #9. Compromise is the enemy

Don't settle for easy compromises on the important points, rather seek for a deeper solution that satisfies the constraints in a better way. Usually, two opposing views are not really totally opposite, they just emphasise different aspects of the problem. Underlying there could be a view

that satisfies everyone. Does it mean that you never should have compromises? No, of course not. Design is an exercise in considered compromise. But you need to be careful when you do it. Too much compromise makes your startup undefined, middle of the road, unremarkable.

> Compromise is a stalling between two fools.
>
> — Stephen Fry

[1.7] It's not magic

So far, I mentioned innovation and a lot of things around it, but I haven't talked about **how** you actually do it. How can you make sure that you come up with great new ideas, and turn them into a success?

The first thing to understand is that coming up with new ideas is not a magical thing that just happens, it is a process. The human brain is evolved for it. It has great problem solving intelligence, and is very adaptable to new situations and environments. It does this by using the powers of association and learning. You are using them both every day of your life.

If you are one of those people that think they are not creative, it is just that you have never learned to apply the inner mental machinery to the situation in the right way. And don't blame yourself: it's totally natural. You have simply adapted to the norms of the world around you.

For one, the efficiency thinking that is drilled into us at school, where there is only one correct answer, makes it much more difficult to come up with new ideas. Corporate culture punishes mistakes and makes it even harder.

To become better at ideation, you will need to get around these outside pressures. You'll need to let go of habits that hold back your creative mind, and develop new routines that push new ideas to the forefront.

It's going to be hard work. But it will be rewarding.

(Module 3 dives deeper into how this all works.)

[1.8] The creative process

The second thing to know is that there is a process that makes your creative process much more effective. It is structured around doing the right things in the right order, and learning from your mistakes.

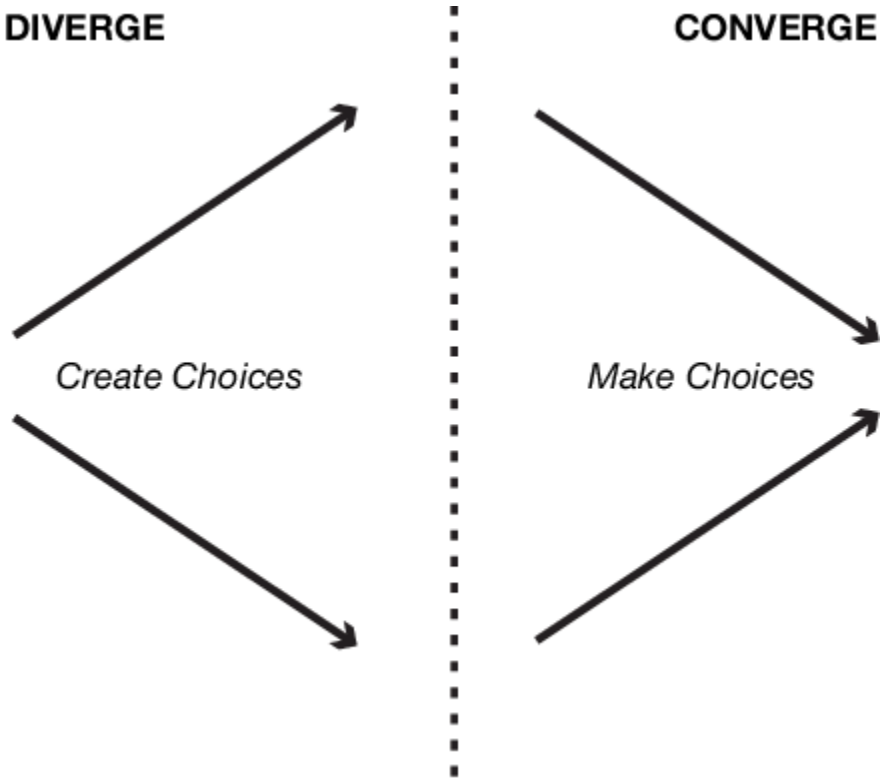
Create vs criticize

The main principle is that, if you want to be creative, you can't judge at the same time. Judging or criticizing your ideas brings you in a mental state that is totally wrong for coming up with new ideas.

The problem is that we have been trained to be critical of our ideas immediately. We want to think 'is that a good idea?' right away. And that blocks your flow of ideas.

The reason is that the brain has the 'association' superpower. Everything you see, everything you come up with, sparks new ideas. The brain just keeps making connections. Think of ideas like stepping stones. A few weird or 'bad' ideas might lead you to the right one.

Only **after** you have come up with a bunch of ideas is it time to make sense of them and filter out the most promising ones.



That means, you first '**diverge**' and come up with tons of ideas, and then you '**converge**' and then **select** the ones you want.

In the following modules, I'll dive into tricks and tools to make diverging and converging easier. You'll see that you can come up with hundreds of ideas, and you'll learn sensible ways of wading through that flood and picking out what is most interesting.

Challenge your assumptions

The second part of the process deals with that other mental super power: learning.

Innovation is super complex. For any idea or solution we come up with, we don't know if it will really work. We may **think** that we know, based on our assumptions of the world.

But if you make life-changing decisions based on assumptions that turn out to be wrong, that can be really bad.

Here, your brain works against you.

The brain is a very expensive piece of machinery to run. It takes a sizable chunk of what you eat every day simply to have it stay conscious and alert.

That means, to save power where possible, your brain has a tendency to be **lazy**.

To save time and precious processing power, it uses shortcuts to make quick decisions. These shortcuts are based on assumptions it makes about the world.

And in many situations, that is a great thing to do. It worked very well for saving your skin from a hungry predator in the stone age, and it works very well when you're trying to cross the street.

But it does not really work out of the box for innovation. Here, you are trying to do something that lies outside of the familiar. To get better insights and ideas, you can't stay at the surface level of the assumptions. You can't rely on shortcuts. You need to dive deeper.

A great innovator is constantly trying to become aware of his or her assumptions, and then challenging those assumptions in a structured way.

That means first understanding where your assumptions about the world have influenced your ideas, and then trying to **validate** if those assumptions are correct.

The brain is naturally not very good at this, since it keeps trying to find shortcuts. You will become more aware of this as you analyze your own thought process. It is very important to have a process to follow that is less intuitive and creative, and more formal and analytical. That way, you won't fool yourself so easily.

Rinse and Repeat

After validating your assumptions, you go back to the start. Using what you have now learned about your assumptions, and adding these new facts about the world to your mental database, you'll be able to come up with new, different ideas – that will be based on your adjusted assumptions. In this way you home in on more promising ideas. You can rely on the learning superpower to integrate your new knowledge in the way it will associate and make connections.

This process is something you can use for any creative situation. Great designers and innovators train this process continuously, every day. They learn to recognize if they are in a mental state for diverging, converging, selecting, or validating, and they learn how to induce the mindset they require for a specific task. This is something you can practice during this workshop.

Are we there yet?

The question remains, 'when are you done?'. Besides the slightly disappointing answer 'never', which is not very helpful, there is another way to look at this.

You're done when the solution you have discovered effectively brings you (closer) to your goal.

So you will need to specify what that goal is, and you need a way to see if you're there yet. The next module focuses on setting this up.

[1.9] Don’t be a planoholic

Our culture is caught in a strange dynamic. On one side, we admire successful entrepreneurs that made millions and changed the world. On the other, we promote risk-avoidance and punish failure.

Together, these two sides turn well-meaning people into **planoholics**.

Planoholics lock themselves in their attic for months, or even years, developing ideas and plans, without ever going outside into the real world to test their assumptions. They never allow their ideas to leave the fantasy world of their assumptions, where everything always looks perfect and success is guaranteed. And because of this, they can never fail – but they can never succeed either!

Planoholics mistakenly focus on the outcome (the plan) rather than the process (planning). There is no such thing as a perfect plan, reality is stubborn.

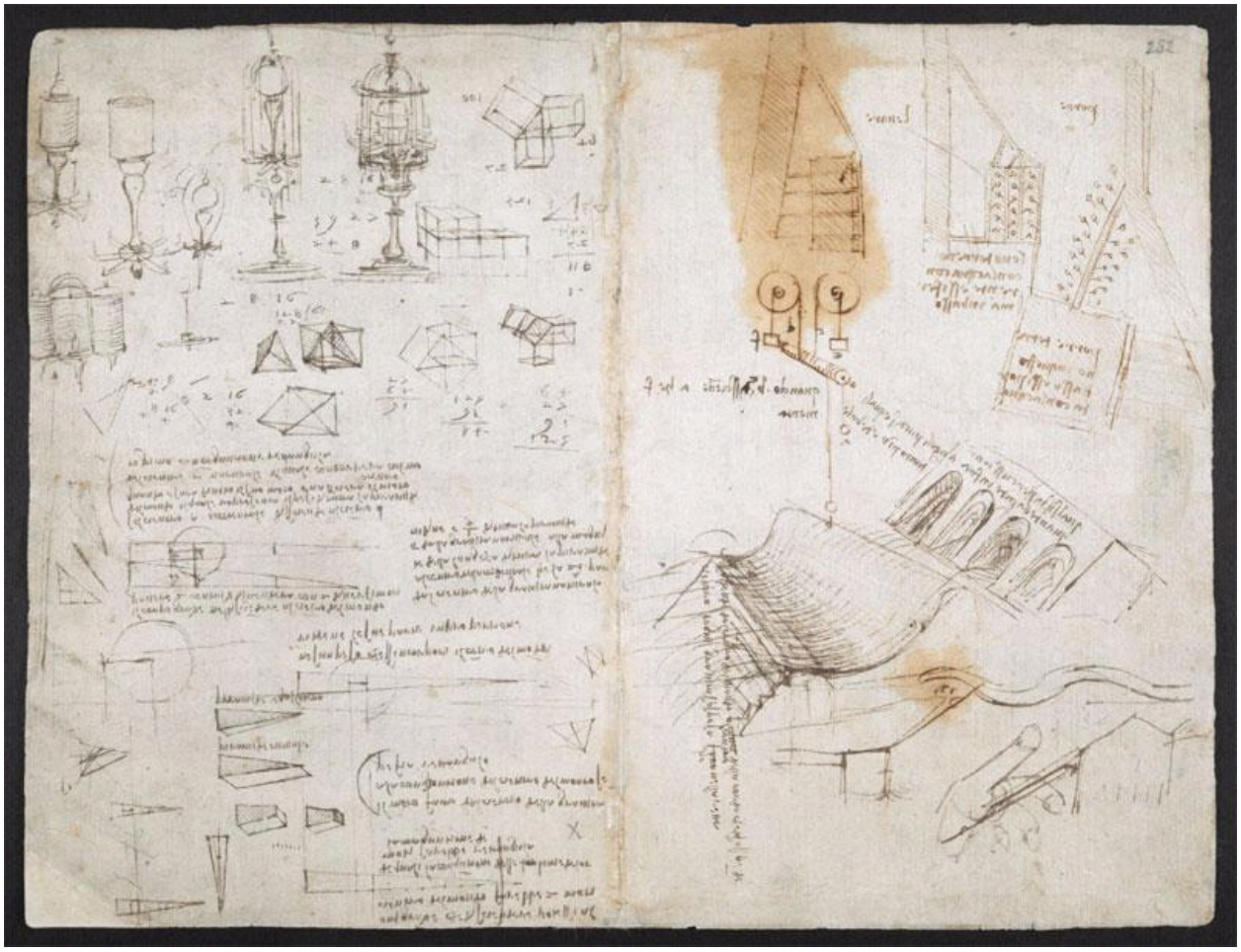
Planoholism is rampant in corporate cultures all over the world. You’ll probably know a few planoholics, or maybe you’re struggling with it yourself. This course is a remedy against that. At the very least, we’ll turn you into a recovering planoholic, and inoculate you for the rest of your life.

The main way of doing that? Get beyond your own ideas and assumptions as fast as possible, and start testing them in the outside world. Keep asking yourself what is the minimum effort you can spend to uncover your hidden assumptions, before you can test them in the outside world.

> Success seems to be connected with action. Successful people keep moving. They make mistakes, but they don’t quit.
>
> — Conrad Hilton

[1.10] Your Logbook

This is the end of Module 1. A great time to talk about your logbook. During the course, we'll invite you to write out your experiences in your logbook.



Keeping a logbook during an iterative, agile process is vital for your progress. If you don't, learnings and ideas can turn out to be ephemeral and get lost in the noise of every day activity. Next thing you know, you'll be running in circles. Give yourself a break. Keep a decent log 🙌

Checklist - Before you start

Before you really dive into the next module, consider the following checklist items:

- ☐ **Zero to One** Know what you're getting yourself into. Think about how you are going to become an innovation rockstar.
- ☐ **Why** Know what you want to get out of it.
- ☐ **Creative Process** What does your creative process look like today?
- ☐ **Logbook** Start your creative logbook

Reading List Module 1

Books

- Zero to One - Peter Thiel
- The Lean Startup - Eric Ries
- The Hard Thing about Hard Things - Ben Horowitz
- Thinking Fast and Slow - Daniel Kahneman
- Design a Better Business - Patrick van der Pijl, Lisa Kay Solomon, Justin Lokitz, Maarten van Lieshout, Erik van der Pluijm

Blogs

- Do Things that Don't Scale - Paul Graham
- The Design Squiggle

Videos

- Brian Schmidt on Uncertainty (TEDx)

Theory

- Build Measure Learn (Wikipedia)

[2] Module 2. Goals

Before you start on the - potentially life changing - journey of building a startup, you need to know why you want to do that. That is important, among other things, because it will help you decide the best direction to take later on.

[2.1] Why?

Why do you want to create new ideas?

Your journey of discovery

When you visualize the journey ahead of you, from these humble beginnings towards a successful business, it's important to visualize it as a journey of discovery.

Think of it as being an explorer, going into uncharted territory. You're going to setup an expedition, and venture smack into the white space on the map, going boldly where no-one gone before.

First off, you'll need a **good reason** to even think about undertaking such a dangerous journey. How are you going to convince people to back you? And who is going to come with you on the journey without some clear promises?

> All of us have to work toward a definite future... that can motivate and inspire people to change the world.
>
> – Peter Thiel

You also definitely need to have some idea of what you might find there. What are you going to bring back? What will it be worth? But just those two things by themselves won't get you there. You also need a north star to guide you.

How do you know you've found what you're looking for, and have reached your goal? When will you call your journey a success?

After all, in module 1 I quoted Yogi Berra (yes, corny, I know):

> If you don't know where you are going,
> you'll end up someplace else.
>
> – Yogi Berra

This truism tells you something important. You don't need a goal per se, but if you don't have one you can end up anywhere. How do you know that 'right here' is not good enough?

This mindset won't help you to choose the hard thing. It won't help you to get a whole group of people off their collective behinds to start pushing for a difficult or seemingly impossible outcome.

Is a great business case not enough?

The reason vision is so important in your design journey because it's a hard journey, and you won't be making it alone.

The people that go with you on that journey need to know the trouble they face is worth it. In the beginning, a vision is all they have to buy into. If you can create a compelling vision that they can believe in, it becomes much easier to join forces and commit.

> A goal is not always meant to be reached, it often serves simply as something to aim at.
>
> – Bruce Lee

A vision is more than just a great business case. And, however much some would like you to believe otherwise, people are not rational.

People don't believe in numbers. They believe in stories and myths. And that means, that you will need to transform the unique opportunity that you see based on your perspective into a compelling story. Your vision must inspire others. Your vision must become a story people are inspired by. A story they tell each other.

How big should it be?

Does this all sound like a tall order yet? Don't worry, it doesn't need to be. Your 'why' does not necessarily need to change the entire world.

You don't **need** to plan to send people to Mars, or solve the world's energy problem.

It doesn't need to be a super big vision. It just needs to be yours, and it needs to be super inspiring. And to make it super inspiring you need focus.

You need to be very clear about what it is that you want to achieve, and what not. It needs to be super concrete.

Your point of view

Summarizing, your point of view has three components (*) :

1. **Your Vision: The Reason Why** First of all, look inward. You will need to be able to inspire others with your idea. You'll need to be able to explain what it is you want to achieve - and (even more importantly) why.
2. **Your starting point** Secondly, you're not alone in the world. There are countless outside influences, from stakeholders that want a say in what you're doing, to customers, and market trends. You need a clear idea of how the world affects your startup idea. If you don't have a clue that someone else is developing the same idea, or that an emerging customer trend will make your idea obsolete, you're going to get hurt. You'll need a first stab at defining a mental model of this worldview so you can start to find your own hidden assumptions.
3. **Your Design Criteria** What Does Success Look Like? Finally, you'll need some kind of metric to know if you're going in the right direction. We call this: 'Design Criteria'. Your Design Criteria define the kind of startup you want to create.

**) With each component, just make sure you're prepared to change some or all of those aspects later on when your idea comes into contact with the harsh realities of the outside world.)*

It starts with 'Why'

One of the most powerful and easiest ways to start figuring out your vision is to ask 'why'. Why do you want to change the world? Why do you feel you have the right to do so?

If you can't make this clear to another person, how can you expect them to invest in changing their behaviour and using your product? If you can't get them excited, how can they trust you?

> People don't buy what you do; they buy why you do it. And what you do simply proves what you believe
>
> — Simon Sinek

Simon Sinek has created a visual tool called the Golden Circle, that you can use on your own or with your team to make sense of your 'why'. You will use it in this module.

[2.2] What is a good startup idea?

Idea vs vision

So far in this module, and in this course, I've written more about your vision and goals than about your idea.

How does your vision relate to business ideas?

Your vision, your personal point of view, acts as a filter for ideas. It defines the scope of acceptable business ideas.

To illustrate, most people will have an ethical point of view that prohibits them from pursuing illegal business ideas. Nonetheless, we all know from Breaking Bad that illegal activities can be very lucrative. This (very sensible) aspect of the point of view keeps illegal activities out of scope. They are not acceptable.

Your personal view will similarly filter for ideas that fit with what you find acceptable, what you want the future to be like, and what you find important in the world.

If you think climate change is a big problem, you won't accept business ideas that make that problem worse, for instance.

Does it need to be disruptive?

The idea of disruptive innovation, where a new idea transforms an entire market, has been very influential. We all know the examples of Uber, Tesla, Dropbox, etc. But it is also super risky.

Remember that most businesses in the world are not venture capital backed, and are not based on a model with 100% growth year over year. They are not unicorns.

Does that make them bad businesses? Definitely not. There are tons of super profitable businesses out there that are not unicorns or multinationals.

Disruptive, VC backed innovation is just one route to take, and it is high risk, high reward. But if you want to take it, you better make sure that it fits your personal point of view, and that you are not taking this route only because 'everyone else seems to be doing it'.

Creating value

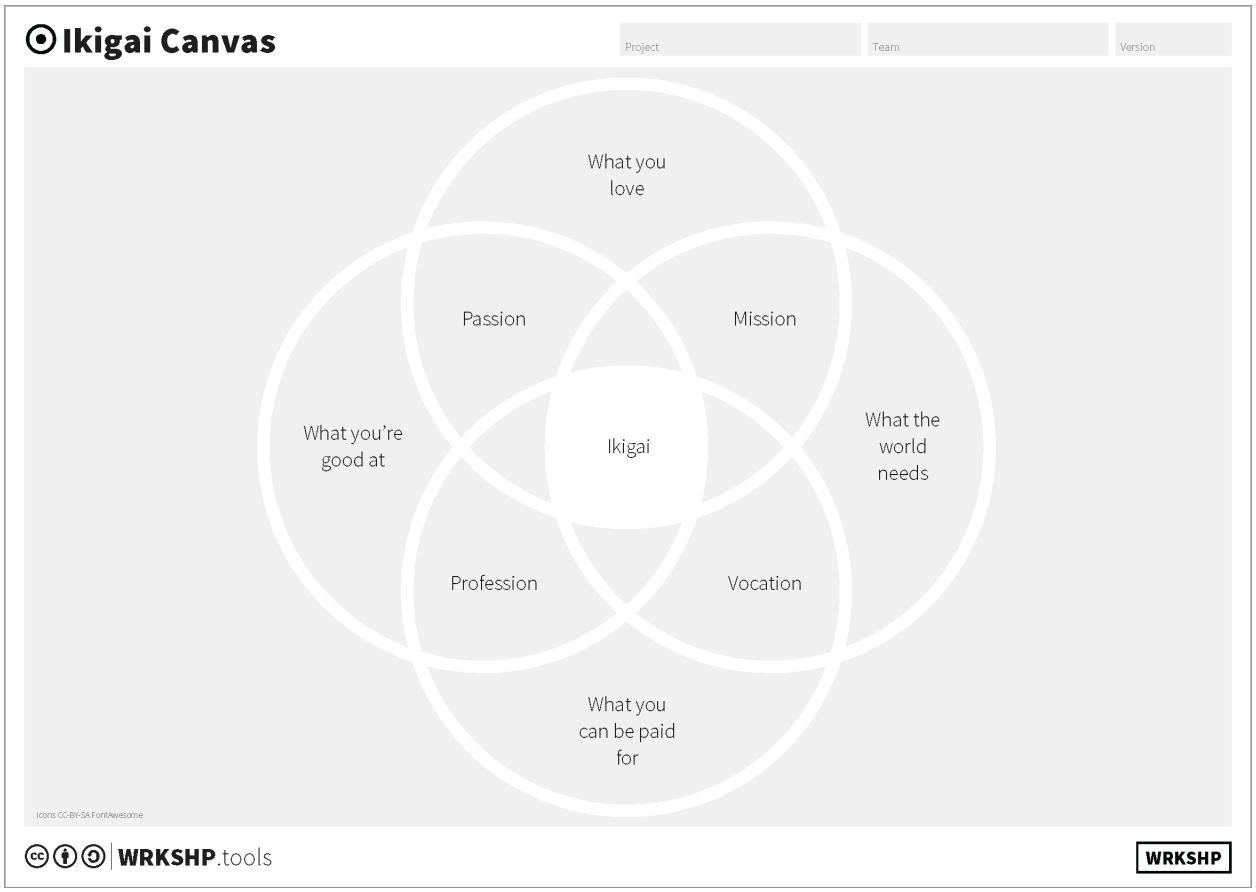
A good business idea creates and captures value, preferably at least in part for you. What that value is, is something you can define. It can be monetary, but it can also be valuable to you to have a good work environment. Or work from anywhere in the world.

There are many different ways to create that value. But it starts with defining what value means to you. That is part of this module.

[2.3] Tool: Ikigai Canvas

- Materials: Flip over paper, coloured post-its, markers
- Time: 20-30 minutes
- Difficulty: Medium
- Number of people: 1-2

“Ikigai” is Japanese for “a reason for being”, which can be loosely translated as “purpose”.



Canvas Building Blocks
The Ikigai Canvas has four overlapping circles that together create 9 sections:

1. **What you’re good at** - What are you good at? What are skills and talents you have? What do you have experience doing?

2. **What the world needs** - What are things the world (or people in it) need? What are the problems that need solving?
3. **What you love -** What do you love to do or experience? What are the things that make you happy?
4. **What you can be paid for -** What are the things you can make money with? Things you can do or create that you can get paid for?
5. **Your Passion -**Things that you are good at and love to do are probably things you are passionate about.
6. **Your mission -** Things you love to do that are also what the world needs are things you could see as your mission.
7. **Your Profession -** Things that you are good at and can get paid for are candidates for your profession.
8. **Your Vocation -** Things you can be paid for that are also what the world needs are your vocation.
9. **Your Ikigai -** Your ikigai is what is your personal intersection of what you are good at, what the world needs, what you can be paid for, and what you love to do.

How to use the Ikigai Canvas

The Ikigai exercise can help you to define your personal perspective, by asking yourself four key questions .

The questions to answer are: ‘what do you love?’, ‘what are you good at?’, ‘what can you be paid for?’, and ‘what does the world need?’.

By answering them and mapping the results in the Ikigai canvas, you see if there are any entries that are closer to the center of the diagram.

If there are things you love and are good at, for instance, they end up in the part of the diagram where those two circles overlap. Try to find out if there is anything that you came up with that is the answer to all four questions.

If you get stuck doing this, simply go over all the different things you have done in your life, plus things you’d love to do, and see where they end up in the circle. Find inspiration in what other people in the world are doing.

Step 1. Collect
Sit down, and for each of the four outer quadrants, come up with 3-5 items. If you get stuck, ask yourself: what would somebody else answer about me? Or, simply ask someone that knows you well. Stick these on your canvas.

Step 2. Connect
Try to see if there are any items you already put down that can be placed on the overlap of any of the circles.

Then, go over the overlapping circles that are still empty and try to see if you can combine items that you already have to fill them. Of course, if you come up with new items that is also fine, just make sure that they are really what you feel and are comfortable with.

Step 3. Ikigai

Try to connect items further until you have something that can be placed in the center. Perhaps you didn't find it yet, if so, go back to step 1 and try to talk to close friends and relatives about what they think you are good at, can make money with, etc.

Step 4. Check

Check your Ikigai, first with yourself. Is this really something that feels right for all four aspects? Is there nothing else that could take its place? If you aren't completely sure, come back to it a few days later and repeat the exercise.

Then, check it with close friends and relatives. Do they agree?

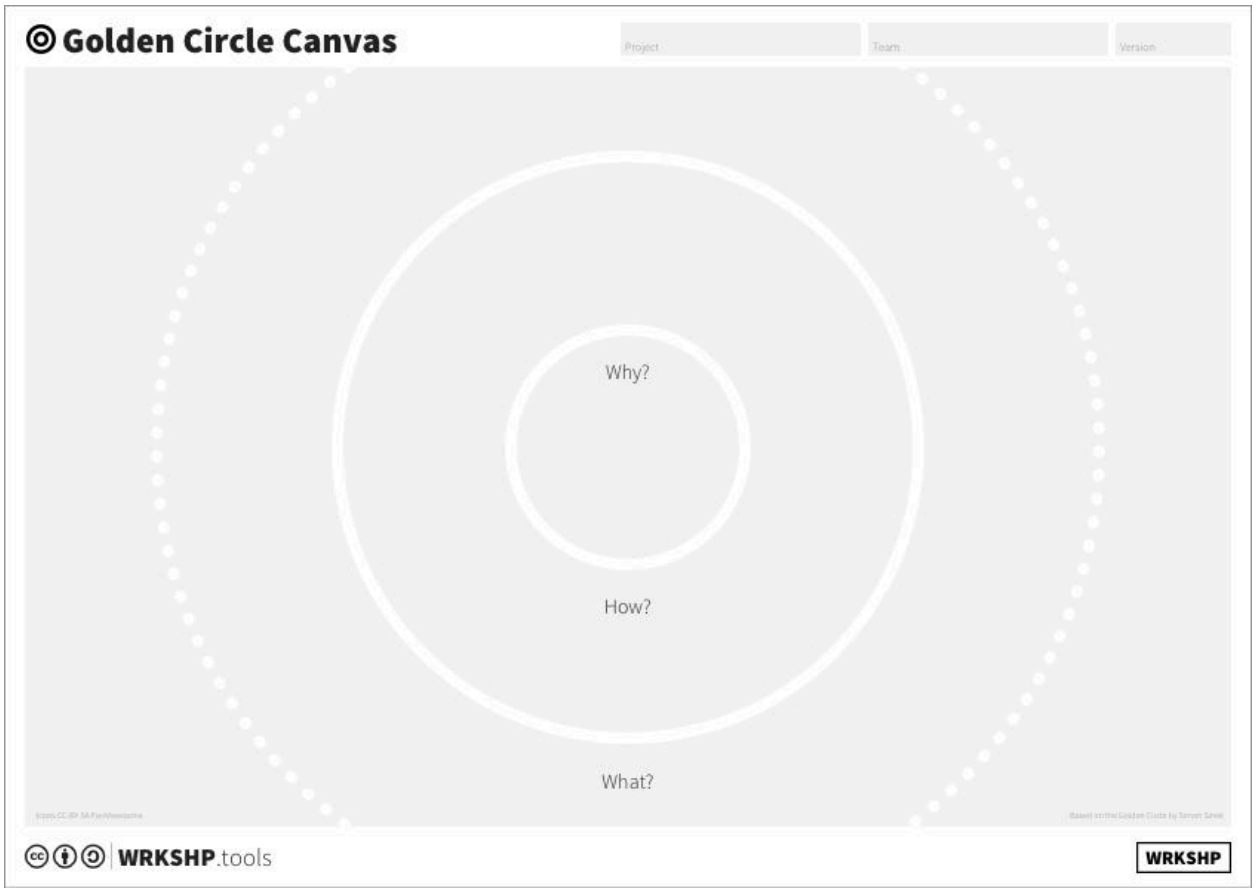
Step 5. Next steps

Keep revisiting your Ikigai.

[2.4] Tool: Golden Circle Canvas

- **Materials: Flip over paper, coloured post-its, markers**
- **Time**: 20-30 minutes
- **Difficulty**: Medium-Hard
- **Number of people**: 1-5

Coming up with a vision statement and ‘rallying cry’ is often the hardest part of defining your vision. To do it, start with the following exercise, using the Golden Circle Canvas based on [Simon Sinek’s Golden Circle.]



Step 1. Collect

Put the Golden Circle canvas on the wall, and hand your team a stack of post it notes. Set an alarm for 5–10 minutes. Ask the team to come up with things that define the company in the future state (1, 2 or 5 years in the future). Ask them to write down as many things as they can come up with that they find important about the company or the product on post-it notes.

Step 2. Categorize
Once the timer rings, have each team member stick post-its on the Golden Circle canvas. Try to categorize what they came up with in ‘What’, ‘How’, and ‘Why’. If there are similar post-its, cluster them together (skip identical ideas).

Step 3. Ask 5x 'Why'
Now that you’ve filled the Golden Circle canvas like this, take a step back. Look at your canvas, and try to see if there is a balance between ‘What’, ‘How’, and ‘Why’ post-its. Chances are, there will be a lot more ‘What’ and ‘How’ post-its than ‘Why’ post-its.

Go over the different post-its and use the ‘5x Why’ approach to get to the deeper reasons that you find them important. Start with ‘Why is this post-it important?’, and keep drilling down, asking for the deeper reasons. Add the new answers to the Golden Circle.

Step 4. Next Steps
The Golden Circle reflects your current ideas about your idea or startup. It can change, so revisit it every so often.

CHECKLIST
✅ You have sanitized the post-its and removed all the less important or duplicate ones
✅ You have asked 5x Why on the most important post-its
✅ You have checked your canvas with people that were not in the meeting – do they understand it?

> People don't buy what you do; they buy why you do it. And what you do simply proves what you believe
>
> – Simon Sinek

[2.5] Your Starting Point

Now that you have defined your Point of View through the Ikigai and Golden Circle canvases, you're starting have a much better idea of the scope your ideas should fall in.

Before you bring all of this together in design criteria, it is now time to find extra constraints that further constrict the **search space** for your business ideas.

This involves going over what you already have. Perhaps you are starting out from an existing project or business, perhaps you're under time or budget constraints. Perhaps you have promises to keep.

Constraints
List what you already have in terms of ideas, commitments, and constraints.

- **Brands** - Are there any brands or other IP that your idea needs to fit in with, or stay away from?
- **Customers** - Do you have any knowledge from existing customers?
- **Finance** - Do you have any financial means to use?
- **Data** - Are there any data sources you can use? Do you have access?
- **Technology** - Is there technology you can use (or should use)? Anything you're not allowed to use?
- **Time constraints** - Is there a deadline for your idea? What do you need to have proved by then?
- **Budget constraints** - Is there a budget constraint for your idea? How much can you spend?
- **Stakeholders** - Are any stakeholders involved with their own political agenda? This is something that is vital to consider for corporate innovation.
- **Team** - Do you have constraints on the team? Is everyone completely committed?

Go over this list and see if they are important to your situation.

[2.6] Creating Design Criteria

Note: This is where you will define your North Star. Besides the Golden Circle, this is the most important part of the chapter.

When you're hard at work in your startup journey, it becomes difficult to continuously go back to all of the maps for context, customer, and vision. You just need one piece of paper that holds all of the important decisions and learnings you have already made. For that purpose, we have created the Design Criteria.

> There are gonna be a core set of values that shouldn't be up for debate. Should be our north star.
>
> — Barack Obama

[2.7] Tool: Design Criteria Canvas

- Materials: Flip over paper, coloured post-its, markers
- Time: 20-30 minutes
- Difficulty: Medium
- Number of people: 1-5

Design criteria form the principles and benchmarks of the change you're after. They are not formulated from thin air, but incorporate information from your business, vision, customer research, cultural and economic context, and mindset that you have formed along the way.

> Design Criteria stay with you for the duration of your journey, and will keep getting new updates.

Don't think of Design Criteria as simply features of your idea. They can and should be more than that. For example, a design criteria coming from your vision might be that your business must contribute to a greener planet. Or, maybe you want your customers to feel delighted; this is another design criterion. Does your new business idea need to generate a certain amount of revenue within three years? Chalk that up to more design criteria. In short, design criteria are there to make it easy to determine if you are on the right track.

Examples:

- A non-negotiable '**Must**' could be that the startup needs to make 1 million in revenue three years from now.
- A '**Won't**' coming from the team could be that there won't be any partnerships with non-eco friendly organizations.

It's up to you to find the criteria that are non-negotiable or nice to have for your situation.

How to use the Design Criteria Canvas
The Design Criteria Canvas is a simple canvas that captures all of the decisions and learnings you make during your Startup Journey.

The design criteria you capture will likely first come from the vision you've formulated with your team. You'll find that some of the elements in that vision are so important that they are **non-negotiable**. Some other elements may be a bit more flexible or unclear, and are **nice-to-haves**.

To find the most important elements in your vision, use the "MoSCoW" method: categorize every element under "**Must**," "**Should**," "**Could**," or "**Won't**." This will help you prioritize.

Once you've done this exercise, you might find that you need to adjust your vision slightly. This may prompt you to take a different direction. If that's the case, adjust the design criteria so that they match the new direction. As you continue to evolve your point of view, you may need to add or update your design criteria.

Step 1. Collect Design Criteria

Have team-members come up with design criteria individually first, by writing them on sticky notes. Sources for design criteria can be: your vision canvas, things you learned when speaking to your (potential) customers, and validation outcomes.

Besides those aspirative ideas, there are usually also some constraints to take into account: you must deliver a certain revenue, have a fit with a certain infrastructure, you have to deal with time limits, budgets, etc. Make sure to capture all of them.

Tip: Try to make your design criteria as clear as possible, so that others will still understand what they mean in three months time. Split up more complex criteria.

Step 2. Map them on the Canvas

When each team member has a pile of design criteria, take turns to stick them on the canvas. Stick them where you think they should go first, you'll organize them later. Have team members say why they think it is a design criterium and why it should be in the box they put it in. If you find duplicates just stick them on top of each other.

When everything is on the board, take a step back. Have a short break. Did you miss anything? Forget something?

Step 3. Organize the Criteria

Now, with the team, go over each sticky note and see what are the real **non-negotiables**.

Be strict in this, nice-to-haves are nice-to-haves, nothing more! If you get stuck, try to compare sticky notes in the same box and see which ones are the least important. What if you did not meet that criterium? If that does not mean total failure, it's a nice-to-have.

Tip: Organizing a canvas usually means nothing more than clustering post-its and removing duplicates and less-important things. When there is doubt, it is not a non-negotiable! If you want to keep things you removed for later, make a special parking lot.

Step 4. Make it S.M.A.R.T.
Go over the Design Criteria, and make them S.M.A.R.T. (Specific, Measurable, Achievable, Relevant, Time-bound). If necessary, replace the post-its with better defined ones. Keep a note of the SMART Design Criteria.

Step 5. Next Steps

Regularly revisit your design criteria, both as a touchstone for ideas and directions, and to see if they need to be updated because your point of view became more informed.

CHECKLIST

✅ You have sanitized the Design Criteria by removing unimportant criteria using e.g. voting.

✅ You have spent time with your team to sharpen and quantify your criteria. Try to make them S.M.A.R.T. (Specific, Measurable, Achievable, Relevant, Time-bound)
✅ You've linked your Design Criteria with your 'Why'

> An inner process stands in need of outward criteria.
>
> — Ludwig Wittgenstein

Checklist Module 2

Before you really dive into the next module, consider the following checklist items:

- ☐ **Ikigai** You have found (or at least worked on) your Ikigai. You know what drives you. If you have team members, they have done the same thing.
- ☐ **Golden Circle** You have done the Golden Circle exercise.
- ☐ **Design Criteria** You have filled your Design Criteria
- ☐ **Logbook** You have updated your logbook with your learnings.

Reading List Module 2

Books
Start with Why - Simon Sinek

Videos
How Great Leaders Inspire Action - Simon Sinek (TED)

Theory
The MoSCoW Method - Wikipedia

[3] Module 3. The Problem you Solve

Let’s face it. The point of view you have defined in the previous model is just a nicely packaged stack of assumptions, since they have not been tested against the real world.

You need to start understanding what the problem you want to solve and your point of view mean to the people that have the problem in the first place: your customers. What do they think?

Learn to fall in love with the problem.

[3.1] Your Point of View as a Mental Model

Let's face it. The point of view you have defined in the previous model is just a nicely packaged stack of assumptions, since they have not been tested against the real world.

Your point of view, your idea of what you are building, will need to be tested in order to know if it has a shot at being successful, creating value for you and for other people. In this Level, we'll take the first steps at validation, which will probably mean your Point of View will change.

> When you're surrounded by people who share the same set of assumptions as you, you start to think that's reality.
>
> — Emily Levine

So, if all this testing and validating is so important, why take the time to come up with an idea in the first place? Why not skip that part and go out immediately, and ask your customers what to build, or do market research?

Three reasons:

1 **You need something to believe in**
The most important one is that, in order to make decisions and move forward on your journey, you'll need something you (and others) can believe in. A clear vision. Just having market research numbers and percentages is just not very inspiring. So that's where your point of view comes into play. Even as new information and feedback comes in, your point of view is where it all comes together. It functions as the framework for new feedback, helping you to further inform your point of view.

2 **You need a framework to interpret new data**

The role of the point of view as a framework leads directly to the second reason: to interpret and make sense of all the data coming towards you, you'll need to define your take on the world first. You need a mental model of how you think the world works and what the place of your startup in that world is. If you don't have that, it's hard to see what feedback is relevant, and where to search for new opportunities. The point of view is a description of your current mental model: what you currently know about the world.

3 **You need to learn about what you don't know**
The fact that the point of view reflects your current mental model is what makes it super valuable. Because, as we'll soon see, your mental model will most probably be wrong, or at the

very least incomplete. In the beginning, you just don't know what you don't know.

> We're blind to our blindness. We have very little idea of how little we know. We're not designed to know how little we know.
>
> – Daniel Kahneman

This means, that by using your mental model, your point of view, as a basis for experiments, will help you to uncover the areas where your lack of knowledge about the world is most impactful and risky. It will uncover hidden biases you have. And, it will help you locate the areas where you think you know what you need to know - but in fact don't. Those areas are the most dangerous ones for any startup.

> There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we know we don't know. But there are also unknown unknowns. There are things we don't know we don't know.
>
> — Donald Rumsfeld

Blindly believing you have all the answers, sweeping any contrary information under the rug, will lead you to bankruptcy fast, and that's not the kind of 'fail fast' that you need. The balancing act of a 'reality distortion field' on one hand, and daring to go back, let in the uncertainty, and change your own world view on the other is one of the most difficult aspects of running a startup.

A Balancing Act

That balancing act is what you'll need to take your startup beyond the 10% 'incremental improvements' to the 10X 'disruption' level (if that is where you want to go). That's the reason why you can't go out and ask your customers what they want. They won't know - since they can only see the world in terms of what it is like today.

Customers were not any more able to understand what the iPad would bring them ten years ago than they were in the beginning of the 20th century when the automobile was introduced.

> If I had asked my customers what they wanted, they would have said: 'faster horses.'
>
> — Henry Ford

Customers simply don't know what they need until they have it in their hands. It's your job to

figure that out for them - and it's also your job to make sure you're right about it before making any big bets. It's your job to learn.

> It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them.
>
> — Steve Jobs

How do you learn?

In the Lean Startup, the learning loop is called 'Build-Measure-Learn'. It comes down to this: first, you'll build something (a prototype, or an experiment), based on your current mental model of the world. Then, you'll measure its performance in the real world. You do this by running the prototype, or conducting the experiment. The outcome of that measuring is data. This data you then use to take a step back, analyze what happened, and learn from the result.

'Learning' simply means, that you'll need to adjust your mental model, based on feedback. This is what we mean by informing your point of view.

[3.2] Curiosity is your Superpower

Avoid Bad Bets

So, how do you inform your point of view the right way and use your reality distortion field for good? What are the steps you can (and should) take to make sure you're not making bad bets? How can you 'load the dice' in your favour? There are some clear things to do, and they all start with curiosity.

> If there is any one secret of success, it lies in the ability to get the other person's point of view and see things from that person's angle as well as from your own.
>
> — Henry Ford

Remember the part about uncertainty in Module 1? This is the time to start turning the tables on that beast, and using uncertainty as a resource. The fact is, as Peter Thiel describes in his book 'Zero to One', all the things you already know probably don't hold the answer. Other people also know them. You won't have an advantage. It's all about asking the questions that nobody else asks. And that means, that you have to start using your innate uncertainty averseness to your advantage.

Whenever you get contradicting information, whenever your mental model does not fit with reality, train yourself not to think "That's wrong, let's ignore it", or "It's an outlier, it's not important", but rather: "Hey, that's interesting! How can I learn more about that?". And start asking the hard questions, the ones that nobody else asks. To do that, you can't stay in your ivory tower, you need to get out of the building.

Video: Steve Jobs on Failure.

Where to Start?

The best point to start is at the core of your idea: the problem (you think) you're solving. After all, if you're not solving a problem for anyone, that means you're not creating value.

At the beginning, it is quite possible that the problem you want to solve is based on nothing but an assumption. It's even quite common, that what you want to solve is actually your own problem, or a problem you think your customers should experience. This can obviously be quite dangerous.

> People don’t want to buy a quarter-inch drill. They want a quarter-inch hole.
>
> — Clayton Christensen

Another, sometimes more appropriate way to describe the ‘problem’ a customer has, is to figure out their so-called ‘Job to be Done’. What is it that the customer is trying to achieve? Clayton Christensen, who came up with this idea, explains it best, and it’s all about milkshakes. As a bonus it perfectly illustrates the power of observation.

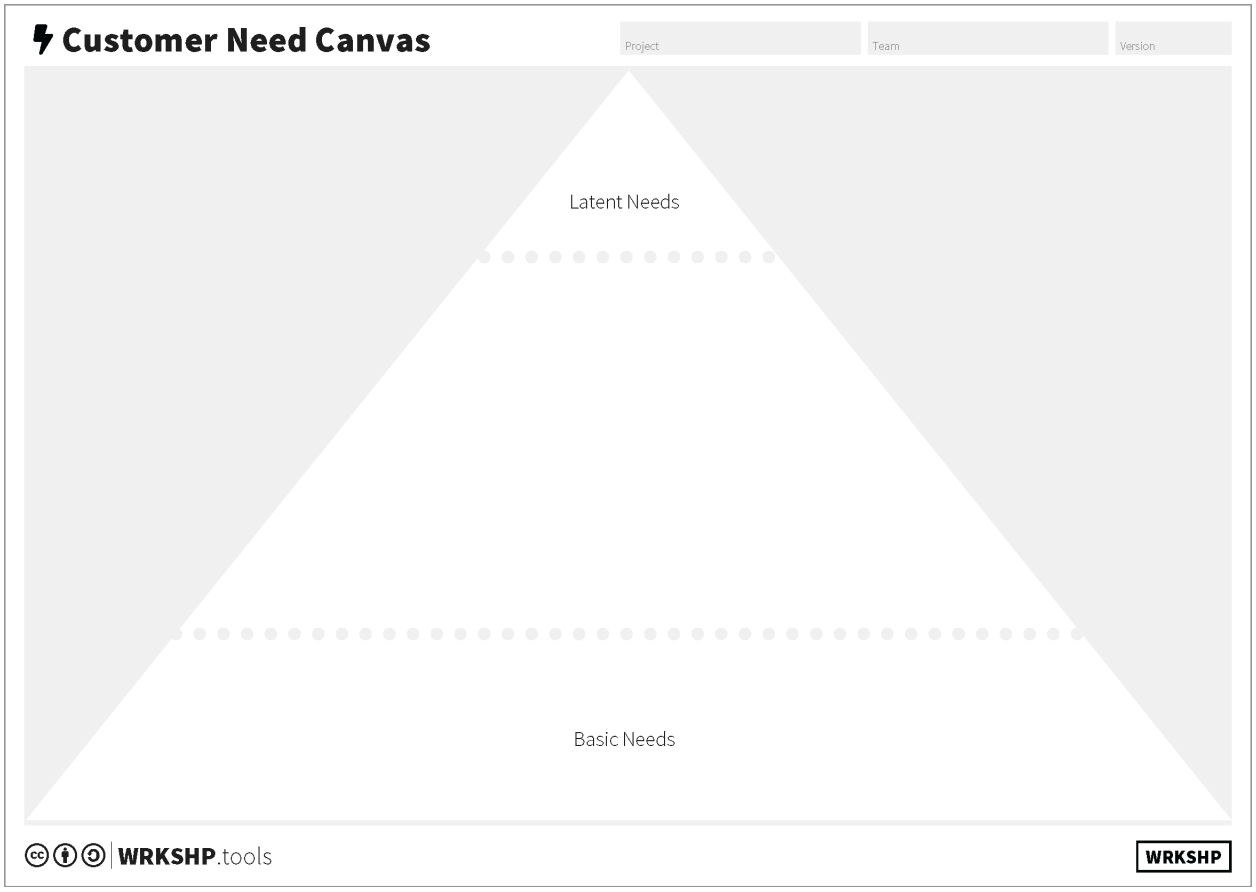
> Love the problem, not your solution
>
> – Ash Maurya

[3.3] Understand the Problem

When coming up with problems (you think) people face, there are a number of aspects to keep in mind.

- **Market Size** - How many people face this problem?
- **Customer Segments** - What do people that face the problem have in common? How can you group them together and characterize them? And where are they best reached?
- **Real Need vs Latent Need -** Is the problem a real need for the potential customers? Or is is a nice to have?

Think of the Maslow pyramid. At the wide base of the pyramid, you find things everyone needs, such as food, water, rest. These are things you can't do without. At the narrow top, you find things that only become important to people once their basic needs have been fulfilled.



If you think of problems to solve for your business, think about where that problem is in the pyramid. Is it on the bottom, or at the top? This is a way to visualize latent needs vs real needs.

The problem with latent needs is that people don't really know or care about fulfilling them yet. They are 'optional problems'.

That does not mean that a latent need can't be huge: in a 1999 interview, people in Amsterdam laughed at having a mobile phone in their pocket every hour of the day. They simply could not imagine what it would be like yet.

Interviews by Frans Bromet about the use of mobile phones in 1999 on the streets of Amsterdam. (English subtitles)

Convincing people of a latent need is an uphill battle. It can be done, but it is a lot harder than fixing something people are aware of as a problem.

The easiest way to tell if people have a real problem is to look for problems that people actually have a workaround for. Some way that they already solve that problem today. If that workaround is unsatisfactory for them, for instance it is expensive, takes time, or only solves part of their problem, then you have a candidate for a real need.

[3.4] Your Customer

Design is about people

It is very important to remember you are solving a problem for **other people**. What you come up with should help those people solve a problem, fulfil a need, be delighted.

To do this well, you need to understand the people you are designing for.

It's a trap!
When designing, it is very easy to fall into the trap of thinking for your customer. Instead of diving into what makes your users and customers tick, it is tempting to assume they will think and behave as you do.

This can be very hard to spot: we are all living in our own tiny bubbles, and the amount of diversity we come into contact with on a daily basis is very limited.

When designing something for other people, this tunnel vision can be very dangerous, because most people are very different from us. Therefore, as a designer you should actively strive to find and represent this diversity in your process. You're not designing for yourself, but for your users and customers.

(Hidden) assumptions and biases
The tunnel vision mentioned above is a problem for everyone, from experienced designers to novices. The reason is that it is very difficult to imagine the breadth of different perspectives and opinions other people may have. It is too easy to base your ideas on your own limited perspective and experience. It's impossible to get rid of your biases towards the world.

The difference between experts and novices is that experts are aware of some of their biases, and they have adopted processes that will uncover hidden biases they are not aware of.

Data as the antidote?

The obvious antidote to this tunnel vision is to use actual data. Unfortunately, doing that effectively is harder than it sounds. The brain has a hard time integrating raw, 'hard' numerical data with 'soft' data such as anecdotes and stories.

Even if you managed to integrate this information in your mind, it is very hard to make decisions on it – and even harder to communicate your conclusions. Numbers, facts, and stories that are separated from the people behind them feel artificial and intangible.

Transform your data

So, rather than trying to integrate this data in its raw form, it makes sense to transform it into something the human brain can handle.

We are wired to make sense of other people, keeping track of their needs, thoughts, and behaviours over time.

Mirror neurons

Your brain contains millions of mirror neurons. These special neurons have similar activation patterns when witnessing an action, hearing about it, and performing it. This allows us to empathize with what others are experiencing, by, in a sense, reliving it ourselves. Mirror neurons are responsible for the fact that we can learn from observing others.

Customer personas tap into this layer of the brain. This is why stories and anecdotes are indispensable. Done right, they enable everyone in your team to have a clear sense of what your audience might do or think, with just a little extra effort.

What do you want to know?
To really understand your customer, you need to be able to follow them every step of the way as they experience the problem you want to solve.

In this module, the Customer Persona and the Customer Journey are two methods that you can use to gather this information and make sense of it on paper.

[3.5] Tool: Persona Canvas

- Materials: Flip over paper, coloured post-its, markers
- Time: 20-30 minutes
- Difficulty: Easy
- Number of people: 3-5

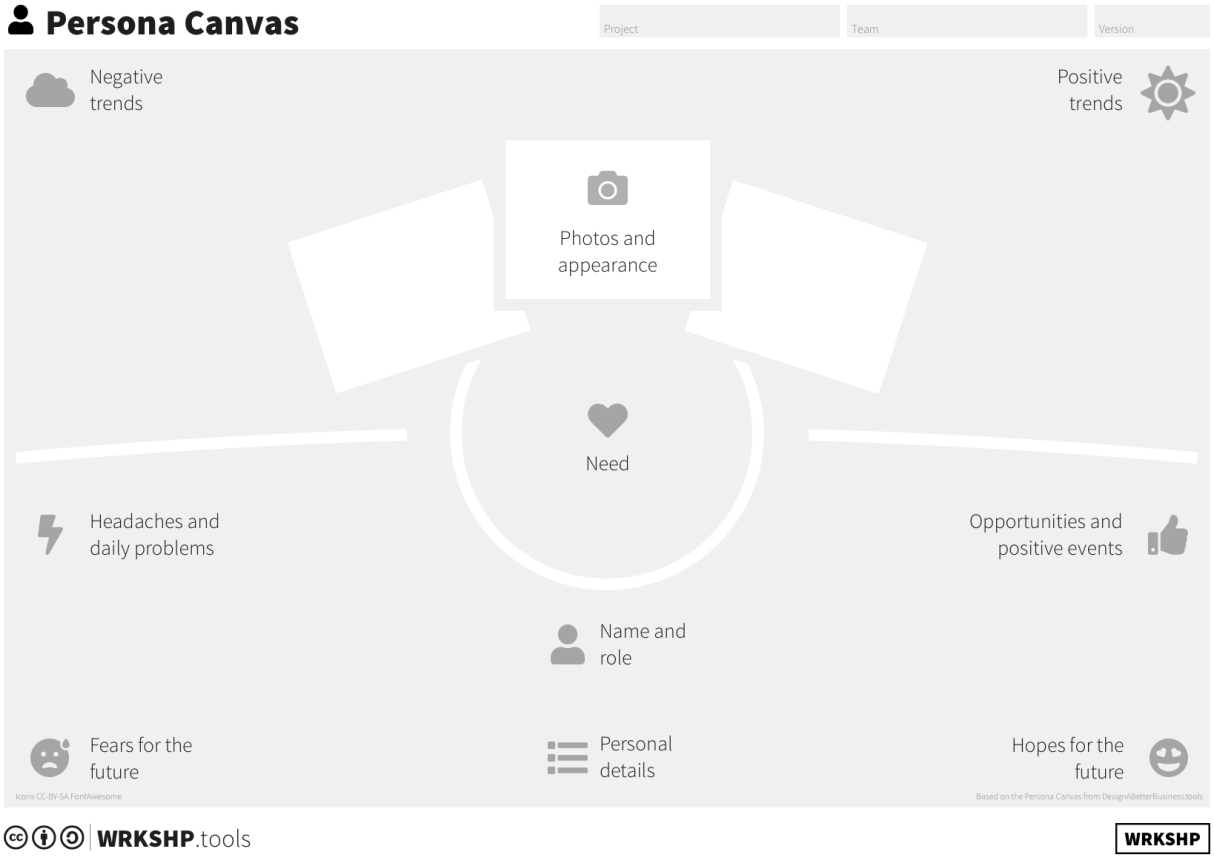
The Persona Canvas is organized in nine different sections. It is designed to be worked on as a team with postits and markers, and to give you an easy to read visual of your persona once you're done.

The most important element in any persona is the representation of the person itself. The heart in the center defines the need your persona has. What is his or her goal? What is he or she trying to achieve?

Completing the representation of the person, there is space on the bottom to add identifying information such as a name and a role, and any other facts you gather.

The next thing that stands out, is that the persona is divided into a left and a right side. The left side has space for negative aspects the persona has to deal with in their life, such as fears and trends with negative impacts. The right side has positive aspects.

Using this left/right split, it becomes much easier to get a picture of what is going on in the life of your persona.



Canvas Building Blocks

The Persona Canvas is organized in nine different sections.

1. **Name, role, and personal details** - Giving your persona a real name and role helps anchor them in reality. Using a real person as a basis is even better.
2. **Photos** - The canvas is designed to make it easy for you to add photographs of your persona. Is it a man? A woman? Is he or she happy? Or sad?
3. **Need** - This is the goal the persona has, their job to be done. What do they really want? What decisions will they make?
4. **Positive Trends** - What are positive trends the persona experiences in their life?
5. **Opportunities and positive events** - What are positive opportunities the persona experiences in their professional or private life?
6. **Hopes for the future** - What hopes does the persona have for the future?
7. **Negative Trends** - What are negative trends the persona experiences in their life?
8. **Headaches and daily problems** - What are headaches and roadblocks that the persona experiences in their life? What is blocking them from achieving their goal?
9. **Fears for the future** - What fears does the persona have for the future?

How to use the Persona Canvas

Step 1. Define your goal

Why are you creating a persona? What do you want to achieve? Are you trying to create a persona for design? For marketing and sales? For customer validation? Or for storytelling? Although the steps to follow are the same, knowing what to focus on will help you to ask the right questions and get a better result.

Step 2. Gather data

This step is critical. As we have seen, it is vital to base your personas on real data. On the other hand, gathering data can be very time consuming, especially if you don't know very well what you're looking for – which will most likely be the case if you're just starting a new design journey.

To be efficient, there is a balance to maintain. You will have to spend some time and energy researching, but at the same time, you can already start by coming up with what you think is relevant for the persona and make your assumptions explicit. Both your research and your assumptions will need to be validated, so on your first stab at the persona, it is fine to mix these up.

The important thing to remember is, don't try to create a perfect persona on your first attempt. Not only does such a perfect persona not exist, but spending too much time researching or coming up with stories isn't going to get you there, even if it

would. The real value is in validation. What research should you do on your first iteration?

There are a number of types of research that are super valuable on your first pass.

Creating a Persona with the Persona Canvas is not very difficult or time consuming.

Following the steps below you should be able to create 3-5 good personas within a few hours.

Basic demographic data

For your target audience, look at demographic data. How old are audience members on average? What are the lowest and the highest ages? What is the distribution? Where are they located? What kinds of jobs do they have? What is their gender, cultural background, level of education? Family situation? In each case, it is good to have a statistic, but it is much better to also have some examples.

✅ *Find at least 5-10 examples of demographic*

information.

Interviews and Social Listening

If you have customer feedback for your product or service already, look for information that outlines what they are trying to achieve. What are their goals? What is blocking them from realizing those

goals? If you haven't had the chance to talk to any users or customers, that's ok.

Take an afternoon to go over customer feedback records, and if you can, take the time to reach out to some of your customers to get extra insight.

If you decide to interview people, that does not mean you need to have time consuming 1-on-1 interviews. You can also use a technique called Discussion Group, which is used in social science

research. Divide all interviewees into small groups of 6 to 12 members, and let them talk freely about the topics you offer. Write down the words and concrete ideas of the interviewees without

interrupting their speeches. If there is a silence or awkwardness, you can offer new questions or prompt the interviewees to continue.

Either spend some time talking to people now (and that is time that is never wasted, you'll learn something every time you talk to a customer or user), or… look for the information online.

Online research

Look on forums and social networks such as Quora, Reddit, Facebook and Twitter. Try to find out what kinds of questions your target audience members ask. What do they share? What are they struggling with? What are the different viewpoints? What are the things that are discussed the most?

Especially on your first attempt, taking two or three hours going through forum posts can really pay off.

WARNING Keep in mind that the people that are posting in these forums and social media are not per se representative of your entire target audience.

✅ *Spend an afternoon going over forum posts and social media, and copy at least 10-20 quotes and questions.*

Sentiment analysis

While you are talking to people or researching online, make notes of the sentiments people express. Are they passionate? Demotivated? Angry? How do they feel? What kind of language do they use to express those feelings? What makes them feel that way?

Doing this can help you to get a better idea of their motivations. Perhaps here you can already find evidence of different groups in your target audience that have different opinions, problems, or

perspectives.

✅ *Find at least 10-20 examples of different sentiments expressed by members of the audience*

Analytics data on behaviour

Besides sentiments, it also makes a lot of sense to look at behaviours. You can do this by looking at, for instance, the number of reactions on a post.

When a lot of people agree or disagree, that is important data. When the same question pops up many times, that is important to know.

You can also use analytics data for this. Knowing what pages on a website are visited the most, or what search terms are most used on google can give you some extra ideas for your personas.

✅ *Find at least 10-20 examples of posts or questions with a very high response, relative to other posts.*

What are the top posts or questions? What are the most visited pages? And are there any pages or posts that rank (in your opinion) surprisingly high or low? Write these down as well, as

they may be the first hints of hidden assumptions. Extra research in subsequent iterations When you come back to this step in later iterations, you can delve deeper into each of the three aspects mentioned above, and because you have more information after validating, you can ‘zoom in’ more. Spend more time on research: you’ll have a much better idea of what you’re looking for. In your second pass, try to come up with some interview questions that you can use to really get a fix on what makes your customer tick.

Step 3. Cluster the data

In this step, you’ll filter your incoming research data and cluster it. An effective way to do this is in a workshop format. With your team, take 30-45 minutes to go over each of the pieces of information uncovered.

Try to see which pieces fit well together, and come up with 3-5 clusters. These are the nuclei for your personas. Each of the clusters should have a selection of demographics, sentiments, quotes, etc. Look for themes and characteristics that are specific, relevant, and universal to the cluster.

When you have done a first clustering, take a step back. Are your clusters distinct enough? Or are they all focusing on the same pieces of data? Do they make sense? Are the most interesting bits

of research you have uncovered incorporated in the clusters? If you answer ’no’ to any of these questions, adjust your clusters.

Step 4. Define your Personas

The next step is to take your clusters and turn them into personas. To do that, stick a printout of the persona canvas above each of the clusters. Looking at the clustered data, fill out the canvas.

Name and Role

Start by choosing a name and role to go with your cluster, and defining other relevant demographic facts.

Goals

Then, come up with a goal. What is your persona trying to achieve? What is the Job they are trying to get done? What is the problem they are trying to solve? What is the attitude they have towards this

goal? Is it a pain? Or a nice to have?

Trends

Next, go over the data you have uncovered and try to come up with positive and negative trends that impact the daily life of your persona. What are things that are happening in their world that are

impacting them? It could be anything from the rise of AI or climate change to the rising popularity of K-pop. What is relevant totally depends on your project.

Headaches, opportunities, hopes and fears

The next step is to fill out headaches and opportunities, and hopes and fears. Headaches are things that are blocking your persona from reaching their goal. What are they struggling with, in their daily life. Opportunities help your persona achieve their goal. Fears are things they hope will not happen in the future, and hopes are things they would like to happen in the future. People can be highly motivated by fears and hopes.

Quotes

Finally, come up with quotes for each persona. What would be a typical thing for them to say? Use the sentiment analysis and online research as a base.

✅ *Come up with 3-5 very different personas based on your clustered post-its. Try to be complete but don't spend hours on it.*

Step 5. Create a Rich Picture

The next step is to create a 'rich picture' of your persona. The persona canvas is designed to do this. You should get a complete picture of who the persona is, just from looking at the canvas.

Create a complete picture: not only the facts and data points, but also the character of the person. What do they look like? What is their world like?

You can go overboard with this, but in the first iteration, it makes sense to go easy: after all, your work may come undone after validating it. You can either draw the person on the canvas, or stick

photos, quotes, etc on it. Create a collage of the person, his or her environment, and what they hold important.

Once you're done, spend some time to go over a day in the life of the persona. With your team, map out a few of the key moments during their day. See if you can add these moments to your canvas. If you don't, the persona will remain a couple of datapoints, and nobody will get a 'personal' connection.

Step 6. Mark your assumptions

Go over the persona you have created, and mark the things you have added to it that you have not validated or directly copied from data. These are your assumptions.

Then, add one extra assumption: that the 3-5 personas you have defined accurately cover your entire target audience. When validating, you'll probably discover missing personas.

Step 7. Validate your assumptions!

This is another crucial step. Luckily, it doesn't have to take a lot of time and energy. Likely, you'll be talking to (potential) customers anyway, so if you do that, mix in some questions about your persona.

Test if the goals, attitudes and preferences you have mapped out really exist. They won't perfectly match, in most cases, and that is fine; but if you only get answers that are totally at odds with your

persona, it's back to the drawing board.

Another way to validate is to try and find a number of people from your target audience, and interview them face to face. Using your persona as a guide, come up with interview questions, and once you're done, see if what you find matches your persona, or if it is totally at odds.

Step 8. Iterate!

Now that you have validated your persona, it's time to find the problems and fix them. To do that, go back to step 1, and proceed from there. Of course, you probably won't need to start from scratch this time, so there will be a lot less work to do. Rinse

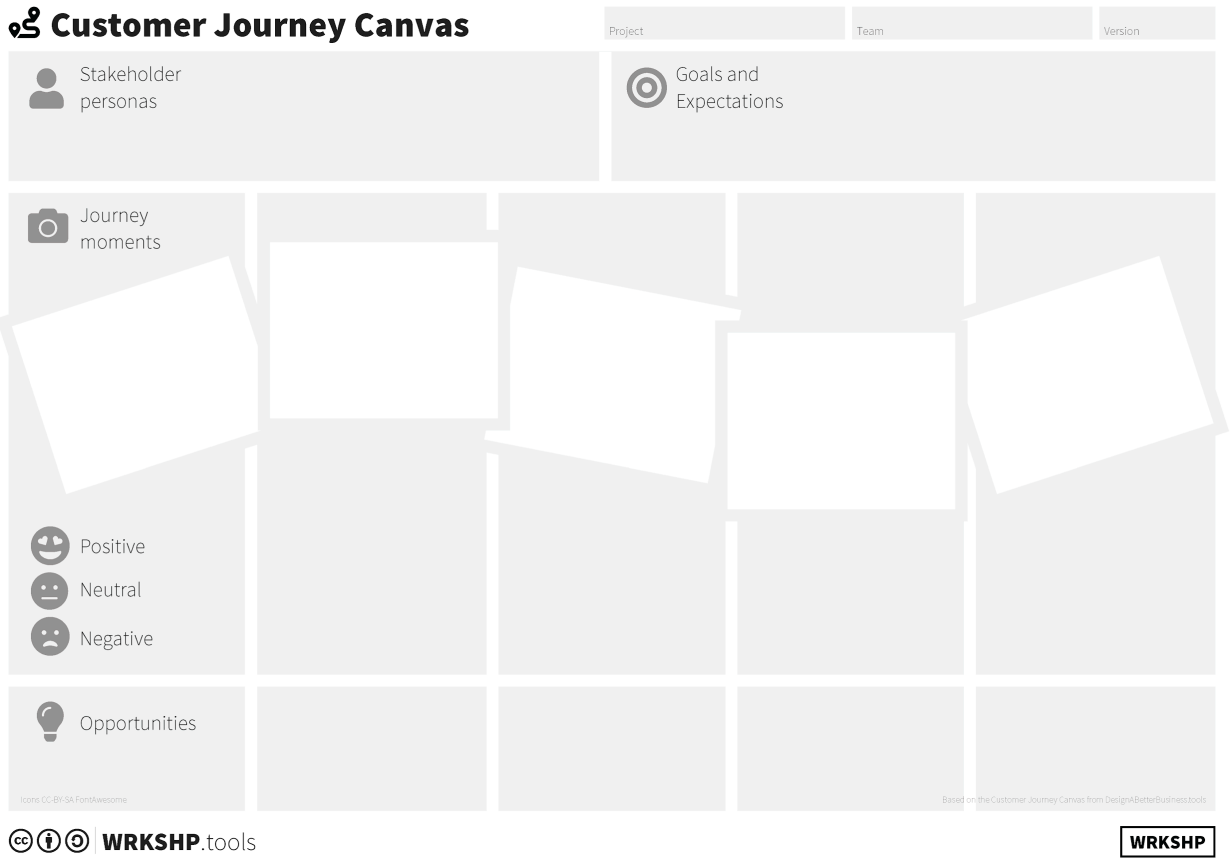
and repeat!

A persona is never completely 'done'. Keep revisiting it throughout your design journey, and keep referring back to it.

[3.6] Tool: Customer Journey Canvas

- Materials: Flip over paper, coloured post-its, markers
- Time: 20-30 minutes
- Difficulty: Medium-Hard
- Number of people: 3-5

The Customer Journey is a tool to help you get insight into, track, and discuss how a customer experiences a problem you are trying to solve. How does this problem or opportunity show up in their lives? How do they experience it? How do they interact with you?



Canvas Building Blocks
The Customer Journey Canvas is defined in three layers. The top layer defines the stakeholder personas in the journey and the goals and expectations. The second layer describes the touch points in the journey and the customer's emotion. The bottom layer defines the opportunities.

How to use the Customer Journey Canvas

Mapping this journey will provide you with insights into how customers experience a product or service, as well as how they might be better served or even delighted. This is especially true when co-creating the journey together with your customers or when validating your assumptions with them. What are the circumstances? How do customers feel throughout? What are the moments when the experience can best be improved?

Customer journeys are not linear. A customer can jump from one phase to another depending on many factors. They interact with some touch points and miss out others. It is your job, as a designer, to understand the moments when customers engage so that you can design better experiences for them in the future. This tool helps in looking at your products and services through the lens of the customers.

Of course, no customer journey is totally complete or made without assumptions. Mapping the customer journey is based on the knowledge and insights of your team. This tool simply helps you understand and explore from the customer's point of view.

The customer journey canvas helps make things real. Through the mapping exercise you can identify where customers get stuck, where they have great experiences, and why. One outcome of using this tool with your team will be the so-called low hanging fruit that you can deliver on immediately. Once you have co-created and assembled the customer journey maps, you can add real customer data gathered through customer safaris, interviews, and feedback. This will enable you to make informed decisions based on reality.

The customer journey is relevant for everyone. Everyone on the team, and in your company, must understand what your customers experience, how they feel, what they struggle with, and how you can improve the experience. The underlying goal: to solve our customers' problems and make them happy.

Step 1. Define your customer and the goal

To make a good customer journey, you need to define who it is for. Who is the customer you are going to follow? And easy way to do this is by using the persona canvas. You don't want to specify generic customer segments here, but start from specific customers, that you know. This will help enrich the journey. Generalizing it comes later.

Step 2. Map the Journey

With the team, come up with moments in the journey of your customer. Think from that customer's perspective. His or her goal in life is not to buy your product or use your service, that is (usually) a means to an end. What end is that? How do they experience the problem you are

trying to solve? And do they really experience it? What do they currently do to deal with that problem?

While you are defining moments for the customer, try to place them in an order. That could be a short interval, for example a day in the life of the customer, or a longer duration. The goal is to find the meaningful moments for the customer first, and then to look for the touchpoints where your product or service comes into the picture.

An easy way to build moments is to think of what happened first (what would be the movie frame for that moment?) and then to proceed what the customer thinks or feels, and ultimately what their needs are. Make sure it's their needs, don't sneak your product back in!

Step 3. Challenge your assumptions
Now that you have mapped out a lot of moments, it's time to challenge assumptions. So far, almost everything you have done is an assumption, starting from what you know about the customer, and going all the way to their needs in specific moments. Some of these assumptions are more impactful than others. They need to be checked before you start building product ideas on top of them. To do this, you need to go out of the building, and run experiments.

Show your journey to actual or potential customers, and see if they recognize themselves. What is their journey? Map it out with them. Once you have done that, you will start to see patterns and learn what the actual needs are that they have. Sometimes they may not even know it themselves!

Step 4. Next Steps
Check the following items to see if you have worked enough on the Customer Journey.

✅ Was the persona specific enough?
✅ Is the journey complete? Are any key moments missing?
✅ Ask yourself where the journey really starts and ends. Are there moments before and after that you should include?

Reading List Module 3

Books

- Jobs To Be Done - Stephen Wunker, Jessica Wattman, David Farber
- The Mom Test - Rob Fitzpatrick

Blogs

- Read the story of Better Place, where a bad case of 'Reality Distortion Field' led to vaporizing almost 1 billion dollars 💸, here Fast Company

Video

- Steve Jobs on Failure
- Interviews by Frans Bromet about the use of mobile phones in 1999 on the streets of Amsterdam. (English subtitles)

[4] Module 4. Generating Ideas

There is no single right solution. It's vital to come up with a lot of options to choose from, and you can use creative tricks to make coming up with them a lot easier!

[4.1] Creativity

Earlier, we said it isn't good to start your journey with a 'favorite' solution in mind. The reason for that is that focusing on a solution early on also tends to make you focus on a specific view on the problem that is associated with that solution, namely, your own view. And that can be very dangerous if it does not resonate with the outside world.

But, now that you have spent (a lot of) effort to really understand the problem you want to solve from the user or customer's perspective, and you really have a handle on the Job to be Done for your customer, it's time to start thinking about solutions.

Notice that we use the word 'solutions'. Plural. That is important. Even in this stage, you should not fall in love with a specific solution yet, but rather remain open to a range of possibilities. There is no single right solution. If you remain focused on the job your customer wants to get done, you'll find you can solve the problem in different ways.

In this Module, you'll come up with a large range of ideas for (parts of) solutions. With those ideas, and based on your design criteria, you'll create several 'mini value propositions', to test with your users or customers, to see what they resonate with. That information you'll use in the next level to come up with an actual solution candidate that can be prototyped.

> Nothing will stop you being creative more effectively than the fear of making a mistake.
>
> — John Cleese

[4.2] How to Trick your Brain into being Creative

Find your creative 'on switch' and train your brain to be creative on demand.

Trying to come up with new ideas can be hard. Staring at an empty page, a kind of 'writer's block' can easily grab you, and your mind just won't come up with new ideas. Wouldn't it be great if your brain just had a switch to put it in creative mode? Well, it has!

Think about it. Where does any new idea come from? Chances are, ideas just 'pop' into your head, seemingly coming from nowhere. There probably are moments and situations in which you have more new ideas. For me, it's when I go running, but perhaps for you it is when you wake up at night, when you're in the shower, or when you're stuck in traffic.

Configure your brain

The trick to finding your personal 'on' switch is to identify these moments. Figure out what they have in common, and re-create the right conditions when you need to become creative.

Your brain has different mental 'modes' in which it operates. Some of these modes may be great to make decisions, some may be great for social interaction, others may be good for getting a lot of work done efficiently. And there is also a 'creative mode'.

To get better at switching on your creative mode, you need to learn more about your own mental modes. You need to learn how to consciously *configure* your brain for the task you want to achieve. It's something creative people practice every day. This 'brain configuring' is something that you get better at by observing what happens when you're in a creative vs. an uncreative mode.

For example, I know that if I want to really solve a problem, I need to think about it really hard for a few hours, and really care about solving it. Then, I have to wait a day or so. And only then, my 'subconscious' will start yielding interesting solutions. The process can't be forced. If I would press on after the initial hours, and try to push through directly, I'll just get tired and hit a brick wall.

Also, I know that if I want to switch on a creative mood, it will take me around 30 minutes to get

into the ‘zone’. I know my brain will come up with some really crap ideas first, but that’s ok. I just have to keep going and trust my brain to get me better ideas once I am past this initial stage.

The way I learnt (and am learning more every day) about configuring my own brain, is by observing and evaluating my thought process in various situations, writing my experiences down in a logbook. Also, I keep experimenting with new approaches after talking to other people about their creative ‘mode’. And if something works, it gets implemented into the configuration routine that I use to switch my mode of thinking.

What you can do:

- **Keep a logbook.** Note down in what situations a particular mental mode worked well, or didn’t work at all, and try to evaluate the circumstances. What were you doing/thinking before? How long did it last?
- **Experiment.** Create experiments in configuring your brain, doing different things to stimulate certain mental states. Read about the creative process of others, or ask creative people you know how they get into the ‘zone’.
- **Create configuration routines.** These are short step-by-step routines to get you into a specific mental state. Practice them when you need to go into that state. Soon enough it will become second nature.

Unblock yourself

There are also some things to stop doing. Some things are enemies of the creative mode of thought. We have learned to see our mind as a machine, and we are pressured to be efficient. So we naturally try to be ‘efficient’ about creativity. It is possible to be more efficient (although I’d go for effective rather than efficient myself) — but going at it in a direct approach is counterproductive.

For instance, if you have a goal, and try to come up with ideas, it is easy to immediately judge each new idea and see if it achieves the goal. If you look at it like that, 99.9% of all ideas will look like crap. It is incredibly rare that a fully formed solution will pop into your head that ticks all the boxes.

Judging ideas immediately is very counterproductive. The brain works by association: it uses context and examples to latch onto and create new ideas. Especially when you have a bunch of half-formed ideas on the table, your brain is very good at taking parts from each and creating new, better ideas.

You *need* the initial crap ideas in order to get to the good ones.

Think of these ideas like 'stepping stones'. They are the raw ingredients you can turn into something amazing later on. Besides, judging ideas isn't any fun, because what happens is you'll sit there, punishing yourself for not coming up with any 'good ideas' and feeling super uncreative — and all the while, the only thing that's blocking you is you.

Another really important blocker is having a super rigid point of view. If you go into a creative session without any flexibility, then you won't get anywhere.

So rather than defining the solution you're looking for before the session, having goals set in stone, and judging each new idea on if it meets those goals, next time try something different:

- **Don't set fixed goals**. Instead define clear Design Criteria that you can use afterward to rate your ideas.
- **Timebox** an hour or so to come up with ideas.
- **Defer your judgement** of ideas until after time's up.

In this way, while ideating, you'll feel secure that you're not losing direction, because you're going to check the outcomes against design criteria afterwards, and you'll feel less need to judge ideas immediately. You'll be able to go with the flow, and come up with tons more ideas — and a percentage of those will be surprisingly good, I promise!

Of course, there are other blockers as well such as stress, and many other things that might block you personally. Using the logbook, you'll probably uncover a few of them. What could you achieve if you managed to avoid just one of those blockers?

Brain Kickstarters

And, if you get stuck, and have trouble to switch to being creative, there are some tricks you can use to get you started.

1. Don't take it too seriously

Monthy Python's John Cleese says it all in this amazing video.

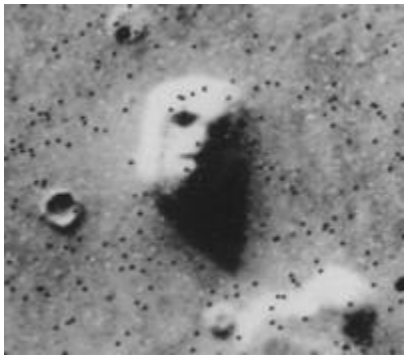
(It may be a long video, but it is too good to miss!)

Having fun and using humour are some of the best ways to become creative. And being too serious (or even solemn) is to be avoided.

Play around with your ideas. Don't treat them as final products, treat them as toys to play with. Turn them inside out, upside down.

2. The power of random

When you look at something like a concrete wall, or a Rohrschach image, you'll see images in the random patterns. Your brain is wired to see things such as faces (the effect is called pareidolia).



What do you see? A face? Or a part of Mars?

When I was working in computer games, concept artists would use random noise to get them started on a new image. When coming up with startup ideas it's no different.

How you can use random noise:

- Get random words from a dictionary. Take a physical dictionary, open it up randomly, and pick a random word from the page. Do this 10 times and try to see how the results connect to what you're working on. Or use this word generator site.
- Random search a webpage using The Useless Web.
- Random name generators, such as Namelix.
- Collections of pictures and card stacks such as Ideo's Method Cards, or Trigger Cards.

Whenever you deal a new combination, or look at a new collection of random words, play with it. Try to make combinations that are interesting to you. *Only then* ask yourself how they could be applied to the subject you're working on.

3. Observation beats judgement.

When you feel you are 'judging' ideas, in a true/false frame, go into observation mode and closely observe your colleagues, a tree out of the window, or the wall. (Not your smartphone!) Look at all the tiny details. When you are really observing you can't judge and that, at least for me, frees up the creative part of the brain.

Happy Ideating! 😎

[3.2] Creativity happens when you get out of the way

There are three important habits creative people have, that you can develop as well.

- They don't block their own creative mind
- They know how to pre-load their creative mind
- They know how to interpret the output of their creative mind

Don't Block

Visualise your creative mind as the ultimate deep-learning neural network. A massive engine, always quietly running in the back of your mind, looking at all the different 'inputs' you receive (sound, images, feelings, scent, etc), and combining those with memories and experiences to synthesise new combinations. The machine knows nothing about purpose, quality, etc. It just continuously comes up with all kinds of connections and weird combinations, almost as if you're dreaming. The creative engine works with pictures, metaphors, and vague ideas. Most of the things it outputs seem not directly useful. And that's why people tend to ignore the machine, and never learn to put it to its full use.

It's just very tempting to judge the output of the machine on face value. Doing that, will mean that you stat thinking things like: 'This is a bad idea! I have no idea what it means. I need to do better! I need to get better ideas!'. It's tempting to try to control it, to use willpower to force it into becoming 'more efficient'. And it's easy to dismiss the output as useless, to think that it is broken, or needs to be recalibrated, to think that you're simply 'not creative'.

Originating in Improv Theatre, the 'Yes And' exercise is a great way to help you stop blocking yourself (and others) in the creative process.

In fact, whenever you judge new ideas, the output of the creative engine is blocked. The trick to becoming more creative is simply to get out of the way, and to stop blocking the machine.

> If only we could pull out our brain and use only our eyes.
>
> — Pablo Picasso

The easiest step to help you stop blocking, and making better use of your creative engine, is to work in batches. First, let your creative engine run full speed for a while, stacking up a ton of ideas of variable quality. Then, use your critical mind and go over each the ideas, trying to

discover how it can be useful, selecting the most interesting ones. Don't mix these two modes of thinking!

This ‘batching’ is the concept behind the ‘diverging’ and ‘converging’ that is used in design thinking. The creative batch is where you ‘diverge’, letting loose with tons of ideas. The ‘converging’ happens when you trim the stack of ideas back to the most interesting ones. During your journey you’ll continuously swing back and forth between diverging and converging. Doing that consciously will help you become much more effective.

> Belief in your creative capacity lies at the heart of innovation.
>
> — David Kelley, IDEO

Pre-load your Creative Brain

Another important realisation is, that getting great ideas will take some time. The creative engine may be ‘always on’, and come up with all kinds of connections and associative ideas, it does not necessarily output the best ideas on demand. However, it can still be guided in the right direction. If you feed it a lot of material on for instance the blockchain, it will start to come up with more ideas in that direction. It takes some time to do that. That’s why, after studying up on a subject, your brain will start to come up with random ‘aha moments’ two or three days later. When you’re working on a startup, keep your creative brain well fed!

> You can’t be a creative thinker if you’re not stimulating your mind, just as you can’t be an Olympic athlete if you don’t train regularly.
>
> — Ken Robinson

Important to understand is, that your creative mind needs a balanced diet. Although personal preferences vary, it can’t only work on numbers, or only pictures, or only conversations. Mix those up. The more data you have, and the more diverse that data is (in terms of subjects, angles, insights, image vs audio, etc), the better it’s able to create new connections and come up with new ideas. Your creative mind needs a ‘rich picture’ to work best.

That ‘rich picture’ is the reason you should talk to and observe customers yourself. You should experience their problem in as many ways as possible. That’s the best way to preload your creative mind. Give it some time, and trust that the results will come.

> A lot of people in our industry haven't had very diverse experiences. So they don't have enough dots to connect, and they end up with very linear solutions without a broad perspective on the problem. The broader one's understanding of the human experience, the better design we will have.
>
> — Steve Jobs

Interpret your Ideas

As said, your creative mind works with images, metaphors, abstractions, vague ideas, similar to dreams. And, as some do with with dreams, you need to interpret the results. Don't judge ideas on face value alone, as if your brain is a computer that is supposed to give only right answers. Rather, try to see how that idea can fit, how it can be of value. More often than not, something that seems weird at first turns out to be a stepping stone to a good idea. It's like ideas are pieces of a puzzle, and it's your job to orient them correctly so they fit.

> You don't have to reinvent the wheel; you just give it a new spin. So if you can give a new spin to somebody else's idea, you've done something creative.
>
> — Michael Gelb, author "Think like Da Vinci"

Create Stepping Stones

All the ideas you (and your teammates) have serve as stepping stones to more ideas. Bad ideas can be stepping stones to good ideas. And you'll never know if what you think is a 'bad idea' will trigger a major insight in a team member unless you share it. See the creative process as a fun part of your journey, where you get to have a vacation of the efficiency-based thinking that rules most of your life, and where you can have freedom to come up with anything you like. Below are a few exercises that can help you get started.

> Great things are not done by impulse, but a series of small things brought together.
>
> — Vincent van Gogh

[4.3] Getting More Ideas

This Module is all about generating tons of ideas. In order to find the most interesting, most promising ways to develop your startup further, you're going to have to come up (and dismiss) hundreds of ideas. And in this Level you'll find a few tricks to help you. After all, as you'll see, creativity is a process.

> Creativity is the process of having original ideas that have value. It is a process; it's not random.
>
> — Ken Robinson

Where do ideas come from anyway? How do they begin? I'm sure you know that feeling of 'aha!' when you get a new idea, when something clicks in your mind. And that's the immediate proof that, even if you perhaps think you're not creative, you can come up with new things. If you think about it, I'm sure you agree that you come up with new ideas all the time.

> Creativity is not a talent. It's a way of operating.
>
> — John Cleese

One of the reasons people sometimes think they are not that creative, is because they have been trained to think in terms of 'good' and 'bad' ideas. They are, either consciously or subconsciously, trying to get only 'good' ideas, in a misguided attempt of efficiency. It's basically related to being a planoholic. The human brain does not work like that. In fact, trying to guide or judge your creative process is completely counterproductive. We all have learned behaviours that are actively blocking creativity.

Video: John Cleese on Creativity (short version) (long version)

Added to that is the misconception that creative people have 'only good ideas' that you could never come up with yourself. You can't look into the mind of others, and you can't inspect the thought process that leads to ideas – it just seems like creative people come up with great ideas like magic. In fact, they have simply acquired some key habits that help them create more ideas, and more ideas means the chance of a 'good idea' is much higher.

> Creativity is just connecting things. When you ask creative people how they did something, they feel a little guilty because they didn't really do it, they just saw

something. It seemed obvious to them after a while. That's because they were able to connect experiences they've had and synthesize new things.

— Steve Jobs

[4.4] Exercise: Creativity

The point of this exercise is to get your creative juices flowing.

- Materials: timer, marker, sticky notes

Set your timer for two minutes.

In that time, come up with as many ways to use a brick as possible. That's right, a common brick.

There is one trick to it: anything goes! 🚀

[4.5] Starting Points for Innovation

In an ideation session, it helps to get a head start. There are techniques that can get the creative juices flowing a little faster. They help you associate and come up with new ideas based on what is already out there. In this module, you can find tools based on some of these techniques.

- **Customer Centric Innovation -** Start from what you know about your (potential) customers. The Creative Matrix works very well to find ideas around customers.
- **Epicenter Based Innovation** - Start from the strong points in your current business model. What are you good at? This is something you can use when creating trigger questions for the Wall of Ideas.
- **What If Questions** - Start with a list of questions that trigger your associative powers. What would Richard Branson do?
- **Trend Based Innovation** - Extrapolate emerging trends to come up with new combinations
- **Standard List of Ideas** - In many ideation sessions, a lot of effort goes into coming up with the same ideas over and over again. Why not use a list of ideas to get you started?
- **Business Model Patterns -** Looking at Business Models, you can see the same patterns come up time and time again. When you have an idea of the problem you want to solve, you can use a list of Patterns to quickly come up with new potential business models.

[4.6] Tool: Wall of Ideas

- **Materials**: Lots of coloured post-its, markers
- **Time**: 20-30 minutes
- **Difficulty**: Easy
- **Number of people:** 3-10

The purpose of this tool is to fill up an entire wall with the ideas generated by a team in a short amount of time.

This technique uses **trigger questions** to get the creative juices flowing. Asking 'what if?' is a powerful way to fill a wall with great ideas. Ask the trigger questions to your team in a fast pace, challenging each person to create lots of ideas.

Using time pressure and a sense of competition (who added the largest number of post-its?) make it easier to shake any creative blocks. In groups of around 10 people, it is doable to reach more than 200-300 ideas in half an hour! From those ideas, there will always be a few that are truly new and interesting. You just need to get past the ideas everyone else already had first…

Tip: To incentivise people to generate more ideas, assign a point for each sticky note. The highest total score wins.

Asking people to describe their idea as they fasten their sticky notes to the wall is a great way to get everyone, from the introverts to the extroverts, working together creatively and feeling a sense of achievement. As each team member adds ideas to the wall, the rest of the team will no doubt come up with new ones or point out ones that are funny or interesting.

Step 1. Prepare

The wall of ideas requires preparation. First, decide on a list of trigger questions that you're going to ask the team in rapid succession (one every 30 seconds or so). Use the What If questions list supplied with the course to get you started, taking out the ones that don't apply to your business. You can find a selection of trigger questions to start with below.

Step 2. Trigger Questions
Good trigger questions help you make new connections, and help you to think in a '**what if**' mindset. It is perfectly possible to make trigger questions based on for instance your business model, customer journey, persona, or vision. The process will be always the same, and it will help you come up with a lot of options. You'll probably need around 20-40 questions at least.

Use your existing business model canvas, feedback from earlier experiments, design criteria, context canvas, etc. as fodder for creating new questions. If, for instance, you sell a product today through retailers, what would happen if you sold it directly to customers through an online channel? What would that look like? You get the picture.

In the course materials you'll find a list with 200+ trigger questions.

Step 3. Diverging: Asking Trigger Questions
Have the team members sit individually, with a stack of empty post-its and a good marker. Explain that when the exercise starts, you will ask a question every 10-15 seconds or so. They should write down everything that they think of, and fill as many post-it notes as possible. At this stage, there are no bad ideas. Every idea is a stepping stone that leads you to the next.

Then, when everyone is ready, set a timer for **15 minutes** (you can always do a second run, it's better to do two short runs than one longer one). Let the timer tick down, and keep asking trigger questions every 10-15 seconds. Slowly repeat the trigger questions a couple of times, or come up with variations on the spot.

Tip: When people seem to not write, or get stuck, remind them that it’s about getting as many ideas as possible in this stage. Judging comes later.

As the trigger questions are asked, each person will simply write whatever comes to mind on a sticky note using a permanent marker. By the end of this exercise there should be a pile of at least as many sticky notes as there are questions in front of each participant.

Step 4. Sticking it on the wall

Once the questions run out, have everyone stick their sticky notes to the wall, one at a time, calling out the idea. Make sure everyone is clear about what’s been added. Don’t worry about organization too much at first, but whenever someone had the same idea or a similar one, try to stick them in the same general area.

Step 5. Converging: Clustering your ideas
There will be way too many ideas on the wall to make sense of, so the next step is, to organise the ideas into a maximum of ~5 high-level clusters.

You can define the clusters beforehand, or you can use affinity mapping and let them emerge.

Have the team members work on the clustering together, and **silently** cluster them. The point is

that they do not talk or discuss the ideas, but simply move them around. If you notice a sticky note that can't find a good home, put it to the side, or agree to disagree.

These clusters are the starting point of your mini-propositions.

Step 6. Next Steps
When you're done clustering, record your result. Photos make it easy to do that. Send them around to the team and don't forget to keep them informed of future progress!

Example: Robinhood

'What if... we don't ask a transaction fee?'

The founders of stock trading app Robinhood came up with a novel approach that made investors very reluctant to invest in the early days of the startup. It also helped them grow to a 5.6 billion Dollar valuation. Seems they understood their customers better than the investors did!

Full story on Business Insider

[4.7] Tool: Creative Matrix

- **Materials**: Large sheet of paper, post-its, markers
- **Time**: 20-30 minutes
- **Difficulty**: Easy
- **Number of people**: 3-5

The creative matrix is an alternative way of getting to a large collection of new ideas quickly. When you're finding that everyone's ideas are falling in and around the same areas of exploration, it's time to expand the boundaries of your thinking. This is a perfect time to use a creative matrix.

How to use the Creative Matrix
The goal of ideation is to expand the thinking and ideas of everyone on the team, to create something that is greater than the sum of its parts. However, without context and practice, most of us have a tough time expanding beyond what we know (or came up with in the shower).

The creative matrix was designed with this in mind. Essentially, the creative matrix is a tool that will help spark new ideas at the intersections of discrete categories. This tool is all about divergent thinking. Best of all, you get to design your own creative matrix based on your design criteria, the market you play in, or the customers you serve (or wish to serve).

Step 1. Setup

To design your own creative matrix, draw a grid on a whiteboard or poster paper with no more than five rows and five columns. Give it a topic or a central "how might we...?" question.

For each of the **columns**, designate a **customer segment** (existing or new). For each of the **rows**, designate a **particular technology, need, or value proposition**. You might opt to designate the last column and/or row as a wildcard category, for placing open ideas that don't fit in any of the cells.

Step 2. Diverge
With your matrix in place, it's time to ideate! Using sticky notes, have each person randomly and rapidly add as many ideas as they can come up with to the cells in the matrix. Words are good. Pictures are better! The goal is to fill in every single cell in the creative matrix with at least one idea. You're done when all the cells have been filled!

Tip: To incentivise people to generate more ideas, assign a point for each sticky note. The highest total score wins.

Step 3. Converge
Once every cell has been filled in and the time limit is up, it's time to review everyone's ideas. Have the team huddle around the create matrix as if it were a painting.

Once everyone has had an ample chance to look at each other's work, have each person call out their favourite ideas (or top two).

From there, as a team select the ~5 most promising ideas to move forward.

[4.8] Tool: Business Model Patterns

- **Materials**: Large sheet of paper, post-its, markers
- **Time**: 20-30 minutes
- **Difficulty**: Medium
- **Number of people**: 1-3

How do you come up with new ideas for business models? Where do ideas come from? And how do you know that you've covered all your bases when coming up with ideas?

In ideation workshops, sometimes it feels like throwing darts on a dartboard while wearing a blindfold and looking in the wrong direction. It's hit and miss at best, as you're dependent on the experience and personal point of view of the people in the room.

What if you spent the time to come up with ideas but simply missed a great idea because it wasn't in your personal frame of reference? Do you want to make your innovation process dependent on coincidences like that?

What if there was a way to circumvent this problem? What if you could use *data* to come up with new ideas?

Well, here is a trick: **use Business Model patterns** to come up with new ideas.

(TL;DR: Download the full list of 100+ patterns for free)

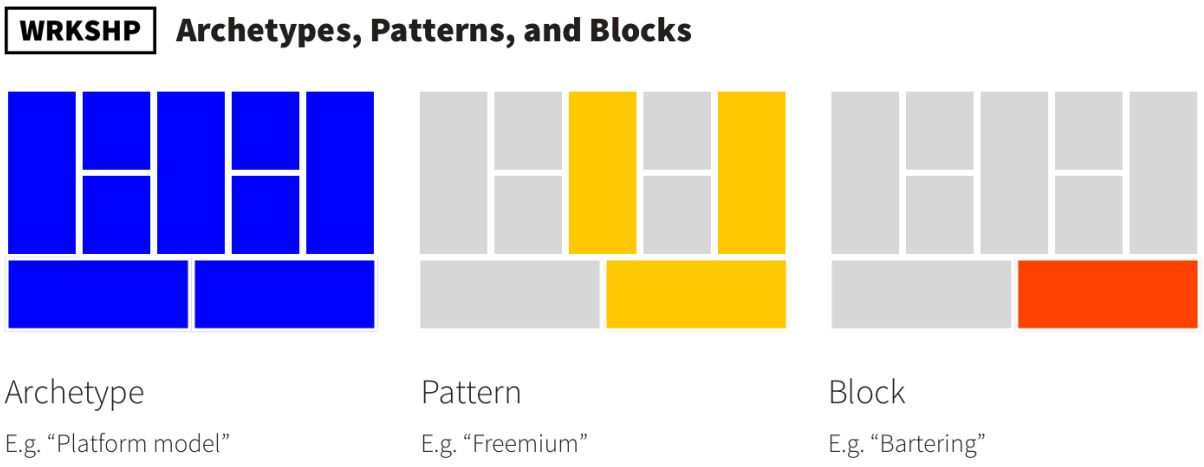
Business Model Patterns

If you look at various business models, it won't be long before you start to see different patterns. The models for Uber and Lyft are quite similar. The business model of Google Search looks a lot like that of Bing. The butchery and the bakery in your street have similarities.

For those of you that know the Business Model Canvas, this concept should be familiar territory: The book Business Model Generation already lists out some of these patterns, most notably the Multi-Sided Platform and Freemium. And there are many more patterns to use. St. Gallen's Business Model Navigator lists a total of 55 different patterns.

When I started to go over business models that I found in the wild, I came up with even more than these 55 patterns. So, clearly, it turns out that there are a lot of business model patterns that can be found.

Organizing these patterns into some kind of comprehensive framework is messy, but I have attempted to make a rough categorization: ‘Archetypes’ describe a complete business model. ‘Patterns’ describe how a few business model blocks work together — think of the freemium pattern, or the multisided platform pattern. ‘Blocks’ describe even smaller units, that can combine to create patterns — think of a specific revenue model.



Besides this, there is another category, which I call ‘strategies’ (which is a bad term, and I’d love to find a better one.) They can be applied over the top of a business model. Think ‘go to market strategy’, or ‘customer referral strategy’. They define *how* elements of a business model work together.

For each of these categories, I keep a list with examples that I use to speed up the ideation process.

How I use Business Model Patterns

1) ‘Steal’ patterns

I use Business Model Patterns for ideation in two different ways. First, I look at existing businesses, and try to ‘*steal’* parts of their business model.

I ask myself: ‘what if I took that part from their business model and stuck it onto the one I’m working at?’

Look at other interesting companies, and ask yourself what you can learn from them. Figure out what patterns they used that are interesting to you. What if your business operated like Amazon? Or like an NGO? What can you learn from Facebook? Or from your direct competitor? Start keeping a list of interesting patterns that are relevant for your sector or business.

The benefit of this is that it forces you to go out and look at new business models, which can be inspiring in itself, and it gives you a new collection of examples to ‘steal’ from.

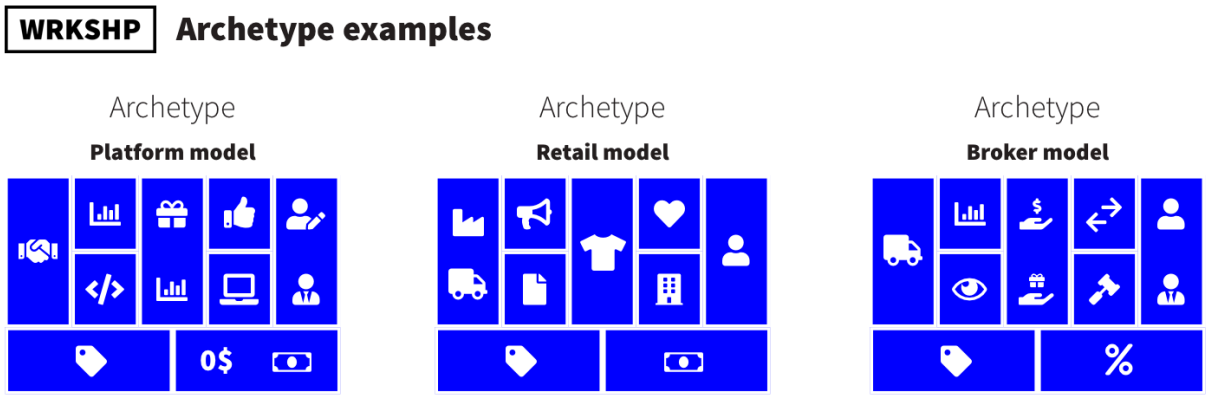
(Side quest: are you able to draw out the business model of your direct competitor from the top of your head? You’d be surprised how hard that can be. It’s a great place to start!)

2) Use the list

The second thing I do is look at my list, and for each entry in the list try to **find a way in which it applies** to the situation at hand. I just go through the entire list, and for every option see how I can make it fit. That usually gives me around 10–20 new ideas easy.

Archetypes

Archetypes describe a **complete business model**, on the value creation side as well as the value delivery side.



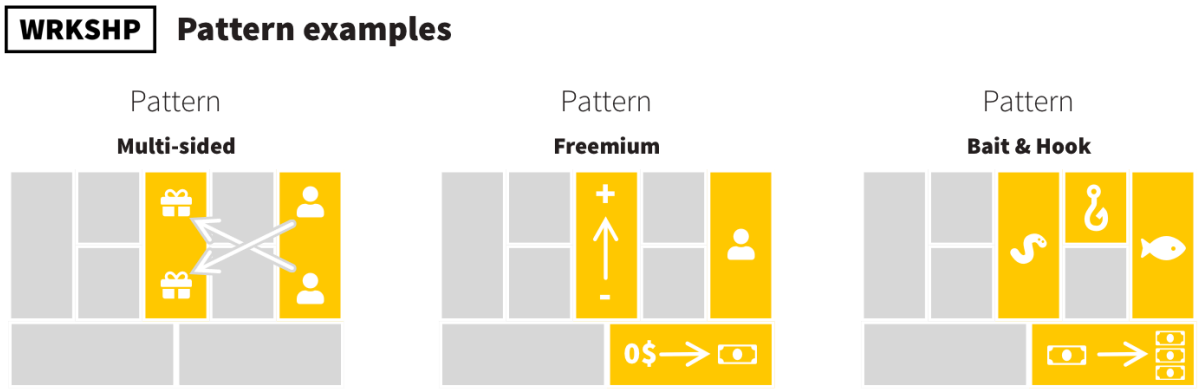
Business model archetypes

Examples:

- Retail model — the typical model of a retail operation
- Consultancy model — the typical model of a consultancy firm
- Broker model — the typical model of a broker
- …

Patterns

Patterns describe multiple parts of a business model **that work together**.



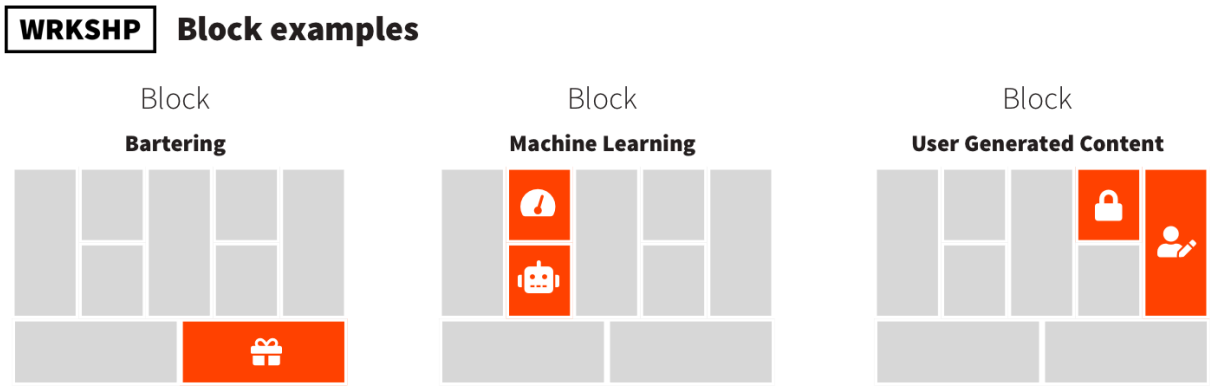
Business model patterns

Examples:

- Multi-sided platform — multiple value propositions for multiple customer segments that interlock
- Freemium — a free value proposition drives a paid one
- Bait & Hook — Give out a cheap ‘bait’ and cash in on the ‘hook’
- …

Blocks

Blocks are patterns for a smaller part of a business model. (This is currently the least well-defined list, as there are so many different options — additions are always welcome!)

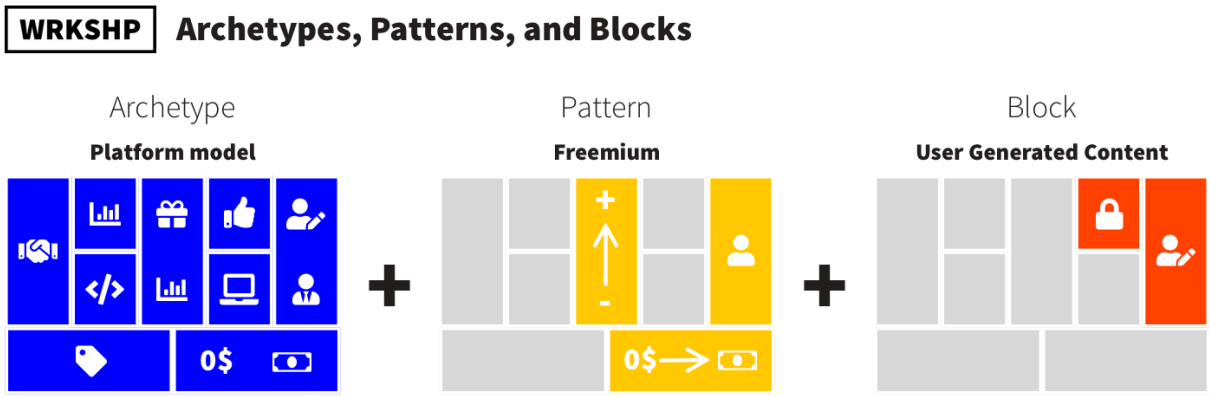


Business model blocks

Examples:

- Revenue Models — e.g. Freemium, Saas, Bartering
- Marketing Models — online marketing, direct marketing, etc.
- …

I use these patterns as Lego blocks and put them together to build new models. It is almost as if you can 'layer' different options on top of each other to create new combinations. Pick an archetype, then add a Revenue Model building block, and a Channel building block, and you have a new combination.



By allowing yourself to play around with patterns and building blocks you allow your creative mind to take over and your analytical mind can take the back seat for a while, until it is needed.

Some interesting entries on the list (where would you categorize them?)

- Anything as a Service (AAAS)
- ‘Cut out the Middle Man’
- 100% Luxury
- Broker
- Freemium
- Matchmaking
- Bait & Hook
- Inverse Bait & Hook
- Razor & Blade
- Bottom of the Pyramid
- …

Can you use a ‘broker’ archetype for your idea? Can you use a ‘freemium’ pattern? Can you use a ‘land grab’ strategy to get market share? Can you combine multiple patterns and building blocks? And what archetypes and patterns do you use in your organization right now?

Using this list will at least make sure you have considered many of the most successful patterns for your business.

The full list is included in this course.

Stepping Stones

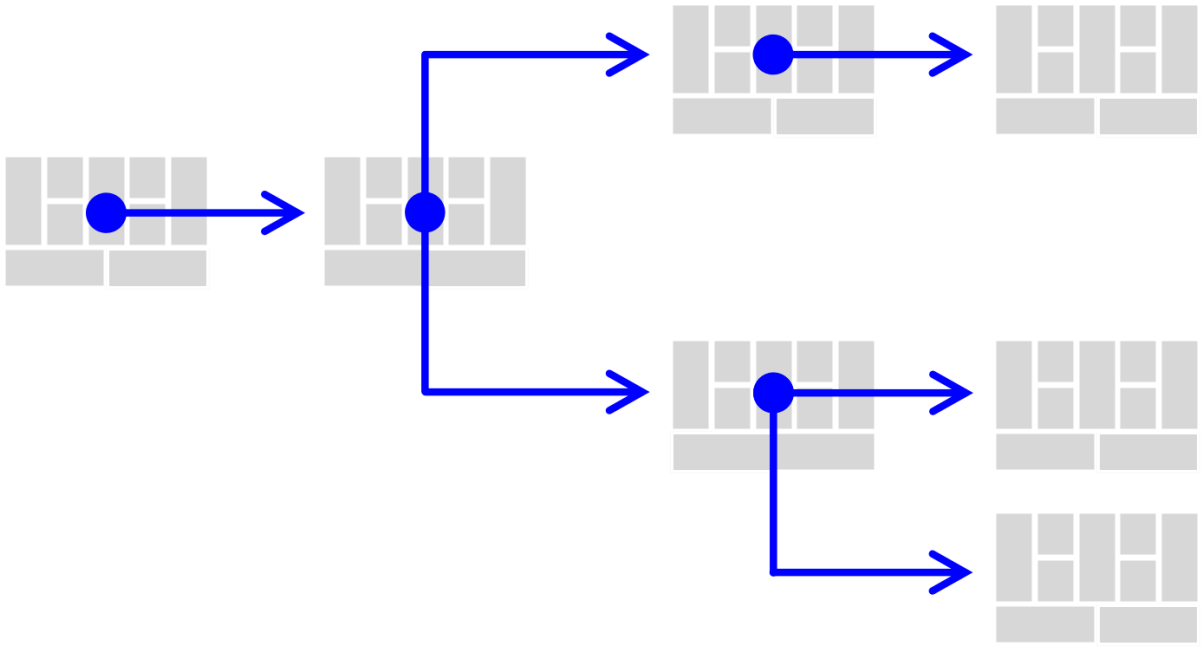
One last thing that comes to mind when looking at these patterns is the idea that business models are connected as ‘stepping stones’. It is possible to pivot from one business model to another, that is similar but has a few extras.

When I have gathered my ~5 ideas that I got from working through the list, I usually find myself organizing them in a series of stepping stones.

Rather than starting with the ‘end game’ business model that is built from multiple patterns, it makes sense to see if you can come up with simpler models that lead toward it in a logical way.

Working backward, you eventually end up with a relatively simple model that you might implement right away, and a few decision points where you can experiment with the next level of complexity and forms the basis of business model experiments.

WRKSHP **Business Model Stepping Stones**



Example:

Let's say you are really excited about implementing an online store model and want to combine it with a subscription pattern like Amazon does with prime. The step before that is making the store itself work at scale, with 3rd party sellers, and the step before that running the store with your own products. These could be logical stepping stones. Each of these models is a step up that allows you to move to the next stepping stone. Shortcuts might not work.

Reading List Module 4

Want to know more about creativity? Here are some resources!

Video

- John Cleese on Creativity - Full version (30 minutes) (Youtube)
- David Kelley (IDEO) on Creative Confidence, TED (12 minutes)
- Karen Tilstra on 'Yes And', TEDx (18 minutes)
- Vincent Walsh - Neuroscience and Creativity (18 minutes)

Books

- A Whole New Mind - Dan Pink (Amazon)
- Blink - The power of thinking without thinking - Malcolm Gladwell (Amazon)
- Thinking Fast and Slow - Daniel Kahneman (Amazon)
- Business Model Navigator - 55 models that will revolutionize your business - Oliver Glassmann, Karolin Frankenberger, Michaela Csik

More Reading & Watching

- Tim Ferriss, Gary Vaynerchuk, and Seth Godin on Creativity (The Next Web)

[5] Module 5. Filtering Ideas

he last module has probably left you with somewhat of a problem.

The chances are, you have generated hundreds of possible options. And once you generate hundreds of different ideas for your business, how do you choose which ones to work on first? How can you make an informed choice? What are the tools you can use to help you?

[5.1] Filtering Ideas

The last module has probably left you with somewhat of a problem.

The chances are, you have generated hundreds of possible options. And once you generate hundreds of different ideas for your business, how do you choose which ones to work on first? How can you make an informed choice? What are the tools you can use to help you?

This module helps you to converge and make decisions, by presenting a few tools you can use to rank and rate your ideas in a more or less objective way. Not to give them a stamp of approval, but rather to seek out the ones that you should validate first, so you can learn from your customers.

[5.2] Filter Techniques

The filtering techniques in this module are selected to be useful for a larger amount of ideas at once.

- **Clustering** - Rank your ideas in order of desirability with your team, and have your customers do the same
- **Sorting** - Rank your ideas in order of desirability with your team, and have your customers do the same
- **Risk / Reward Matrix** - Plot ideas in a quadrant depending on how risky and how profitable they might be
- **SWOT** - This one is well known, make a strengths/weaknesses analysis of the ideas and plot them in a matrix
- **Mini Propositions** - Distill clustered ideas into quick propositions that can be validated
- **Design Criteria Scorecard** - Score the mini propositions or ideas you came up with against your Design Criteria and see if they fit your vision and point of view

[5.3] Tool: Affinity Map (Clustering)

- **Materials**: A lot of ideas to cluster
- **Time**: 10-20 minutes
- **Difficulty**: Easy
- **Number of people**: 3-5

The 'Affinity map' is a way to organize ideas quickly without imposing an implicit structure. The organization 'emerges' from the ideas.

How to use the affinity map
Starting with a lot of ideas (post-its, cards, or written on another type of 'movable' medium), you and team members cluster them by affinity. Ideas that are more alike end up together - but the way in which they are alike does not need to be specified. This allows associative relations to form.

Step 1. Place the ideas
Place all of the ideas on a surface, in a random order. Make sure the ideas are all visible and readable, and that you have plenty of empty space.

Step 2. Cluster
Take around 5-10 minutes and have the team move the ideas to cluster them, with the purpose of moving similar ideas closer together, ending up with 3-5 clusters.

Note: Something that works really well is to do 'silent clustering', where team members don't talk about the choices they make, and don't communicate. They simply move post-its back and forth.

When people keep moving a post-it back and forth, step in and either agree to disagree or put the concept aside for discussion.

Sometimes you need 2-3 rounds to get through, it is better to have multiple short rounds than one long one.

As a facilitator, try to see if the clusters are all worked on sufficiently. If there are some concepts that don't find a 'home' in a cluster, that's ok, simply allow for a parking lot.

Step 3. Name the clusters
Have the team label each cluster, focusing only on what is inside the cluster. The name should describe the cluster.

Step 4. Next steps

Now that you have 3-5 clusters that are named, you are ready to make mini propositions. If you get stuck on too many ideas per cluster or too many clusters, use the risk-reward matrix or sorting to make more sense.

[5.4] Tool: Sorting

- **Materials**: Ideas on post-its
- **Time**: 20-30 minutes
- **Difficulty**: Medium
- **Number of people**: 3-5

When there are a lot (>5-7) of competing concepts or ideas to choose from, the human brain has a hard time. To make it easier to choose, sorting can help.

Sorting or card sorting allows you to organize a cluster of unorganized items into an ordered list according to some criteria.

For instance, you might order ideas based on their potential market size, or their perceived risk.

The way it works is that you pick randomly any two ideas, and place the one that best corresponds to the criteria you chose to the top, and the other one on the bottom. Then, pick another idea, and see where it should go relative to the first two. Keep doing this until you have organized the entire collection of ideas.

Card sorting can work very well for 'non-analytical' orderings as well, such as questions around branding, or how much an idea excites a team member.

Note: Card sorting is basically a one-dimensional version of the 2x2 matrix that is used in the Risk Reward matrix.

[5.5] Tool: Risk Reward Matrix

- **Materials**: Flip over paper, coloured post-its, markers
- **Time**: 20-30 minutes
- **Difficulty**: Medium
- **Number of people**: 1-5

Once you have brought back your wall of ideas to initial clusters you may still face over 10 different ideas that all might be worthwhile to pursue.

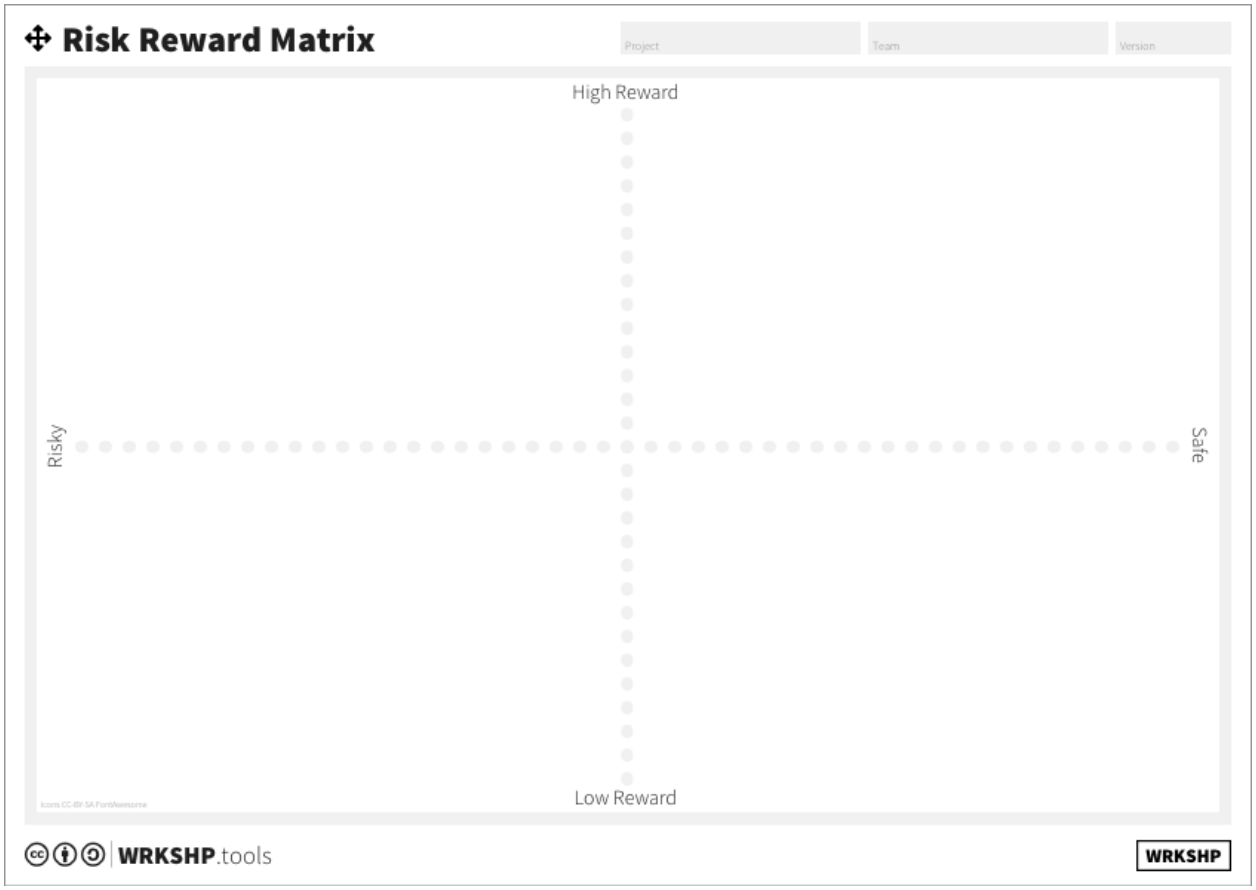
To make it easier to structure them and select promising ideas, it makes sense to use some kind of comparison tool. The Risk-Reward Matrix is such a tool.

How to use the Risk-Reward Matrix
Tools that are very suitable to do this for a lot of ideas are tools that visualize some of the characteristics of each idea. A 2x2 matrix is a very good way to do this. It can hold a lot of data and make it easy to see clusters that are interesting.

A 2x2 matrix allows you to plot different items and score them on two axis simultaneously. (Using different color post-its you can even score three different criteria). In the case of the Risk-Reward matrix you score each idea on the (perceived) risk vs the expected reward.

'Risk' here should be taken to mean the estimated probability that the project will fail, i.e. it is an estimate of how hard you think it will be to pull it off. Of course this is just an estimate, and you can't know the truth before you try it, but it is interesting to see if there is consensus in the team and what the estimates are.

Note: There are many other combinations of axis that work well, such as feasibility vs reward, level of competition vs reward, or time to market vs reward.



Step 1. Plot your ideas

Place all of the ideas from your list (from a long-list or from the clusters in your affinity map) on the canvas in a random spot.

Step 2. Silent positioning

Have the team members spend 5 minute silently moving the post-its. No discussion! Just pick up post-its and put them where you think they belong.

Note: if there is a lot of back and forth for a post-it, either agree to disagree or put it aside for discussion

Note: If a lot of post-its end up in the same quadrant or bunched up, challenge the team to be more selective. Have them mentally 'stretch' the space in the quadrants until they can make a better differentiation.

Step 3. Step back and discuss

Have a guided discussion about the position of each post its. Are there any surprises? Were

there any post-its in contention?

Step 4. Select 3-5 ideas
What are the most interesting ideas? Are there any ideas that are risky for others, but not for you? Is there a low-risk, high-reward option? Does the team agree on the direction?

The goal is to pick 3-5 ideas that you think are most promising to continue with.

Step 5. Next steps
Using the 3-5 ideas, use the SWOT analysis or the design criteria scorecard to further filter.

CHECKLIST
✅ You have plotted your ideas in the matrix
✅ You managed to get clear distinctive results for 3-5 ideas

[5.6] Tool: Mini Propositions

- Materials: Large sheet of paper, post-its, markers
- Time: 20-30 minutes
- Difficulty: Medium
- Number of people: 1-3

This tool will help you to flesh out the clusters of ideas you have come up with previously and to make them presentable so they can be shown to potential customers very quickly. This means you'll be able to start gathering data on what people think about your ideas almost immediately. That means you'll be using early validation to help you guide your selection process.

It allows you to get a clear picture of what the ideas you created could become, while still postponing deciding on one single idea.

The point is to try to explore the most interesting aspects of the ideas you came up with in isolation, by making simple (but compelling) propositions that focus on those interesting aspects and leave out everything else.

Example
Let's say you are working on an idea that will help people to travel more efficiently. You have done the Wall of Ideas exercise and have come up with a ton of ideas, clustered into a number of clusters.

One cluster focuses on ideas around scheduling and journey planning. In the cluster there are ideas that are broad and work for all travelers, but you have also come up with a few ideas that are targeted specifically at busy executives.

A second cluster focuses on ideas around a trend you have observed, namely social travel and ride sharing.

For cluster one, you decide to take the focus on the executives to the extreme, and you come up with a virtual assistant that will track and predict your movements 24/7, and keep you on schedule.

For cluster two, you decide to focus on the social aspect of traveling and you come up with a mini proposition of an app that will always allow you to find like-minded travellers nearby.

Note that in both cases, this proposition is **not** aimed to be a valid business model. That is not what you are testing at this moment. What you are trying to do is to see which of the potentially interesting ingredients you have come up with has the most potential, and how customers respond to it. By doing this in isolation you make it much easier to focus the conversation.

Later, you'll face the task of balancing all of the features you have come up with into one coherent, overarching value proposition. That is very difficult. It will help you a lot to focus first on small aspects and learn how people respond to them. Perhaps some resonate strongly, even if they require adjustment. Perhaps others that you felt confident about before do not strike a chord with customers at all. It's better to find that out right away

Example:
For a cyber-security proposition, we came up with a certificate that small business owners could get when their security was above a certain level. From initial data it seemed that this would be a sure bet, and we expected entrepreneurs would be interested in this. When we made the mini proposition, and tested with actual customers, we found out that they didn't like the idea at all. They strongly preferred another mini proposition that we decided to include only as a wildcard.

How to use Mini Propositions

Once you have created ~5 main clusters of ideas, it's time to create 'mini propositions' that you can use to test with your customers or users.

The basic idea is, to describe each of the ideas behind the clusters in 3-5 lines of text, and a few pictures that you can show to customers.

Step 1. Label the clusters
Go over the clusters on your wall of ideas. Can you already picture what the idea in the cluster looks like to a customer? Try to give each cluster a descriptive name. Write it on a big post it, and put it on a fresh piece of wall (keep some space around it).

Step 2. Describe each proposition
Answer the following 8 questions for each cluster:

1. What is the customer segment?
2. What exactly is the problem you solve?
3. What is the most important pain your customers have that you take away?
4. What is the most important bonus your customers get from using your product/service? This is your most important 'gain'.
5. How do you solve it? What is the product or service description?
6. What is the unique aspect of this idea?
7. How do they purchase it? Do they pay once? Or a subscription? How will you make money?
8. Give each of your propositions a name

Put it into a Mini Proposition statement like this:

Our (product)
helps (customer type)
who experience (problem)
to reduce (key part of problem)
and increase (key benefit of solution)
through (solution)
for a (type of transaction)

(adapted from the Ad Lib Value Proposition by Alex Osterwalder et al. in Value Proposition Design and the value proposition statement introduced by Geoffrey Moore in Crossing the Chasm)

Example
"Our journey assistant helps busy executives who need to travel to multiple meetings every day reduce lost time and stress and stay on schedule effortlessly through a mobile journey assistant for a monthly fee of 5€"

Step 3. Be as varied as possible
The point of this exercise is to get possible mini-propositions that could be a solution to the problem you want to solve that are as different as possible. Each cluster should become as different as possible from all the other clusters, in terms of customer segments, specific take on the problem, how it's solved, how they pay, etc.

The idea is, that you can test how your customers respond to these different options in isolation, so that you get a better idea of the direction you want to go next.

Tip! Remember that the goal is to figure out what possible solutions to the problem **resonate with your customers**, not to see if one specific solution is the right one!

That also means, that you're perhaps coming up with some mini-propositions that are not completely in line with the design criteria you put up earlier. That's ok. Don't worry, you'll never going to be forcing yourself down a path that clashes with the 'why' you have formulated earlier. But it is good to see what happens if you explore the boundaries a little. Who knows, you may learn something from your customer feedback that you can transform into something that does fit exactly with your design criteria.

Step 4. Flesh out the propositions
Go over each proposition and try to find:

- Examples of similar products or services (How are they similar? How are they different?)
- Come up with an example that describes how it is used by a customer. How does it work?

Step 5. Next Steps

Do a round of voting with the team on what you think the most promising of these mini propositions is. Pick the top 3 to validate with customers and see how they respond. For more information on how to do that, see Module 6.

Checklist
Your mini-propositions are done when:

✅Each mini proposition has a name
✅Each mini-proposition has a 3-5 line description
✅Each mini-proposition has an example

[5.7] Tool: SWOT Canvas

- **Materials**: Flip over paper, coloured post-its, markers
- **Time**: 20-30 minutes
- **Difficulty**: Medium
- **Number of people**: 3-5

Once you have made an affinity map and clustered your ideas, it is time to start filtering them down. There are many ways to do this, some work best for a small list of ideas, others work well for a large list.

The SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is a traditional, but very effective tool to zoom in on one idea and really find out its strengths and weaknesses. It can be made to work well with the design criteria scorecard in that respect.

Many of you will know how to do a SWOT analysis, but here I will give a brief overview.

How to use the SWOT analysis
To effectively do a SWOT analysis you need a short list (3-5) ideas to compare. For each entry, going through the analysis will take a bit of time.

Internal and External Factors

On the vertical axis, the SWOT analysis splits internal and external factors working on your idea or situation. Internal factors are on the top of the diagram: strengths and weaknesses. External factors are on the bottom: opportunities and threats.

Positive and Negative Factors

On the horizontal axis, the SWOT canvas discerns positive and negative factors. Strengths and opportunities are positive, and weaknesses and threats negative.

Step 1. Strengths and weaknesses

Go over your idea and come up with at least 5 strengths and 5 weaknesses. To make this easier, go over the different aspects of the idea you previously mapped to a cluster, and refer back to your earlier customer research.

Tip: to combine multiple ideas in one canvas, use different color postits per idea.

Step 2. Opportunities and Threats

Go over the opportunities and threats that face your idea. What are opportunities or threats

coming from the market, economy, competition, new technology, demographics, and changing customer preferences? What are the big uncertainties you face?

Step 3. Compare

Compare the different ideas. Try to see if ideas have strengths that cancel out weaknesses, and that they have strengths that fit well to make use of opportunities.

A good way to do it is to give points. Strengths get +2, weaknesses -2, opportunities +1, and threats -1 point. Compare the scores of different ideas and see if (and how) they make sense.

Step 4. Next Steps

Come back to your SWOT and compare the score with the next iteration of your idea. Did you manage to improve it? Did you cancel out negative points?

CHECKLIST

✅ You have filled the SWOT canvas for each of your ideas
✅ You calculated the score and compared
✅ You have an idea how to cancel negative aspects

[5.8] Tool: Design Criteria Scorecard

- **Materials**: Flip over paper, coloured post-its, markers
- **Time**: 20-30 minutes
- **Difficulty**: Medium-Hard
- **Number of people**: 1-5

Once you generate hundreds of different ideas for your business, how do you choose which ones to work on first? How can you make an informed choice? What are the tools you can use to help you? The design criteria canvas can be used as a score card with which to evaluate potential new business model options.

The first step is to cluster your ideas. That helps you to see patterns in what you have created. How can you organize them? (Perhaps, doing this will show you some obvious gaps and combinations that you haven't covered yet.)

For each cluster, try to define a mini proposition that defines your business idea. That should leave you with maybe 5-10 ideas that you think have the best chances for success. That is a good number to create mini propositions for so the ideas are a bit more developed. Don't spend too much time on each of them, it should take you around 15-20 minutes to sketch a business model canvas for an idea.

Using the Design Criteria Scorecard to evaluate your business model options makes sure that you and your team spend your energy on the right things and don't waste time on endless discussions. Alternatively, when you only find options that are not aligned with the Design Criteria, or there is an option your team loves, but it does not match the criteria, you can take a hard look at your Design Criteria: maybe something needs to change.

How to use the Design Criteria Scorecard
You've come up with some 5-10 possible directions. Besides the feedback from your customers, it's vital to understand how well each of these fits with your own point of view: your design criteria.

To do this, use the scorecard sheet in the course materials.

The sheet offers you a fast and reasonably objective way to find which idea matches with your Design Criteria.

When you create (and update) your Design Criteria, they will contain the must haves, should haves, could haves, and won't haves for your business, based on your vision, analysis of the content, team charter, and any other things you have learned along the way. The Design Criteria are the compass you take your decisions with. So when you want to evaluate a mini proposition

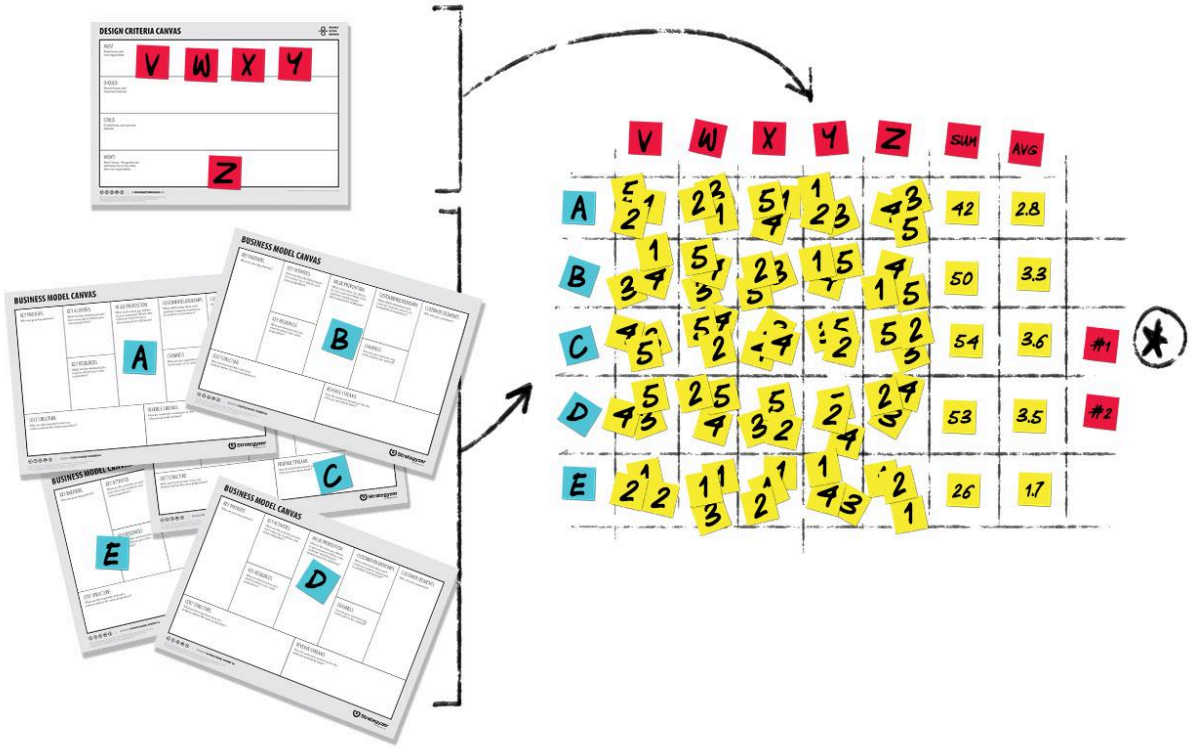
or business idea, you should definitely evaluate it against how well it fits the design criteria.

Example

In the design criteria, you might see criteria that define what you and your team find non-negotiable in terms of:

- Finances and Revenue (perhaps your CEO gave a directive to look for at least a 50% increase in profitability, or a reduction in cost)
- Environmental impact (perhaps your team of founders wrote in the team charter that they want to be 100% renewable)
- Company size (perhaps you want to build a large company, or, in the opposite, find a way to increase scalability)
- Market (maybe you put in your vision that you want to be number one in your target market)
- Other non-negotiables you came up with in the Design Criteria (for instance you want to be known as a great place to work)

Let's say we have 5 of them, as listed above. Let's also say we have 5 mini propositions to evaluate. What we can do now is make a matrix, and give scores for each business model option. The business model with the highest score is the one that is most in line with the Design Criteria, and is the winner. That is the one you should work on first.



Step 1. Prepare the sheet

Using the sheet, and make columns for the different post-its in your design criteria canvas. For each proposition, make a new row.

Step 2. Score your ideas

Ask your team members to stick their voting post-its onto the matrix. For each category, for each business model, you need every team member to add one post-it with a score. It would be best if they would rank the business models 1-5 on each category. (If you want to check if you did it right, the totals for each category need to be the same, (5+4+3+2+1) x (nr of team members))

No Cheating!

The trick to assign scores with your team is to make sure people can't 'cheat' (wether by accident or on purpose) when filling it in.

If you have 5 models, you'll also have 5 scores, 1-5. There are 5 categories in our example, so 5 categories to score. By giving each team member 5 sets of post its numbered 1-5 you can make sure each of them has the same impact on the end result. A '5' means 5 points ('best match'), a '1' means only 1 point ('worst match').

Note: the 'Won't' category also gets scores, and here 1 means: your idea matches well with the 'Won't'; **5 means that it violates the 'Won't'**. So if your 'won't' is 'no advertising', then selling ads would score 5 points.

Now, average the scores. Add up the scores for each of the business models, and divide it by the number of categories. This is your average score. It should now be clear that there is one option that scores better than the rest. This is a percentage score of how well the mini-proposition aligns with your Design Criteria.

Use [this Google Sheet]to make your life easier. Simply copy it, enter your criteria, and score 1 or 0 for each to get a score:

	Must		5	points		Should		3	points		Could		1	points		Won't		-5	points					
Idea	Must 1	Must 2	Must 3	Must 4	Must 5	Should 1	Should 2	Should 3	Should 4	Should 5	Could 1	Could 2	Could 3	Could 4	Could 5	Won't 1	Won't 2	Won't 3	Won't 4	Won't 5	# of criteria	Total Score	Average	Ranking
Proposition 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
Proposition 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
Proposition 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
Proposition 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
Proposition 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%	1

Example of the sheet (not filled in) (A filled example is discussed below)

Step 3. Filter the top ideas
You can filter them from high to low, and in that way get a picture of how well the idea fits with your own criteria.

TIP If you still got results that were too similar, replace all the '5's by '10's and recalculate your result. This will weight the top choices more strongly.

Step 4. Next steps
Use the ideas you found most promising to validate.

CHECKLIST

✅ You have mapped all your Design Criteria to the sheet.
✅ You scored each idea for each criterion.
✅ You have selected the top ranking ideas.

Example of filled sheet

This sheet was filled with an example of a startup in the very early stage, looking to make transport of people or goods more sustainable. They came up with 5 innovation directions and plotted these against their design criteria. In their case the top 3 was "Uber for Solar Powered Cars", "Re-use" (so avoid extra transport) and "Drone delivery". This tool helped them to better navigate the space of possible ideas and to see which would map best to their design criteria.

	Must		5	points		Should		3	points		Could		1	points		Won't		-5	points					
Idea	>> $100 M Potential	100% Eco suppliers	Scalable company	Virtual Office	Patent / IP	Steady growth	International markets	Multiple products	Best work environment	Safe	Online	Work with partners	Additional offerings	Sell data	.	Blockchain	Own assets	Big Initial Investment	.	.	# of criteria	Total Score	Average		Ranking
"Uber for Solar Powered Cars"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0					
	5	5	5	5	5	3	3	3	3	3	1	1	1	1	0	0	0	-5	0	0	225	39	17.33%		1
"Autonomous transport"	1	0	1	1	1	1	1	1	1	0	0	1	1	1	0	0	1	1	0	0					
	5	0	5	5	5	3	3	3	3	0	0	1	1	1	0	0	-5	-5	0	0	225	25	11.11%		4
"Print on demand trucks"	0	0	1	0	0	0	1	1	1	1	1	1	1	0	0	0	1	1	0	0					
	0	0	5	0	0	0	3	3	3	3	1	1	1	0	0	0	-5	-5	0	0	225	10	4.44%		5
"Drone delivery"	1	0	1	1	0	1	1	1	1	0	1	1	1	1	0	0	0	1	0	0					
	5	0	5	5	0	3	3	3	3	0	1	1	1	1	0	0	0	-5	0	0	225	26	11.56%		3
"Re-use and refurbish"	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0					
	5	5	0	0	0	3	3	3	3	3	1	1	1	1	0	0	0	0	0	0	225	29	12.89%		2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	0	0.00%		6

Checklist Module 5

✅ You managed to go from 100+ ideas to 3-5 most promising ideas
✅ You are ready to test these ideas in the real world

Reading List Module 5

Books

- Value Proposition Design - Alex Osterwalder et al.
- Crossing the Chasm - Geoffrey Moore
- 6 Thinking Hats - Edward de Bono

[6] Module 6. Validating Ideas

All those ideas may look super promising, but they are built on a shaky foundation of assumptions. If one or more of these assumptions turn out to be wrong, the whole house of cards can come tumbling down. Validation is about testing those foundations early, before building too much on top of them.

[6.1] What Is Validation?

All those ideas may look super promising, but they are built on a shaky foundation of assumptions. If one or more of these assumptions turn out to be wrong, the whole house of cards can come tumbling down. Validation is about testing those foundations early, before building too much on top of them.

‘Validation’ is a term that is used a lot nowadays. Everyone wants to validate everything, and that is definitely a good thing. The important thing to keep in mind, is that you’ll need to do it in the right way to make sure that your validation results actually mean anything.

There are two ways to look at validating your business idea, you can validate it 'internally' or 'externally'.

When both validations turn out 'good', you have an idea that is worth taking the next steps on.

TIP: Remember that it is about finding holes in your idea, not confirming it! If you spend the time trying to break your idea and you can't, then you're on to something!

Internal Validation
Internal validation is the least time-consuming part of validation, and it basically involves research and pen and paper. To validate a business idea, you can look at market research, you might calculate several business cases, and you could look at benchmark numbers for conversion rates, prices, and so on in your market. In this module, I'll show you the 'back of the napkin' calculation you can make for your idea.

WARNING: because internal validation involves using your own ideas and assumptions, you run the risk of buying into your own story. This can lead to confirmation bias. Try to be critical and check your findings with others.

External Validation
External validation is more involved than internal validation, but it is also way more rewarding. To do external validation means to talk to (potential) customers. This is where you can really challenge your own assumptions and biases. Most of this module involves setting up experiments for external validation. In the early stages of validation, you will probably have qualitative meetings with potential customers. From these talks you will need to draw conclusions about how to progress with your idea, and to do that well you need a clear framework: the experiment canvas.

Watch out for confirmation bias

People tend to interpret ‘validation’ as simply a way of getting feedback to see if they are on the right track. However, while getting feedback and measuring is absolutely the best way to move

forward, there is a warning attached. Don’t try to ‘validate’ your ideas: you’ll run the risk of seeking confirmation bias. Try to ‘invalidate’ them instead!

If you’re not actively trying to find evidence that invalidates your riskiest assumption, you run the risk of missing that evidence. You'll only be looking for confirmation. And that will hurt you later on.

[6.2] Exercise: Back of the Napkin

The first exercise for this module is to use the startup calculator (see link) and crunch the numbers for your startup.

To help you to make the back-of-the-napkin calculations about your business model, we created the Startup Calculator. This is a set of Google Sheets that you can use to calculate important figures for your business.

The Startup Calculator sheet has multiple tabs:

- Intro: Short introduction and legend
- 1 Market Size - calculate your market size
- 2 Growth - growth scenarios
- 3 Funnel - calculate your funnel
- 4 Pricing - pricing scenarios
- 5 Fixed Cost - what is your fixed cost
- 6 Variable Cost - what is your variable cost
- 7 Revenue Prediction - all the above sheets feed into this one
- Bonus: Subscription Business Model Calculator

With the following steps, you can create three scenarios for your revenue predictions.

Step 1. Market Size
To calculate your market size you need to do some research first. In the Netherlands, you can find great data to start with on http://statline.cbs.nl/Statweb/, for the rest of the world, use e.g. https://data.worldbank.org/.

TamSamSom
A method that is used a lot to figure out your market size is TamSamSom.

- **Tam**: Total addressable market: the potential market.
- **Sam**: Serviceable addressable market: reachable market.
- **Som**: Share of market. Sales divided by Sam.

Tam can be big. It's all the people in the area you're targeting that are potentially your customers. They are potentially experiencing a need for your solution. For a movie theater in the Netherlands, that could be all people in the age range of 5 up to maybe 90 years of age. You can use demographic data to find out how many people that is, or business data for B2B.

Sam is smaller than Tam, but still (hopefully) big. It's the number of people from Tam that you can actually reach. In the movie theater example, it could be defined to be all the people in the age range that have bought a movie ticket in the past year. The point is, that you know a bit more about this group, it's defined as people that are actually open to purchasing your solution. To get this data, it pays off to dive a bit deeper, usually into industry related data.

If you're starting a company with a totally new proposition or market, your Sam will start out relatively small: not all your customers will immediately realize that they need your solution. It will be mostly the early adopters out there that you can potentially reach early on.

Som is your share of market. This is a number you'll calculate in a better way below from your growth. In this sheet, it serves to show you how many people a small or larger market share could be.

The Som % you'll enter here is the percentage you aim for in 3-5 years time. A typical high market share is in the 20% and up. Starting companies will rarely if ever make that, unless they open up a completely new market.

Play around with the numbers in the sheet, and make sure to enter the low-mid-high scenario entries. They will be used later on.

Step 2. Growth rate & Starting number of users
The Growth tab is where you create three possible scenarios for your starting number of users, and your growth rate over the coming years.

Starting number of users
This is the number of users you'll have in the first year. These are your starting users. The sheet calculates the market penetration for the scenarios to give you an idea of how big your market share is. Obviously it can never exceed 100%...

Churn

Churn is the percentage of users that will drop out in a year. So, how many customers you'll lose. In order to grow, you'll need to first make up for the lost users!

Threshold
We calculate the average lifetime for a customer here as the time in years after which only half the original users are left. Change the threshold value if you want to use a different proportion

than half.

- **% new users** The percentage in growth relative to the number of users you have. This is the number of new users.
- **% churn** See above.
- **% growth** The resulting growth (% new + % churn)
- **% SOM** Calculated market share.

Step 3. Your Funnel
Ok, so now we got some information about possible market sizes, and an estimate of a starting number of users. Now, we'll start setting up a sales funnel for your customers. Basically, this is a series of stages people go through going from unsuspecting bystander to happy customer. Between each of these stages you can measure a conversion rate. Knowing these rates is a good way to see where your startup should start doing better, and where you're already scoring great.

Pirate Metrics (AARRR)
A great way to visualize the funnel for your startup is using Pirate Metrics. The pirate's

trademark utterance ‘AARRR’ is the acronym for the stages in this funnel:

Acquisition
This is your first stage. People in this stage generally have just come into contact with you, and expressed that they want to stay in touch in some way. They may have signed up for a newsletter, or they have started a free trial. This is what startups brag about when they talk about ‘total app store downloads’.

Activation
This is the next stage. There will be a lot of people that have for instance signed up for a newsletter, or a free trial, but never actually read it or use it. People who activated actually interact with your product. Startups talk about ‘total users’ or ‘total sign-ons’ when they want to flaunt this number.

From Activation the funnel splits in three branches, and users can be in multiple buckets at the same time. They can be in Retention, or in Revenue, or in Referral, or in a combination of those. The conversion metrics to these stages measure different aspects of how happy your customers are.

Retention
A lot of the people who activated, do that only once. The number of people that come back to your service is key to getting to revenue. People that you managed to get to activation but never come back afterward have cost you a lot of energy, and money. This is where you’ll find things like ‘monthly active users’.

Referral
If your users are happy with your product, they’ll start to refer it to their friends and peers. That’s a big plus, since it will help you lower the cost of acquisition tremendously. This is what startups talk about when they talk about ‘organic growth’.

Revenue
So once people use your product and love it, you might be able to even monetize on this. This last metric shows that number of active, paying customers - and once they get to this stage, they’ll probably stick around for a while.

Note: It’s key to understand that there is a direct relationship between the number of people you need to have in your funnel to meet your goals, and the conversion rates you have in the funnel. If you’re able to increase these rates, you’ll need to do much less work to obtain customers!

Conversion rates
Filling in the conversion rates you expect (and you can definitely look up some benchmarks for these) will give you an idea of what the number of customers will be that you need to target with e.g. marketing in order to reach your target starting number of users.

We'll use these numbers in the Variable Cost prediction to estimate your Customer Acquisition Cost (CAC).

Sheet
In the sheet, the number of starting users from the Growth sheet is used to calculate up the funnel how many people (or measurements) you need to get in each stage of the funnel. With a target of 2000 paying customers, using the conversion rates you specified, the sheet calculates how many should be in the acquisition stage of the funnel. As you can see these become big numbers quite quickly.

Step 4. Your Price
The next step is to estimate the price for your product or service. We'll look at a price for a subscription per year. Tip: If you're selling a product, simply change the number of purchases per customer to 1.

To get a better handle on price, ask yourself:

- What do competing products cost?
- What does the problem cost?

If your price is vastly higher, you'll need to come up with a good reason that customers will actually go for that! And it is not impossible, just look at Nespresso.

Step 5. Fixed Cost

The fixed cost is cost you'll need to create your business and your product. It includes development, salaries, rent for office space, etc.

Fixed cost is split in initial cost and recurring cost. Initial cost is everything you only need to pay for once. Recurring cost is things like salary. To keep things simple, we have localised all the initial cost in the first year, but you can easily adjust the sheet to change that.

Step 6. Variable Cost

The variable cost is cost that you make per transaction. You'll need to factor in marketing (Customer Acquisition Cost, CAC) and cost of goods sold, as well as things like maintenance, returns, and helpdesk.

Step 7. Revenue Prediction

The final sheet is where the numbers all come together. This sheet has nothing to fill in, that has all been done before. This is just what the numbers come down to in terms of revenue for the first 5 years.

Warning: Although doing these calculations is important, they are not the truth. This sheet is a kind of Crystal Ball. It's tempting to tweak the numbers and get huge values, and start to think about ordering a yellow Lamborghini. Don't. Instead, try to be realistic, and validate your numbers.

Find some financially inclined colleagues or partners, and have them ask you the nasty questions. How did you come up with these numbers? How could you validate the underlying assumptions?

[6.3] Bring on the Science!

The best way to avoid falling into the confirmation bias trap is to try to be 'scientific' about your experiments. That means, you'll need to follow a protocol, so that each experiment is performed in the same way and you are able to compare the results. It also means, you'll need to take records. That's why we have been asking you to keep a logbook!

Especially while your experiments are still qualitatively, it can be very difficult to interpret the results correctly. Not writing down the results and conclusions will only make that worse.

Not keeping a good log will only mean you'll move around in circles, having the same discussions over and over again as you start to doubt the results of past experiments.

Being able to look back and check your log for the conclusions, and what they were based on, will save you tons of time.

[6.4] Riskiest Assumptions

Assumptions

Your mental model is based on assumptions, there is no way around that. And that doesn't have to be bad: some assumptions may be correct, while others may be wrong, but have little impact on the result.

The correct assumptions and the ones that have little impact are not the assumptions you should waste time on. The ones you're looking for are the assumptions that have a huge impact when they're incorrect. Those are the ones you need to validate.

Riskiest Assumption

When validating, and learning, it's your job to select assumptions to test and figure out a way to create a clear signal that tells you if your assumption was correct. Doing this takes time and effort, so it makes a lot of sense to only do this for the most important assumptions.

So, if you would list all of the assumptions that are underpinning your point of view, and rank them from most important to least important, you'd ideally want to start with testing the most important one. In the Lean Startup, this is called 'The Riskiest Assumption'. It's called that, since, if this assumption turns out to be incorrect, you will need to rethink your entire startup.

Defining Riskiest Assumptions with your team is something you'll do later on, but luckily there is a rule of thumb to follow. Each Level in the Startup Readiness Level has an associated Riskiest Assumption. Only when those are validated, you are ready to progress. They are:

- **Level 1** You are able to define a 'why' and problem to solve that interest others
- **Level 2** You are able to find customers that experience the problem and care about it
- **Level 3** You are able to find solution options that resonate with customers
- **Level 4** Customers really prefer your solution over alternatives
- **Level 5** You can get early traction: people start using your solution
- **Level 6** Customers are willing to pay for your solution (Product Market Fit) and over 40% of customers do not want to stop using your product

A great tool to define your Riskiest Assumption with your team can be found in the tools section on this module.

[6.5] Your Hypothesis

Hypothesis

In validation, the hypothesis defines your assumption in a quantitative way. It makes it measurable. It defines how many people (and from what audience) you need to perform the experiment with, in how much time, and how many of them need to respond positively in order to validate the assumption. You also need to define when you count people as positive.

Example hypothesis

"We show our iphone-powered-cat-products landing page to 20 millennial cat lovers within 2 days."

- If we find more than 80% of them (>16) signs up their email address, our assumption that millennials that love cats are interested in digital cat products counts as validated.
- If we find less than 80% but more than 40% signs up (8-16), the assumption counts as inconclusive, and we should have a good look at the way we performed the experiment.
- If we find less than 40% (<8) signs up, the assumption is invalidated.

> Ideas are cheap, acting on them is quite expensive. — Ash Maurya

[6.6] Define your Experiment

Define your experiment
Now it's time to define the experiment. What are the questions you want to ask? What is the prototype you want to show? What exactly is the result you're looking for?

Try to come up with the simplest possible experiment that will give you a strong signal. Really, trim it down. Come up with questions that elicit a clear response.

This can be more an art than a science, so make sure you try out what you came up with and do some dry runs.

Experiment Protocol
The experiment protocol is often overlooked. This is what ultimately dictates the quality of your results. Setting up quality experiments is a whole different ball game, and in fact it's probably impossible to remove all bias. In this stage, even though defining a better experiment will definitely help you a lot, it's not the point to create the perfect experiment. It's more about doing a good enough job and avoiding the big mistakes.

Some basic guidelines:

- Make sure you define your target audience, and why they are your audience. If you find people for your experiment, make sure you know for certain that they are part of the audience. Don't start 'fudging' to get more respondents.
- Make sure everyone has the same interview questions, prototypes, and other experiment artefacts, that they are in the correct order, and that it's clear which ones need to be answered. Are there questions that are optional?
- Make sure you write down location, time, and the method of contact for interviews.
- Define beforehand how you will score the output of each question. When does a question count as a positive result?
- Define how to tally up the scores and assign a positive / negative / unclear result.
- Following these guidelines isn't that hard, and will get you a long way towards a clear outcome.

TIP: setup a google sheet for you and your team members to use, so you'll capture all the data in one place.

The tool Experiment Canvas dives deeper into this aspect of experiment setup.

[6.7] Prototypes and Types of Experiments

Interviews

To setup interviews, asking questions is super important.

Define your list of questions beforehand. Test your questions before unleashing them on a larger audience. Do people get the question? Do the answers have the information you're looking for? How long does the interview take?

In general, with e.g. street interviews or online surveys, aim for 2-3 minutes max, which means no more than 3-5 questions.

Some good questions:

- When did you last experience <the problem you are curious about> ?
- What did you do to deal with it?
- How much (time, energy, money) does that cost you?
- Have you spent time looking for solutions?

Interviews can of course also be combined with prototypes.

Tools

- The Mom Test - by Rob Fitzpatrick (Amazon)

Offline prototypes

Offline prototypes are prototypes you show where you yourself need to be present to record the results, for instance a paper prototype, or an invision app you can show on your own mobile phone, or a simple 'product box' where you create fake packaging for your product, or for instance simply test a product from a competitor

Building an 'offline' lo-fi prototype, gives you a different angle on your customers. It's a way to observe actual behaviour, beyond answers to questions. Giving a customer something they can touch is a great way to get deeper responses.

Offline Prototype Example: Book Cover Tests
When we were creating the book Design A Better Business, one of the decisions to make was what the cover should look like. And we were not the ones that were ultimately the best judge of that. We left that to actual customers.

First, we photoshopped a number of Amazon pages with competing books, with different possible versions of our cover on it, and showed that to people. This got us a top 3. And, with this top 3, we created 3 fake books where we took a different book and stuck a print of our cover on it.

We put those on the shelves in bookstores, and observed the result. Who would pick them up? Which one was most popular? Once someone picked up the book, we asked questions on why they did so and what they'd expect to find inside.

Tools

- Marvel: An app that helps you do paper prototyping: https://marvelapp.com/
- Invision: another paper prototyping app: https://www.invisionapp.com/
- Maze: an app that takes your paper prototype and gets user analytics on it, as well as a questionnaire. Now you can do paper prototyping online. https://maze.design/
- Product box exercise (innovationgames): https://www.innovationgames.com/product-box/

Online prototypes

Building 'online', digital prototypes is different from offline prototypes in that you won't be observing the results directly. The prototype, for instance a landing page, or a campaign email with a call to action, will have a life on its own, and you'll measure the interactions of the users through something like Google Analytics.

The great thing is, that you'll be able to get quantitative measurements. The hard thing is, that you'll probably need access to a large amount of users to get meaningful results. That means, that you'll need access to an existing online channel with many active users.

Examples of online prototypes are for instance landing pages, email campaigns with a call to action, Facebook ads, linked in posts with a click through, etc. In all cases, you'll present users with an offering, and measure if they interact with it in some way.

Online Prototype Example: Find the need through Facebook
For a startup looking into mobility, we used a very basic Facebook ad campaign, targeted to people in Amsterdam that live in areas where it's hard to park your car.

The ad promoted a new shared mobility service. The point was, to see if they would click on the ad to get to a landing page, with more details, and if we could get them to sign up their email address. The number of email addresses was our validation metric.

We created a fake brand, with a landing page on Squarespace, and a simple advertisement on Facebook, and set a small ad budget.

The ad on Facebook and the landing page were left quite basic on purpose, since we wanted to see if people responded to the basic concept rather than if they liked the branding of the landing page.

People would signup their email address, which we did through Mailchimp. We then used the Facebook, Google Analytics and Mailchimp information to see how the results went.

Tools

- Squarespace Landing page builder (https://www.squarespace.com/)
- Mailchimp Email registration (https://mailchimp.com/)
- Typeform questionnaires (https://www.typeform.com/)
- Zapier: tie all these online tools together and send the results to a Google Sheet (https://www.zapier.com)

[6.8] Finding Respondents

Once you have your protocol and hypothesis setup, it's time to get some respondents together! And, it will definitely take you some time to do this right. Getting a good sized list of people that you can use for validation experiments is vital for future success.

Make sure the respondents are from your defined target audience, and double check if you have enough diversity. If you defined an age range from 20-50, and you interview only 20 year olds, that will skew the results. Also, try to find more people than you need, since there are bound to be a few no-shows.

Tip: try to define an experiment around a channel where your target audience is already present. Offline that could be a physical location, online it could be a specific website, email list, or forum. Do you have access to an existing channel? Perhaps through partners, existing products? Then that will be a good place to think about for your experiment.

[6.9] Data!

Getting Data
Ok, so now you're running your experiment and you're getting data. It pays off to think beforehand about where you will store the data and to do a dry run to see if you are getting all the data you need. It's just not cool to figure that out after you have just spent 3 days interviewing.

Storing your data with your team in a common Google Sheet that already has all the questions (and ideally, how you'll score them) is a great way to capture qualitative or quantitative data. Make sure you try to record the answers as complete as possible, writing down your own thoughts or interpretations won't help you.

And, do some practice runs asking questions. It's completely human to be biased in the questions you ask, and doing this in pairs will help you spot the most obvious ways in which you are subconsciously influencing the result.

Interpreting Data
Once your experiment has run its course, the real work begins. The raw data needs to be interpreted. Even assuming you followed the advice and kept it as simple as possible, you'll still end up with quite a bit of information to go through. Not all of it may be complete, or usable.

Do an overview of the data first, and figure out if there are any obvious errors or unusable submissions. How many usable results do you have? Did you make the cut specified in the hypothesis?

Next, go over the data entries and score them using the protocol you set up.

TIP: go over the same question for all the results, instead of scoring one result at a time. This promotes uniform scoring.

Tally up the scores per result and count them as positive or negative.

Finally, calculate the proportion of positive results in the usable results. Did you make the cut defined in your hypothesis? Then you can set the assumption to validated.

If not, try to see if you have reason to doubt the result (perhaps there was too little data, or

perhaps it was a very close call) and think about setting the result to inconclusive. That does mean you'll need to redo an experiment for this riskiest assumption though!

In all other cases, set it to invalidated.

[6.10] Pivot or Persevere

After coming up with a conclusion, it's time for your next steps. If your riskiest assumption was invalidated, you need to do some hard thinking and really go back to the drawing board. You'll need to Pivot, and go back to your design criteria, and come up with a different solution.

If your assumption was validated, it's relatively smooth sailing. Simply move your current riskiest assumption to the 'validated' pile, and try to find the next riskiest assumption with your team. And based on that, define your next experiment! Repeat until revenue.

> Breakthrough insights are often hidden within failed experiments.
>
> — Ash Maurya

[6.11] Validation and Statistics

The statistically inclined among you may be used to a stricter, statistical definition of hypotheses. And that is great, especially when you are starting to use larger numbers of respondents.

While you're still dealing with less than 100 people, statistically the results won't make that much sense. That's why it is more important to actively look for the counter results. If you tried hard and still can't find any, you're probably on the right track!

In all, you should be very careful to interpret the results. It also means, you'll need to try to get very clear results: only measure one thing at a time. Don't try to make a big questionnaire. It also means, be strict about your target audience. And, finally, when in doubt: try to rerun the experiment with a larger group of respondents.

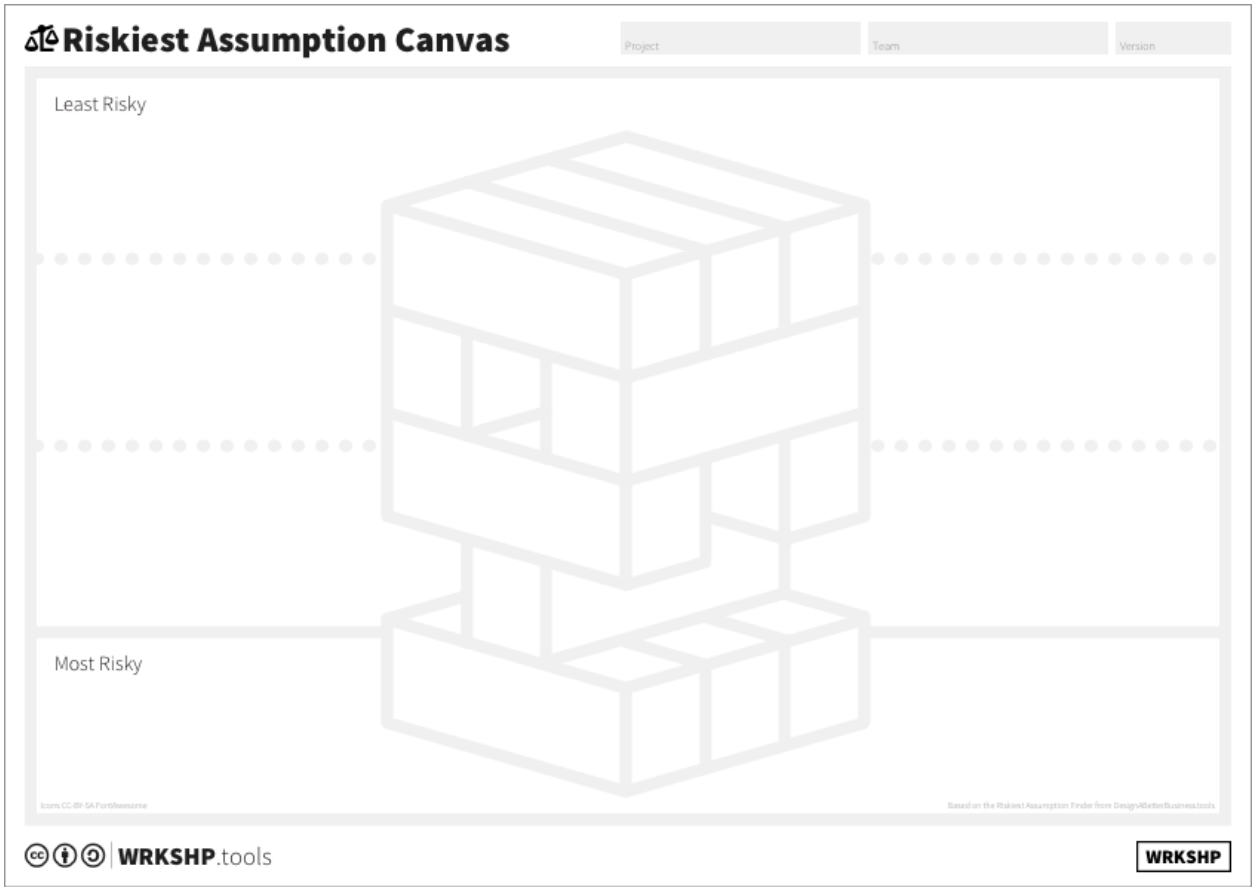
> The future ain't what it used to be.
>
> — Yogi Berra

[6.12] Tool: Riskiest Assumption Canvas

- Materials: Flip over paper, coloured post-its, markers
- Time: 20-30 minutes
- Difficulty: Easy
- Number of people: 3-5

We've all been there: your idea is so great that you're literally bursting at the seams wanting to launch it as soon as you can (maybe even today!). Most of us feed on this excitement. But how do you know you're making the right bet with your idea? Which bets does the success of your idea hinge on? These are your riskiest assumptions; they need to be tested.

Whether you work for a small start-up or an existing large organisation, validate your riskiest assumption as quickly and cheaply as possible so you don't waste valuable time and resources toiling away at something that likely will never work. But this is often harder than it sound. How to find your riskiest assumption?



Canvas Building Blocks
The Riskiest Assumption Canvas has four main areas, organized from top to bottom. The 'Jenga® tower graphic' in the center is not part of the building blocks, but only serves to illustrate that the bottom area is more risky than the top.

The topmost horizontal box is reserved for the least risky assumptions: the ones you are most certain of. This is also where (in)validated assumptions end up: validating means reducing risk.

The bottom most box is for the single most risky assumption.

In between, there is space for assumptions that have some risk, but are neither the riskiest or the least risky.

How to use the Riskiest Assumption Canvas
In your stack of assumptions, the riskiest one is the first gate. If when testing this assumption it continually comes back as “false,” you don’t get to pass go, you don’t get to collect your $200. This tool will help you rank your assumptions before moving on to experimentation.

The first key to identifying your list of riskiest assumptions is to bring a team together to unpack the idea and brainstorm together.

To identify the assumptions you have made about your business, have a look at other canvases you made, such as your Why, Design Criteria, Customer Journey, or Context Canvas. Each of these canvases contains untested assumptions.

Especially the Business Model Canvas (see below) makes it easy to find assumptions, by looking at each of the building blocks and asking yourself: is this really true? The goal of this exercise is to sort these assumptions, and find the one riskiest assumption that underpins your idea. The one assumption that, if it is not valid, will make your idea come down like a Jenga® tower.

With your team in place, use your designer tools (sticky notes, markers, and a big wall) to rank these, based on which you could not do without or which are most likely to be false. The sooner you find these, the more likely you are to be able to validate them and either move forward or pivot.

Finding the riskiest assumptions

Finding the riskiest assumption is not always easy. Discussing assumptions with your team will help to identify the ones to go after. Do this visually so it's to the point and provides you with the outcome you need! This tool makes it easy for your team to have meaningful discussions on what the riskiest assumption really is, and provides a way to come back to the discussion after validating.

Jenga®
Jenga® is a game where players in turn try to remove blocks from a wooden tower. Each block that's pulled out may make the tower collapse, but the blocks on the bottom are critical to keeping the tower upright.

Think of your idea as a big tower, where all of the bricks are assumptions. When one of the assumptions on the bottom of the stack is invalidated, and the brick is removed, the entire tower may fall. When you remove one from the top, not much will happen.

To make your idea succeed, you need to make sure that the base of the tower is safe. We need to start at the bottom, with what we call the riskiest assumptions. At the moment, All the other assumptions are not as important. After all, if the riskiest assumption is incorrect, it may be totally irrelevant to think about any of the others: maybe your idea needs to change completely in the light of the new knowledge!

The goal is to try to make the tower fail fast! So check the bottom-most assumption first, which is the riskiest one. That's what you'll want to know more about. If it is right, you can move to the next riskiest assumption. But if it fails, your Jenga® tower falls, and you'll need to go back to the drawing board to find another approach that works better.

Step 1. Identify Assumptions

What are your assumptions? What are the things you're not sure about? With your team, start by just writing all your assumptions on sticky notes, but don't stick them on yet. Refer to the war room and your point of view for inspiration.

Step 2. Map your Assumptions
Then, put the assumptions onto the template, each team member placing them in the middle 3 boxes, where they think it's best. Don't discuss yet!

Step 3. Arrange the Assumptions
Once all of the post-its are on the wall, each team member quickly goes over his or her post-its,

and explains why they think they should be in the place they are.

Now, with your team, take turns moving sticky notes around. Try to find out which assumption is the riskiest one. Go over each post it, and see if everyone agrees that it is in the right spot. Remember: the assumptions that absolutely must be true for your idea to work go on the bottom of the stack.

The ones that are less important or depend on other assumptions go higher up. Compare pairs of post-its to see which one has priority. When sticky notes move back and forth between boxes, put them halfway between.

Step 4. Fundamental Assumptions

Finally, go over each box and see if there are any assumptions in there that really depend on others (move them up) or that are fundamental (move them down).

After about 15 minutes, you should have only a few left in the lowest box. Vote with your team as to which one you think is the most fundamental one.

Step 5. Describe your Riskiest Assumption

Now that you have identified a riskiest assumption, try to describe what it means with your team. When is the assumption true? Does it depend on something else? How can you make it s.m.a.r.t.?

Step 6. Next Steps
Next, design an experiment using the Experiment Canvas

Checklist
✅ You clearly identified **one** riskiest assumption
✅ You have described your riskiest assumption

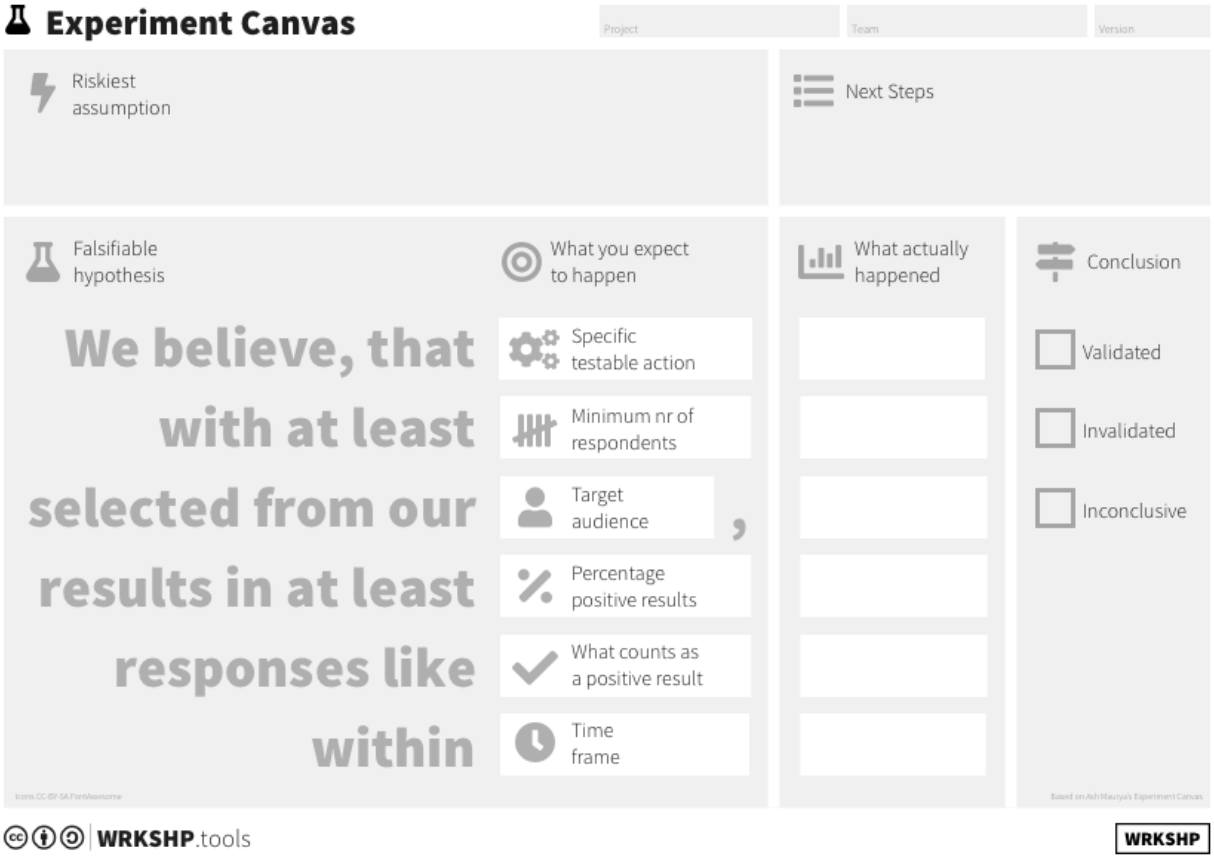
[6.13] Tool: Experiment Canvas

- **Materials**: Flip over paper, coloured post-its, markers
- **Time**: 20-30 minutes
- **Difficulty**: Medium
- **Number of people**: 1-5

Once you've found your riskiest assumptions you'll need a way to figure out how best to test and measure them in a quantitative way. The experiment canvas, created by Ash Maurya, provides a straightforward way to break down your assumptions into measurable, observable, experiments.

How to use the Experiment Canvas
The purpose of the experiment canvas is to design the right experiment at the right time, facilitating a team to have the right conversation. With the experiment canvas, it is easy to design a well-defined experiment

Track the data immediately and write everything down, so that later you can check if you interpreted the results correctly.



Canvas Building Blocks

- Riskiest Assumption: the assumption you want to validate
- Falsifiable Hypothesis: a statement defining your hypothesis, the way you will know your assumption is valid or invalid.
- What actually happened: the results for each of the items in the hypothesis
- Conclusion: the outcome of the experiment
- Next steps: the next steps you take (pivot or persevere)

Step 1. Select the Riskiest Assumption
Start with identifying the current Riskiest Assumption and describing it in a way that you want to test. What will it mean for your idea if this fails? How can you tell?

Step 2. Define your Hypothesis
Specify a clear, falsifiable hypothesis and experiment setup. After running the experiment, check the results and plan your next steps.

Your hypothesis is a statement you believe to be true about your riskiest assumption. Write it down before you run the experiment. It is too easy to change the conditions afterward to make the data fit, and this robs you of valuable insight.

For this version of the canvas, the original hypothesis formula is extended so it is easier to make it quantifiable:

> "We believe, that (specific testable action) with at least (minimum number of respondents) selected from our (target audience) results in at least (percentage) responses like (what counts as a positive result) within (time frame)"

Each of the elements in brackets need to be quantified.

It's okay to use a bandwidth for this, as long as you specify it upfront. The metrics you define need to be actionable (i.e., they need to directly relate to the hypothesis) and accessible (i.e., you need to be able to see the results).

Try to find benchmarks to define percentages, and allow for the fact that if you have small numbers of respondents, you will need quite large measurements to be sure. Look for large percentages.

Tip: Link the numbers back to the assumption you are testing. Why does having 10 positive results validate your assumption?

- **Specific testable action:** This is what you will do as your experiment. It usually ties in with the prototype and the method of your experiment. Examples are: get people to click on an online ad, run interviews, or have a user test.
- **Minimum number of respondents:** You will need some lower bound on this. If you fail to meet that lower bound, you won't be able to get any results from your experiment. If you have an experiment with a clear yes/no answer, go for at least 30-50 people. More is better.
- **Target audience:** The group of people you will select from. Also think about how you will select them. Is it random? Or do they already know you?
- **Percentage positive results:** The percentage above which you will define the experiment outcome as validating your assumption. When talking to people, try to go for larger percentages (>50%). If you have an online experiment, try to find a conversion benchmark, and aim for at least double.
- **What defines a positive result:** The type of answer or customer behaviour you count as a positive result. In the best experiments, it is a commitment the customer gives. This can be a small commitment, such as giving their email address or showing up at a

meeting, or a larger one such as giving access to network, or actually buying a product or service. The stronger the commitment, the more significant the result. This aspect is linked to the protocol you define.

Armed with this hypothesis you're ready to start your experiment.

Step 3. Define a Protocol
Having a good protocol to run the experiment is key to quality results. It's a complete science to do this right, but for our purposes it is sufficient to just avoid the biggest mistakes.

- Create a Google Sheet accessible to all the team members that will run the experiment.
- Create a uniform list of questions or observations. Include some questions to establish rapport with your respondent.
- Define how you will demonstrate prototypes, and ask questions. How long will the experiment take?
- Define how you will score the results. E.g. when your respondent volunteers they have a certain problem, that counts as 5 points. When they only acknowledge it when you ask about it, it's just 1 point. For a prototype, the amount of time the respondent is engaged could be part of the score, or the number of features they tried out.
- Make sure your scores are meaningful.
- Define how you select respondents
- Define how you'll tally up the score, and what score will mean the interview or demonstration counts as positive. Specify any qualitative outcomes and variables. What different answers you are expecting? How will you cluster them?

Step 4. Build the Experiment Here, you'll need to come up with the questions or prototypes you need in detail.

The materials you'll create fall broadly in three categories: interviews, offline prototypes, and online prototypes.

Have a look at the prototyping part of this module for more details.

Note: At this stage it is rarely that you need to test a technical prototype. In most cases, if it actually works in reality only becomes interesting after you have made sure people are waiting for it. So when we say '*prototype*' we really mean something that looks just real enough that customers are able to react to it in a meaningful way. And when we say 'just real enough' that is really telling you to do the bare minimum. No difficult branding exercises, technical setups, or scalable solutions!

Never forget the golden rule:
KEEP IT SIMPLE!

Step 5. Run the Experiment and Collect Data

Ok, so you have an experiment setup. Now it's time to get out there and collect the data. Use the protocol to your advantage! Make sure you record everything of value (and use for instance a google sheet to fill in the data).

Step 6. Interpret the Data
Once all the data is in, it's time to go over it. Get your team together and score the data. For qualitative experiments, have a look at the Experiment Outcome Canvas also included.

Step 7. Draw Conclusions
Once you have your data all interpreted and scored, it's time for conclusions. Get your scores together and compare what you got with the hypothesis you setup.

1. Do you have enough respondents?
2. Are the respondents in the right target group?
3. Are the respondents diverse enough?
4. Did you get enough positive scores?

If you can answer 'yes' to all of them, then you'll have a validated assumption. If you can answer 'yes' to points 1-3, but didn't get enough positive scores (point 4), you'll have invalidated the assumption. If you can't answer points 1-3 with 'yes', you'll likely have a botched experiment, and the result is inconclusive.

Step 8. Next Steps: Pivot, Redo, or Persevere
Ok, you've got your conclusions. Time to act on them. There are three paths forward:

- **Validated**: You can persevere. Pick your next Riskiest Assumption and do an experiment to validate it.
- **Invalidated**: You'll likely need to pivot. Go back to the drawing board and see how you can modify your idea armed with this new knowledge about your Riskiest Assumption.
- **Inconclusive**: You'll need to take a hard look at your experiment. Did you perform it right? Did you have the right setup? The right hypothesis?

[6.14] Tool: Experiment Result Canvas

Don't get tricked by your own experiments

How startups and innovators can make sense of their experiment results in a workshop

As a startup founder, the Lean Startup methodology tells you that you should be running experiments all the time. You should be out validating your idea, problem-solution fit, and product market fit.

It's hard!

In theory, this makes total sense. In practice, however, it can be quite difficult to make sense of the results of your experiments. Especially in the early stages, when you are running qualitative experiments, it is hard. First of all, you need a way to collect and share the information you received with your team. And, even more important, how are you going to draw conclusions from the results?

One method that is used a lot to make sense of experiment results in a workshop setting is to use dot-voting (Dot voting explained on Wikipedia). To see how this works — or actually, totally doesn't work — here is an example.

(Note: Dot-voting itself is arguably a completely flawed method, but that's not what this article is about)

Example

A startup wants to develop a new app that will help self-employed people make sense of their finances. They just started out, and are in the early stages of their journey.

Although initial responses (from their own crowd of friends and acquaintances) are positive, they have barely begun formulating the problem they want to solve for their customers.

They are at a crucial stage for their startup: they are hard at work trying to move from a mindset where they just want to build the thing that is in their head, to something real customers actually want to pay for.

Following the lean startup, the best way to make this mental leap is to confront the ideas living in your head with real people out in the real world. Following this advice, the team goes out on an exercise where each team member interviews 10 self-employed entrepreneurs. They ask them how they deal with their finances, and how they keep tabs on things like their cashflow and invoicing. When they come back, they together have gathered around 50 interview results.

To save time, they decide to print the results, stick everything on a wall, and then go over it as a team. They plan to look at all the results and then use dot voting to mark what they find interesting.

On the surface, this looks like a valid approach. Reviews like this can work great in a workshop setting, where the information is on the wall, clear for everyone to see. The dot voting process is fast and gives you a clear result.

It's broken!

However, when I used this and similar methods in the past, I noticed that it **really doesn't work**.

People tend to focus on the interviews they have conducted themselves. They notice the things that they already agree with, or have noticed before. This leads to a **strong confirmation bias**.

With this method, you'll most likely reinforce any bias that was there to begin with. Clearly, what's needed is another approach. But there are some constraints.

Initial interviews are necessarily exploratory in nature. At this point, the team can't really know in detail what they are looking for. There won't always be a clear script to follow, and the answers are varied.

You simply can't follow the approach that would be used for a large scale survey and use statistics. The low number of responses and the unstructured nature of the results make that impossible. This makes it very difficult to make a clear 'validated or invalidated' decision.

From a statistical point of view your results are a complete waste of time. But at the same time, they are a treasure trove of information about your customers.

How to fix it

So, what can be done? How can we explore qualitative interview results in a workshop setting in a meaningful way? A way that is as objective as possible? How can we extract as much useful information from the interviews as possible?

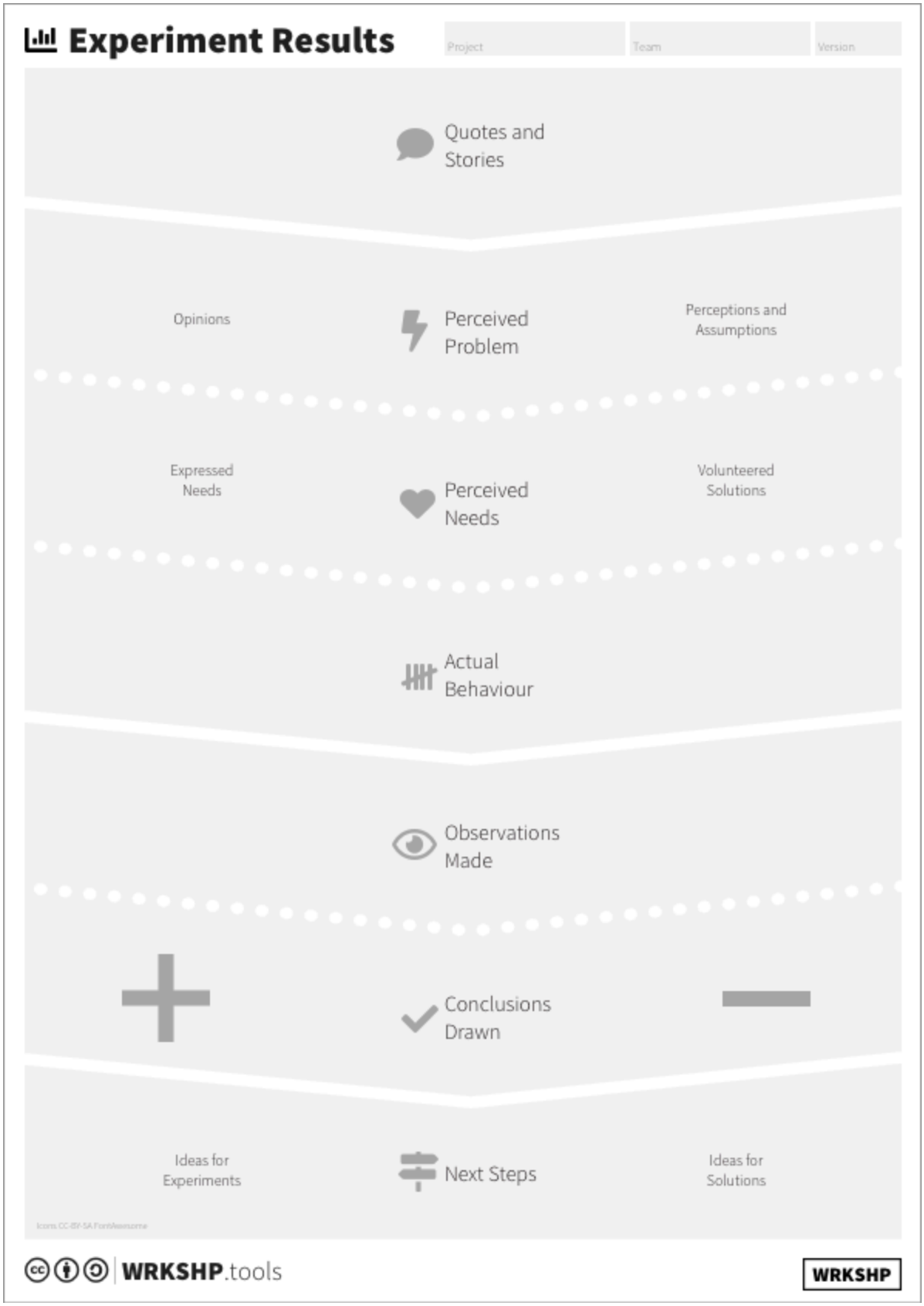
Homework

To do that, going over the results in detail is required. That takes more time than you generally have in a workshop. So, first of all, homework is required.

Doing time-consuming and sometimes expensive interviews and then avoiding to dive into the results is a total waste. If the team is prepared to interview 10 people, then they should also be prepared to read all the results before going into the workshop. Only looking at your own results means you'll open the door to extra confirmation bias.

Framework

Second, a framework is needed to organize the results. The Experiment Result Canvas below was created as one (highly effective) way of doing that.


Experiment Results
Project
Team
Version
Quotes and Stories
Opinions
Perceived Problem
Perceptions and Assumptions
Expressed Needs
Perceived Needs
Volunteered Solutions
Actual Behaviour
Observations Made
Conclusions Drawn
Ideas for Experiments
Next Steps
Ideas for Solutions
WRKSHP.tools
WRKSHP

Step by step

The feedback you received from the interviews is split in four big categories (from top to bottom):

- Quotes and Stories
- Perceived problem, perceived needs, and behaviour
- Your observations and conclusions
- Next steps

1) Quotes and Stories

The first category is filled with raw quotes and stories selected from interviews.

2) Perceived problem, perceived needs, and behaviour

The second category splits results in information about the respondent's perceived problem (how they experience the problem you want to solve), their perceived needs (what they tell you about what they think they need), and their actual behaviour (what they have already done in the past to deal with the problem).

This distinction is important, because it is so easy to pick up only on what you'd like the respondent to answer to your question. It's so easy to hear that they like your solution, or that they really need it. But that information is close to worthless. (They're probably lying — or being polite).

Solutions and opinions volunteered by respondents, telling you how they might solve the problem in the future, are also close to worthless information. People don't know what they will or won't do in the future, and they have a very difficult time predicting their own feelings.

The thing to look for is behaviour. Have they actually experienced the problem in the past, and did it bother them enough that they actually found or tried to find a solution for it? That is what you need to hear if you're looking for information coming from early interviews. It's much harder to 'be polite' about actual behaviour. It's the actions that count, not the words and opinions.

Sticking this information in separate boxes means it is all there, but it's organized in an 'evidence pecking order'. The behaviour box is the most important one. But, if a lot of people say the same things, or have the same opinions, you might want to run a separate experiment based on that and see if their actions reflect those opinions.

3) Your observations and conclusions

The third category can be filled with the interviewer's notes. What observations were made by the interviewer? What conclusions did they draw?

It is important to keep this information separate so that it won't get mixed with the results coming from the respondents.

It's great to collect these observations, and they may help you a lot, but they are **your** observations. They are something that you added — and therefore, based on what you already knew **before** you conducted that interview. They reflect your view of the world and your biases more than anything else.

4) Next steps

Finally, there is space for next steps. What follow up questions would you like to ask? What other things would you like to know?

This tool can be used as a guideline to structure unstructured interview results, and to cluster results together. You can use it to prepare for the workshop and pre-process your interview results. In that way, you can use your time in the workshop to make sense of the results, and, once you have done that, vote—but in an effective way.

Now at least, if you do place your dot vote sticker next to an interesting behaviour, it'll be clear that that is much more valuable than a vote for your own observation or opinion.

You can more or less see from where the dots are on this canvas if they are more likely to be influenced by confirmation bias.

Finally, using this tool can help to compare results over time coming from different interview settings with different formats.

Checklist Module 6

✅ You have selected 1-3 propositions to test
✅ You have found your riskiest assumptions
✅ You have defined 1-3 experiments
✅ You have ran the experiments
✅ You have decided to pivot or persevere

Reading List Module 6

Books

- The Mom Test, Rob Fitzpatrick (Amazon)
- Running Lean, Ash Maurya (Amazon)
- The Inmates are Running the Asylum, Alan Cooper (Amazon)

Blog

- How to Conduct Customer Interviews (Even When You Don't Have Customers) (Growandconvert.com)

[7] Module 7. Iterate

Now that you have gone through a round of validation for your ideas, it is time to check if you have reached your goal, and to decide your next course of action.

[7.1] Did you reach your goal?

Now that you have gone through a round of validation for your ideas, it is time to check if you have reached your goal, and to decide your next course of action.

Riskiest Assumptions
Look at your Riskiest Assumptions. You have (hopefully) managed to validate or invalidate some of your assumptions.

Are there still risky assumptions left (or are there new ones) that you will need to validate in order to be able to take the decision to go all in? Are there things you should validate first?

If so, it is important to go dive back into the validation stage and run more experiments.

If not, there are two options.

1. You are ready for the next step
2. You need to go back to the drawing board.

Design Criteria
Refer back to your design criteria. Does the solution you have validated fit with your design criteria? If so, you can start to think about your next step towards world domination. Your idea seems solid, and you have reached problem-solution fit at the very first. It is now time to start working towards early traction.

If your solution does not fit, or if all your most important assumptions have been invalidated, you need to go back to the drawing board. Your idea seems to lack the qualities to take it to the next step.

Now, that does not necessarily mean the idea is bad – perhaps the timing is wrong, or you need different resources to make it work.

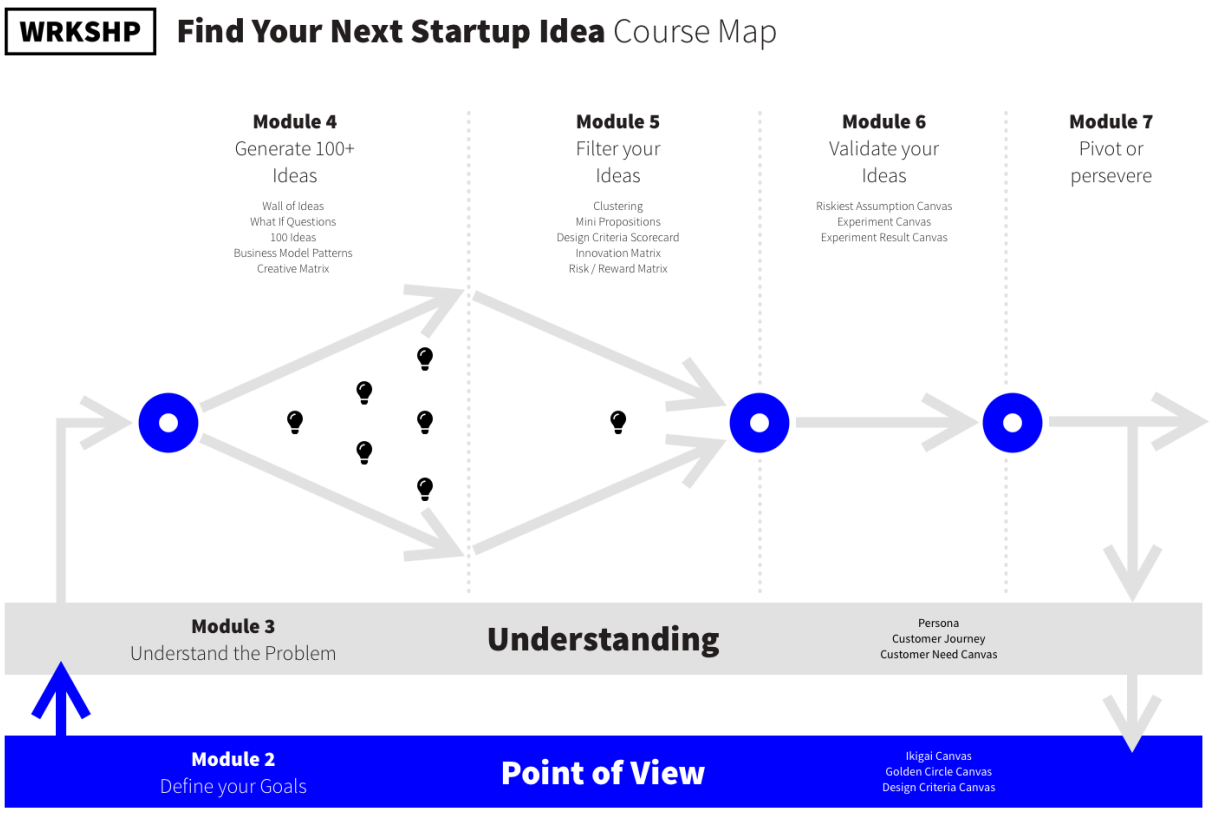
But chances are in the big pile of ideas and mini propositions you can find a better idea to work on with your new-found feedback from the validation round.

So go back to the drawing board, look at the ideas you already had, and maybe add some new ones. Sharpen your design criteria. And then, go through the entire loop again. Rinse and repeat.

Ask yourself where you can jump in, should you go back to first principles and look at your vision? Or can you take the next risky assumption to test?

There is no finish line
It's important to know that this loop is never 'done'. There is always a next step. By successfully

validating, you will be able to tighten the loop and zoom in on more detailed aspects of the idea or the product, but you'll still have assumptions to validate and a point of view to update.



So keep going through the loop, and remember the double diamond!

Good luck!

Reading List Module 7

Books

- The Lean Startup - Eric Ries
- The Lean Enterprise - Jez Humble, Joanne Molesky, Barry O'Reilly
- Running Lean - Ash Maurya
- Scaling Lean - Ash Maurya

Thank you for reading the Find Your Next Startup Idea Course!

The course was created based on 10 years of experience in innovation and venture building in 2019. It has been downloaded over 2500 times since then. I hope it brings you what you have been looking for!

Cheers,
Erik

[END]