The Real Startup Book

by Kromatic

To everyone

who has ever failed

and had the audacity

to admit it.

Foreword

By Tristan Kromer

“When all you have is a hammer, everything looks like a nail.”
—Unknown

My first encounter with the term lean startup introduced me to the concept of a smoke test. The idea was elegant—place a value proposition on a landing page with the intent of gauging customer demand. So of course I applied it immediately.

When I heard about Sean Ellis' "How disappointed would you be" survey, I used that.

When I heard about concierge testing, Wizard of Oz testing, and paper prototyping, I used them.

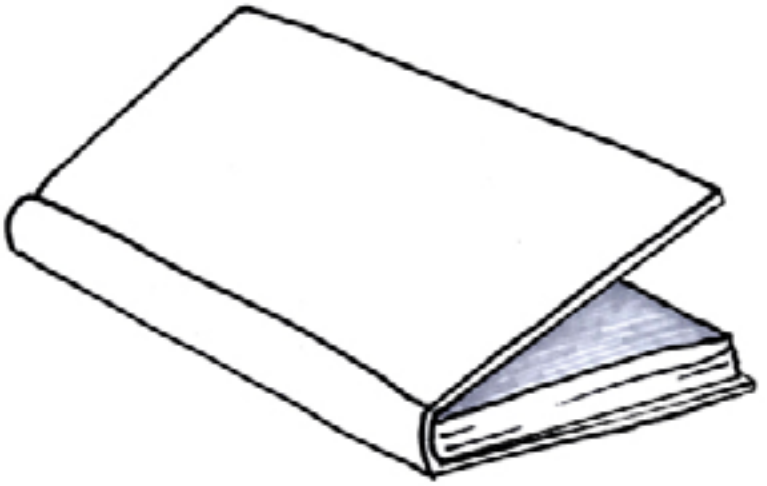
I used them without thought, because that's all I knew.

I used them because someone whose name I recognized used them and wrote it down on a blog, in a book, or on a slide.

I used them with the same flawed logic that says Air Jordans make great basketball players.

After six years of living lean, I'm starting to recognize that to build something great, to build something that will last, to be a great carpenter, we don't need a great pair of sneakers; we need a great toolbox. And we need to know how to use it.

Preface



By Tristan Kromer

"When all you have is a hammer, everything looks like a nail."
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Who Is This Book for?

If you've ever recognized a giant gap or unanswered question in your business model and had no idea how to go about filling it, this book is for you. You may be asking:

- Who are our customers?
- What are the most important features of our product?
- Why are people doing that with our product?
- Will people actually pay for this?

This book is for managing innovation projects where the business model is partially or completely unknown. Your job title might be:

- Product Manager
- CEO of an early-stage startup
- Entrepreneur-in-Residence

Previous Experience

This book will be most useful if you are familiar with concepts such as:

- Lean startup
- User experience
- Human-centered design/design thinking
- Business model innovation

It's ok if you haven't heard of any of these terms, but you'll get more out of it if you have.

In particular, you should already buy into the idea that parts of your business model are unknown,

and the way to figure them out is to do research and experiments out of the building and in the real world with your customers.

Innovation at Scale

This book is particularly useful for those managing or assisting in the management of large numbers of innovation products. This includes job titles like:

- Chief Innovation Officer
- VP of Innovation
- Accelerator Manager
- Lean Startup/Innovation Coach

If you are in any of these positions, this book serves as a versatile and quick reference guide for almost any startup you'll be dealing with. It can also be used to diagnose typical startup problems.

This book is a Creative Commons project, which means you can use it as training material for your startups without any additional cost.

Business Model

This book is best used to answer questions about certain business model elements, such as the *customer*, the *value proposition*, *channel*, *relationship*, and *revenue*. In other words, the critical elements in *product/market fit*.

While many of the methods listed here can be used to investigate other business-model elements such as *partners* and *resources*, it may take some extra effort on the part of the reader.

Stage and Industry

The methods here work fine for small, early-stage startups, and equally fine for teams in large companies trying something new, risky, and outside the normal business model.

These methods work for any industry, but there is a bias toward providing examples and case studies from the technology industry. Other industries will be included as case studies become available. Please send any case studies you'd like to include to realbook@kromatic.com.

Warning: Academics and Existing Businesses

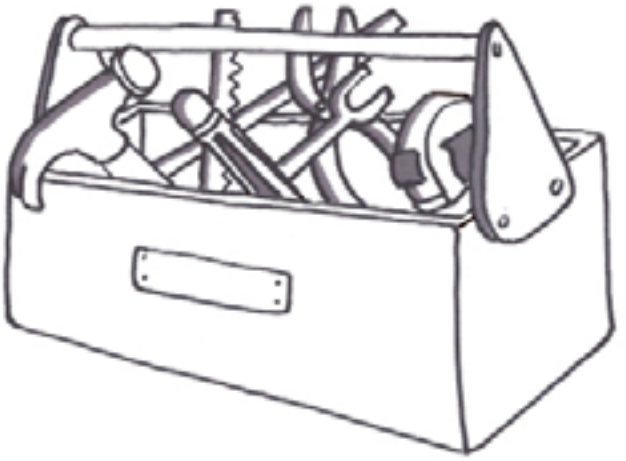
This book is not for students trying to learn in a classroom environment. You'll have to go out and use this book in the real world with real customers to get anything out of it. So if your teacher just handed this to you, get ready to get kicked out of the building to go talk to customers.

This book is also not for companies executing on an existing business model. While some of the techniques listed here work quite well for optimizing an existing product or service, it's not designed for that. You'll have to modify the techniques and make sure you're considering potential side effects.

Continual Improvement

Future improvements may change or broaden the focus of this book. This is a living document that will be regularly updated.

How to Use This Book



Do not read this book straight through. There is no plot or narrative that you're going to miss by jumping around.

This book is not a Step 1, Step 2, Step 3 guide to building a startup. Startups don't work like that.

Begin by reading the intro and index to figure out which parts of the book are relevant to you and your startup. Read the relevant chapters, then reference the methods described in the remaining pages as needed.

Think of this book as a toolbox.

It's organized to help us find what we're looking for when we need it. When we need a way to test market demand, there's a section on *evaluative market experiments*. When we're looking to prioritize our ever-growing feature list into a *minimum viable product*, there's a section on g*enerative product research*.

We must know which tool we need before taking it out and using it. As innovators, we must be wary of Maslow's hammer, and understand which research/experimental method or technique we need so we don't end up repeatedly hitting ourselves in the thumb.

The index for navigating this book is not alphabetical, chronological, or ontological. The index is ordered by what you're trying to learn. Are you trying to learn about your customer? How to price your product? What will make your users come back?

It is highly recommended that you thoroughly read the index. You will not get the major benefit of this book without it.

When faced with an unknown aspect of your business model, first figure out what you need to learn. What's your learning goal? What question are you trying to ask?

Once you know what you need to learn, use the index to find a list of relevant research and

experimental methods. Then read each method and determine which will work best for your situation and resources.

In each method section, you will find the following headers:

In Brief

A quick 2-3 sentence description of the method.

Helps Answer

A list of common questions about a business model that this method helps answer.

Tags

A list of terms that can be used to navigate the book, such as B2B (for methods commonly used for business-to-business models) and qualitative (for the type of data used by this method).

Description

A more detailed description of the steps normally taken to run a research or experiment method, including:

- *Time commitment and resources* needed to run the method
- *How to* run the method
- *Interpreting results* in a meaningful way
- *Common biases or pitfalls* that may distort the results of the method and lead to bad conclusions based on incorrect data
- *Field tips* from startup practitioners who have used this method

Case Studies

Links to various case studies that serve as examples and inspiration.

Tools

A list of software or physical devices that can be used to execute this method.

References

A list of additional materials or resources for those who want more information.

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Version History

- **Version 0.5** - Minor updates to visual styling, general chapter cleanups, added direct download functionality with www.realstartupbook.com
- **Version 0.4** - Moved project to Gitbook, general chapter cleanups
- **Version 0.3** - Updated book's formatting, added *Customer Discovery Interviews* and merged with *Customer Discovery*, added *Secondary Market Research*, added *Concierge Test*, added *Net Promoter Score*, added *Appendices* and *Biases*
- **Version 0.2** - Updated *Generative vs Evaluative* (1.3), added *Generative Market Research* sections 1-3, added *Evaluative Market Experiments* sections 1-4, added *Generative Product Research* sections 1-3, added *Evaluative Product Experiments* sections 1-2, added *Out of the Box* sections 1-2
- **Version 0.1** - Added Preface sections 1-3, added The Index sections 1-6

Index

"An index is a list of data, such as group of files or database entries. It is typically saved in a plain-text format that can be quickly scanned by a search algorithm. This significantly speeds up searching and sorting operations on data referenced by the index. Indexes often include information about each item in the list, such as metadata or keywords, that allows the data to be searched via the index instead of reading through each file individually."

—TechTerms.com

01 What Are You Trying to Learn?

"If I had an hour to solve a problem I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions."

—Albert Einstein

What Are You Trying to Learn?

In school, we're constantly taking tests to gauge how well we learned last week's material. We cram geographic boundaries, the dates of battles, and multiplication tables into our heads, and then we spit out the results.

Sadly, those rote memorization skills used to answer preformulated questions don't help us as entrepreneurs. When building a new business model, there is no test or quiz that we can cram for. It's as if we sat down for our final exam and opened up the book only to find a blank piece of paper in front of us.

> ***"Where is the test?"*** *we ask.*
>
> ***"Right there in front of you,"*** *answers our teacher.*
>
> ***"Is there a right answer?"*** *we hesitantly inquire.*
>
> ***"Yes there is,"*** *assures our teacher.*
>
> ***"What are the questions?"*** *we plead.*
>
> ***"That's what you have to figure out."***

As an entrepreneur (or intrapreneur), we can't just guess at the answers without first identifying the right questions. If we guess by building a fully functioning product, it's likely that the market will

judge us wrong and punish us with zero sales and eventual bankruptcy.

Our job, as entrepreneurs, is to first ask the right questions, and only then can we find the right answers.

What Are Good Questions?

The questions we must answer are fundamental gaps in our business model. Questions like:

- Who is our customer?
- What job do they want done?
- What channels can we use to reach them?
- Which features should we build for our first product?
- Is our solution good enough?

If we can identify the right question, there is a corresponding method (or methods) in this book to help answer it.

If we apply a method without first identifying the right question, the results of that experiment are typically very difficult -- if not impossible -- to correctly interpret.

For example, let's say we're selling a new type of shoe that cures plantar fasciitis. We put up a landing page test (a type of smoke test) with our value proposition and a "Buy Now" button. Then we put $1000 into Google AdWords for "shoes" to drive traffic and wait for the money to start rolling in.

Later, it turns out that our conversion rate is 0 percent.

Should we give up? The landing page test says that there is insufficient demand for this product.

"But what is plantar fasciitis?"

It turns out that everyone coming to our site has been asking this question.

Is our test failing because customers aren't interested, or is it simply because our customers can't understand the value proposition? Or are we focused on the wrong channel?

In this case, we were asking, “Does anyone want my product?” when we should have been asking, “Does our customer understand what plantar fasciitis is?” or even, “Who is our customer?”

How Do We Ask the Right Questions?

Asking the right questions is important, but actually figuring out those questions can be a challenge. How do we know we’re not missing anything? How do we know we are asking the most important questions?

It’s impossible to see our own blind spots. (That’s actually the definition of a blind spot.)

Unfortunately, it’s often these blind spots that hold the deadliest questions and business risks.

One way to generate these questions is brainstorming around problems/challenges/opportunities and reframing them as questions. There are many ways to brainstorm questions and identify gaps in our business model, such as using the *Business Model Canvas*, but most of them still leave blind spots. Fortunately, it’s easy for other people who have a little emotional distance from our business to see where we are making risky assumptions. So instead of listing a variety of brainstorming methods, the only advice we’ll offer in this book is to ask someone else.

A *peer review* is a time-honored method of eliminating oversights. It can be used to proofread a document or make sure we’re not about to walk out of the house with mismatched socks.

To peer review our business model, we don’t need to ask a seasoned entrepreneur or industry expert. Almost anyone is able to provide the input we need.

We can present our business idea and business model to someone else and ask *them* to ask *us* questions. Encourage them to ask any question they want, and remind them that there are no dumb questions.

We simply need to write down those questions that we forgot to ask ourselves. If we go through five peer reviews and everyone asks us, “Who is your target customer?” or says “Gee … your target customer seems broad,” we probably haven’t defined our target customer very well.

We should not defend our idea or try to explain in excruciating detail why their question is *not* a risk for us. Our job is only to note the questions that are being asked and include them when we prioritize.

Priority Does Not Have a Plural

Once we’ve finished brainstorming and conducting peer reviews, we should have at least ten questions, and hopefully much more. If you have fewer than ten, you are probably missing questions in your blind spots.

Startups are risky. There are a lot of unknowns and a lot of open questions. If we can only see five or six questions, it does not mean our startup is *less* risky than someone with twenty questions. It actually means our startup is *more* risky because we are not acknowledging and dealing with those unknowns.

However, we can only address one question at a time effectively. So we have to prioritize.

Again, there are many methods for prioritizing, and we won't list them all here. We should just pick one question where the answer could potentially destroy our entire business model.

We may choose the wrong question to start with. That's ok.

It's better to pick the wrong question and answer it quickly than to spend days, weeks, or months agonizing over multiple priorities to develop a perfect plan of action for the next year. Just pick one and get going.

The following sections will show you how to take that one priority question and figure out how to answer it with *research* or an *experiment*.

Locate the Question

To simplify our search for the right method, we'll ask two questions:

- Do we need to learn about the *market* or the *product*?
- Do we have a falsifiable hypothesis to *evaluate*, or do we need to *generate* a clear idea?

Mapping the intersection of these two questions gives us a 2x2 matrix:

Based on this, if we have a clear hypothesis of who our customer is and what we think they will pay for, we can conduct an *Evaluative Market Experiment* such as a smoke test.

If we don't have a clear idea of who our customer is, we can do *Generative Market Research*, such as data mining.

Similarly, if we have a clear hypothesis of which features will solve the customer's problems, we can do an E*valuative Product Experiment* such as *Wizard of Oz* testing. If we do not know which features will lead to an acceptable solution, we can do *Generative Product Research* such as a *Concierge Product* to try to come up with new ideas.

Any framework is an oversimplification of reality, but this index is a quick way to navigate to the correct method.

The *Index of Questions* and the *Index of Methods* show the complete list of questions and their corresponding methods. But first we'll look at the details of market vs. product, and generative research vs. evaluative experiment.

02 Market vs. Product

Do we need to learn about the *market* or the *product*?

To narrow down the long list of applicable methods to something actionable, we first separate our questions into those that concern the *market* and those that concern the *product*.

Market

- Who is our customer?
- What are their pains?
- What job needs to be done?
- How are they doing this job today?
- Does the customer segment already have a solution to this pain?
- Is this customer segment really willing to pay for a better solution for this job?
- Is our customer segment too broad?
- How do we find our customers?
- How much will this customer segment pay?
- How do we convince this customer segment to buy?
- What is the cost of acquiring a customer in this customer segment?

Product

- How can we solve this problem?
- What form should this solution take?
- How important is the design?
- What's the quickest solution?
- What is the minimum feature set?
- How should we prioritize?
- Is this solution working?
- Are people using it?
- Which solution is better?
- How should we optimize this?
- What do people like/dislike?
- Why do they do that?
- Why do prospects buy from us?
- Why do prospects not buy from us?

In this case, "market" refers to any question or element that is mostly or completely connected to the identity of the customer segment.

Market questions include those about which channels we can use to reach customers. For example, we cannot use traditional broadcast television advertising to target customers who don't have a television set.

"Product" (or service) is simplified to mean anything regarding the value proposition or its creation. This includes resources needed to produce the value proposition, as well as any key activities, partners, or costs.

The value proposition really sits at the intersection of market needs and the product itself. The product has no value outside of the customer using it, but we are again simplifying for the purpose of navigation.

If we are using the *Business Model Canvas*, market questions are those on the right side of the canvas, including *customer*, *channel*, *relationship*, and *revenue*. Product questions are those concerning the value proposition and everything left of it, including *key activities*, *key resources*, *key partners*, and *costs*.

Where Should We Start?

This book is agnostic about where we start. We may already have a product and be investigating who to sell it to, or we may have a customer segment with a strong pain point and are trying to find a solution. But when in doubt, start with the customer.

If the customer segment changes, then the product usually must be adapted to the customer. But if the product changes, customers may simply use a different product. **Human behavior is notoriously difficult to change, though not impossible.**

03 Generative vs. Evaluative

Do we have a clear hypothesis to *evaluate* or do we need to *generate* a clear idea? This distinction depends on our understanding of what makes a clear hypothesis.

> *"Our customers really want our product."*

This hypothesis is bad for a number of reasons. The most obvious is that it's tautologically correct — if they are already our customers, then they've already proven they want our product — which means it is not worth investigating further.

This type of flawed hypothesis is common. Here is a more subtle example:

> *"If 250 Los Angeles teachers were asked to treat minority students with more respect, then at least 50 teachers would do so."*

While not as flawed as the first example, it has fundamental problems that would prevent us from designing a good experiment. If we force an experiment, we will most likely have ambiguous data or be unable to correctly interpret it.

In this case, several things are unclear:

- Which teachers? Teachers at schools with a high percentage of minority students? What percentage is sufficient for this test?
- How would we ask the teachers? Would we ask each teacher differently? Would we let the principals ask them?
- What is *respect* in this context? Which behavior changes would indicate "more respect"?

Without defining the hypothesis very clearly, we might let the principals of schools ask the teachers on our behalf, and they might ask them with varying degrees of persuasiveness.

We might also argue about the results. Is calling a student "Mr." or "Ms." instead of by their first name a sign of respect or a sign of sarcasm?

When we do not have a clear, well-defined, and falsifiable hypothesis, we are better served by doing generative research instead of conducting an experiment. In this case, our learning goal could be "Which teacher behaviors indicate teacher respect to minority students?"

Given this goal, we are better off doing customer discovery interviews (in this case, speaking to

the students) rather that testing our vague hypothesis. The outcome of the generative research should be a clear, well-defined, and falsifiable hypothesis that we can then test with an evaluative experiment.

Defining good hypotheses can be a challenge, so here is a short checklist of points to consider.

Simple and Unambiguous

The hypothesis should be clear and unambiguous so that anyone reading it will understand the context and be able to clearly interpret the results.

> *"If 250 Los Angeles teachers were asked to treat minority students with more respect, then at least 50 teachers would do so."*

In this case, we may have different opinions on what "respect" means. For us to agree that someone is being treated with "more respect," we must agree on which behaviors would indicate respect.

> *"If 250 Los Angeles teachers were asked to treat minority students with more respect, then at least 50 teachers would begin addressing their students with an honorific."*

While this is more specific, not everyone knows what an honorific is (in this case, Mr. or Ms.), so we should avoid using any specialized vocabulary or jargon.

> *"If 250 Los Angeles teachers were asked to treat minority students with more respect, then at least 50 teachers would begin addressing their students by 'Mr./Ms.' and their last name instead of their first name."*

Measurable

> *"Our customers have a strong desire to donate to charitable causes."*

This hypothesis may be true, but it is not observable. At least not until we invent telepathy.

> *"Our customers donate to charitable causes twice per year."*

This new hypothesis has some other issues, but it is at least observable.

Describes a Relationship

> *"50 percent of students at Dalton High School get a C or lower in at least one class per year."*

This again may be true and it is observable, but it doesn't tell us anything about the cause of the low grades. A good hypothesis should allow us to change one thing and observe the effect in another.

> *"Students at Dalton High School that study fewer than four hours a week get a C or lower in at least one class per year."*

There are other issues with this hypothesis, but at least it relates two or more variables to each other.

Cause and Effect

> *"During the summer, ice cream consumption increases and more people drown per day."*

This is a true statement, but it does not tell us how these two variables relate to one another. Are people drowning because they ate too much ice cream? Or are they eating more ice cream because they are sad about the drownings?

> *"During the summer, people who eat ice cream before swimming will drown at a higher rate than people who do not eat ice cream."*

This specifies a clear relationship and the causal direction of that relationship. Simply changing the sentence to an IF _____, THEN _____ structure can make the cause and effect relationship even more apparent:

> *"If we feed ice cream to people before they swim, then the average number of drownings per day will increase."*

Achievable

> *"If an astronaut in a stable orbit around a black hole extends one foot past the event horizon of a black hole, then they will be pulled in entirely."*

There are many theoretical physicists who create a number of hypotheses that are not testable now but may be testable in the future. While this black hole/astronaut hypothesis is theoretically testable, it is not testable today.

Unfortunately, as entrepreneurs, we should restrict our hypotheses to ones that can be tested in the immediate future and with our current resources.

Many things seem untestable today, but clever application of lean thinking can simplify the hypothesis into a testable first step.

Falsifiable

All of these conditions add up to a hypothesis being falsifiable. If a hypothesis cannot be proven incorrect, then it is not relevant to run a test on it.

> *"There is an invisible, intangible tea cup floating between the Earth and Mars."*

When in doubt, we can ask ourselves, "What evidence would prove this hypothesis incorrect?"

If there is no amount of evidence that would prove our hypothesis is invalid, then either the hypothesis is flawed or we are very stubborn.

Other Frameworks

There are a number of frameworks and checklists for forming a hypothesis, one of which is popular enough to comment on to avoid confusion:

We believe this capability will result in this outcome and we will know we have succeeded when we see a measurable signal

The entire sentence is *not* the hypothesis. Let's break this into its parts:

> *We believe ...*

This section just confirms that we think the hypothesis is *correct*. It is not part of the hypothesis, and there are many situations where we may test a hypothesis that we believe is *incorrect*.

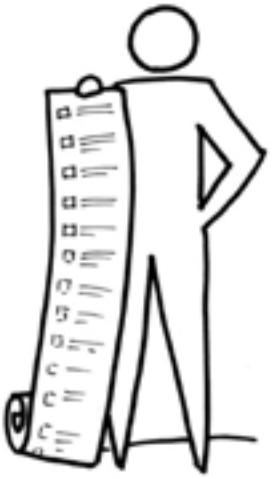
> *... **<this capability>** will result in **<this outcome>**...*

That is the hypothesis.

> *... we will know we have succeeded when **<we see a measurable signal>***

That is the data we will collect, including any information about sample size, margin of error, success conditions, or fail criteria.

04 Hypothesis Checklist



Writing a Good Hypothesis

Lean startup practices turn project managers, business leaders, and designers into scientists who constantly validate their ideas by running an array of experiments. But experiments can get out of hand and turn perfectly sane people into mad scientists. A sure way to keep our sanity is to start with a strong hypothesis to give the experiment structure.

A strong hypothesis will tell us what we are testing and what we expect to get out of the test. By stating expectations, we are delineating the goals that the experiment has to hit to make it a success or failure. This will help us define when to determine that the experiment needs to be scrapped or the idea is ready to be taken to market.

Key elements of writing a good hypothesis:

1. The change that you are making
2. The aspect that will change
3. The success or fail metric
4. How long we are going to run the test

A hypothesis should end up looking like this:

> **This new feature** *will cause* **a ten percent increase** *of* **new users visiting the homepage** *in* **three months.**
>
> *(the change) ----------(the metric)----------(the impact)----------(the timeframe)*

Let's break down each aspect:

The change

This is the aspect that we are going to change, launch, or create that is going to affect our overall business or product. It can be as simple as changing the color of a button or as big as launching a

new marketing campaign. Make sure that only one aspect is changed at a time, otherwise there is no way to tell which aspect contributed to the effect.

The impact

This is the expected results of the experiment. If we change *x*, then we expect *y* to happen.

The metric

This is a measurement that needs to be hit or surpassed. This can be a fail metric, where if the experiment does not meet the minimum goal, then the project must pivot to a completely new direction. This can also be a success metric, where the experiment is deemed a success if it hits the goal. Choosing between the success or fail metric is dependent on **if we want the baseline to know** when to scrap a project or when to launch a project.

The timeframe

This is the length of time it takes to run the test. If the timebox is too short, then the amount of data might be too small, or there might not have been enough time for effects to take place. But if the timebox is too long, we are wasting valuable time collecting unnecessary data.

Now let's use these elements to form a hypothesis in an example scenario.

Say that you are a product manager at a startup that creates a mobile app to help waiters and waitresses keep track of their tips. You have noticed that users who document their tips four times a week have a higher retention rate. You want to see if you can increase the number of times current users use the app within a week.

What are you going to change within the app?

How about adding a notification system so the user can set reminders to ping them at the end of a shift?

What do you want the outcome to be?

You want more users to open the app four or more times in a week.

What is the metric of failure or success?

At this time you have 50,000 monthly users, and 10,000 use the app four days a week. You want to increase the current user's rate of opening the app from 10,000 to 15,000. This translates to a ten percent increase.

How long are you going to run the test?

This always depends on a number of variables within the company, but let's say that you are at a midsize company that has a little more time to get the correct data. So let's say three months.

The end hypothesis would be:

If I add a notification feature that allows the waiter/waitress to set reminders to add in their tips, then I am going to see a ten percent increase in the number of users opening the app four times or more in

a week over the next three months.

Now let's go through a worksheet that will test if you can figure out the strongest hypothesis for a given scenario. The answers are at the bottom.

Scenario A: You work for a company that rents out toddlers' clothes. It is a monthly subscription where families get a box of five pieces of clothing, and when the toddler grows out of them, they return the clothes for a new box. The data shows that there might be a correlation between members who frequently send back items to higher customer retention rates. Your goal is to have members return more boxes. You have decided that you can do this by adding pieces that are seasonal, holiday themed, or super trendy so that the family will need to keep updating the clothes.

1. By adding one piece of special-occasion clothing, you will see a ten percent rise in returned boxes in three months.
2. If you include one special-occasion outfit, a new designer piece, and a seasonal accessory, then you will see a 15 percent increase in returned boxes in the next 12 weeks.
3. When you add three seasonal pieces, families will learn to request more items, and you will see growth in the next two months.
4. By including one trending designer piece, you will see a 15 percent increase in requests for those designers once the experiment is completed.

Scenario B: You already made your millions with the Uber for parrots, so you decided to invest your money into saving the manatees. You designed a tracking app that shows boaters where herds of manatees are sleeping so they don't run the herds over. You are having a hard time getting the boaters to download the app, so you decide to start advertising. You want to conduct a test to see if a promotion will increase the app's downloads.

1. If you pair up with dock owners to offer a ten percent discount on monthly docking fees to boaters who download the app, then you will see a ten percent increase in downloads over the next three years.
2. If you give out ten percent coupons to boat rentals for downloading the app, and 15 percent off tack shops, and you advertise around piers, then you will see an increase of 15 percent new downloads in the next three months.
3. By pairing up with ten boat rentals to give a coupon for ten percent off the boat rentals for downloading the app, you will see a five percent increase in downloads over a six month period.
4. When you have a special where someone downloads the app, they get a one-of-a-kind lure at Ted's tack shop (which has 15 stores in Florida), then you will see a ten percent decrease in manatee deaths over the next five months.

Scenario C: Your labrador retriever is obsessed with a tennis ball and you are tired of throwing the slobbery thing. It inspired you to start a drone company that drops tennis balls and takes funny pictures of the dogs. Your customer-support team has received complaints that it is hard to understand how to download the pictures from the iPhone app. You want to test moving the photos section to various parts of the app.

1. If you add a photos section to the navigation bar, then you will see a five percent increase in new users over a four month period.
2. If you advertise the photo feature in your app, you will have more users and fewer complaints within the next ten weeks.
3. If you add three pages to the onboarding process that explain how to move the photos, then you will get a 25 percent increase in dog pictures.
4. By moving the download photos to the home screen, you will receive 50 percent fewer

complaints about the photos section in the next three months.

Scenario D: You are so sick of wearing the same outfits that you developed an AI software to pick out your clothes every morning. A venture capitalist saw your tweets about it and gave you a million dollars to start the company. You need the AI to address weather conditions when choosing the clothes. You want to run an experiment to test a method for collecting data for when it is 80 degrees and sunny.

1. If you poll people in popular cities on sunny days, then you will be able to add five percent more data points.
2. If you see what is in clothing stores on sunny days, you will be able to add ten percent more data points to the algorithm in a month.
3. If you send out a survey to ask people what they are wearing when it is 80 degrees and sunny, then you will get a 75 percent answer rate in a week.
4. By collecting data points of Instagram selfie dates to days that are 80 degrees and sunny, your AI can identify 75 percent of the clothing in three months.

Scenario E: Men's socks are a great way to jazz up an outfit, so you decided to start a men's sock e-commerce store. Your customers are not completing the checkout process, and usability tests show that some users question the site's security. You want to add a small adjustment to the payments page to see if more users complete the checkout process.

1. If you add a password strength indicator, then more people will create passwords in the next two months.
2. If you add a lock icon next to the credit card information, the completion of the checkout process will increase by 15 percent in three months.
3. If you make the site prettier, the completion of the checkout process will increase by 25 percent in six months.
4. If you add a review page before the confirmation page, then 20 percent of customers will be able to complete the checkout flow in ten minutes.

Answers:

- **A - 1**
- **B - 3**
- **C - 4**
- **D - 4**
- **E - 2**

Learn from your mistakes. Look at the questions you got wrong and see which key element is either missing or vague.

Common Mistakes:

- There are too many variables. If you are testing multiple things then you cannot pinpoint which variable caused the results.
- There is not an achievable metric attached to the hypothesis to know the point at which the experiment succeeds or fails.
- The success or failure of the experiment is not directly linked to the experiment. If the success or failure could have been the result of a number of variables, then you don't know if the experiment was the reason for the change.

- The timebox is too long or too short. Some experiments are going to take longer, but make sure that the timebox is reasonable for the stage your company. You don't want to have an experiment that takes years or extends past your runway.

Other Resources

- http://www.producttalk.org/2014/11/the-5-components-of-a-good-hypothesis/
- https://medium.com/@mwambach1/hypotheses-driven-ux-design-c75fbf3ce7cc#.5c8t3tneh
- http://www.slideshare.net/intelleto/lean-ux-meetupvegashypotheses201307

Hypothesis Checklist

Questions	Yes	No
Is it simple and unambiguous?		
I mean ... is it simple...?		
...and is it unambiguous?		
Is it measurable?		
Does it describe a relationship between two things?		
Is the cause and effect relationship clear?		
Is it achievable?		
Is there any evidence that would convince us the hypothesis is *invalid*?		

05 Index of Questions

	Market	Product
Generative	- Who is our customer? - What are their pains? - What job do they need done? - Is our customer segment too broad? - How do we find them?	- How can we solve this problem? - What form should this take? - How important is the design? - What's the quickest solution? - What is the minimum feature set? - How should we prioritize?
Evaluative	- Are they really willing to pay? - How much will they pay? - How do we convince them to buy? - How much will it cost to sell? - Can we scale marketing?	- Is this solution working? - Are people using it? - Which solution is better? - How should we optimize this? - What do people like/dislike? - Why do they do that with our product/ service?

06 Index of Methods

	Market	Product
Generative	- Customer discovery interviews - Contextual inquiry/ethnography - Data mining - Focus groups* - Surveys* (open-ended)	- Solution interview - Contextual inquiry/ethnography - Demo pitch - Concierge test/consulting - Competitor usability - Picnic in the graveyard
Evaluative	- Five-second tests - Comprehension Testing - Data mining/market research - Surveys* (closed) - Smoke tests (e.g. video, landing page) - Sales pitch - Pre-sales - Flyers - Pocket test - Event - Fake door	- Paper prototypes - Clickable prototypes - Usability - Hallway - Live - Remote - Wizard of Oz - Takeaway - Functioning products - Analytics/dashboards - Surveys* (e.g. Net promoter score, Product/market fit survey)

07 Tags and Other Frameworks

Other Frameworks

There are many great methods, books, and frameworks out there on how to identify and prioritize risky assumptions, hypotheses, and questions.

All the methods in this book are tagged so they are easily searchable depending on any other frameworks we might use. This includes simple tags such as qualitative or quantitative, which are used to denote the type of information the method produces.

It also includes tags related to the type of business model, such as:

- *B2B* for business-to-business
- *B2C* for business-to-consumer
- *B2G* for business-to-government
- *2-sided market* for a business with buyers and sellers.

Using these tags to navigate the methods is not as simple as using the index and may result in a large selection of methods not entirely suited to the learning goal. But we have included them so they can help us further narrow down the methods.

Using the Business Model Canvas

The Business Model Canvas is a popular framework that identifies the nine basic building blocks of any business model and asks us to make assumptions as to what our business will be. Those blocks are:

Based on our completed canvas, we choose the area of greatest risk to our success. Sometimes this is the customer segment, but in the case of an existing market it may be the value proposition, channels, or even key partners.

Each method in this book is tagged with these blocks. If we can identify the greatest risk to our business model via the Business Model Canvas, we can search the tags for a complete list of experimental methods relating to that building block.

For example, if the customer is the biggest risk to our customer segment, then we are asking "Who is our customer?" or "Is this our correct customer segment?" Based on that, there are several tools available to learn more about our customer, including:

- Customer discovery interviews
- Ethnography
- Data mining
- Surveys (close-ended)
- Focus groups

This search won't differentiate between generative research and evaluative experiments, so you'll still need to take that extra step.

1.0 Generative Market Research

"Advertisements may be evaluated scientifically;
they cannot be created scientifically."

—Leo Bogart

1.1 Contextual Inquiry

In Brief

Contextual inquiry is a combination of semi-structured interviews and observations done in the actual location where the problem occurs or the solution will be used. This method avoids hypothetical statements and helps reveal knowledge that the customer may have but is unaware of and thus unable to communicate in a traditional interview. It may also reveal substitute products, competitors, or workarounds that will help define the optimal solution.

Helps Answer

- What are the customer's pain points?
- What are the jobs to be done?
- How often does this problem occur?
- Are there makeshift solutions the customer is currently using?
- Does the customer have any tacit knowledge about the problem space that would help create a solution.

Tags

- B2C
- B2B
- Qualitative
- Channels
- Value proposition
- Jobs to be done
- Key resources
- Key activities
- Key partners

Description

Time Commitment and Resources

Contextual inquiry can be very expensive depending on the proximity to the customer and the frequency of their problem. In some cases, the problem is unpredictable and a lot of time can be wasted either waiting for the problem to occur or simulating an occurrence.

Expect to spend at least one hour per customer with a minimum of five customers, and two hours to debrief.

It is helpful to have already conducted customer discovery interviews and have both customer personas and a preliminary storyboard of the user experience.

How to

Preparation:

- Arrange the time and place for the interview, making sure it is the time and place where the customer would typically have the problem.
- Prepare a framing statement.

Conduct the Interview:

- Frame the interview.
- The researcher must establish rapport and put the customer at ease.
- The customer must not feel judged.
- The researcher is there to learn.
- Establish the rules for observation.
- The customer will be doing work, so the researcher must establish up front when they can or cannot interrupt the workflow to ask questions.

Observation:

- The researcher should take notes on the workflow, asking questions to clarify any points of confusion.
- Take care to note extraneous activities that may be outside the scope of the solution to be designed but may impact the user's workflow, e.g., coworkers engaging in distracting chitchat.

Summarize:

- Summarize the observations and ask the customer for confirmation.
- Ask any additional clarifying questions.

Interpreting Results

A number of debriefing methods, such as affinity diagramming, card sorting, or creating jobs to be done can be used after reviewing recordings or notes.

Since the data is primarily qualitative and sample sizes are small, researchers must be careful not to extrapolate a pattern of behavior to the entire population, but they can usually synthesize a clear

hypothesis for further evaluative testing methods.

Potential Biases

- Confirmation bias : The interviewer can be prompted to sell their vision in case the interviewee's vision differs drastically. The interviewee feels compelled out of sympathy to adjust answers to the interviewer's expectations.

Field Tips

- "Apprentice yourself to the customer and learn how they are currently solving their problems without your product." *—@TriKro*
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Lucky Iron Fish: The founder arrived at his solution after he immersed himself in the people he was solving a problem for and studied their culture.
- Shopping Cart: A perfect example of how you can build better products when you are in contact with customers and build the product in parallel with customer development.
- Fast Food Milkshake example by Clayton Christensen
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Beyer, H. & Holtzblatt, K. (1998). Contextual Design: Defining Customer-Centered Systems. San Francisco, CA: Morgan Kaufmann Publishers.
- Gaffney, G. (2004). Contextual enquiry - A primer
- Holtzblatt, K., Wendell, J. B., & Wood, S. (2005). Rapid contextual design: A how-to guide to key techniques for user-centered design. San Francisco, CA: Morgan Kaufmann.
- Rampoldi-Hnilo, L. & English, J.(2004). Remote Contextual Inquiry: A Technique to Improve Enterprise Software. Boxes and Arrows.
- Whiteside, J. Bennett, J., & Holtzblatt, H. (1988). Usability engineering: Our experience and evaluation. In M. Helander (Ed.). Handbook of Human-Computer Interaction. New York, NY: Elsevier Science Publishing. 791-817.
- Got a reference? Add a link by emailing us: realbook@kromatic.com

1.2 Customer Discovery Interviews

In Brief

Customer discovery interviews are conducted with potential customers to gain insight into their perspective, pain points, purchasing habits, and so forth. Interviews also generate empathy between the customer and the entrepreneur to aid the design and ideation process. The best interviews help narrow the target market and provide a deep understanding of what causes a market need, and of the underlying psychology of the customer.

Helps Answer

- Who is our customer?
- What are their pains?
- Where can we find our customer?

Tags

- B2C
- B2B
- Qualitative
- Customer
- Channel

Description

Time Commitment and Resources

Typical rounds of customer discovery interviews require at least five separate interviews with individual customers, but some entrepreneurs advocate doing as many as 100 before drawing a

conclusion.

The time commitment can entail as little as 15 minutes per interview for consumer products, to a two-hour conversation for B2B sales.

The most significant investment of time can be in recruiting interviewees, which can again vary from a five-minute walk to the local coffee shop to a lengthy cold outreach program via LinkedIn (in the case of an entrepreneur with no market access into a highly specialized vertical).

Costs are typically zero or very low. In many cases, interview subjects are offered a gift certificate for their time that can be anywhere from $5 to $50 USD.

How To

Plan the Interview

1. Define the learning goal for the interviews.
2. Define key assumptions about the customer persona.
3. Create a screener survey of simple questions that will identify if the potential interviewee matches our target customer persona. Here's an article on screener questions from Alexander Cowan for reference.
4. Make an interview guide. Note that it should not be a strictly followed script. If you don't know where to start, check out some questions from Justin Wilcox or Alexander Cowan. Something like this:

    - What's the hardest part about [problem context]?
    - Can you tell me about the last time that happened?
    - Why was that hard?
    - What, if anything, have you done to solve that problem?
    - What don't you love about the solutions you've tried?
    - Prepare a handy template to put your notes in afterwards or check on the tools to record your interview (first check legal restrictions that may apply to recordings).
    - Prepare any thank you gifts, e.g., gift cards.

Conduct the Interview

1. *Frame*: Summarize the purpose of the interview with the customer.
2. *Qualify*: Ask a screener question to determine if the customer is relevant to your customer persona.
3. *Open*: Warm-up questions get the customer comfortable talking.
4. *Listen*: Let the customer talk and follow up with "what" and "how" questions.
5. *Close*: Wrap up the interview and ask for referrals, or if applicable, a follow-up interview.

Debrief the Interview

- Make notes promptly; sometimes a video or audio recording can be helpful.

Interpreting Results

Are you able to listen and record data based on the following?

- *Job*: What activities are making the customer run into the problem?
- *Obstacle*: What is preventing the customer from solving their problem?
- *Goal*: If they solve their problem, then _____?
- *Current solution*: How are they solving their problem?
- *Decision trigger*: Were there pivotal moments where the customer made key decisions about a problem?
- *Interest trigger*: Which questions did the customer express interest in?
- *Persons*: Are there any other people involved with the problem or solution?
- *Emotions*: Is there anything specific that causes the customer to express different emotions?
- *Measurement*: How is the customer measuring the cost of their problem?

Potential Biases

- Confirmation bias: The interviewer can be prompted to sell their vision in case the interviewee's vision differs drastically. The interviewee feels compelled out of sympathy to adjust answers to the interviewer's expectations.
- *Order bias*: Sometimes the order in which you ask questions can affect the answers you get. Try to run questions in a different order in different interviews.

Field Tips

- "Ask about the past. Observe the present. Forget about the future." @TriKro
- "1st rule of validating your idea: Do not talk about your idea." @CustomerDevLabs
- "The harder customers are to interview, the harder they'll be to monetize." @CustomerDevLabs
- "It's always handy to shut up for 60 seconds and let the interviewee talk." @red_button_team
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Case study submitted anonymously via Lean Startup Circle discussion thread
- How I Pivoted Product Strategy and Grew SaaS Deal Size by 10x
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Rob Fitzpatrick - The Mom Test: How to talk to customers and learn if your business is a good idea when everyone is lying to you.
- Alexander Cowan - The Customer Discovery Handbook
- Justin Wilcox - How I Interview Customers
- Quora - What are your favorite methods for doing problem interviews during customer discovery?
- Kissmetrics - 26 Resources to Help You Master Customer Development Interviews
- Got a reference? Add a link by emailing us: realbook@kromatic.com

1.3 Data Mining

In Brief

Data mining uses statistics from large amounts of data to learn about target markets and customer behaviors. This method can make use of data warehouses or big data.

Helps Answer

- Who is our customer?
- What are their preferences?
- How do they rank planned feature sets?

Tags

- B2C
- B2B
- Customer
- Quantitative

Description

Data mining can start with the results from a few questionnaires, but it is more effective to use a large dataset. Identifying the source information (where you get the data) and extracting key values (how you pick the data points) are important to getting quality results.

Data mining is best used for pattern discovery in customer perceptions and behaviors. It is useful in understanding your customers and/or your target market.

For example, you can identify the profile of potential buyers or customers by running email campaigns and gathering the results. This data can help in customer acquisition efforts.

You can also gather customer information by sending out customer satisfaction questionnaires or

feedback forms. Alternatively, you can track customer behaviors or mouse clicks on your websites. By combining these two data points, you can determine customer behavioral links between reported satisfaction and actual usage. This can identify key drivers for customer loyalty and churn.

Time Commitment and Resources

Depending on the amount of data that you need to crunch and data points that you want to discover, it can take from 2-3 hours to a few weeks. You should pick one or two of the most important data points to start the learning process.

How to

You can either acquire outside (industry or market) data or distill your own (customer or product) data. Once you identify the area that you want to test:

- Acquire data (integrate from various sources, if required).
- Identify data points (determine which data or information is relevant to the research).
- Transform and extract data (there are many tools to choose from, from business intelligence tools to database software with built-in reporting tools).
- Recognize and search for patterns.
- Draw conclusions or refine the process by going back to Step 2 (or even Step 1 if you need to get better data).

Interpreting Results

Data matters, but perspective matters more. Human beings tend to see what we want to see and draw conclusions based on our own biases.

To counter these biases, you can:

- Get outside help or another pair of eyes to interpret the data.
- Get two data points that are counter to each other. (In research methodology, that is called the control group and experimental group.)

Potential Biases

- Confirmation bias : The interviewer can be prompted to sell their vision in case the interviewee's vision differs drastically. The interviewee feels compelled out of sympathy to adjust answers to the interviewer's expectations.
- False positives /negatives: Small sample sizes can give disproportionate weight to results that mistakenly show the opposite of their true nature
- Ignorance of black swans (rare and unprecedented events that can dramatically change or determine the future outcome)

Field Tips

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Data mining answers questions for startup businesses in Northwest Colorado
- Jaeger uses data mining to reduce losses from crime and waste
- MobileMiner: A real world case study of data mining in mobile communication
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Data mining knowledge discovery
- Everything You Wanted to Know about Data Mining but Were Afraid to Ask - The Atlantic
- SPSS. (2005). Data mining tips
- Got a reference? Add a link by emailing us: realbook@kromatic.com

1.4 Experience Sampling

In Brief

This method is used to get information about a participant's daily behaviors, thoughts, and feelings in real-time, or as close to it as possible. Participants are asked to stop at certain times in their natural settings and make note of their experiences. It is also known as the daily diary or experience sampling method (ESM).

Helps Answer

- Who is our customer?
- What are their pains?
- What are the jobs to be done?
- **How do we find them?**

Tags

- B2C
- B2B
- Qualitative
- Customer segment
- Channels
- Value proposition

Description

The key to experience sampling is asking the right questions. Be especially careful with phrasing, since you will be asking the question over and over again. This method makes most sense when you want to solve a frequently reoccurring problem. You get the most useful and viable input when asking about repeated behavior and, more specifically, the last time it occurred.

Time Commitment and Resources

Your participants' time commitment will depend on the amount of data you want to collect. The more data you get, the more confident your interpretations. You should aim for at least 100 data points, depending on your goals and customer segment.

There are three dimensions to expanding your data pool: How many times a day are you asking the question? On how many days are you asking the question? To how many participants do you ask the question about repeated behavior? Keep in mind that usually two-thirds of the answers will be useful, and adjust your planning accordingly.

The recruiting process will often take a lot of time since only participants who are part of your target group can ensure valuable data. That's why you will need to create a screener to make sure the participants qualify for your target group. How long the recruiting takes depends on how many participants you want, and could range from one day to multiple days. One fast and cheap way to find them is to search social media settings that correspond to the theme of your study.

If you plan on amassing a large amount of data, you should have a team ready to analyze that data. Aim for a couple of analysis sessions, each after a certain amount of data is obtained. The first session will take the longest — depending on the amount of data, it could range from two hours to a day.

You should offer your participants some kind of incentive. The amount depends on the number of questions answered, and should range from $5 to $50 (or something of similar value, like a coupon).

How to

Preparation

- Carefully phrase the question.
- Make sure the answering process takes no more than a minute.
- Plan how often you want to send alerts, both how many times a day and distribution over the days. Be careful that the frequency doesn't lead to the perception of being nagged. If the user hasn't completed the behavior, another alert may create an undesirable effect.
- Choose your medium of contact — SMS, phone, email, app, etc.
- Plan how to collect the data; a spreadsheet is common.
- Decide how many participants you want and start recruiting as soon as possible.
- Plan the analysis according to the expected amount of data, team size, process, etc.

Finding Participants

- Use a screener to select relevant participants.
- Identify participant criteria and formulate questions accordingly. If possible, use quantifying questions (e.g., how often the participant does something).
- Consider non-criteria that your questions might not cover yet.
- Check willingness to participate by collecting contact information.
- Check availability.
- Select your participants.
- Set their expectations according to how often they will be asked to give answers.

Start Collecting Data

Remember to thank the participants for each participation.

Analysis

- Check the first set of answers to see if they are sufficient for your research. If necessary, expand your questions or explain to participants the level of detail you need.
- Check if the questions are correctly understood. If necessary, adjust your questions or correct individual participants.
- Begin the analysis as soon as possible; do not wait until you have collected all the data.
- Eyeball the data to get a general impression.
- Decide on categories to help you organize the data.
- Adjust categories during the process if necessary — split if too big, combine if too small.
- Clean the data of answers that are not useful as you run across them.
- If you analyze in a team, work on the first 50-100 data points together, deciding on categories and classifying the answers.
- Distribute the remaining data among the team for classification; answers may match multiple categories.
- Switch the data within the team for a second blind classification and discuss possible discrepancies.
- Create frequency charts.

Interpreting Results

First, look at the frequency distribution and identify common themes to gain insight into participants' pain points and delights. Then pinpoint what you have and have not been doing well in solving your target group's problems, as well as opportunities for improvement. You may find that the problem is slightly different than expected, or what you thought was a problem is not one at all. You may get ideas for additional product features. In any case, you end up with data on different experience categories and therefore many opportunities.

Potential Biases

- Prediction bias: Do not ask about people's opinions on potential products, situations, or what they think they need. People are bad at predicting the future! Ask about recent behavior and problems.
- Confirmation bias: Be careful not to use leading questions or give examples of what kind of answers you expect.

Field Tips

- Run a comprehension test before a landing page test or you won't understand why it doesn't work. - @TriKro
- Don't ask for opinions, observe behavior. - @tsharon
- Often, what customers say they want and what they actually need differ significantly. - @macadamianlabs
- Trying to understand users without actually observing them is the same as learning to ride a bike by reading about it. - @MarkusWeber
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Using experience sampling methodology to understand how educational leadership students solve problems on the fly
- Teacher Motivation and Job Satisfaction: A Study Employing the Experience Sampling Method
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Experience Sampling Method
- Experience Sampling
- Using experience sampling methodology in organizational behavior (2012)
- Don't listen to users, sample their experience - Tomer Sharon (Video)
- Got a reference? Add a link by emailing us: realbook@kromatic.com

1.5 Focus Groups

In Brief

A focus group is a small group discussion designed to rapidly gain customer feedback on a given topic. It is like customer development, but performed in a group. In the lean startup world, it is often criticized for devolving into groupthink. The opinions of the most outgoing group members tend to dominate the discussion and distort the outcome. It can also be used to understand the dynamics behind group buying patterns/influences.

Helps Answer

- How do customers influence one another in a group setting?
- What do customers think?
- What are the customers' problems?
- What do they think about the product/solution?
- What do customers think of alternatives?

Tags

- B2C
- B2B
- Qualitative
- Customer

Description

Focus groups are a traditional method that larger companies use to hear the voice of the customer. Focus groups are a divergent tool to gather insights based on group conversations. When done well, group conversations help chain associations among group participants, supposedly resulting in a better sense of the subjective essence of customer feedback.

Focus groups have a long history. They were first used over 60 years ago by U.S. government sociologists investigating the effectiveness of WWII military propaganda movies. They are most often used in the context of:

- Media consumption
- Consumer product advertising
- Traditional market research

According to Harvard Business Professor Gerald Zaltman, focus groups tap into only about five percent of people's thought processes — the five percent that lies above the level of consciousness.

Focus groups are quick and easy to design and use, particularly if there is a bigger budget available, as there are many companies and third parties that help recruit and organize focus group sessions.

They tend be more effective when used as a source of idea generation rather than a tool for verification. Overall, they are used to try to understand "unarticulated needs" directly in the voice of the customer.

According to B2BInternational.com, typical market research situations that might involve focus groups include:

- To unravel complex processes from the basics, such as a complicated buying process
- To identify customer needs (i.e., where there is a complex interaction of factors influencing motives)
- To identify working practices, such as how a particular product is used
- To test new products (i.e., when something needs to be shown to people)
- To explore a concept with stimulus aids
- To explore and identify issues of satisfaction for customers, staff, or suppliers
- To explore perceptions of brand and service elements associated with the brand

Time Commitment

Three days prep (much less if you outsource participant recruitment) + 90 minutes per session + 1-4 hours to collate results

How To

1. Pick a single, clear purpose. A single product or issue.
2. Narrow down your target audience. Pick and talk to one group at a time.
3. Consider organizing a control group to contrast group opinions against a larger market context.
4. Refrain from using the focus group for ulterior motives.
5. Find a second facilitator. Helps with note taking and other organizational issues to avoid group distractions.
6. Choose a comfortable venue and recording method. Comfort and safety are critical when helping participants relax.
7. Prepare up to ten questions.
    - Use open-ended questions.
    - Establish rapport.
    - Avoid jargon.
    - Avoid embarrassing or intimidating questions if you can, or only ask them towards the end of a session if participants feel comfortable.
8. Plan ahead how you will record data. Consider:

    - Post-its
    - Evernote
    - Excel
    - Software tools
9. Recruit 6-10 participants, using appropriate incentives/goodies.
    - Advertising
    - Specialized focus-group recruiter
    - Other existing marketing channels (from business model canvas)
10. Pass out consent forms at the beginning of the meeting.
11. Have everyone introduce themselves.
12. Announce that the purpose of the meeting is to hold a brainstorming session to get participants' opinions, and inform participants that the session is being recorded.
13. Ask questions. Use your original ones, but also throw in others. Ideally, participants will start to talk amongst themselves at some point so that you can withdraw from the conversation.
14. Stay neutral and empathetic. Establish eye contact with participants who are speaking less.
15. Take written notes during the session (assistant), including non-verbal cues as well as what was said.
16. Prevent any individual from dominating the discussion. Use questions like, "Does anyone else have a different perspective?"
17. Finish anywhere between 45 and 90 minutes after the start.
18. Provide a feedback form.
19. Repeat if you can. Run a few focus groups, just to get a diversity of opinions.

(adapted from wikihow.com)

Interpreting Results

Use techniques to match patterns in responses, such as affinity mapping using post-its. Also, take note of language used by customers as well as any ideas generated during the discussion as a source of inspiration for further evaluation.

Potential Biases

- Confirmation bias: Don't use focus groups to tell you what you already know. Listen for divergent opinions or the unexpected.
- False positive: Your focus group may tell you things that aren't true for your market as a whole.
- Difference between what customers say vs what they do/buy: Assume consumers are not capable of accurately describing why they make decisions.
- Ability of moderator to lead a session: Moderators need to have enough skill to lead a group and manage the dynamic so that you don't lose useful information.
- Unrepresentative sampling: Choosing the wrong participants devalues any insights you gain, as they won't be actionable.
- Ulterior motives: Don't turn a focus group into a PR or sales opportunity. It will skew your results.

Field Tips

- If you are considering focus groups, consider whether you can achieve the same with customer development interviews.
- Start focus groups with simple questions that build participants' comfort level.

- Check technical equipment before starting and have a contingency plan in place.
- Focus group members may bring up false information or offensive opinions. Have a plan in place to handle them.
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Moore Research helps the nonprofit Heartwood Institute with detailed interviews, in-depth analyses, and statistical information that helped them launch a successful product.
- A Fortune 100 company uses focus groups to successfully validate likely market segments.
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Kansas University - Community Toolbox: Section 6. Conducting Focus Groups
- Nielsen Norman Group: The Use and Misuse of Focus Groups
- Slate: Lies, Damn Lies, and Focus Groups
- Interaction Design Foundation: How to Conduct Focus Groups
- B2B International: Using the Focus Group in Market Research
- User Focus UK: Is Consumer Research Losing Its Focus?
- Got a reference? Add a link by emailing us: realbook@kromatic.com

1.6 Open-Ended Survey

In Brief

An open-ended survey asks a fixed set of questions, usually via a mass communication channel such as an email or website pop-up. Answers are not constrained as in the case of multiple choice or check boxes, but are free-text responses in which the customer can choose the length and detail of their answer.

Helps Answer

- Who is our customer?
- What are their pains?
- What are the jobs to be done?

Tags

- B2C
- B2B
- Qualitative
- Customer
- Generative market research

Description

Time Commitment and Resources

Surveys can be quick to write and execute, often taking only 1-2 hours to set up. However, designing effective questions that don't introduce biases into customers' answers can require a high degree of skill, multiple revisions, and even comprehension tests run on the survey.

Collecting results typically takes more time and depends on the communication channels available to distribute the survey. Response rates can vary from 1 to 20 percent on a survey sent to existing customers, depending on the level of customer engagement, so large numbers of target customers and a good deal of time may be required to collect data.

Analyzing the data can take 4-8 hours, depending on the length of the survey, the number of respondents, and the quality of responses. As answers are free text, a large amount of reading, transcribing, and synthesizing may be required.

How To

Preparation

1. Write screening questions:
    - These are typically close-ended questions that help identify if the respondent is in the desired target segment (e.g., "How old are you?").
    - A few leading questions can be placed in a survey to identify "professional survey respondents" who will lie to be included in a survey or have a chance to participate in a follow-up research project for cash.
2. Write questions:
    - Questions should be non-leading and non-hypothetical.
    - Asking for anecdotes or historical information can generate more concrete insights.
    - Conduct comprehension tests on survey questions.
    - This ensures that the questions are being correctly interpreted, and can often reveal leading questions.

Distribution

Surveys can be sent out via any method to the target audience.

Typical distribution methods include:

- Social media
- Email
- Website pop-ups
- Regular mail
- Telephone
- SMS

Interpreting Results

An open-ended survey is a generative research technique, and as such, be careful to interpret any input as simply ideas, not as a vote from the customer. The data is qualitative in nature.

Because surveys are flexible, easy to write, and easy to deploy, they are more likely to be misunderstood and misused. Surveys are often a default research method when researchers do not feel they have the time to conduct ethnography or customer interviews. They are often highly favored in a corporate setting because a large number of respondents may be considered statistically significant, even if the survey responses are qualitative.

Open-ended surveys are sometimes combined with closed-ended surveys, making it tempting to spend extended periods of time analyzing the data and looking for correlation that will draw a definitive conclusion to act upon. This tendency to use the data to drive a firm conclusion even when the data is generative in nature is the biggest argument for avoiding surveys at all costs.

A typical debrief method to analyze the generative data is to read each answer and transcribe salient points on post-it notes for a sorting exercise. Patterns can then be more easily identified.

For surveys that specifically solicit suggestions from users, the entire list of suggestions may be added to a repository for later analysis.

In the case of very large data sets, algorithmic tools such as sentiment analysis or word clouds can give additional quantitative insight, but should be used to supplement the qualitative insights, not replace them.

Potential Biases

- Selection bias: Researchers will often fixate on qualitative comments they agree with and ignore other comments.
- Sampling bias: Although the sample may not match the general population to be surveyed, if the data is taken as generative and not evaluative, this bias is less relevant. Any ideas generated still must be validated by an evaluative method.

Field Tips

You can run an open-ended survey once you know the best questions to ask. Talk to your customers to figure out the right questions. - @TriKro

Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

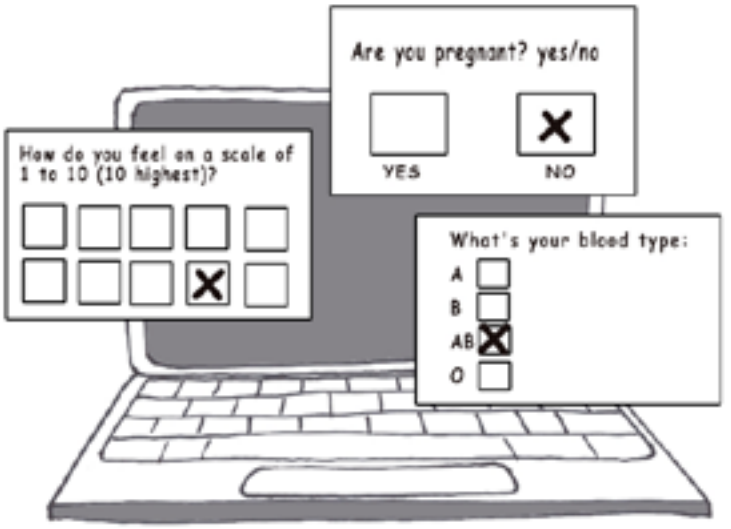
- A Guide to Open-Ended Questions in Marketing Research
- FluidSurveys: Comparing Closed-Ended and Open-Ended Questions
- Midwest Political Science Association: Structural Topic Models for Open-Ended Survey Responses
- Centers for Disease Control and Prevention: A Catalog of Biases in Questionnaires
- Open-Ended Questions: Get More Context to Enrich Your Data
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.0 Evaluative Market Experiment

“Life is an experiment in which you may fail or succeed. Explore more, expect least.”

—Santosh Kalwar

2.1 Closed-Ended Survey



In Brief

Closed-ended surveys help you converge on what's relevant in great detail, particularly to customers or prospects. They are designed to create structured quantitative data, which lends itself to statistical techniques. These surveys preselect a number of possible answers for each question. They also help explore categories of data, for example, to explore segmentation.

Helps Answer

- What is the breakdown of client concerns/problems/preferences in terms of percent of all clients in a segment?
- How X varies with Y (e.g., how many part-time students find advanced calculus challenging?).
- What patterns emerge over time? (if repeated over time)?
- Ranking questions like: What is the order of priority? Who/what is the best option?
- What provides the most satisfaction?

Tags

- Quantitative
- Analytical
- Convergent

Description

Closed-ended surveys consist of closed-ended questions only. These types of surveys are most useful for exploring "known unknowns." Typically, this means that:

1. You've tried exploring what you don't know.
2. You've already chosen your direction, and

3. There are still holes in your knowledge.

For example, a startup founder who has achieved problem-solution fit and has performed some smoke testing around key "happy case" assumptions could use a closed-ended survey to prioritize or discover other issues.

As the survey giver, you are interested in finding patterns in the answers. By focusing in depth on a particular group of people, you hope to uncover hidden patterns in the data you gather.

Here are a few examples of closed-ended questions:

- How do you feel on a scale of 1 to 10 (10 highest)?
- Are you pregnant? yes/no
- What's your blood type?
    - A
    - B
    - AB
    - O

These surveys can be delivered offline (expert with clipboard), online (popup form), or as a hybrid (iPad at a conference).

Time Commitment

Varies significantly with the survey length and methodology chosen. It can take an hour to configure an exit survey on a website, or it can take weeks to perform a large-scale, in-person survey and manually enter the data into a useful format.

How to

1. Be very clear what you want to learn up-front when designing the questionnaire. Usually this goal will flow from your current overarching goal in the business. Ideally you should be able to write out the goal of the survey in one sentence. For example, a survey would have very different questions for each of these goals:

    - Discovering user problems
    - Improving an existing product/UX
    - Keeping track of user satisfaction (as a proxy for referrals)
    - Improving customer service

2. Formulate questions you'd like respondents to answer. As a rule of thumb, only include questions that you think will result in specific actions. For example, how will you use the data you gather to inform your decisions when it comes to catering, lodging, transportation, registration, event activities/workshops, and speakers? Types of questions include:

- Dichotomous: Do you have private health insurance?
    - yes/no
- Likert-type scale: To what extent are you satisfied?
    - 100 percent
    - 75 percent
    - 50 percent
    - 25 percent

    - 0 percent
- List of items: My favorite food group is:
    - Grains
    - Meat
    - Fruit and Vegetable
    - Milk
- Ordinal: Sort the following according to the order of importance to you:
    - Price
    - Speed
    - Cost
- Matrix question: Please rate the following company divisions with respect to knowledge of MS PowerPoint on a scale of 1 to 5:
    - Marketing
    - Product
    - Operations
    - Sales
    - IT
    - Finance

3. Collect the answers. This can be done face-to-face, by phone, online, or via postal mail.
4. Organize the answers into a useful format. Typically a spreadsheet is good enough to organize the data. Then it can be loaded into a statistical tool, like R, or a database for further inquiry.

Interpreting Results

Use simple statistical techniques like correlation, ANOVA, or regression for further insights. You can also hire a data scientist to help interpret your results.

Be sure that you have enough respondents to be able to use rigorous tools. Check your sample size as a whole, but also for each subgroup. If you don't have enough within a segment, you can't make a statistically informed statement about that group of people.

Based on your responses, check to see if any of the questions were too obviously worded or confusing.

Look at overall scores. Compare average answers to a benchmark or predetermined expectations.

Also look at the distributions of responses. Are they normally distributed? Skewed? A power law distribution (i.e., 80/20)?

Create a visual summary of the results.

Take action!

Potential Biases

- Avoid overly sensitive questions — you are unlikely to get a "true" response.
- Avoid leading questions, which subtly prompt the respondent to answer in a particular way.
    - "Are you for or against an increase in tobacco tax rates?" (Non-leading)
- "Are you in favor of increasing tobacco tax rates to protect our children's health?" (Leading)

- Take into account that your respondents will often not want to admit to unsavory or socially undesirable behavior or preferences, particularly if they don't feel safe or the results aren't confidential.
- Using emotionally loaded content can predictably skew results to a "yes" or a "no" or cause the respondent to abandon the survey if they don't identify. For example, "Where do you enjoy drinking beer?" implies that the respondent enjoys drinking beer specifically, and would yield unpredictable results at an AA meeting.
- While conducting surveys, never ask people what they would like to pay for. Usually they lie or are simply unaware.

Field Tips

- Keep questions simple on closed questionnaires. For example, avoid hypotheticals.
- Ask (and learn) one thing at a time. You can check for correlation and causation later.
- Allow the respondent the option of answering with "not appropriate"/"don't know"/"have no strong feelings".
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- FourSquare used a closed-end survey to prioritize which city to launch in next (using a google form)
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Survey Monkey: How to Analyze Survey Data
- Fluid Surveys: Comparing Closed-Ended and Open-Ended Questions
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.2 Comprehension Test

In Brief

A comprehension test will evaluate whether or not the customer understands the marketing message explaining the value proposition. This eliminates a possible false-negative bias on smoke tests where the customer indicates they do not want the value proposition when actually they do not understand it

Helps Answer

- Does the customer understand the value proposition?
- How could we explain the value proposition better?

Tags

- Quantitative
- Qualitative
- Value proposition
- Smoke test

Description

Time Commitment and Resources

- For B2C, it can take 1-2 hours offline or 24 hours online.
- For B2B, participant recruitment times can vary widely.
- 10-20 participants.

How to

- Write out value proposition in 1-3 sentences.
- Show the value proposition to a participant for a few moments, then remove it.
- Ask them to explain the value proposition in their own words from memory.

Interpreting Results

If the participant's explanation is roughly comparable to our own, we count that as a positive result. If not, then it's a negative. For this sort of test, we generally want a sample size of about 20 people and a positive conversion of about 80 percent.

The conversion has to be very high because regardless of what our value proposition is, people should understand it.

Take note: if many of the participants use identical language to explain the value proposition back, it should be considered as possible alternative marketing messages.

Potential Biases

- Confirmation bias: Overly enthusiastic entrepreneurs will sometimes over-explain, correct, or nonverbally prompt the participant with the correct answer.
- Invalid target audience: Participants do not need to be the target customers, but they must have the same level of language and vocabulary as the target customer (e.g., a junior marketing manager can stand in for a chief marketing officer).
- False negative: When using online surveys such as FiveSecondTest, the distractions of an online test can often result in a higher than normal failure rate.

Field Tips

- Run a comprehension test before a landing page test or you won't understand why it doesn't work. @TriKro
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- GrasshopperHerder: Comprehension vs. Commitment
- Pearson: Technical Report - Cognitive Labs
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.3 Secondary Market Research

In Brief

Secondary market research gathers and interprets available information about the target market, and includes published reports, newspaper articles, or academic journals. This method is used to figure out the size of the market or customer segment, pricing, and ways for the market to evolve. Also referred to as “desk research” or “market study,” this type of research is always done using third-party sources, and there is no direct customer contact.

Helps Answer

- How much would our customers pay? (What should be the price of our product?)
- What is the size of the market? (How many customers would be using our product?
- How many would be paying customers?)
- How much would it cost to sell? (What are the marketing channels and their exploitation costs?)

Tags

- B2C
- B2B (studies of industry sectors)
- Quantitative (but simple figures)
- Marketing channels
- Segments

Description

This method does not refer to primary research such as customer discovery interviews, focus groups, surveys, and so forth. This form of market research is simply the act of seeking out existing research and data.

As the data from secondary research cannot be easily verified and may come from a variety of sources, it is theoretical rather than experimental. Some would consider the data qualitative rather than quantitative because the researcher must factor in the quality of the data source to any conclusions.

The goal of secondary market research is to use existing information to derive and improve your research strategy prior to any first-person research. Often, existing research can help determine rough market sizes and if first-person research is worth the effort. With existing markets, a great amount of information can be found online or purchased from market research consultants.

This type of research can be performed for any market, but is most often done for companies targeting existing markets. There is typically no information available for startups creating new markets.

We distinguish it from Data Mining, which is about exploiting big, numerical data sets (existing or generated by you) so that they can be automatically processed and plotted. We also distinguish it from Picnic in the Graveyard, which is about regarding existing or deceased products in the market rather than the market itself.

First you must find the relevant reports. Then you analyze them in a way that allows you to learn something about your product or idea.

In "market status research," you look at:

- User behaviors: How often users need to use a similar product, and in which circumstances (not to be confused with user behaviors regarding specific products, which is covered by the Picnic in the Graveyard method).
- Marketing: What are the typical channels used? What are the costs of opening and maintaining such channels?
- Current technology: Benchmark technology to understand what kind of standards have been set regarding speed, accessibility, etc.

Identifying relevant reports will help derive target population size, prices, and costs — hence, your revenue.

In "trend research," you look at:

- User behaviors: What new user behaviors are emerging?
- Marketing: What new channels are being used in this area?
- Technology: What coming technology may disrupt the market and our own approach?
- This helps to derive the possible evolution of your revenue and avoid pitfalls, or even give you new ideas (as a generative method).

A typical use of market research is to develop a first idea of the target population itself. For instance, you may want to know if your product would be used more often by teenagers or young adults. Imagine your product is a Facebook app. There are numerous reports about the growth of distinct Facebook population segments and their respective habits, hence you can find if your type of product can meet the needs of younger or older Facebook users, and you can also see if this segment is growing or diminishing.

Time Commitment and Resources

When performed for a particular occasion (to answer a specific question about a market size, for instance, or to get the initial big picture at the beginning of the project), it may take 1-3 days, depending on the difficulty of gathering relevant information, the amount of information that is available, and the filtering of the obtained information.

How to

Where to find useful information:

- Libraries
- Professional associations
- Business groups
- Professional fairs
- Publications relevant to your target market
- Governmental organizations
- Public and nonprofit organizations that generate a lot of data (hospitals, transportation systems, etc.)

You must be specific to get information that is relevant to your specific question (i.e., the current status of your idea/product development). For instance, if you want to launch a service that enforces some privacy when publishing images on the internet, look beyond the population of people that publish images on the Internet (which is very large). Figure out who is interested in privacy and takes it seriously. This is not necessarily just a subset of the first population, because there may be people who currently do not publish any images out of concern for privacy issues.

To be specific, you have to be smart, or even crafty. For instance, you may examine annual reports from corporations that may include interesting facts about their target segment within the description of how their products are doing. Another trick is to use tools that are primarily made for other purposes. For instance, by trying to promote something on Facebook (a post, a page, or an app), you can define an ad campaign, then Facebook provides you with tools to target your population (gender, age, device - iPhone or Android - and interests) and displays information about the potentially reached population, which in turn gives you an idea of its size. You do not need to actually launch the campaign and pay for this.

Research into competitors is also a source of information — not just their product, but also their users, marketing channels, prices, and costs (or production methods). This method is generative as well as evaluative, such as in indicating how you could, and when you should, differentiate your product.

Interpreting Results

This method can be quite extrapolative. You may resort to complex resources such as behavioral economics models, but it's better to keep it simple and allow the most space for actual experiments. Use your results to get an early idea of the market, to detect and qualify niches within that market, and to gain a broad idea of whether you should commit effort to that market. We use qualitative results to stay smart and aware and to avoid missing an important piece of information such as a disruptive trend (e.g., when you want to launch a camera service to capture racers while self-piloted tracking drones are emerging).

Potential Biases

- False positive: Often be due to a lack of specificity in your research. For instance, it is easy to get large numbers for potential users of an image-publication app, while the specificity of the service you have in mind (e.g., to protect privacy or to enforce copyrights) will drastically decrease the numbers.
- False positives are also due to the scale of markets that are described by the survey you use. Most often, surveys describe wide international environments while you will tackle regional markets, or niches inside this market. The mechanisms that result in the described market may be different at your scale.
- Confirmation bias: Often obtained by suddenly importing an unfounded ratio in your population estimate that actually make the result of the whole exercise fanciful. Indeed, you have to consider the size of the population you will actually acquire out of the target population, which depends on the competition (including indirect solutions) and your marketing channels. If you omit the conversion rate or use one that is whimsical, your results will be too optimistic. One of the goals of market research is to try to get a documented and realistic conversion rate. So it is important not to just figure out the size of a population having a given problem, but also to understand what part of this population is typically following such-and-such marketing channel, and what part will do so in the future.

Field Tips

- When looking at available market surveys, take into account your product specificity @tdagaeff
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Secondary Market Research versus Primary Market Research
- Example: Association Providing Links for Business in a Specific Area - Queensland, Australia
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Marketing Donut, General Description of Market Research
- Market Research Methods, Market Research vs. Direct Research
- Know This, Type of Research Types by Decision Types You Have to Take
- The Craig Newmark Graduate School of Journalism at the City University of New York: Market Research Guide for Entrepreneurial Journalists: Primary & Secondary Market Research Resources
- SBA.gov: Market research and competitive analysis
- Census.gov, US Census Historical Data
- European Commission, Consumer Market Studies
- US Commercial Services, Market Research Library
- Cornell University, How Can I Find Market Research Data
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.4 Value Proposition Test Broken Promise

In Brief

People naturally want to share ideas or products they love with their friends. This smoke test helps test how much of a natural/inherent virality lies in the idea itself. It helps identify high-potential ideas before we've built a product.

Helps Answer

- Does the product answer an unmet need?
- Are users getting excited enough to share the product or product idea?
- Do we have an idea or product that people love?
- What relationships exist in our market?
- Who gets the most excited about the product?

Tags

- Viral
- Landing page
- Sharing
- Audience
- Segmentation

Description

This smoke test puts up a small social barrier (the social pressure of a personal promise) to see if anyone would consider the product idea worthy of sharing regardless of how developed it is. It tests the virality coefficient, or the "Referral" in Pirate Metrics' AARRR model. It is arguably a social variation of the landing page MVP.

This test is most relevant for early-stage founders, particularly when testing a variety of ideas. It

helps identify which of a number of ideas actually have relative merit. Ultimately, it helps focus your resources on an attractive and buzzworthy product.

In terms of the mechanics, it works similar to a landing page. There is a dedicated web page with a call-to-action. On the thank-you page or in follow-up communication, the copy explicitly asks the registrant NOT to share the idea with others. After some time passes, you compare the original list of people you contacted with the actual list of signups. Anyone who wasn't in your original list of people you told about the idea is counted as a referral.

Referral rate = (total number of signups in a time period/total number of original people contacted)

If this is above 100 percent, then you are seeing referrals.

With this smoke test, you aren't testing conversion rate but referral rate. Has anyone referred the product despite being told that it's not to be shared?

To the extent possible, it's also worth noting who is being referred. This provides additional insight on the ideal target profile for that product idea. These referrals should ideally be interviewed to discover more about them.

Time Commitment and Resources

Minimal: 1-2 day developer and designer time, or you can use a viral landing page template like the ones at KickoffLabs.com

How to

1. Send out a few early landing pages/code-free MVPs to a group of 10-15 people.
2. Ask them not to share with anyone.
3. Track email signups or a different CTA (follows, Facebook page likes).
4. See which (if any) of the pages gets signups outside of the group you sent it to (broken promise = formula for growth).

(Adapted from Art of Cleverness)

Interpreting Results

Interpretation is framed by how you originally formulated the experiment (i.e., what is the cutoff value for the referral rate required to make a go/no-go decision?). Also, be clear on exactly who you count, both in the original and referred groups. For example, immediate family like your mom doesn't count (as well as anyone she refers) unless she really is representative of your target market.

Potential Biases

- Confirmation bias : The interviewer can be prompted to sell their vision in case the interviewee's vision differs drastically. The interviewee feels compelled out of sympathy to adjust answers to the interviewer's expectations.

Field Tips

- It's only hard [to market an idea] if your idea or product isn't loved. @simonelucidi87
- Figure out your cutoff rate for referrals before you run a broken promise smoke test @ LaunchTomorrow
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- The Art of Cleverness: Use the Broken-Promise Strategy to validate your startup
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.5 Value Proposition Test Event

In Brief

We can use an event to smoke test a problem, and to some extent, content that is attractive for our target audience. By organizing an event, we are confirming that our audience has the expected pain points. If we charge for the event, we are confirming they are willing to pay to solve their problem. And if we are ultimately creating a digital product, it can be used to smoke test the content or process we'd like to deliver digitally.

Helps Answer

- Who is actually interested in a problem?
- How do I reach my target profile?
- Are they willing to pay for a solution?
- What exactly do they like and why?

Tags

- Qualitative
- Channel
- Problem test
- Solution

Description

Organizing an event speeds up your validated learning by scaling it one step above one-to-one interviews. The goal is to create a safe and fun environment for your target prospects to confirm what you've learned from individual problem and solution interviews.

An event allows you to create a product for your target market. By organizing one, you need to figure

out how to reach your target market, what to say exactly, and how to create an experience that they find useful, pleasant, or inspiring.

The choice of format can vary widely:

- Lecture by one or several authorities
- Peer-to-peer events like an unconference (e.g., LeanCamp)
- Smaller and more intimate events like a LeanCoffee structure
- Gameshow style
- Trip together
- Support groups like a mastermind
- Networking or drinks
- Conference (online or offline)
- Webinars
- Live video streaming (e.g., Facebook)

This type of smoke test is easiest to organize in a larger city, where there are already lots of events and people. Even though an event focuses on your target clients in one location, it can be used to establish a more in-depth relationship, giving you much more information than interacting online.

Events themselves are attractive as a low upfront investment product. They can be considered valuable content. They can be used as a source of highly qualified leads (or a way to test a channel), leading into an upsell or presell of a different product/service.

Because an event is a mini-product in and of itself, it can be used to test a number of different hypotheses around related business models. Most frequently, events help with scaling up exploratory customer discovery. They help the most with exploring customers and problems. They can also be combined with other techniques, like basic landing page smoke tests (with a minimum audience size to confirm there is enough interest in the audience), or combined with a service, such as concierge MVP.

Time Commitment and Resources

Most evening events will take 5-10 hours to organize. This will usually be enough for validation purposes. The biggest "time suck" tends to be finding a venue, particularly if you want to run a specific type of event. The event itself typically lasts 1-3 hours. The key is to make it long enough to seem valuable to the target audience.

Breaks during the event are critical. They give participants time to network, go to the bathroom, and eat or drink anything you've provided. They help consolidate anything learned. From a validation POV, breaks provide you with unstructured time to interview your target audience.

How to

1. Find a venue that is appropriate to the type of event you want to organize.
2. Decide what you want to charge and how to pitch the event.
3. Create an event page on an appropriate platform: meetup.com, eventbrite.com, or another platform. Use insights about the customer problem and language from customer interviews to inform the event description.
4. Promote the event with your target audience, using suggestions from previous customer development about appropriate channels.
5. If appropriate, run a survey before or during the event to customize the event to audience needs.

6. Run the event. Be sure to have many unstructured conversations with attendees, in addition to the formal agenda and event goals.
7. Follow up afterwards with a survey. You can also create buzz on social media by sharing any photos, blog posts, or other artifacts from the event.

Interpreting Results

Because you can use events to prove many kinds of hypotheses, it's critical to be clear what you want to learn and why it's important to you before you start organizing the event. As long as there is a clear cutoff value formulated upfront, you will find it easy to use events as a source of validation.

Potential Biases

If using events specifically as smoke tests, you don't want to oversell the event. If your goal is to determine if there is demand around a problem, you should sell enough to make sure that the proposition is clear and easy to buy. However, a very hard sales push will distort your results. For example, if you are using...

- High-pressure in-person sales techniques
- Sales tactics on your event description with lots of scarcity and "CRO best practices"

...you won't know if you are getting a clear indicator that there is high demand, or just proof that you are a good salesperson.

Field Tips

- Get excited and enthusiastic when speaking at the smoke test event - @LaunchTomorrow
- Prepare what you will need the day before: Name tags, signs for people to find you, camera, directions, etc.- @LaunchTomorrow
- Greet participants individually and make them feel welcome. It's customer development you've earned. - @LaunchTomorrow
- Make it very clear how to reach the event venue, both online and offline. Dropoff sucks. - @LaunchTomorrow
- If you can, use arrows and signs to make sure everyone interested reaches your event smoke test - @LaunchTomorrow
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Eventbrite
- Facebook
- Google Hangouts
- Meetup
- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- James Burchill: Meetupology
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.6 Value Proposition Test Fake Door

In Brief

People are bad at predicting what they want, but they are great at reacting to new offers. Building just the entry to an offer makes it possible to predict future reactions based on actual behavior. This test is also known as a 404 page test.

Helps Answer

- Is the customer interested enough to click?
- Which target audience is attracted?
- Which words, icons, or images work well?

Tags

- Testing
- Quantitative validation
- Positioning
- Value proposition testing
- Feature testing

Description

The fake door or 404 page test is a quantitative validation method that is useful in two circumstances:

- To test if your idea sparks the interest of potential customers.
- To test if a new feature is a welcome addition to an existing product.

The idea of this test is to build a fake advertisement or button on a website to gauge the interest of potential users by looking at the clickthrough rate. The fake door could link to a “coming soon” page and prompt the user to add their email address to be notified when the product or feature is available.

Advantages

An idea can be quickly validated without spending a lot of time and money on development. Data is generated on users' actual behavior rather than asking them if they would be interested.

Ethics

Fake door testing can be thought of as tricking customers and decreasing the credibility of the product or business. When used carefully and in moderation, it can save time and money and lead to the development of a better product.

Clear communication that the feature or product is in development can prevent the user becoming upset that the product or feature isn't available.

Internal and External Fake Doors

The internal fake door is great for testing if a potential new feature appeals to current users. Usually a link or button is created on a website for this new function.

One example would be a button on a local news website that says "Switch to map view" when the information is currently presented in a tile view. If users are satisfied with how the information is presented, it is likely they will not click this button. If users assume a map view would better suit their needs, it is likely they will click. The clickthrough rate (the amount of clicks divided by the number of views) will help to gauge user interest.

Be careful when interpreting results. For example, the location of a button can have more influence than the button itself. Always experiment with placing buttons in different locations.

Using an external fake door is a great test to see if your concept is interesting for a certain audience. A common way to test this is using a "fake ad." For example, say you have the idea to start an online community for Kingfisher enthusiasts. Before building a complete website, you set up a test and check if there are enough Kingfisher enthusiasts looking for an online community. You determine beforehand that if more than five percent of all views convert to a click, enough users are interested. This allows you to simply test if your idea suits the need.

Be careful. The text in the header and body of your ad have a great impact on how people react to the advertisement. Always try a variety of sentences in your headers and body of the ad to overcome bias.

Fake doors are not suitable for testing your minimum viable product and essential functionalities, such as your registration process.

Time Commitment and Resources

- 1 hour to formulate a hypothesis.
- 1-4 hours to create the fake doors, depending on the type.
- 1-10 days to generate enough traffic for a representative sample size (depending on the amount of traffic or money you're willing to spend)
- 1 hour to evaluate and write down learnings.

How to

- Write down the hypothesis. Each test starts with writing down your key assumptions in the form of a hypothesis.
- Build the fake door(s). Make sure you represent the feature the same way it would be built. If you exaggerate the button or particularly highlight the link, your results will be biased and therefore useless.
- Make sure that you also include a method of measurement. With fake ads the channel takes care of this: Google, Facebook, and Twitter all give metrics on how your ads perform. And you might as well track the number of visits on the page you send them to. If the link is on your website, add a "Google tracking event" to your button, or create a special landing page so you can track the number of visitors.
- Measure.
- Run the experiment. And try to be patient. Don't draw conclusions too soon; wait until the test is complete (in this case when you have at least 1000 visits or 10,000 views).

Interpreting Results

Check your initial hypothesis and see if the results match your success rate. Depending on your results, you have three options:

- Success! Congratulations, you were right. You decide to build the feature.
- No success! You pivot. Try reframing the link or button. A different word/icon/picture might yield a totally different outcome.
- No success! Congratulations. You prevented yourself from wasting scarce resources.

Potential Biases

- Copy bias: The words used in the fake door will greatly influence your results. Make sure to try copy variations
- Location bias. The location of your ad (which platform) or your link (relative position on your website) will also influence your results. Make sure you try different variations.

Field Tips

- Don't scare off your users. Testing is okay, but be careful not to overdo it.
- Making (too many) false promises by fake doors might give the user the impression of a lousy product or cause them to lose trust in your company.
- Make sure you have a significant number of users so you can accurately judge the results.
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Game studio Zynga has a strong reputation for using fake doors and other quantitative product tests. They test new game ideas by coming up with a five-word pitch for each one. Then they publish the pitch as a promotional link in their live games for a period of time to see how much interest it generates from existing users.
- Local Dutch information aggregator Tippiq.nl uses fake doors extensively in their proposition development, via a separate website with www.tippiqlabs.nl. All new ideas are tested first using fake ads that lead to a landing page on that website. On the landing page, the product/service is explained and the visitor is asked if they would like to use the product. After they have expressed

their interest, they get a notification that the product is still in development and they can leave their email if they want to stay up-to-date.
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Hustlecon 2013: Fake Doors - How to Test Product Ideas Quickly
- Alberto Savoia: Pretotype it! Make sure you are building the right it before you build it right
- Web 2.0 Summit 2010: Playing for High Stakes in the New App Economy
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.7 Value Proposition Test Flyer

In Brief

Flyers serve as placeholders for conversations that need to happen. Just like flyers are used to describe existing products, they can also be used to describe product plans. By choosing product benefits, features, and a visualization, we communicate the product vision to the prospect to gauge their reaction. This is a common type of smoke test in enterprise sales.

Helps Answer

- Will the client agree to an appointment?
- Does the target prospect respond positively to the flyer?
- Does the target customer pick up the flyer in a normal business context (conference, lobby, etc.)?

Tags

- B2B
- B2C
- Enterprise
- Sales
- Software
- Service

Description

Flyers are effectively product or service descriptions printed on a graphically attractive piece of stationary. They contain the key message about the product and entice the prospect to take a specific next step, such as arranging an appointment, making a phone inquiry, or visiting a specific URL.

They are most useful as smoke tests for founders or product people in the early stages of a product idea.

In the smoke test scenario, the product does not exist in its full form, so it is possible to test different messaging and value propositions on the flyer.

If you are in a B2B sales scenario, the business relationship is very important. In such markets, there are usually just a handful of heterogenous clients that individually could make a very large purchase. This factor significantly influences the testing process.

Time Commitment and Resources

- Depends on your design skills and abilities, but likely a few hours
- Or hire a designer to create one
- Distribution: 1-2 days

How to

1. Choose a color palette.
2. Determine flyer size.
3. Decide on a distribution strategy.
4. Write a headline that will appeal to the target profile (in eye-catching font and size).
5. Add a subtitle that goes into more detail.
6. Add body copy that describes the product/service.
7. Add bullet points.
8. Include a very clear call-to-action that is easy to see.
9. Choose pictures, graphics, or other visualizations to get your point across.
10. Once you are finished designing it, put it up and look at it from a distance (five meters away or across the room).
11. Optionally, ask someone else to proofread and give feedback on the flyer.
12. You may want to run a comprehension test of some kind (to confirm your message is clear).
13. Print and distribute your flyer.

Interpreting Results

- For a B2C idea, the primary metric that will often be useful is customer acquisition cost (CAC).
- CAC = Total cost of flyer production/number of conversions (inquiries).
- For a B2B/enterprise idea, causing some kind of a specific response in your prospect should be the measure. Often this is subjective, as the sales process for a new B2B product tends to be discovered as you are creating it.

Potential Biases

- Avoid counting responses of immediate friends and family who aren't in the target market.
- If the customer knows that the product doesn't exist yet, it may bias your results.

Field Tips

- Use insights and language from customer development when crafting your first flyer @ LaunchTomorrow.

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- NextDoor: How the mailbox can be the best way for startups to reach potential users
- Dojo: Heartfelt letters nabbed thousands of downloads and investor interest
- Relatas: Left flyers on every seat in the conference auditorium while it was empty during lunch
- James Clear: Successful People Start before They Feel Ready
- Got a case study? Add a link by emailing us: realbook@kromatic.com

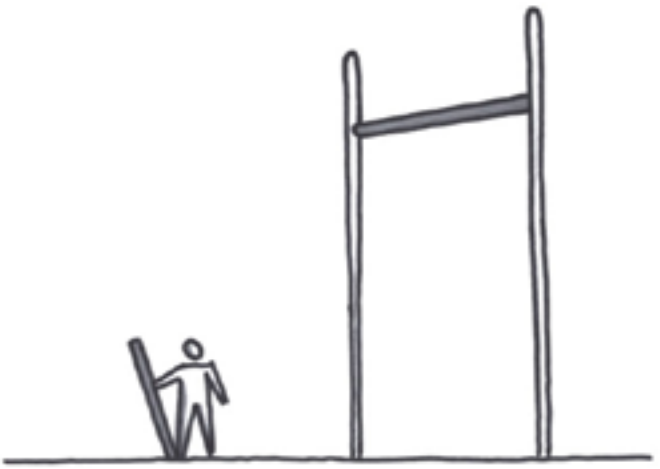
Tools:

- Canva
- Figma
- Smore.com
- Adobe Illustrator
- MS Publisher
- Designer recruiting sites like 99designs.com
- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Create Irresistible One Page Sales Flyer
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.8 Value Proposition Test High Bar



In Brief

A High Bar test helps to gauge the customer's willingness to pay without using any form of monetary payment. This particular form of smoke test is focused on having the customer go through a set of activities containing abnormal amounts of usability friction (e.g., a very long, complicated signup form) to gauge the customer's desire for a particular solution. This can be combined with additional "pre-qualifying" to ensure that the customers who do take the action are exactly the right kind of customer for the product.

Helps Answer

- How keen is the customer?
- How big of a problem is it for the customer?
- Who is my early adopter?

Tags

- Purchase motivation
- Nonmonetary
- Behavioral
- Sales
- B2B
- Quantitative

Description

A high bar smoke test refers to using an additional behavioral filter to test actual purchasing behavior (even if you aren't charging money yet). Basically, you are assuming that a truly motivated customer will jump through any hoops you put in front of them.

This is a particularly useful technique, if:

1. You aren't yet ready to charge.
2. You are operating in a B2B environment where the price will be customized to the customer's needs.

It's worth establishing that customers are already "signing up" with a frictionless form of currency. For example, you are gathering a lot of prospect emails. You aren't sure how well this will translate into sales. Your conversion rate to email serves as a benchmark value. Assume you introduce additional steps (extra form fields, application criteria, additional meetings, and hurdles). If you continue to get a similar conversion rate, then this high bar is reached. The smoke test passes.

This technique corresponds with "lead scoring" in a B2B context. In short, you can prioritize the relevance of incoming sales leads based on their interactions with you. Usually, the three main criteria used include RFM (recency, frequency, and money). A prospect with recent interactions is more likely to buy from you. A prospect who's frequently "touched" you, i.e., opened emails, attended meetings, or fielded calls, is more likely to buy. A prospect who's already spent money elsewhere to solve the problem (or with you) are more likely to buy from you. This is already implemented in various CRM and email software packages.

An early stage B2B startup can run a high bar smoke test, which if passed can also serve to prescreen incoming leads. The more robust data collection process helps them prioritize future sales opportunities.

Ultimately, what matters is sales. This test helps provide a proxy for sales if it is not practical or possible to immediately sell. Even if your signup conversion rate falls, this might not proportionally impact your actual sales. If you weed out prospects for whom your product is irrelevant, this will not impact your sales.

Time Commitment and Resources

Online: A few hours to a few days of developer time for a simple approach Existing packages: Integration time Offline: Depends on your existing approach/processes, and what you want to learn

How to

1. Determine what else you want to know about your target market and in what time frame (timebox).
2. Determine the current conversion rate on your existing signup process.
    - Make it clear exactly how this is calculated, i.e., what constitutes a conversion event, particularly if you are doing it manually.
    - Also be clear on the ideal prospect, i.e., your near-miss prospects don't count if they fill out the form.
3. Add some "friction" to the process in the form of additional form fields or introduce an application process.
    - If you have enough traffic, you can try to set this up as an A/B split test.
4. Once the timebox expires, compare your conversion rate.

Interpreting Results

This type of smoke test requires a lot of self-awareness and accountability, even compared to other smoke tests. If you get an unexpected result, there is a temptation to question your previous assumptions.

As with all smoke tests, do not ask about future behavior.

Potential Biases

- Ambiguity: Even more so than with other test types, it is critical to be clear up front what "counts" and what doesn't.
- Backfire effect: The reaction to disconfirming evidence by strengthening one's previous beliefs.

Field Tips

- Agree what constitutes a conversion event before you do a high bar smoke test.
- Your near-miss prospects don't count if they fill out your signup form when doing a high bar smoke test.
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Marketing Experiments: Lead Generation - Testing form field length reduces cost-per-lead by $10.66
- Got a case study? Add a link by emailing us: realbook@kromatic.com

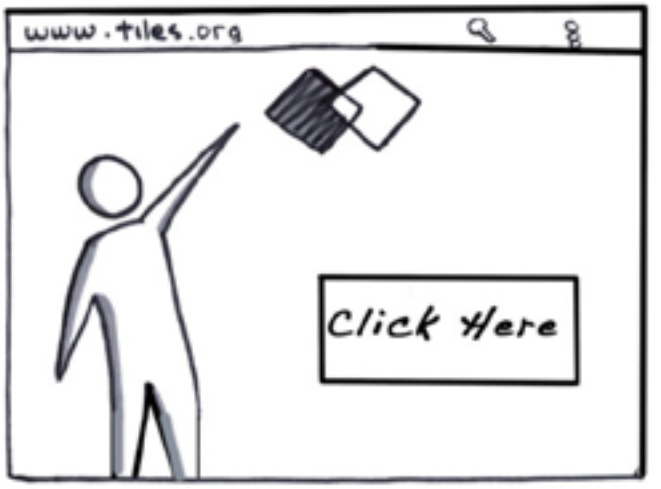
Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.9 Value Proposition Test Landing Page



In Brief

A landing page used as a minimum viable product evaluates whether a particular type of customer wants a proposed product based on actual behavior (as opposed to a declared preference). This technique typically includes buying advertising or generating targeted traffic to a small website that describes the product idea. The prospect confirms their interest by:

1. Leaving an email address or
2. Going through a checkout process that simulates the purchase of the product

Helps Answer

- Is the customer interested enough in the value proposition to spend money?
- Is the product idea attractive to a particular segment or niche?
- Is the product positioned effectively against alternative solutions to the problem?

Tags

- Quantitative validation
- Benchmarking
- Positioning
- Value proposition
- Audience selection strategy

Description

Time Commitment and Resources

- 1 day to set up landing page, ideally based on actual prospect language used during customer development
- 1+ days to drive traffic (depends on amount of time or money you are willing to spend)
- Ability to set up a landing page with an appropriate service (e.g., QuickMVP, Unbounce, Leadpages)
- Small advertising budget to target relevant keywords, or demographic-use “daily budget” limits to control exact ad spend for this purpose
- Advertiser’s account with paid traffic source

How to

1. Identify sub-niche/persona most likely to be interested in the product idea.
2. Research relevant keywords and demographics.
3. Brainstorm ads.
4. Formulate the experiment’s success criterion as expected conversion rate (for leaving email or completing fake purchase).
5. Edit a landing page template with the product description and value proposition.
6. Run ads.

Interpreting Results

In the context of a landing page MVP, conversion rate here approximates what percent of this particular niche, keyword, or traffic source are interested in the product. It approximates unmet demand among members of that niche.

If the conversion rate obtained exceeds your predetermined signpost value, the landing page MVP confirms that this particular audience is interested in the product. Assuming you chose a large enough niche, the idea is worth pursuing further. If not, this audience is not interested in the product idea. At that point, you will need to pivot on your audience or dig deeper into your audience’s actual needs.

Potential Biases

- Not specifying success criteria up-front: A very common anti-pattern is that founders attempt to run a landing page experiment without committing to a clear cutoff value up-front. If they get results they don’t expect, they question their process.
- Over-optimizing the landing page for sales: With a landing page MVP, you are measuring how much demand exists for the product without conversion rate optimization (otherwise you won’t be able to know whether you met your success criteria because it’s a good idea or whether you’re good at using countdown counters effectively).
- Warm traffic: If possible, try to use completely cold traffic, particularly if you are comparing a few possible ideas. If prospects are already aware of your product, you as a founder, or your brand, this will skew your conversion rate upwards unpredictably.

Field Tips

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Dropbox used a simple landing page to gauge interest and caprute email adresses
- Buffer went from idea to paying customers in seven weeks
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Eric Ries - Using AdWords to Assess Demand
- Luke Szyrmer - What is a good conversion rate for a landing page MVP?
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.10 Value Proposition Test Pocket

In Brief

This smoke test applies to physical goods or products with hardware components — at minimum a mobile phone. It entails interviewing a prospect or customer, then physically pulling a prototype out of our pocket and using the prototype to drive further discussion and exploration.

Helps Answer

- Am I building the right product?
- Does the product have the right features or characteristics, relative to the value proposition?
- Does the user understand the product and its structure/architecture?
- How does the user expect to interact with the solution?
- Does the user understand how to achieve their goals using the product prototype?
- What constraints does the user have?

Tags

- Solution
- Design
- Value proposition

Description

This type of smoke test helps validate whether the type of solution is appropriate for the problem you want to solve. It's meant to start a discussion. You can lead with a number of questions, particularly to confirm the problem(s) you want to address.

By showing a specific solution to a voiced problem, you can go in much greater depth with questions. You can also observe how the user expects to use the product.

This is a smoke test. Treat the prototype as a conversation piece. You are focusing on the main "happy case." Is it something users want? Could it believably address their problem? It's fine for a prototype to be ugly, as long as you use it to learn something you didn't already know.

Time Commitment and Resources

Varies significantly on the actual product. On the low end, it's easy to use mobile phone mockup software to show the average person on the street a mobile phone app prototype. This takes a few hours in the hands of a decent designer using software like InVision or Prototyping on Paper (POP). You can create a simulated version using simple materials like wood and plastic, to discuss form factors for instance. On the high end, it might take a lot of time to design and source custom parts to build a prototype that addresses a specific pain point.

How to

1. Roughly sketch how the product should look. This can be very simple or a full electronics blueprint.
2. Build or assemble the product (manually, 3d printing, Arduinos and Raspberry Pis, sensors, breadboards, etc.).
3. Show it to prequalified customers who have the problem you want to address.

Interpreting Results

Ask lots of questions about what the user would find valuable. Hone in on how your prototype differs from how they currently solve their problem(s).

Potential Biases

- Confirmation bias: Overly enthusiastic entrepreneurs will sometimes over-explain, correct, or nonverbally prompt the participant on how to use the prototype.

Field Tips

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Eduardas Afanasjevas - A guide to building a hardware prototype
- Ben Einstein - The Illustrated Guide to Product Development (A good framework for hardware design in a Lean Startup context)
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.11 Value Proposition Test Pre-Sales

In Brief

Pre-sales involves accepting payment in exchange for a promise to deliver the value proposition at a later date. Usually, the value proposition is the product or service itself. This is a highly committed form of smoke testing because it requires actually collecting money from the customer and usually carries a very strong implicit (if not legal) promise to deliver the product or service at a later date. Pre-sales are also known as pre-orders, vaporware, or vaporgoods.

Does the prospect know our product does not yet exist? If not, the pre-sales campaign can be considered a true smoke test and will have different dynamics and results than if the prospect is aware of this fact.

Most crowdfunding campaigns are in fact pre-sales campaigns. Pre-sales campaigns can also rely on online platforms built from scratch, or on platforms like Celery.

The MVP for the pre-sales campaign can include a description of the value proposition, product renderings, mock-ups, simulations, a promotional video, customer testimonials, and so on.

Helps Answer

Is the customer actually willing to pay money for the value proposition?

Tags

- Quantitative validation
- Benchmarking
- Positioning
- Value proposition

- Audience selection strategy
- Investor attraction

Description

Time Commitment and Resources

One week to 90 days. Most successful crowdfunding pre-sales campaigns involve 30 days of pre-promotion and a 40-day campaign duration (70 days total).

How to

- Create your MVP (renderings or simulations, promotional media, pricing, testimonials, etc.)
- Establish your pre-sales ecommerce platform.
- Promote and launch your campaign.
- Measure results (conversions and total orders).

Interpreting Results

Eric Reis: ""If you're worried about disappointing some potential customers – don't be. Most of the time, the experiments you run will have a zero percent conversion rate – meaning no customers were harmed during the making of this experiment.

And if you do get a handful of people taking you up on the offer, you'll be able to send them a nice personal apology.

And if you get tons of people trying to take you up on your offer – congratulations. You probably have a business.

Hopefully that will take some of the sting out of the fact that you had to engage in a little trickery."

Potential Biases

- Confirmation bias: Make sure your pre-sales success extends beyond your friends and family.
- False negative: You might be targeting your smoke test with an invalid target audience.

Field Tips

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Soma water filters used Kickstarter to raise $100k in nine days
- Coin, an electonic credit card, reached its pre-order goal in 40 minutes
- ElasticSales and Close.io were charging for their products before the company existed
- TechCrunch: Jolla Closes Pre-Sales Campaign For Its First Phone
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Celery: Pre-sales platform
- Indiegogo
- Kickstarter
- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Kickstarter Prohibits Product Simulations and Photorealistic Product Renderings
- Conversion XL: How to Use Smoke Tests to Validate Your Product or Feature Ideas
- Harvard Business Review: Sell Your Product Before It Exists
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.12 Value Proposition Test Sales Pitch

In Brief

Conducting a sales pitch as a smoke test is when an entrepreneur pitches a value proposition to a potential user or customer for the purpose of gathering feedback on a problem. This versatile method can also help us gather insight on a solution we have built and decide whether or not a target market is willing to pay to use our solution. During a sales pitch, we are looking to discover pain points, learn their impact, and confirm that there is value to the customer in solving them, and then to pitch a solution. This is related to the Flyer Smoke Test.

Helps Answer

- Will a customer pay money for the product?
- Does the customer see value in the product's value proposition?
- What objection(s) do customers have?

Tags

- B2B
- B2C
- Behavior

Description

To paraphrase Thomas Watson, if you are building a for-profit business, nothing really starts happening until something is sold. While it's a test of founder gumption, the primary (learning) purpose of pitching a product is to force the target prospect to make a decision.

As a smoke test, initial sales are particularly valuable when testing in the early stages. The ad copy,

product packaging, and value proposition are still up for grabs in a B2C context. In a B2B context, it's often possible to tailor the product or service to the company's needs. Actual sales prove that you have a combination that works in the prospect's eyes.

Time Commitment and Resources

Tends to vary significantly based on cost of product and method of distribution.

- At one extreme, you have a low-dollar-value product. Figuring out where to sell and place the product tends to take some time. Yet the actual purchase will tend to be an impulse buy.
- At the other extreme, a large enterprise sale can take months, if not years, and many meetings with multiple decision makers. For the main decision maker, it's not just a financial decision, as the success of the purchase can impact their career trajectory.

How to

1. Establish contact via a channel that is working for you. Traditional techniques include cold calling, door-to-door sales, or piggybacking on existing marketing and lead generation systems (if any).
2. Meet with the prospect in person.
3. Establish rapport and trust.
    - Show warm interest.
    - Don't be needy.
    - Do your homework and check out the prospect on social media before meeting them (LinkedIn, Facebook, etc.).
4. Ask well thought-out and observant questions. Match the customer's motivations with product attributes.
5. If/when appropriate, pitch the product.
6. After the pitch, expect objections and be ready to handle them.
    - This is where you will learn the most about how your prospect perceives your offer and your product.
    - Listen closely, and give the prospect a chance to explain what's bothering them.
    - If appropriate, repeat the concern back to the prospect to make sure that you understand what they're saying.
    - Explore the underlying reasons.
7. Close the sale
    - "Does this sound like something you want?"
    - "So do you want to pay now or pay next Tuesday?"
    - "We've got a 20 percent discount for customers who sign up today."
    - "So we have the Networked Toaster, the 10-year comprehensive guarantee, and our free delivery and installation service. When would be a good time to deliver?"
    - "In your opinion, does what I am offering solve your problem?"
    - "Is there any reason why we can't proceed with the shipment?"
    - "If we sign the contract today, we can start work on these concerns first thing tomorrow morning. Is that something you would be willing to commit to?"

Interpreting Results

If you are successful at selling the product or idea, particularly for the first time, you have proven that the product can be sold. This is independent of whether or not it delivers on the promises you made. From a business-model standpoint, you have proven a number of assumptions affecting your revenues box, should you decide to go further using this business model. From a pirate metrics

standpoint, you have figured out what you needed to successfully acquire customers.

This smoke test does not suggest the optimal price point for the product, or whether you can deliver it profitably (after your costs).

Potential Biases

- Anchoring bias: One sale does not a business model make. A fully functioning sales system is what you ultimately need; however, a smoke test is still useful to prove that you have a sellable product.
- Clustering illusion: It can be tempting to overgeneralize learnings from one sale. Try to make a few sales, particularly if the product is not very expensive.
- Estimation fallacy: Underestimating the amount of time to get to that first sale.
- Curse of knowledge: You know your product, service, or solution better than your prospects. You may overwhelm or confuse them, preventing them from buying, even though they actually need it. When fielding objections, try directly asking them whether or not they understand the proposition, or use comprehension testing to determine this.

Field Tips

- When initiating a conversation with a prospect, make small talk by observing and commenting on them or the situation.
- Use open-ended questions to discover more about the customer and what they're looking for.
- Ask about your customer's goals and intentions first, to adapt your pitch to their circumstances.
- An in-person sale is usually made by overcoming one or a few top objections, and each customer will have a different one.
- *When* is a powerful question that helps establish the urgency of the problem for the customer.
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Neil Rackha - SPIN Selling
- Oren Klaff - Pitch Anything
- Chet Holmes - The Ultimate Sales Machine
- Sterling Chase - 7 Killer Closing Techniques to Increase Sales
- HubSpot - The 5 Most Common Objections During Prospecting and How to Overcome Them
- First Round - The Three Frameworks You Need to Kick-start Sales
- Got a reference? Add a link by emailing us: realbook@kromatic.com

2.13 Value Proposition Test Video

In Brief

The video smoke test consists of using a trailer video to test excitement and virality/buzz when describing the product to an early-adopter audience. Unlike a traditional trailer, the video should create the illusion the product is real to measure how much buzz it generates. The technique is particularly useful where user behavior can be easily simulated or demoed before a fully functional version of the product is ready.

Helps Answer

- How well does the audience understand the messaging around the product?
- Does the audience find the value proposition compelling?
- Is the product buzzworthy, and does the target audience want to share it with their friends?
- What channels are the most responsive/viral?

Tags

- B2C
- Value proposition
- Referral
- Product
- Evaluative
- Video

Description

Movie trailers have existed for decades. Book trailers have been used to successfully launch books. With a video smoke test, you are using video to explicitly run an experiment.

The difference here is that:

1. The product does not have to exist yet, particularly if the product concept is very new and different from existing technology.
2. The goal is to test how early evangelists actually react.
3. Usually the key metric to observe is the virality coefficient, which is somewhat easier than it was with classic movie trailers.

Often the production of a video will require comprehension testing. In high-tech industries, it's common to create products that have clear benefits to geeks but are incomprehensible to the general population. A video used for a smoke test should use concepts that could be understood by a young child.

According to **Lee LeFever**, a good video:

- Establishes empathy
- Is unique
- Is easy to understand
- Communicates a key insight
- Answers *why* the product exists
- Gets prospects to care or hooks into why they would care about it

A good video also delivers enough impact that prospects want to share it with their friends so they can:

- Appear "in-the-know"
- Help identify and address the problem mentioned in the video

This is measured via the virality coefficient, as mentioned in the Broken Promise Smoke Test. In practice, it's possible to check for video virality by using social media platforms like Facebook or Twitter, particularly if they are used by the target audience. It's easy to use them to gather baseline organic sharing metrics.

Then some thought and planning needs to be put into promotion. In particular, channel testing is an important part of testing virality. Which Facebook groups? Which subreddits? Where should you guest post? Posting the video should also take into account the news cycle on social platforms (i.e., when is the right time to post it?).

To some extent, this technique is also embedded in crowdfunding platforms like Kickstarter and Indiegogo.

Time Commitment and Resources

This depends on the expected production value of the video. Basic videos can be recorded and edited in 1-2 days; however, there is always the risk that the video will fall short because it doesn't deliver on one of the key criteria above. A full production can take 1-3 weeks.

To be effective, promotion planning starts a few weeks before posting. Actual work required depends on how much you want to promote the video to get valid test results. At a minimum, you'd want to schedule at least five working days. More realistically, it requires at least a part-time effort of a few hours a day from idea to video launch.

How to

1. First define your hypothesis, particularly your success criteria and the metric you want to test.
2. Assuming its referral rate, determine how exactly you are going to measure and track this rate.
3. Plan out the key story or message you want to get across in the video. Ideally this product story should connect to the prospect emotionally.
4. Create a marketing plan based on your channel testing plan or results, ideally centered around a medium which:
    - Has many people in your target market
    - Is quite active
    - Will allow for sharing of the video. The video itself could be on a landing page or embedded directly into another site (e.g., FB video).

The following is adapted from Tim Ferriss' detailed breakdown on how to create a viral video trailer:

1. Storyboarding: Create a paper based "comic book" version of how the video should play out, with particular focus on the narrative
2. Hire a video team (if you have budget): Professionals will help increase the production value of the video, and in many case, the perceived value of the product.
3. Scout locations: Choose backdrops that reinforce your message or are at least familiar and relevant for the target audience.
4. Shoot principal footage: Take a lot of shots.
5. Editing: Choose the best shots and arrange them.
6. Add music: The right music should add to the mood and intended emotional tone of the entire video. Also make sure it doesn't overpower important audio, such as "spoken word" narration.
7. Launch/Promote: Try to get it out in front of as many (relevant) prospects as possible.
8. Analyze: Tally your metrics and figure out what referral rate you achieved.

Interpreting Results

Referral rate is difficult to accurately track, because most referrals (93 percent) in traditional businesses happen offline. Your best bet is to track aggregate exposure and then total number of referrals. If you only need a high-level metric, this will be enough to pass/fail your original hypothesis.

Potential Biases

- View count vanity: Views from people outside your intended target audience is a vanity metric.

Field Tips

- Keep your video concise and snappy, even when doing a video smoke test. @LaunchTomorrow
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- YouTube: Amazon Alexa + Pebble Core: Now We're Talking
- YouTube: The 4-Hour Chef - Official Trailer - Cinematic
- CommonCraft: Twitter
- CommonCraft: Dropbox Video and 25 Million Views
- VideoPixie: Best Kickstarter videos of 2014

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Tim Ferriss: How to Create a Viral Book Trailer (or Get 1,000,000 Views for Almost Anything)
- Launch Tomorrow: Dropbox “explainer video”? You’re missing most of their Lean Startup story...
- Nick Kolenda: An Enormous Guide to Viral Marketing
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.0 Generative Product Research

"Research is formalized curiosity.
It is poking and prying with a purpose."

—Zora Neale Hurston

3.1 Analog/Digital

In Brief

This technique helps decouple the risks around physical delivery of a product from a digital component of the product. We can sell a physical version of the product or service, even if our final product will be digital. Selling the physical form first may be easier, riskier, or more complicated. As a technique, this works best for software and information-based or data-based products that historically have had a physical component. Alternatively, it works well if we want the end product to be decoupled from a computer or smartphone.

Helps Answer

- What is the most usable way to gather or deliver an information-based service/product (assuming the customer won't need or doesn't want desktop or mobile)?
- How does this (analog) process work currently, so that we understand the details of what we're turning into a digital form?
- What are the biggest risks around the physical form of our product?

Tags

- Generative
- Product
- Value proposition
- Key resources
- Costs

Description

Many industries have seen a convergence of their existing products with a digital component. Information or software add extra value to an existing product type. In his Harvard Business

Review article, Mark Bonchek says, "Digital business models are a bit of a misnomer. It's not digital technology that defines them; it's their ability to create exponential value. The music and video industries, for example, weren't redefined by converting analog to digital formats. Just ask Sony about Minidisc players and Netflix about their DVD business." Founders who want to de-risk assumptions around using a particular delivery vehicle for a product or service will be well-served with this technique.

While it can be used in different areas, here are a few examples of when/where it is best applied:

- Internet of Things (IoT): Design and sell the physical object first, before adding the distributed software (e.g., monitoring).
- Enterprise software: Design or map out the existing process in great depth using paper or other analog formats, and ideally streamline it as much as possible before creating a software version of it.
- Users without computers: Design a paper-based version (or an event) of an information product before selling it in a digital format.

The benefits of taking this approach are:

- Greater flexibility before committing to a large digital product-development project, especially in the context of software.
- The ability to get user or customer feedback based on tactile responses and observing how they actually interact with a physical product.
- Understanding the design criteria and economics of a physical form first, before trying to make the product digital.

This is a common pattern in enterprise lean startups, particularly with bigger companies having a lot of legacy processes.

Note: This is not the same as Randy Komisar's analog/antilog thought experiment for formulating a value proposition or identifying a problem. The goal here is to gather actual user feedback, based on something physical that approximates the final form of the product.

Time Commitment and Resources

Can vary widely. It depends on how long both the physical and digital forms of the product will take to build, and what exactly you are trying to test.

How to

1. Confirm that the current "riskiest assumption" lies in Value Proposition, Key Resources, or Cost Structure areas.
2. Formulate a hypothesis that implies the existence of a physical version of the product in order to conduct testing.
3. Recruit users/customers.
4. Validate your hypothesis.

Interpreting Results

Digital is not good for its own sake. Make sure that you are adding useful features and benefits as you add to the product's complexity.

Potential Biases

Over-engineering/gold-plating: Sometimes a good physical product feature will solve the problem better than fancy software and engineering.

Over-focusing on technology: If the tech is proven or low risk, test the business model first (especially customer needs).

Field Tips

- A minimum viable product is not always a smaller/cheaper version of your final product. @ sgblank
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- While selling a digital information product, the experiment team gathered early versions of this data "by hand," then produced a printed report for test customers. This printed report provided real value and was used to gather feedback. Eventually, the team created a digital version of this report.
- Artivest had to deal with analog paperwork before they could deliver a digital version of its FinTech platform for individuals and IFAs. There was both an operational component and a regulatory one to the analog paperwork.
- Flowserve offers "sensor-enabled valves along with as-a-service valve-status monitoring"
- Wagamama (a fast food Asian fusion restaurant chain) initially took orders like in a traditional restaurant, noting orders via a number system on paper placemats, then introduced a wireless handheld PoS that waiters used to take orders, communicate with the kitchen, and manage operations data.
- Drones in precision farming
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Harvard Business Review: How to Create an Exponential Mindset
- What Drones and Crop Dusters Can Teach About Minimum Viable Product
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.2 Ask an Expert

In Brief

Founders ask experts for opinions, then choose whether or not to act on those opinions. Asking product and marketing experts is ok, but it's generative research, not evaluative.

Helps Answer

- What is the received wisdom/standard approach/assumption(s) about a market or product?
- Am I missing an important part of the overall picture?

Tags

- Generative
- Advice

Description

Experts provide deep insights into a particular problem domain, and provide useful input for problem types that are complicated according to the Cynefin decisionmaking framework. These are problems with predictable but many factors, components, or pieces. There are many "known unknowns" that can be analyzed using cause-effect analysis to uncover a range of appropriate answers. Ultimately, founders need to be able to execute quickly, so piggybacking on others' knowledge can serve as a useful shortcut.

Certain industries require significant expertise to compete effectively (FinTech is a good example). Finance itself is highly regulated and highly dependent on detailed models used for valuation, risk assessment, or accounting. Each of these are context-sensitive. While it's possible to learn some of this from books, seeing how these play out in a competitive environment gives us extra insight. Some areas of finance have high degrees of product innovation, such as, derivative markets. On top of that, technology itself has been changing rapidly over the past few decades. Founders entering this market would be wise to consult with experts in areas where they feel it will help generate additional options that they hadn't considered.

Even in other contexts, quite often an expert will be able to view a founder's situation in the context of many companies facing a similar problem. For example, if you are considering channel-testing around Facebook, consulting with a Facebook marketing expert can be a good use of resources.

As a general rule, though, using third-party expertise to evaluate existing options is an anti-pattern. Experts will view the situation through assumptions that may not hold up in the data.

Time Commitment and Resources

15 minutes (quick coffee meeting) to a longer term engagement (regular meetings over X weeks).

How to

1. Seek out an expert via:
    - Google & Bing: Enter specific terms or questions you have and look at who is responding with appropriate content.
    - Meetup: Tap local experts on your topic.
    - LinkedIn: It's easy to locate specific experts via keyword.
    - Academia.edu: Find an academic that specializes in a narrow topic.
    - Use FindAnExpertOnline.com.
    - Try social media that provides free content: Quora/Medium/Facebook.
2. Consider paid sources:
    - Clarity.fm
    - PopExpert.com
    - FounderDating.com forums
3. Contact the expert and arrange a phone call or meeting in person.
4. Prepare:
    - Questions you'd like to ask.
    - Areas where you'd like feedback.
    - Topics you'd like to brainstorm.
5. Conduct the meeting.
6. Note key ideas or recommendations.
7. Ask for a referral to another expert in the same or related area.
8. Use your learnings to formulate a falsifiable hypothesis, and test whether their advice applies to your specific case.

Interpreting Results

In general, it is best to limit yourself to experts who either

- Have personal experience (success or failure) in the topic area.
- Have gained significant insight through academic or journalistic research.

Keep in mind that all advice is context-dependent. Even if an expert was successful before, the situation and competitive landscape changes over time. And despite their best intentions, an expert's advice might not be relevant to your specific case.

Potential Biases

- If you take advice from anyone, make sure their interests are genuinely aligned with your own. Confirm there are no conflicts of interest that would affect the expert's advice. It's best to pay for impartial advice if you're unsure.
- Free advice may or may not be useful. You often get what you pay for. Time spent executing bad advice is still wasted time.
- Some topics naturally invite strong opinions. Try to get access to data that the expert used to formulate their recommendations or advice, so you can evaluate its relevance.
- No matter how much advice you've collected, always think for yourself.

Field Tips

- Information is plentiful. Wisdom is rare. Ask experts to figure out what to test in your business @ LaunchTomorrow
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

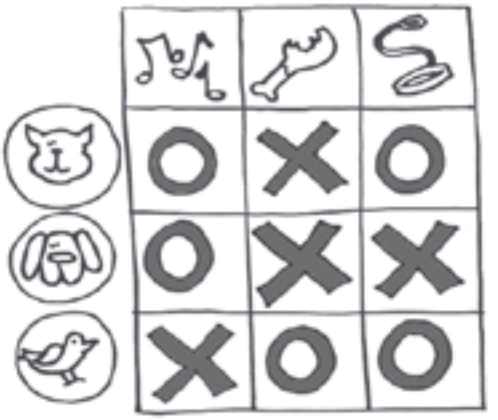
Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Wired: Given "Expert" Advice, Brains Shut Down
- Harvard Business Review: Find the Right Expert for Any Problem
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.3 Competitor Analysis



In Brief

Competitive analysis is very much a secondary research method that we can perform online relatively quickly and comprehensively. It can be used for generative market analysis as well as generative product analysis. The analysis is absolutely crucial for any new business idea.

As we are defining our idea, we need to conduct research to paint a picture of the competitor landscape. We will likely start out with quite a wide capture of different players, and will then be able to zoom in over time as your other experiments guide you towards the exact customer segment and solution we will build. A detailed competitor analysis can help us communicate our idea to others as well as differentiate it from the competition. The analysis is a form of due diligence repeated over time, and is expected by investors or sponsors.

Helps Answer

- Who is our competitor?
- How are they solving their customer problems?
- What form should the product take?
- How can we differentiate our offering and positioning?
- What type of revenues are being generated?

Tags

- B2C
- B2B
- Qualitative
- Channels
- Value proposition

Description

Time Commitment and Resources

Initially 1-2 days, and then keep adding on and performing regular scans of the market.

How to

The typical way to display a competitive analysis has been to plot performance on an X/Y graph with all the competitors located at the bottom left and your company at the top right. This method is typical when existing companies launch a new product into an existing crowded marketplace, and is therefore not as relevant for startups or existing companies looking to create new markets (true innovation).

Steve Blank suggests using a "petal diagram" where you plot your idea at the center of the slide. Highlight where your new customers are likely to come from (adjacent market segments) using a cloud around your company (as many as needed) and fill in each section with names of companies that are representative players in each segment. You can then try to identify which companies are private and note how much investment they received to identify which spaces are being perceived as "attractive" to investors. On top of this, you can note the current and projected market size of each segment to understand how big your new market could be.

After initial analysis, you should know three things: who your biggest competitors are, the basics of their company strategies, and how what you are doing (or will be doing) is different from what they're doing. By understanding the market landscape, you are able to gather more clues about how you might approach distribution, positioning, and pricing.

Some tools you can use to extract competitor information are:

- Crunchbase
- AngelList
- Quora
- Google Finance (listed companies and their "related companies")
- Google Search (industry key words)
- Google News Alerts (industry key words)
- Forrester Research/IDC/Gartner (market reports)

When doing competitive research on other web-based companies, here are a few additional tools you can use:

- Compete to see their traffic data and which way it's trending.
- Quantcast to get a rough feel for the demographics of their average customer.
- AppData (if they have a Facebook or mobile app) to see how engaged their users are.

Interpreting Results

By understanding the key players in your space and adjacent segments, you will increase your domain knowledge around your business. If you can't find any similar organization or research being conducted, it means you have not looked hard enough, as it is highly unlikely that no one in the entire world is working on the same or a very similar business idea. On the flip side, uncovering many competitors doesn't mean you should not continue. The discovery will help you to refine your offering and business model for a market that is growing overall.

A rising tide lifts all boats. Focus on being one of the boats, and don't worry about how to dominate the entire segment from Day One. Competitors can become key partners in helping each other get off the ground in a new market. They can also give you clues as to where you can gain initial traction in the market.

Potential Biases

- Confirmation bias: Entrepreneurs naturally don't want to find competitors, so it's easy to put on our blinders and simply focus on our own vision. Make sure your methods are exhaustive, compelling, and repeated to keep up to date with new entrants. Get external/neutral help to make the analysis to avoid this kind of bias.
- The numbers: Don't worry about too few or too many players. Learn how you can fit into the space that is being created. Know your strengths and weaknesses against each player.
- Too local: Don't limit your search to your local area. For most new business ideas, we need to be taking a global perspective, which means doing global research.

Field Tips

- Competitor Analysis should color your thinking, create the appropriate context, and help educate you on what's going on @byosko
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Steve Blank: A New Way to Look at Competitors
- Instigator Blog: Competitive Research 101 for Startups
- Justin Mares: A Startup Guide to Competitive Research
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.4 Competitor Usability Testing

In Brief

Competitor usability testing is observing our target market using a competitor's products or services to gain insights on the mindset of the user, common issues, and potential improvements in our own product. In some cases, this can reveal the need for an entirely new product. In other cases, we can gain insights on what parts of a competitor product are unnecessary.

This is almost identical to — but not to be confused with — competitive usability testing, which tests an existing product against existing competitors to establish which product is "winning."

See Usability Testing.

Helps Answer

- What is the minimum feature set to solve the problem?
- How important is design?

Tags

- Value proposition
- Key activities
- Generative product research

Description

The process of conducting competitor usability tests is the same as when testing our own product.

In this case we apply the same methodology to a different purpose by testing our competitor's products or substitute goods.

Where usability testing is an evaluative test of our own product and seeks to verify that the product functions sufficiently to deliver the value proposition, competitor usability testing is a generative method intended to create ideas for a potential solution.

For example, to generate ideas on how to create a better U.S. tax experience, we could conduct usability testing on tax preparation in Sweden or India. The results and observations would not tell us whether the U.S. tax experience is good (it is not), but it may give us ideas around whether or not to improve the comprehensibility of the tax code, the tax submission process, or the tax rules themselves.

Time Commitment and Resources

See Usability Testing

How to

See Usability Testing, but use a competitor's products or a substitute good. For maximum idea generation, use different products.

Interpreting Results

Any results should be taken as generative rather than evaluative. Ideas generated tend to be highly unstructured and piecemeal, so they must be properly integrated into a viable solution.

Before building a solution, any ideas should be tested via alternative generative product research methods such as Solutions Interviews or Concierge Testing.

Field Tips

- Don't reinvent the wheel -- figure out what's wrong with walking. - @TriKro
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Nielsen Norman Group: Competitive Usability Evaluations - Learning from Your Competition
- trymyui: 5 secrets to running a comparative usability study
- StackExchange: Should usability testing of a competitor's website be a part of your usability

testing routine?

- Whittington: Legal Espionage - User Testing Your Competitor's Website to Improve Your Own
- TestFort: Usability Testing of Competitor's Site - 4 Tips and Reasons
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.5 Concierge Test

In Brief

Concierge is a technique to test the solution of a customer problem by manually performing tasks as a service. It is typically not very cost-effective, but it can provide detailed information about how a solution can be created and what minimum viable feature set should be included in an automated and optimized product.

Helps Answer

- Does the solution solve a real customer problem?
- How can the problem be solved?
- What is the minimum feature set required to implement a solution?
- What are the greatest problems in effecting a solution for the customer?

Tags

- B2C
- B2B
- Qualitative
- Value proposition

Description

In a concierge test, the value proposition is delivered as a service. Like a hotel concierge, the focus is on a highly customized, customer-facing service. For this method you need to perform the tasks manually, usually for only a few customers as it is not cost-efficient to scale. That said, the heavy customer touch gives you quality feedback from the targeted segment, allowing you to adjust services instantly at a very low cost. Hence iterations based on insights from customer feedback are easily accomplished.

To conduct a successful concierge test, you need a clear and well-formulated value proposition. As an evolution of problem-solution interview techniques, the goal is to test the solution and figure out if

it matches your customer's expectations. Design your value proposition as a service with the leap-of-faith assumptions in mind. When using the service, your customers should go through the same steps as they would later with your actual product.

Deliver your service manually in a customized and personal way. To avoid being overwhelmed, start with just a small batch of customers. At this point, you do not need a single line of code or automation. Even though it is inefficient and time-consuming, keep in mind that the direct customer touch is a valuable learning tool. While delivering your service, keep collecting customer feedback and adjust your service accordingly.

After some time, you learn about your customers' expectations and what is really valuable to them. Gradually automate the parts of your service that work. Be careful not to run your concierge test forever! Keep automating and expanding your service until you are not getting new major insights.

Time Commitment and Resources

Concierge tests can be the most time-consuming method as they require manually solving the customer problem. For a complex B2B IT solution, a concierge test can be a complete consulting engagement lasting many months. For a consumer, it might be as simple as personally going shopping with a customer.

Similarly, the method can require substantial resources or nothing but a pen and paper. In the case of a B2B concierge service, it is often possible to charge for the solution up-front, which eliminates resource constraints.

How to

- Write down the value proposition that needs to be tested.
- Design the value proposition as a personalized, customer-touching service.
- Talk to potential customers (early adopters) and offer them your service in exchange for payment.
- Execute the service by performing tasks manually.

Interpreting Results

You will collect mostly qualitative data as you are delivering a manual service. You need to aggregate the data from all your current customers for the various aspects of your service. Use the insights to adjust your service accordingly.

The main benefit of this method is the ability to generate ideas around the potential solution/product and identify obstacles to implementing that solution.

Potential Biases

- False positive bias: This method does not serve to validate the solution, as the manual component provides an extra value proposition of trust and responsiveness. Entrepreneurs can therefore mistake positive feedback on the service as validation of the product concept. When moving to an automated solution, the extra "human" value proposition is removed and the customer can reject the solution.
- Sampling bias: As the concierge test is manually performed, you have to find a balance. On the one hand, having too many customers can be overwhelming — you find yourself or your team

busy delivering the promised service, which leaves very little time to analyze the data and use the insights to make adjustments. On the other hand, you have to make sure that your customer batch is not too small. Insights you get from just one or two customers might not be enough. You risk that the collected feedback is not representative of the customer segment you are targeting.

Field Tips

- A concierge test is an experience, not a product. @poornima
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Food on the Table - The Ultimate Guide to Minimum Viable Products
- SlideShare - Manuel Rosso: Concierge MVP Lean Startup
- Medium - On MVPs Gluing Things Together and 270 Flights to South Africa
- Moves the Needle - Enterprise Lean Startup Experiment Examples
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Cindy Alvarez - Lean Customer Development: Building Products Your Customers Will Buy
- I Build MVPs - The Concierge Minimum Viable Product Maximizes Customer Learning
- HBR - Building a Minimum Viable Product
- The Concierge MVP Board
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.6 Demo Pitch

In Brief

A demo pitch is when we present or pitch our solution using some kind of product or service demonstration in the hope of convincing a potential customer to buy. It is similar to a solution interview, but typically takes place at a later stage, as the solution becomes more baked and we have more elements to demonstrate (although this can be done early in the process by using the most realistic examples available). The style is more of a presentation than an interview, and the goal is to assess how positive the reaction is and why. A demo pitch is essentially a sales pitch to a potential customer to test their willingness to buy or recommend us to the economic buyer.

Helps Answer

- Who is our early adopter or first customer?
- Who is the decision-maker?
- Is it valuable enough for them?
- Are we positioning it right?
- Are we highlighting the most compelling features?
- How much is it worth to them?
- What is the sales/procurement process?
- How will they use or implement our solution?
- Can we sell it?

Tags

- B2C
- B2B
- Key partners
- Channel partners
- Value proposition

Description

There are many ways a demo pitch may be deployed. For B2C, you may try to catch consumers in a physical location at the point of sale of similar products. Or it may be done online via a targeted video ad in a particular social media channel so you can measure conversion. For B2B, you will need to identify influencers and decision-makers along with other key stakeholders so you can meet with them. Be careful to select people who you think will be early adopters and won't be too worried about the "Who has already used this?" question. How do they react? What feedback do they give? You might start with a cold call or via introduction and be able to demonstrate your solution using a video call or screen sharing.

You are looking for a "wow" reaction and a significant next step in the buying process. You may be able to offer a pre-order option, secure a signed letter of intent, take a deposit, have a purchase order issued, get added to the vendor list, or have your purchase agreement approved.

You may also use this method to test commitment from key partners and channel partners as an indication whether they will enter into agreements or trial phases with you. You therefore are collecting insights on how you can go to market with your offering.

Time Commitment and Resources

A few days for B2C and a few weeks for B2B, depending how quickly you can set up appointments.

How to

- Have a refined, confident pitch suitable for the selected audience.
- Prepare some form of demonstration that shows your solution in its best light.
- Put yourself in a situation where you can communicate the above uninterrupted and receive feedback.
- Be ready to offer a suitable next step in the buying process as a test to see if they will move forward.

Interpreting Results

You will receive qualitative signals during and after your pitch demo where the challenge is to differentiate between who is just being nice and who is genuinely excited and why.

The most important data will be who moves forward to the next stage of the buying process.

Potential Biases

- Being able to secure a high number of demo pitches in itself is not an indication of success.
- People may make positive comments, but if they don't move further along the buying process you are knocking on the wrong door or need to make changes to your offering.

Field Tips

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Salesforce: How to Make a Good Sales Pitch
- Forbes: 10 Steps for Giving a Convincing Sales Pitch
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.7 Dogfooding

In Brief

Dogfooding is simply using the product as if we were the customer and experiencing it firsthand. It is a common practice but an unstructured methodology, as there is no script outside of using the product in the use case it was designed for.

Helps Answer

- Will the solution provide the value proposition?
- Is the solution working right?
- What is the minimum viable feature set?

Tags

- Value proposition
- Solution
- Generative product research

Description

Using one's own product is standard practice among many technology startups and entrepreneurs. In many cases, entrepreneurs are building a product to solve their own pain points, so it is common to then use the product.

There is no predefined script for dogfooding, and it is not a formal quality assurance (QA) process. The main advantage to this method is that it may reveal unorthodox use cases that were not covered in the requirements or QA tests. Dogfooding should primarily be considered generative research and not an experiment.

Companies that do not use their own products and services are sometimes criticized, in some cases very publicly.

Time Commitment and Resources

If team members regularly encounter the use case of the product, then there is no time commitment or resources necessary aside from having a notebook and writing down the results.

If the use case is infrequent or complex (such as for booking and taking a vacation using AirBnB), then dogfooding can require a substantial use of time.

How to

Preparation

Make sure you have a place to take notes that is easily accessible and won't interrupt your workflow too much.

Research

Simply use the product in your day-to-day work. Take notes whenever something works surprisingly well or fails to live up to expectations. Record any additional insights or ideas that occur while using the product. Note any time when the workflow is interrupted or another service is needed to finish the task.

Debriefing and Interpreting Results

Be careful to interpret the results as generative and not evaluative. The makers of a product have an intimate knowledge of the product design and likely cannot capture the uneducated user's perspective.

This is especially true in dogfooding the new-user process, where the makers of the product have a massive amount of prior information and expectations regarding the signup and onboarding. Completely missing edge cases is also particularly common, especially if the team is not particularly diverse. For example, a team may not analyze the product for use by handicapped or minority users and thus overlook substantial aspects of its user experience. This can be more of a problem as a product scales beyond an initial niche audience.

When multiple team members dogfood their product, notes can be collected and sorted via card sorting, stack ranking, or other standard UX methods.

Potential Biases

- Confirmation bias: Creators of a product can subconsciously avoid situations and use cases they know are incomplete or buggy, leaving a positive impression that the product works according to the specification, even if it has serious flaws in ordinary usage.

Field Tips

- Dogfooding only works when your team is as diverse as your customer base. - @TriKro
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Dogfooding at Bitglass: We Secure Our Own Corporate Data
- Cnet: Google's Eric Schmidt: Why I Love My BlackBerry

- Alphabet exec Eric Schmidt uses an iPhone, but thinks the Galaxy S7 is better
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Intercom: The Danger of Dogfooding
- Forbes: Not Eating Your Own Dog Food? You Probably Should Be
- Got a reference? Add a link by emailing us: realbook@kromatic.com

3.8 Picnic in the Graveyard

In Brief

This technique involves exploring "near miss" failures similar to our product idea to generate ideas about what to test and how to build a business model that could work in a second attempt.

Helps Answer

- What related products have been created in the past?
- What did customers like/not like about previously created products?
- What advice would founders of failed products similar to our idea (near misses) give us, if they were to go after the idea again?
- Which features have to be included in the product?
- How is this product different from similar products offered in the past?

Tags

- Generative
- Product
- Feature
- Positioning
- Advice

Description

Sean Murphy described it best: "Do research on what's been tried and failed. Many near misses have two out of three values in a feature set combination correct (some just have too many features and it's less a matter of changing features than deleting a few). If you are going to introduce something that's "been tried before" be clear in your own mind what's different about it and why it will make a difference to your customer."

The goal of this technique is to identify a unique way to angle a product, so that you avoid a previously committed error. You will be introducing the idea at a later time, which will be to your benefit, but it's

likely that previous failures will provide you with useful feedback.

With this technique, you are aiming to construct a fuller picture of what's been tried in the past to identify potential landmines. This helps navigate a similar space, but with the benefit of the previous founders' experience. It may help generate ideas on the product side, such as in terms of feature set. It may also help generate ideas about targeting to a different market segment, or any of the ten other pivots in Eric Reis' *The Lean Startup*.

Time Commitment and Resources

- Desk research: 1-2 days.
- Customer development: Similar to customer discovery interviews.
- Founder interviews: It depends on how difficult it is to find contact details for former founders. It is probably a good idea to timebox contact detail searches. Actual timebox size will depend on how useful/helpful you think advice would be from that founder. For example, choose a timebox of one day per founder if there were a few startups similar to yours. After that, it's similar to customer discovery interviews.

How to

1. Perform some desk research (such as Google) to identify previous attempts at entering a similar market with a similar product to your product/product idea. Depending on the idea type, you may also find it useful to ask your local librarian if they can help you find relevant case studies.
2. Use social media platforms to seek out customers of these previous companies. Look for "Likes" of the product/company name on Facebook, or old tweets mentioning the company.
3. Reach out and contact these previous customers and interview them. Do both problem and solution interviews. Find out what they liked and disliked about the previous company.
4. Then try to find the founders or project/product leads if at a big company and interview them about their experiences.

Interpreting Results

This is a wonderful technique to generate a lot of ideas in an area you are already operating in. Particularly at the beginning of a startup journey, this technique can help zoom in on what to avoid and exactly what to test, to verify for yourself if a particular assumption is still true/false.

Potential Biases

- Overconfidence: Could prevent you from using the technique.
- Dismissing it too quickly: On the other side, exploring the reasons why others failed can make you doubt an idea too much if you can't find a unique angle to test the idea.

Field Tips

- Picnic in the Graveyad: If you try to hold a night-time picnic in a cemetery that doesn't allow it you might get arrested. @RebelCircus
- "Our idea is not unique. Use the Picnic in the Graveyard technique." @TriKro
- "Get help from other founders when you can. Use the Picnic in the Graveyard technique." @TriKro
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Medium: My Startup Failed: Lessons learned from a first-time founder in the startup trenches
- Autopsy Lessons from Failed Startups
- CBinsights: 323 Startup Failure Post-Mortems
- Got a case study? Add a link by emailing us: realbook@kromatic.com

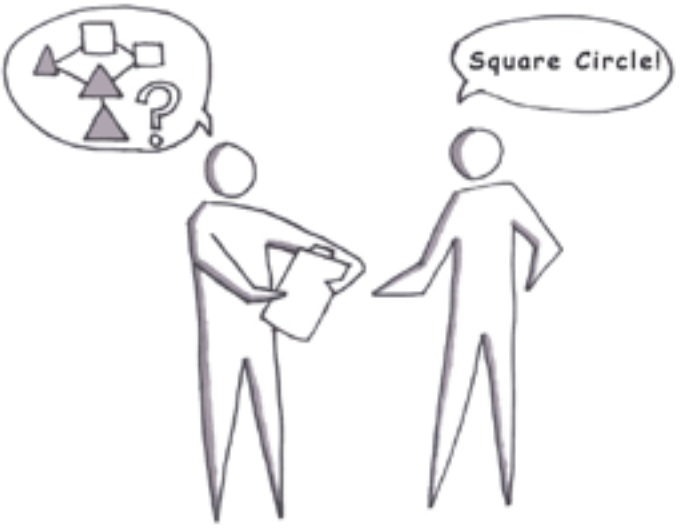
Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- GrasshopperHerder: Generative Research - Picnic in the Graveyard
- SKMurphy: Pretotyping – Techniques for Building the Right Product
- Phillip Kaplan: F'D Companies: Spectacular Dotcom flameouts
- Forbes: Top 10 Ways Entrepreneurs Pivot a Lean Startup
- Got a case study? Add a link by emailing us: realbook@kromatic.com

3.9 Solution Interview



In Brief

The solution interview builds on our research around the problem and proposes a solution to see how potential customers react. Solution interviews result in qualitative feedback from users or prospects about the product when presented with the product or a prototype. Use a “demo” to help customers understand the solution and confirm that it will solve their problem.

Helps Answer

- What is the minimum feature set needed to launch?
- What are “must have” features/benefits for the user?
- Will the solution “work”?
- Where are the solution’s strengths and weaknesses?
- Is the copy/presentation right?
- Why is the price right/not right relative to alternative ways of addressing the problem?
- How do I create the groundwork for repeat sales?
- How does the product fit into the prospects’ existing technology mix (for B2B tech especially)

Tags

- Qualitative
- Demo
- Visualization
- Price
- Features

Description

The biggest risk product entrepreneurs face is that they’ll create a product that absolutely no one wants to buy. Problem interviews help identify common problems within a particular market

segment. When you have identified a clear problem, solution interviews help nail down the reasons why or whether a particular product "works" for your early adopters.

Often solution interviews are performed with some kind of a proxy for a product, created to spark a conversation with the prospect or customer. According to @ashmaurya, "You want to build enough of the solution (or a proxy, like screenshots, a prototype, etc.) that you can put in front of customers for the purpose of measuring their reaction and further defining the requirements for your minimum viable product (MVP)."

The primary goals of solution interviews are to:

- Define the minimum features needed to solve a previously identified problem.
- Have a found price the customer is willing to pay (to check that you can build a business around it).

For smaller dollar-value products, you may want to perform some kind of a smoke test instead. A solution interview is a useful way to prepare a smoke test or to understand why a smoke test didn't pass your research hypothesis.

For a larger dollar-value product, the solution interview may feel like a consultative sale, but it's primarily a research tool to help adjust or customize a product to real customer needs.

Like other types of customer interviews, solution interviews are best done in pairs. One person takes notes during the interview. The other actually asks the questions and focuses on building rapport with the user.

Time Commitment and Resources

This is similar to initial customer discovery/problem interviews.

- Rounds of interviews to test one hypothesis can range from 5 to 100 interviews.
- Actual interviews last anywhere from 5 minutes for consumer products tested using "man on the street" interviews, to 2 hours for detailed B2B requirements gathering.
- Time costs can be significant in terms of recruiting appropriate interviewees, particularly ones who currently have the problem you want to solve and who are in the target segment.
- Financial costs: Depending on context, you can offer gift certificates or a symbolic gift if you feel it's appropriate (such as in a B2B scenario).

How to

Determine what you want to learn before conducting interviews and formulate a research hypothesis.

1. Greet the user/prospect.
2. Confirm that they fit all of your criteria and that they have the problem you currently want to solve.
3. Set the problem context by telling a story.
4. Reflect/reconfirm the problem back to the customer.
5. Propose/demo a specific solution.
6. Optionally discuss pricing, particularly relative to alternative products.
7. Ask "what do you need to do to make progress?"
8. Get permission to follow up and/or for referrals.

9. Document your results, ideally on a small A6 notepad that fits in your pocket if you are out on the street.

Interpreting Results

Use the solution interview to plan the initial feature set of your product and determine pricing strategy.

Potential Biases

- Leading questions such as “Do you usually add products to the cart or use the one-click-purchase?” miss the opportunity to actually learn how the user uses Amazon.
- Allow the user to tell you what they think the product does and what it could do.
- Give the user something to react to, rather than making them imagine how the product makes them feel.
- Be certain you are interviewing the right user, someone who is currently seeking out a product like the one you are making.

Field Tips

- Forget all about the art of Pitching, you want the art of Dialogue. @Justin_Wilcox
- “Don’t ask users to imagine a feature.” @DaisyHappy2014
- “Allow the user to tell you what she thinks the product does and what it could do for her” @LauraKlein
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Apply the Lean Startup in B2B to Build Products Businesses Want: Solution Interviews
- The Sales Pitch is Dead. Long Live Solution Interviews!
- LeanSteps: Solution Interviews
- Got a reference? Add a link by emailing us: realbook@kromatic.com

4.0 Evaluative Product Experiment

“Any product that needs a manual to work is broken.”

—Elon Musk

4.1 Dashboards

In Brief

A dashboard is a simple view of product metrics that displays information about the general health and viability of the product. While more detailed metrics are generally used to analyze the results of a specific feature-level experiment, a dashboard can indicate when complex factors are affecting the product. For example, competitor behaviors, seasonality, or multiple conflicting experiments are all potential factors.

Helps Answer

- What is going on in the business right now?
- How is the situation changing over time?
- Do we have any major blind spots?
- Does everyone in the company have access to the right metrics to track progress to overarching goals?
- Are we making the right decision right now?
- What are our current priorities?

Tags

- Visual
- Metrics
- Tracking
- Operations
- KPI

Description

In situations where there is great uncertainty, planning for the future has less value than having a clear picture of the current status. Dashboards give you a visual “information radiator” that shows the

exact current status on key metrics affecting operations:

- How much of a product is built, or a goal already achieved?
- What is the state of current channel testing in marketing?
- What is our market share?

Dashboards help visualize inter-relationships among parts of a business. For example, a $10k investment in a channel may seem like a lot of money, unless you knew that last year's revenue was $250k.

Dashboards are inherently motivating. They presuppose an open and data-driven culture. For many employees and partners, this level of trust and transparency motivates them to do their best work. By going through the effort of choosing one or a handful of key metrics for the whole organization, you generate a lot of focus. Dashboards help maintain this focus operationally if everyone continually checks a dashboard that contains those key metrics driving the business.

This technique can be used for:

- The company as a whole
- Specific departments
- Key roles (such as the VP of Marketing's dashboard)
- Individual contributors

In terms of how it works, it can be anywhere from "manually using a spreadsheet" to a custom-built monitoring system that integrates a number of the business systems so that you have a "real-time view" of the company.

Approaches that may or may not be helpful:

- AARRR: Pirate metrics can help

Time Commitment and Resources

This method tends to require a significant investment of thought to decide what needs to be on each dashboard (1-5 days). The implementation of the dashboard itself can vary widely. If done manually, it could cost one hour a week of a junior employee's time. If automated, there would be no recurring cost, but instead a potentially significant up-front technical implementation cost. The actual cost would vary widely based on exactly which systems and data need to be visualized. There are also off-the-shelf SaaS solutions that can provide a sufficient subset of the data required to reap most of the benefits in a small company, without bearing a significant cost.

How to

1. Get all of the key decision-makers in one room, ideally physically (even if it's one startup founder).
2. Decide what needs to be on the dashboard(s). What are the key metrics and drivers of the business as a whole?
3. Design a process and/or a visualization of those key metrics.
4. Include visual cues to help interpret quantitative data, such as two standard deviations.
5. Consider how much you need to integrate "change over time" or cohort analysis in the dashboard, so that it's actionable.
6. Publish them in a visually accessible place for everyone they affect.

Possible resources include:

- Google Sheets: Manually keep track of key metrics in a spreadsheet.
- Cyfe.com: Basic integration with a lot of standard startup tools.
- Geckoboard.com: Geared towards being a TV interface in an open office space.
- GuidingMetrics.com: Builds dashboards for small businesses.
- BareMetrics.com: Subscription analytics and insights for SaaS or other subscription businesses.
- Mixpanel.com: Decent free option for product-level analytics.
- Tableau: Enterprise-level data visualization tool.

Interpreting Results

Dashboard colors, shapes (traffic light), and status icons help you quickly interpret the reported data. The size of each dashboard component should also reflect the importance of the particular data point.

Potential Biases

- Graphs and visualizations can easily be misleading.
- Using scales on an axis that doesn't start from zero will make the immediate trend swings seem much bigger, and therefore draw attention away from the fact that the absolute value is quite high.
- Labels and naming on axes are often overlooked or unclear.
- Data can intentionally or inadvertently be left out, making it possible to draw conclusions that do not reflect the full picture of a situation
- Sources should be fully documented, clear, and agreed upon by all parties.
- Using cumulative graphs rather than breaking down data by time period. For example, https://qz.com/122921/the-chart-tim-cook-doesnt-want-you-to-see/
- Ignoring conventions, such as pie charts that don't add up to 100 percent.

Field Tips

- A good dashboard communicates everything you need to know even when looking at it from across the room. @LaunchTomorrow
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Geckoboard: Pirate Metrics (AARRR) dashboard example
- VentureBeat: 6 Dashboards I Use Daily — and Why Every Startup CEO Should As Well
- Got a case study? Add a link by emailing us: realbook@kromatic.com

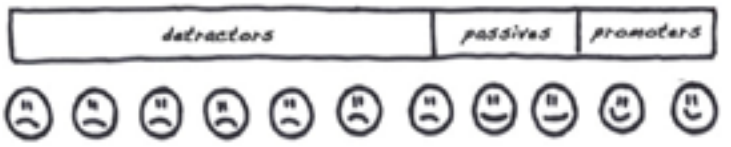
Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Statistics How To: Misleading Graphs: Real Life Examples
- Edward Tufte: Blog
- Got a reference? Add a link by emailing us: realbook@kromatic.com

4.2 Net Promoter Score Survey



In Brief

The Net Promoter Score (NPS) identifies customer loyalty to the brand or product. The survey uses a score from 0 to 10 to answer the question: "How likely is it that you would recommend [company X or product Y] to a friend or colleague?"

NPS was first introduced by Frederick F. Reichheld in a Harvard Business Review article, "The One Number You Need to Grow."

People who give a score from 9 to 10 are considered "Promoters." People who give a score from 7 to 8 are considered "Passives," meaning those who are satisfied but not very loyal to our brand or product. People who give a score from 0 to 6 are considered "Detractors."

The NPS question can be followed up with another question to find out the reason(s) for the score the customer gave. By doing so, the Net Promoter Score can be associated with both qualitative and quantitative results.

Helps Answer

- What is our customer loyalty rate?
- How do we segment our customers to promote the product/services?
- Who are the brand ambassadors among our customers?

Tags

- B2C
- B2B
- Customer
- Relationship
- Value proposition
- Quantitative
- Qualitative

Description

NPS tracks loyalty and can identify the ambassadors among your customers. It is commonly used as

a simple customer satisfaction metric.

The NPS is not just one question, but rather a group of questions probing to understand the customer's feeling or loyalty towards the company, product, or service.

By understanding the reasons of the scores, you can determine how many people will become ambassadors. It can also determine where your company, product, or service stands in word-of-mouth marketing.

Time Commitment and Resources

The survey can be sent to all customers at one time. The results can be compiled and analyzed in about a week. NPS surveys can be sent every six months or every year to determine changes as well.

How to

An NPS survey is simple and straightforward. You can use third-party survey companies such as Survey Monkey or traditional pen-and-paper methods. You can even just send the question via email to your customers directly.

Many companies send NPS questions together with other survey questions to save time and resources.

Interpreting Results

Loyalty economics can be calculated by understanding the reasons why customers are loyal to (or recommend) your company, product, or service.

While there are some variances in the interpretations of an NPS result, the original NPS score calculation is achieved by subtracting the percentage of respondents that are labeled "Detractors" from the percentage of respondents that are labeled "Promoters":

NPS = % of Promoters – % of Detractors

However, interpreting the scores is only half the benefit of the NPS questionnaire. The second part of the "Why" question is equally important — if not more important — than the actual NPS itself. Understanding the reasons why your customers may or may not promote your company, product, or service can lead to breakthrough insights.

By understanding the "Why" components of NPS surveys better, you can identify which customer segments are more valuable and what they want more from your company, product, or service. Moreover, you can identify the reasons certain customer segments become detractors or passives.

Potential Biases

The timing of sending the NPS questionnaire to customers can lead to biased results. For example, if you sent out the survey shortly after you have upset several customers, they will not give high scores. Likewise, if you have recently made several customers happy, they will rate your customer, product, or service higher.

Field Tips

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- GrooveHQ - Lessons Learned Sending a Net Promoter Survey to 4,000 Users
- Zendesk - Measure customer loyalty with Net Promoter Score surveys in Zendesk
- Got a case study? Add a link by emailing us: realbook@kromatic.com

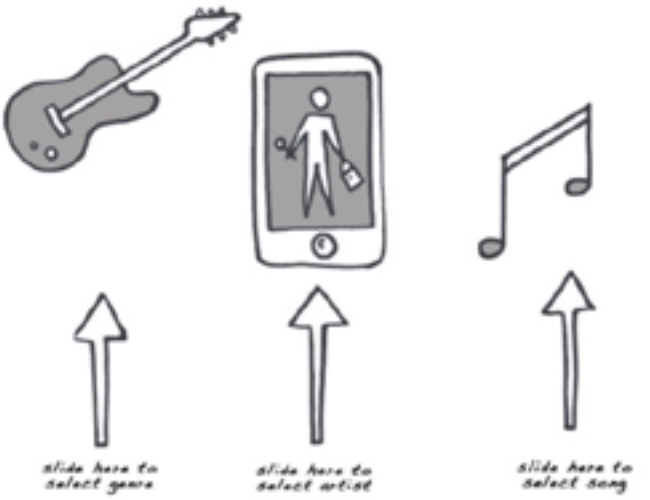
Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Survey Monkey - Net Promoter® Score (NPS) Survey
- Bain & Company - The Economics of Loyalty - Loyalty Insights #3
- Zendesk - NPS Best Practices: The Most Effective Way to Send a Net Promoter Score
- Qualtrics - Net Promoter® Score System Questions Answered
- Got a reference? Add a link by emailing us: realbook@kromatic.com

4.3 Paper Prototyping



In Brief

Quickly test a solution idea by simulating user-product interactions using paper drawings and cutouts. Paper prototyping is often a form of usability testing, although it can also be used to help generate and evaluate design alternatives during ideation.

One person plays the role of product user while others simulate the behavior of the product in response to the user's actions using paper mock-ups of screen images or other user-interface elements.

Helps Answer

- What basic form(s) might our solution take?
- Where are there usability issues in our solution concept?
- Is our solution intuitive for our customer to use/navigate?
- Are there other use cases or error conditions we didn't think of?
- What pieces of information do we need to provide to our customers?

Tags

- B2C
- Qualitative

Description

Time Commitment

Anywhere from a few minutes to several days. As a formal usability-testing approach, more time may be needed to allow for advance planning of time with customers and more complex preparation of mockups and planning of scenarios. Alternatively, can be used in the moment as part of generative design work with very little prep in the time it takes a to produce a few rough sketches to help quickly visualize a concept and test it for weaknesses.

How to

1. For each screen/interface that is part of the interaction you are testing, create a simple mockup on paper illustrating what will appear on the screen for the various scenarios you are exploring.
2. One person (or a pair) plays the role of the customer/end user (customer).
3. Another person (or several people) plays the role of the software (computer).
4. The customer interacts with the paper prototype as if it is a "real" application, physically interacting with the paper interface just as they would the real thing. They are encouraged to explain their thinking out loud as much as possible.
5. For each action the customer takes, the computer then moves/updates the paper prototype to reflect the new state in response to the customer's action. As a general rule, the computer should not talk.
6. For more formal forms, observers would typically watch for additional insights and capture notes. A facilitator may also be desired, as they can encourage the customer to ask questions and think aloud.
7. Alternate interaction flows and layouts, and/or modifications to proposed interactions can be quickly mocked up and tested if changes are desired.

Interpreting Results

You are looking for places where the customer got stuck, was not able to find what they were looking for, or accidentally went down the wrong path. Anything that is misleading, confusing, or hard-to-find is noteworthy. For items like this, dig into what information the customer was missing that led to the confusion and how that information might be provided (or how might the need for it be eliminated). You can look for situations that may have come up where the response by the computer was not defined, or where an action was possible that you did not want to be possible. Also consider revisiting assumptions about your customers' motivations or the knowledge and experience base they bring — the test may reveal incorrect assumptions and provide insight for improving your solution.

Potential Biases

- Confirmation bias is possible, especially if a facilitator or other participant knowledgeable about the software provides too many "hints" to the customer.
- Can miss more fine-grained usability issues such as those relating to placement, size, scrolling, mouse/keyboard interactions, and more. Digital tools may be more appropriate for this level of detailed usability testing.
- Customers may hide feedback if they are concerned about appearing incompetent or offending others.
- If the user performing the test is more experienced, you may miss issues that a less savvy user would have revealed.

Field Tips

- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- NN Group: Mozilla Paper Prototype
- Interaction Design: Paper Prototyping as a Core Tool in the Design of Mobile Phone User Interfaces
- Lean Tools: How TenTune Harnessed the Power of the Pencil - Grasshopper Herder
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Dumas, Joseph and Janice Redish, A Practical Guide to Usability Testing. Intellect, Ltd, 1999.
- IBM: Sure, It's Low-Tech, but This Usability Testing Method Can Help You Sidestep Problems before You Write Your Code
- User Focus: 7 Myths about Paper Prototyping
- SpeckyBoy: Effective Video Examples of Paper Prototyping
- NN Group: Paper Prototyping: Getting User Data before You Code
- Atlassian Blog: Usability Testing with Paper Prototyping
- Got a reference? Add a link by emailing us: realbook@kromatic.com

4.4 Product/Market Fit Survey

In Brief

The Product/Market Fit Survey (PMF) specifically asks the customer, “How would you feel if you could no longer use this product?” with a multiple choice response. The survey is often used as a proxy metric for PMF. If 40 percent or more customers answer they would be “very disappointed” without the product, then it is assumed the product is ready for marketing to the entire segment that answers that way.

Helps Answer

- What are the demographics of our customer segment?
- Will significantly increasing marketing spend (to a specific segment) result in a successful outcome?
- Can the market I’m in sustain my business?
- Can my product meet the needs of that market?

Tags

- B2C
- Quantitative
- Value proposition

Description

“Product-market fit” is a term originally coined by serial entrepreneur and VC Marc Andreessen in his epic post “The Only Thing that Matters.” In short, it refers to being in a good market with a product that can satisfy that market. If you really have it, typically you will be stretched to the limit with resources to deliver the product.

Having achieved product/market fit, you can safely say that you have fully proven the value hypothesis, where the value hypothesis is the key assumption that underlies why a customer is likely to use your product. Andy Rachleff of Wealthfront argues that you should achieve PMF before searching for venture money.

Product/market fit is also a proxy for customer excitement. Customers recommend you more frequently if you've achieved it.
This survey technique gives you a quantitative measure of whether you've achieved PMF.

Sean Ellis recommends sending the PMF survey question to people who have:

- Experienced the core of your product offering
- Used your product at least twice
- Used your product in the last two weeks

Time Commitment and Resources

Setup form on website: .5-1 day.

or

Prepare a longer survey containing the question below: 2-3 days (see Closed-Ended Survey for more details).

How to

1. Optionally pre-segment your users so you can track how different segments respond to this survey question.
2. Present your existing users or customers with the following survey question, either independently or as part of a larger survey:

How would you feel if you could no longer use this product?

- Very disappointed
- Somewhat disappointed
- Not disappointed (it isn't really that useful)
- N/A – I no longer use product
- Send the survey using any of the below:
    - Email
    - Survey.io
    - Typeform
    - Google Forms
    - Intercom

Interpreting Results

If over 40 percent of your users are saying that they would be "very disappointed" without your product, you are building a "must have" product for your initial customers. You can also include an open-ended follow-up question to understand why the user answered this way.

Look for differences in qualitative responses between very disappointed and somewhat disappointed for extra clues. Most likely, either product or market segment needs to be improved.

Potential Biases

- If part of a longer survey, take into account that answers may be skewed based on previous questions.
- Don't ask too early. It only makes sense to use this technique to measure something that's actually possible.
- Make sure you have a large enough sample population to make asking this question worthwhile (aim for at least 30 people).

Field Tips

- Survey.io is necessary but not sufficient for product/market fit. You better have 40 percent, but it's not the only metric you need. @TriKro
- If you aren't sure if you have product-market fit, you probably don't. Use this quantitative validation technique to track your progress. @LaunchTomorrow
- Achieving product/market fit isn't a goal in its own right. Know your product's role in your customers' lives and the market as a whole. @LaunchTomorrow
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Hitenism: 731 Slack Users Reveal Why It's So Addictive
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- The Pmarca Guide to Startups - Part 4: The Only Thing That Matters
- Startup Marketing: The Startup Pyramid
- GrasshopperHerder: False Positives and Product-Market Fit
- SlideShare: Measuring and Understanding Product-Market Fit
- Startup Marketing: Using Survey.io
- Fast Company: Why You Should Find Product-Market Fit Before Sniffing Around for Venture Money
- Cobloom Blog: How to Find Product-Market Fit
- Got a reference? Add a link by emailing us: realbook@kromatic.com

4.5 Usability Testing

In Brief

Usability testing involves observing people trying to complete a series of tasks while using an interactive product. The product can be any level of fidelity, from a paper mockup to a fully functioning product. Users are asked to perform tasks, and the observer records whether the user is able to complete them, as well as their level of confusion or frustration during the process.

Helps Answer

- How do people use the product or service?
- Do people understand how to use the product or service as intended?
- What do people experience at different touchpoints while using the product or service?

Tags

- Qualitative
- Value proposition
- Customers
- Description

Time Commitment and Resources

Usability tests with 5 users can be finished in half a working day with minimal resources. Tests typically require no more than 5-7 users, unless the tasks are complex and involve several parties collaborating simultaneously to complete the test. Tests are often performed with extensive equipment, including full usability labs with cameras, eye tracking software, and one-way mirrors (although this is not strictly necessary).

How to

1. Prepare:
   Usability tests can be performed in any environment. In some cases, a usability lab with no distractions may be very different from the environment where the product will actually be used. A real environment such as a workspace or coffee shop may provide more accurate real-world behavior, but may make detailed observations difficult or impossible. A usability lab allows for detailed observations but might lack realism. Preparation is critical for usability testing since the test produces a number of potential biases in interpreting the qualitative results. At the minimum, the experimenter should have:
   - Introduction script.
   - List of use cases and tasks.
   - Context of the task ("You are thinking of buying a car.").
   - A description of task ("You would like to compare prices of various cars.").
   - A reasonable time limit for each task.
   - Recording equipment such as a notebook or a camera.
2. Frame for feedback
   - The experimenter explains the purpose of the experiment to the user to ensure that they are willing to give honest, open feedback. Normally, the experimenter will reassure the user that any tasks that are difficult are not the fault of the user, and that any problems encountered are exactly the feedback the experimenter desires.
   - This is normally done with a prewritten script to ensure consistency between sessions and experimenters.
3. Explain the task
   - The experimenter explains a single task and any context to be performed by the user.
4. Observe the user
   - The experimenter observes the user attempting the task while asking them to talk out loud about their impressions, intentions, and expectations. The experimenter does not explain or provide any guidance, but only interjects to ask the user about their thought process, feelings, or experiences.
   - The entire process can be recorded with audio, visual, and screen-capture software, or even eye-tracking software for additional review later.
5. Repeat if necessary
   - The user may then be given additional tasks, and steps 3-4 are repeated until all tasks are completed.
6. Exit Interview
   - Usability tests are usually concluded by thanking the user and asking open-ended follow-up questions to clarify their experience.

Interpreting Results

Even usability experts sometimes don't agree on the interpretation of usability tests. Having multiple observers for the usability tests can help eliminate potential subjective biases from having only one experimenter.

The experimenter and any observers must synthesize their observation notes, taking care to note any points where the user showed an emotional response such as frustration. The group must then identify the functional issues or functional errors that were reported by most/all of the participants.

Given the small sample size of most usability tests, consistent usability problems found in most cases should be prioritized, and testing rerun with the proposed solution.

If all users can successfully complete the tasks, that indicates the product is usable, but does not indicate whether the product is desirable or whether the value proposition is actually delivered.

Potential Biases

- Hawthorne effect (the observer effect): Users may behave differently when attempting to complete a task due to their awareness of being observed.
- Social desirability bias: Users may try to answer questions or do tasks in a way that causes them to be viewed favorably by the experimenter.
- Confirmation bias: Experimenters sometimes ask questions or create use cases in such a way that the user's response/action confirms their preconceptions, hypothesis, or beliefs.
- Selection bias: Selection of the incorrect audience can severely bias results. For example, testing usability with existing users will not show issues that new users may have with a product.

Field Tips

- A usability test is the place to synthesize what you believe and what reality will accept @ericries
- The goal of a usability test is to make the users' experience with the product easy and intuitive @ dharanidhar21
- When testing usability, find users who are a little less savvy and aim to simplify your product @ TriKro
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Maryellen Allen — A Case Study of Usability Testing of the University of South Florida's Virtual Library Interface Design
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

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- The Myth of Usability Testing, by Robert Hoekman Jr. October 20, 2009
- Practical Usability Testing (Human Factors International, n.d.)
- The 12 Cognitive Biases That Prevent You from Being Rational (George Dvorsky, io9)
- Got a reference? Add a link by emailing us: realbook@kromatic.com

4.6 Wizard of Oz

In Brief

The Wizard of Oz (WOZ) test involves one or more individuals simulating fully functioning product features without the use of technology. All inputs, outputs, and algorithms are performed manually by humans, but without the knowledge of the customer. This allows entrepreneurs to test a complete solution and gain accurate customer feedback without the cost of building a complex, fully automated solution. It is often confused with Concierge Testing.

Helps Answer

- Which features will provide the best solution?

Tags

- B2C
- B2B
- Quantitative
- Value proposition

Description

The WOZ test is a well-known experiment from the 1970s. It involves one or more humans, so-called wizards, who manually simulate the functionality of a product. However, the wizards are hidden so that the user does not know that someone is manually doing the work.

Time Commitment and Resources

WOZ is not a “quick and dirty” prototyping method, as it requires a high commitment of resources. Depending on the test, there can be more than one wizard interacting “behind the curtains” with

the customers. The time commitment also heavily depends on the task domain and the number of users exposed to the product. For instance, categorizing images by a wizard is easier and faster than transcribing voice for speech recognition. Hence the time commitment can vary from days to several weeks.

How to

1. Build a prototype of your product without the fancy algorithms/technology.
2. Allocate at least one person (the "wizard" behind the curtain) who simulates the interactive behavior of the product.
3. Show your product to your users and let them use it.
4. Collect data to see if your product delivers value to your users.

Interpreting Results

The WOZ test can provide valuable information, especially quantitative data. You can also gather information about the nature of interaction with your product. Summarize all observations and use the insights to adjust your solution accordingly.

Potential Biases

- Sampling bias: See Concierge Test
- Confirmation bias: See Concierge Test

Field Tips

- Be lazy. If you can hire five interns to fake a feature, don't bother coding it. @TriKro
- The Wizard of Oz method is for evaluating a solution hypothesis. @TriKro
- Pareto Principle + Wizard of Oz Experiment is all you need to invest your time in a successful business @andreftavares
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Harvard Business Review: Aardvark
- Fast Company: Cardmunch
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- GrasshopperHerder: What Type of Lean Startup Experiment Should I Run?
- Roskilde University—Centre for Cognitive Science: Wizard of Oz Prototyping: When and How?
- Y Combinator: The Wizard of Oz Approach
- Quora: What Are the Pros and Cons of "Wizard of Oz Testing"?

- Usability Net: Wizard of Oz
- Got a reference? Add a link by emailing us: realbook@kromatic.com

5.0 Out of the Box

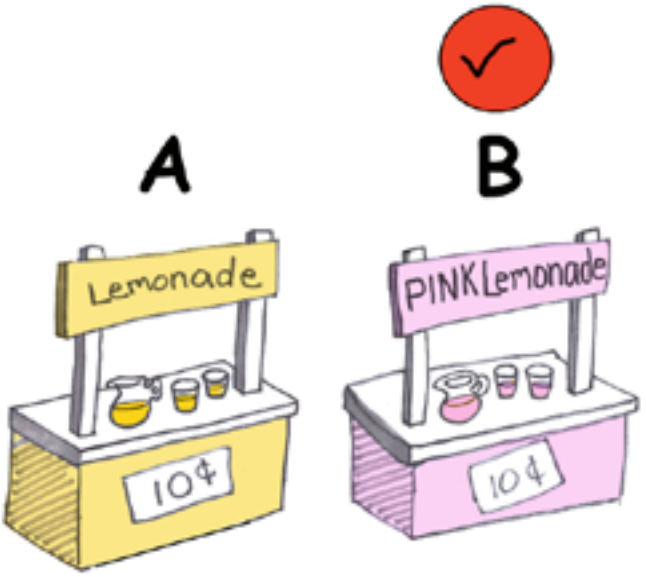
"Constraint inspires creativity."

—Biz Stone

Not everything fits into four convenient boxes.

This section contains a few methods that are variations that can be applied to several research methods or were generally worth mentioning but didn't rightly belong in any of the four quadrants.

5.1 A/B Testing



In Brief

A/B testing (also known as split testing and bucket testing) is a randomized method of comparing two versions of an element (A and B) against each other to determine which one performs better using a metric to define success. We subject both versions to experimentation simultaneously, measure which version was more successful, and select that version for real-world use.

Helps Answer

- Which features of my product or service will increase my conversion rate?
- Which is the most effective design of my product or service to increase sales?
- What is the most effective design of my website to generate traffic?
- Which website layout will lead to a higher sales-conversion rate?

Tags

- Quantitative
- Design features
- Conversion rate
- Bounce rate
- Value proposition
- Customer
- Channel
- Relationship

Description

A/B testing is similar to the experiments you did in Science 101. Remember the one where you tested various substances to see which supports plant growth and which suppresses it? You measured the

growth of plants at different intervals as they were subjected to different conditions, and in the end tallied the increase in height of the different plants.

A/B testing allows you to show potential customers and users two versions of the same element and let them determine the winner. As the name implies, two versions (A and B) are compared that are identical except for one variation that might affect a user's behavior. Version A might be the currently used version (control), while version B is modified in some respect (variation).

In online settings, such as web design (especially user experience design), the goal is to identify changes to web pages that increase or maximize an outcome of interest. Constantly testing and optimizing your web page can increase revenue, donations, leads, registrations, downloads, and user-generated content, while providing teams with valuable insight about their visitors.

For instance, on an ecommerce website the purchase funnel is typically a good candidate for A/B testing, as even marginal improvements in drop-off rates can represent a significant gain in sales. Significant improvements can sometimes be seen through testing elements such as copy, layouts, images, and colors.

By measuring the impact that changes have on your metrics (such as signups, downloads, purchases, or whatever else your goals might be), you can ensure that every change produces positive results.
This differs from multivariate testing, which tests multiple variations of a page at the same time.

The vastly larger group of statistics broadly referred to as "multivariate testing" or "multinomial testing" is similar to A/B testing, but may test more than two different versions at the same time and/or has more controls. Simple A/B tests are not valid for observational, quasi-experimental, or other nonexperimental situations, as is common with survey data, offline data, and other, more complex phenomena.

Imagine a company, Acme Cables, that operates a web store selling cables. The company's ultimate goal is to sell more cables and increase their yearly revenue, thus the checkout funnel is the first place Acme's head of marketing will focus optimization efforts.

The "Buy" button on each product page is the first element visitors interact with at the start of the checkout process. The team hypothesizes that making the button more prominent on the page would lead to more clicks and therefore more purchases. The team then makes the button red in the variation and leaves the button grey in the original. They are able to quickly set up an A/B test using an A/B testing tool that pits the two variations against each other.

As the test runs, all visitors to the Acme Cables site are bucketed into a variation. They are equally divided between the red button page and the original page.

Once enough visitors have run through the test, the Acme team ends the test and is able to declare a winner. The results show that 4.5 percent of visitors clicked on the red "Buy" button, and 1 percent clicked on the original version. The red "Buy" button led to a significant uplift in conversion rate, so Acme then redesigns their product pages accordingly. In subsequent A/B tests, Acme will apply the insight that red buttons convert better on their site than grey buttons.

You can also use it when you want to test your headline, but you have three possible variations. In this case, running a single test and splitting your visitors (or recipients in the case of an email) into three groups instead of two is reasonable and would likely still be considered an A/B test. This is more

efficient than running three separate tests (A vs. B, B vs. C, and A vs. C). You may want to give your test an extra couple of days to run so you still have enough results on which to base any conclusions.

Testing more than one thing at a time, such as a headline and call to action, is a multivariate test, which is more complicated to run. There are plenty of resources out there for multivariate testing, but we won't be covering that when talking about A/B testing.

Once you've concluded the test, you should update your product and/or site with the desired content variation(s) and remove all elements of the test as soon as possible.

Time Commitment and Resources

A/B testing is not an overnight project. Depending on the amount of traffic you get, you might want to run tests for anywhere from a few days to a couple of weeks. And you'll only want to run one test at a time for the most accurate results.

Considering the impact A/B testing can have on your bottom line, though, it's worth taking a few weeks to properly conduct tests. Test one variable at a time, and give each test sufficient time to run.

How to

1. Define the question you want to answer: "Why is the bounce rate of my website higher than the industry standard?" Start an A/B test by identifying a goal for your company, such as "Reduce bounce rate."
2. Do background research: Understand customer/consumer behavior. For websites you can use Google Analytics and any other analytics tools. For other purposes you can use consumer behavior analytics if they are available. Construct a hypothesis: Define the hypothesis you want to test in a concise and measurable manner, such as "Adding more links in the footer will reduce the bounce rate."
3. Define metrics and significant difference: Derive one metric that measures the hypothesis, in this case the "bounce rate." Once you have defined the metric, set the significant difference, that is, the minimum difference between the two versions' metrics that will mean the change is worth it. For example: Version B must have at least 3 percent less bounce rate than Version A to consider it a successful and meaningful improvement.
4. Calculate the number of visitors/days you need to run the test for: Always calculate the number of visitors required for a test before starting the test. You can use an A/B Test Duration Calculator for website purposes.
5. Test your hypothesis: You create two products/services A and B, in which the variation (Version B) has the hypothesis you want to test, in this case a footer with more links. You test it against the original and gather results of the metric selected, in this case bounce rate.
6. Analyze data and draw conclusions: If the footer with more links reduces bounce rate more than the target set, then you can conclude that an increased number of links in the footer is one of the factors that reduces bounce. If there is no meaningful difference in bounce, then go back to Step 3 and construct a new hypothesis.
7. Report results to all concerned: Let others in marketing, IT, and UI/UX know of the test results and insights generated.

Interpreting Results

We must set from the beginning the significant difference (practically significant), that is, what difference between the version will lead to change. This decision is based on several factors, including

investment of the changes and periodicity of changes. For online testing, a 1-2 percent difference is enough to justify the change. For offline testing (such as new medicine or a new hardware product), the difference to make the change beneficial can be around a 10-15 percent difference in magnitude.

We must ensure that what has been observed is repeatable, and not an isolated case. The size of the experiment must be constructed in a way that the statistical significance bar is lower than the practical significance.

Potential Biases

It is important to note that if segmented results are expected from the A/B test, the test should be properly designed at the outset to be evenly distributed across key customer attributes, such as gender. That is, the test should both (a) contain a representative sample of men vs. women, and (b) assign men and women randomly to each "treatment" (treatment A vs. treatment B). Failure to do so could lead to experiment bias and inaccurate conclusions being drawn from the test.

Giving a test insufficient time can mean skewed results, as you don't get a large enough group of visitors to be statistically accurate. Running a test for too long can also give skewed results, though, since there are more variables you can't control over a longer period. Make sure that you stay abreast of anything that might affect your test results, so that you can account for any statistical anomalies when reviewing your results. If you're in doubt, it's perfectly reasonable to retest.

A/B testing is not so good for testing:

- New things (such as change of version or novelty effect).
- Too many changes, as the results will not be conclusive.
- If something is missing (such as feature, style, information).

Field Tips

- Keep your A/B Testing variations to a minimum to ensure meaningful results - @sircastel
- Define your metrics and minimum success rate before running A/B Testing - @sircastel
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- VWO - Website Redesign Increased Conversions
- VWO - SaaS Pricing A/B Testing
- Airbnb - Experiments at Airbnb
- Grab - How Grab Experimented with Chat to Drive Down booking Cancellations
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Optimizely - A/B Testing
- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

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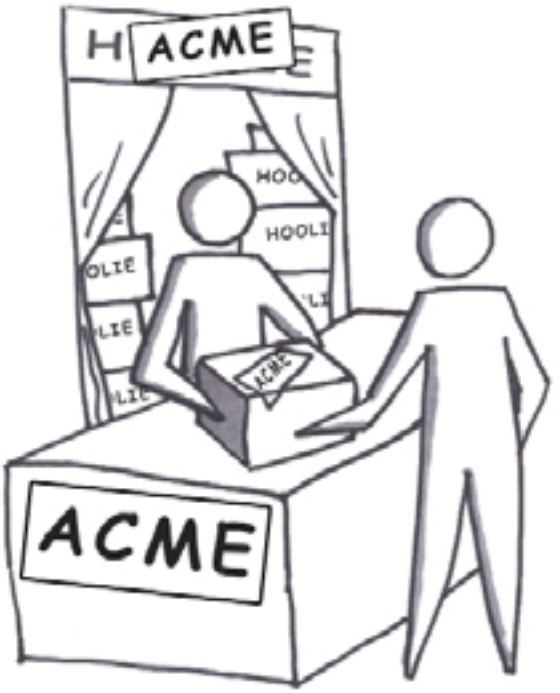
- Udacity - Online A/B Testing Course
- Evan Miller - A/B Testing Sample Size Calculator Tool
- MailChimp - How Long Should You Run Your A/B Test?
- Got a reference? Add a link by emailing us: realbook@kromatic.com

5.2 Off-Brand Testing



In Brief

Off-brand testing is a technique that helps established companies run experiments while minimizing risk to their brand equity. Off-brand testing prevents skewing the customers' response (up or down) due to their brand. In a nutshell, the product or service being evaluated is presented using a no-name brand or without branding at all. Typically, these are executed as very small scale tests to get a statistically meaningful result. If it comes back positive, the data justifies a larger batch of effort.

Helps Answer

- Is there merit in the idea itself, or is there interest because of high brand value?
- Would our existing customers be interested in this type of product, even if they didn't know it was from our company?
- Would there be alternative market segments that might be interested in this product?

Tags

- Brand
- Evaluative
- Product
- Market

Description

While the numbers vary based on product and market type as well as survey, most customers need

on average 8-21 exposures to a brand message before they'd consider purchasing a product. As these numbers are typically quoted as averages, they presumably describe the behavior of the majority, not of the early adopters. With repeated exposures to a specific message, customers start to associate certain emotions or thoughts with a specific product or company. By increasing the number of exposures, a marketing team can create a familiarity with the product, to at least consider it when purchasing a product from that category. When evaluating branding initiatives, the key metric is the number of exposures a consumer has to the core message behind the brand.

In truth, most "businesses earn almost all their profits from a small number of brands — smaller than even the 80/20 rule of thumb suggests. In reality, many corporations generate 80 percent to 90 percent of their profits from fewer than 20 percent of the brands they sell, while they lose money or barely break even on many of the other brands in their portfolios," according to Nirmalya Kumar writing for the *Harvard Business Review*.

With off-brand testing, you are essentially trying to discover which early adopters are most likely to respond to an offer (without adding the persuasive influence of a known brand to the mix). This is trying to measure the level of passion or pain the particular group is feeling with respect to this problem or your solution. So the key unit of measurement is typically the conversion rate. If you show this product (for example on a landing page) to 1000 ideal prospects, what percent take action?

If these customers have been repeatedly exposed to the brand, particularly with positive associations, the conversion rate obtained will likely be higher than if it were not related to the brand. It may even skew results enough to give you a "false positive." You walk away from a test thinking you have a good product idea, but in fact you obtained a positive result because the customer knows and trusts your brand.

Alternatively, if a company or brand has a bad association within a particular segment, it can use off-brand testing to anonymously evaluate products or features.

Another common application of this approach is to launch an app in an app store in a similar country to your final target market. Tongue-in-cheek, this technique is referred to in Silicon Valley as "Test in Canada."

Time Commitment and Resources

Negligible, as this is done alongside other techniques mentioned in the Real Startup Book. For example, on a landing page smoke test, you'd avoid using corporate logos, color, or fonts that could hint at the identity of the experimenter.

Interpreting Results

Off-brand testing is similar to:

- Single-blind studies in scientific research. The researchers know who is being experimented on and who isn't, to help remove bias that may affect the subject's perception and behavior.
- Blind taste tests are usually used to compare one brand to another, albeit in a more mature product category.

Potential Biases

As this is a technique used to reduce bias, there are no major additional biases. It's worth noting that you can still go overboard with selling instead of validating, even without branding. There are a number of techniques that will influence the outcome but will not necessarily tell you about true demand. For example, heavy scarcity tactics will increase "sales," but will not help you understand the underlying demand. On the flip side, having too many options will depress response.

Field Tips

- Fight the urge to throw a big bang corporate-style launch when validating an idea using off-brand testing. It works, and it gives you data you can stake your career on. - @LaunchTomorrow
- There is a time for brand compliance, security, and all of the other goodies you're used to. First do a smoke test using off-brand testing - @LaunchTomorrow
- Corporations do not lack ideas, but rather have a hard time deciding on what ideas to invest in. - @davidjbland https://medium.com/@davidjbland/lean-startup-comes-home-8f205993da40
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Toyota used an off-brand landing page test with Facebook ads to figure out if anyone would actually want to pay for gas from the convenience of their car. They were concerned the presence of their brand might skew the results.
- "Traditionally what we might have done is develop an app and release it and then see what happens next. But we knew that with this, if we were going to get it right we would need to expose it to customers and get their feedback."
- Dell uses off-brand testing to test landing page variants that the company won't be implementing in the near term. Dan Siroker and Pete Koomen in A/B Testing: The Most Powerful Way to Turn Clicks Into Customers
- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

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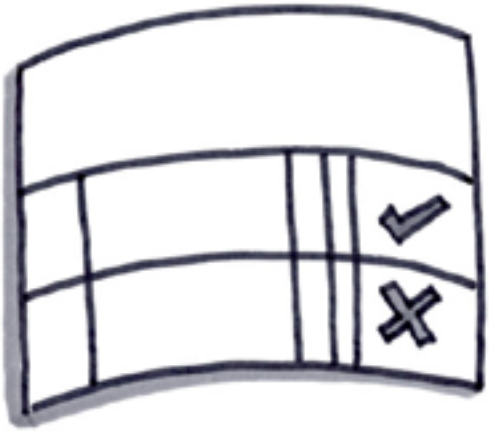
- Harvard Business School: Kill a Brand, Keep a Customer
- Wikipedia: America's Test Kitchen
- Got a reference? Add a link by emailing us: realbook@kromatic.com

5.3 Scorecards



In Brief

A scorecard is an evaluative decision-making or prioritizing shortcut, often done in a spreadsheet. It is a structured way to identify *one* top choice among a number of options, to help focus our use of resources such as time and money. It helps achieve a goal one small step at a time. This technique can be useful if there is no clear intuitive priority.

Helps Answer

- What is the best of a number of options?
- What criteria will help us achieve the best possible outcome?

Tags

- Evaluative
- Benchmarking
- Decision-making
- Structured
- Quantitative
- Diagnostic

Description

As a quick and dirty tool, to choose one thing to focus on, scorecards are difficult to beat. It forces you to choose criteria that are important, then to weight each criterion, and finally to multiply or weight each value to generate a number that can then be used to rank all options being considered.

This general framework can be applied in many different areas of running a startup or innovation program:

- Justin Wilcox's SPA analysis helps early-stage founders prioritize who to interview first by subjectively valuing market size, how much founders think they'll be willing and able to pay, and how easily the founder can access them.

- Rank product ideas or projects worth pursuing with criteria such as how much potential revenue, how easy it would be to complete, how fast it can be done, how much social impact.
- Use urgency and importance to prioritize a product backlog.
- Identify your riskiest assumption by using a scorecard to rank risks by impact and likelihood.
- Prioritize a channel for one of a number of potential marketing channels for channel testing.

The primary goal here is to prevent "analysis paralysis" while still providing one clear priority to make it easier to identify an immediate next step.

Time Commitment and Resources

15-30 minutes, depending on the number of options to evaluate.

How to

Ask what are three examples of the best and three of the worst of this thing (skill, venue, performance, etc.)? What were the consistent mindsets leading to the three best examples?

1. Make a list of the options you want to consider in the left-hand column
2. Choose criteria that are important in the top row. For example, in Justin's SPA analysis, that would be Market (S)ize, Willingness to (P)ay, and (A)ccessibility for the founder.
3. Weight each criterion. For each option, consider the importance of that criterion. In each column, put in a value from 1-10. For example, in the first data row, put in a value that estimates the market size of potential interviewees.
4. When you have estimated across all values, multiply out the values of each option to generate a summary number per option. In other words, multiply the values for Size, Pay, and Accessibility for each row. This will give you a summary weight for each option.
5. Sort the summary numbers from greatest to smallest, and rank all options being considered.
6. Identify the top option, and take action.

Interpreting Results

This technique is highly dependent on subjective factors. While it seems "scientific," in fact a lot depends on the weights you assign to each option. Its primary goal is to give you *one* option to pursue, so that you can execute it without dwelling on which decision you ought to make. If you take action quickly, you can always change your mind later. If you don't take action at all, you won't generate a result.

A scorecard may generate a result that is counterintuitive. If that is the case, then most likely the result that you wanted is the "correct" option to pursue. Going through the exercise can help bring to the surface what you already know, but can't articulate consciously.

Potential Biases

As this technique does not gather data, it is purely a subjective ranking tool to help you take action. Even though it looks very considered and rational, it should not be confused with data-backed decision tools. The numbers used are subjective estimates.

Field Tips

- Scorecards get you 'out of the building' and executing, if you lack the intuition to know what to do next. @LaunchTomorrow
- There can only be one top priority at any given time. Use a scorecard to identify yours. @ LaunchTomorrow
- Got a tip? Add a tweetable quote by emailing us: realbook@kromatic.com

Case Studies

- Got a case study? Add a link by emailing us: realbook@kromatic.com

Tools

- Got a tool to recommend? Add a link by emailing us: realbook@kromatic.com

References

- Customer Dev Labs: Prioritizing Customer Segments with Excel
- Diana Kander: How to Diagnose Your Riskiest Assumptions
- Sixteen Ventures: Startup Customer Development Hacks
- Medium - Ipsita Agarwal: Leaning into the Lean Startup Methodology
- Got a reference? Add a link by emailing us: realbook@kromatic.com

Afterword

What Are the Next Steps?

"I'm not of the opinion that the next logical step for a book is for it to be made into a film."

—Jasper Fforde

For You

This book won't make you successful. You have to work for that. Entrepreneurship is not an academic theory; it's a practice. So to get better at it, just do it!

Figure out what question you have about your product or market, pick a method, and start practicing.

About This Book

This book is not done, nor will it ever be. We learn faster together.

- Have you come up with a new method?
- Got a new tip?
- Do you want to share a case study of how you used the techniques in this book so the community can learn from your experience?

Let us know by emailing realbook@kromatic.com.