

The image features a dark teal background with a network of white and light blue hexagons and lines. A large, stylized 'SVV' logo is in the top left. A decorative wave of teal and green colors flows across the middle of the page.

SVV

Founders Guide To The Greater Bay Area

E-Book

Supporting the Growth of Innovation and Pioneering the Future of Technology

Our Mission

"Our mission at Shenzhen Valley Ventures is to help take the 'hard' out of 'hardware'. We want to make creating hardware products less difficult. SVV strives to accelerate the testing and introduction of new products and provide the best engineering, product design and manufacturing services possible. This is all in the name of innovation."

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Introduction

It's most certainly an incredible time to get into hardware. We have seen a huge influx in innovation in recent years, all across the globe, and no signs of slowing down. China has always been spoken about among startups and entrepreneurs, however, what does China actually have to offer?

Aside from nightmarish stories of IP (intellectual property) theft and unfair trade practices, in recent times China has made great strides in protecting foreign businesses and has now advanced rapidly into the future of technology.

We are seeing great feats into the future of technology, with fully electric vehicles being deployed, autonomous driving, and comprehensively designed software platforms paving the way to easier living. All this innovation is coming from the heart of China's Greater Bay Area, Shenzhen.

As a foreigner, we hold the West in high regard when it comes to the development and deployment of new technologies, and look toward areas

like Silicon Valley as the leaders in design and development. But, today, the challenge has arisen for startups and corporations about the direction forward. China has fast become very influential leaders of future technology, it now begs the question, is it beneficial for me, as a founder, to develop in China? And, Where do I begin?

This founder's guide to The Greater Bay Area covers everything a startup company will need to grasp the basic concepts of navigating the local ecosystem and getting their product designed, developed and manufactured. When I say the far east, and more throughout this book, I am referring to China's Greater Bay region.

This book has taken the best of 2 years of direct experience through the eyes of a foreign founder and has been advised by numerous successful entrepreneurs, both locally and international. A lot of this experience originates from SVV, an engineering, venture, manufacturing company in the heart of Shenzhen's hardware ecosystem.

SVV has worked with 1000's of startups, numerous corporations, governments, educational institutions, and venture capitalists. This book is directed toward the young and mature entrepreneurs, with the hopes that this will greatly increase your understanding of the Chinese

ecosystem and paint a intricate picture of the process a startup's product goes through to get to market.

In light of this, I want to assist startup entrepreneurs with developing basic business skills to ensure that they can create a viable business and sustain it once hitting the market.

CHAPTER ONE

THE STARTUP

What to consider when starting a startup?

Building a startup doesn't have a unique formula that everyone needs to follow. However, building the foundations of your company is an important part of becoming a 'successful' startup. From creating the right brand to leveraging the right resources. I want to share with you the process which many founders consider at the early stages of their company.

WHY ARE YOU STARTING THIS COMPANY?

A question numerous founders struggle to answer - why am I starting my company? So many startup companies fail, in fact, according to CBInsights "42% of startups fail because there's no market fit". Many entrepreneurs set out to create a solution to a problem, and this solution is the center of

their entire business. So, before building your startup you'll need to do a deep analysis into whether your future product will succeed, or flop.

FINDING THE RIGHT PARTNERS

This is essential when starting a startup. Without the right partners you're destined to fail. Consider, when entering into a business, are you partnering with the right person? Aside from companies failing due to no market fit another is because the partners can't agree on anything and argue constantly, which leads to the failure of the company. It is essential to the success of your startup to ensure you have the right people onboard.

Take for example the process of a general venture capitalist (VC), before investing into a startup company/idea they go through an extensive due diligence process. This process is designed, not only to see future growth in the company, but also a growth in a relationship between the founders and the VC. This should be applied to yourself when selecting the right business partner.

Why are startups failing to get to market?

Nowadays we are seeing a vast rise in startups working on some of today's most disruptive technology. However, statistics show that many startups are constantly failing to get to market. There doesn't seem to be a proven source for this failure, but rather a mixture of bad mistakes, and unforeseeable circumstances startups neglect to prepare for. Perhaps by highlighting these issues, startups can better plan for the long product development journey ahead.

RESOURCES

As a startup, you will look toward accelerators, incubators, and/or set up an office in a maker/coworking-space. Regardless of where you begin, you'll be lacking the necessary resources which can accelerate your product to market.

Don't get me wrong, these types of spaces are fantastic, and have been proven to elevate/nurture startups through their very early stages. But, what happens after? Startups fail to realize that getting to a

prototype/proof of concept (POC) is only the first real step towards completion. We (SVV) meet many founders who think the next logical step after a prototype is Chinese manufacturing (*discussed further in chapter 2*), this is, of course, a misaligned illusion which leaves startups scratching their heads, due to assembly & quality issues.

Make sure that there is a path paved out once getting to your prototype. A prototype is nothing more than a validation point, it is not a product, and is more than likely not fit for the market. There are many more validation points you will need to achieve before hitting the market, so prepare for this journey, make sure you have access to the necessary resources that will get you there.

PARTNERS WHO SPECIALIZE IN STARTUP'

DEVELOPMENT

Perhaps you have hired a good in-house team who understands the process, regardless, you will need the infrastructure, and knowledge to get your product to market, which is a huge investment on the startup' side, so, you'll have to outsource this portion no matter what. The above paragraph outlines the difficulty startups will face once leaving early-stage institutes, a solution to this is outsourcing to a trusting partner. You must find a partner who is capable of getting your product through the next

stages of the product development process and who has the resources/infrastructure to do so.

Startups usually attempt to keep their product development internal, or are unable to trust a 3rd party to help. But this can be a huge mistake. By not outsourcing or working alongside a 3rd party, after getting to prototype, you'll either stagnate or discover many barriers which will ultimately fail your startup. Once outsourcing part of the work to experts in the hardware field, it frees up a large amount of the workload, allowing you to focus on other key areas of your startup's development.

INVESTMENT

Investment is a huge part of a startup's success. Without initial capital, your company will have many difficulties or even be dead in the water. So, not only is raising investment crucial, but also how you spend it too. If we look into the past we can see numerous startups successfully raise capital, but ultimately fail. Why is that?

One reason is that they didn't know where to spend it. Growing a startup, especially in the hardware space, is expensive. You'll find many people suggesting you can get from idea to market within a \$100K USD budget.

This is ridiculous, and anyone who understands hardware will agree. Now, don't get me wrong, I am not talking about simple consumer products, but rather the industry changing sectors such as medical, sustainable, agricultural, and AIOT technology.

There is a vast amount of startups who are constantly chasing the money rather than building the product itself. Once receiving your first round of funding get yourself to a validation point (prototype). Prove your product is generating market traction, and outline your next steps for getting it to the market. Only then will investors be more inclined to invest/reinvest in you.

Regardless of where you are, and how you're starting up, there are many platforms in-place ready to assist you throughout your product's development process. It takes time, but if you're smart in utilizing resources, partners, and your investment, then you'll have a higher chance of getting to market. Remember, globalization has accelerated the pace of development. Think globally rather than locally.

Startup Know-How: Develop the Perfect Business Plan

There are a large number of companies, trying to solve today's challenges. However, so many of these companies fail due to a flimsy business model. Let's explore how you as a startup founder can overcome these challenges and put together an ironclad business model which will be sustainable for years to come.

DOES IT HAVE VALUE?

Before developing the perfect business plan, you'll need to find out if there is a market fit for the service/product you're about to offer. So, validating your idea is crucial before beginning your business. Talk with friends and family. Get their opinions on your idea. Form an online community and ask for feedback from your peers. Don't waste your time working towards a business that has no fit.

This book has not been written to tell you 'how' to create an idea. But rather how to ensure you're working towards a sustainable one. Let's take the famous Juicero (*founded in 2013*) for example, a Wi-Fi connected juicer.

The astonishing thing about this company is the amount they raised, reaching \$120M USD, and they still failed. A huge reason as to why they failed is that, their product did not fit the market, (*and the tech had many flaws*), no one wanted it. There are many reasons that made Juicero fail, but one thing was for sure, it was not developed well for the market.

This is why your startup's product must deliver true value to the market. Why would anyone want to spend a monthly fee on a juicer which is fundamentally useless? Your idea may sound amazing to **you** but does the market share the same vision.

Outline the value-driven applications your product will deliver, if you're drawing a blank, or coming to the conclusion that 'it's just cool' then think again. We're living in an extremely comprehensive and competitive market, so value is extremely important when introducing a new product.

COMPETITION

You would be surprised by the amount of startups wanting to invent the next 'smartphone'. Like, what? Why would you work on a product that's market is already completely dominated? When developing your business keep in mind that you're going to have competition. But, what

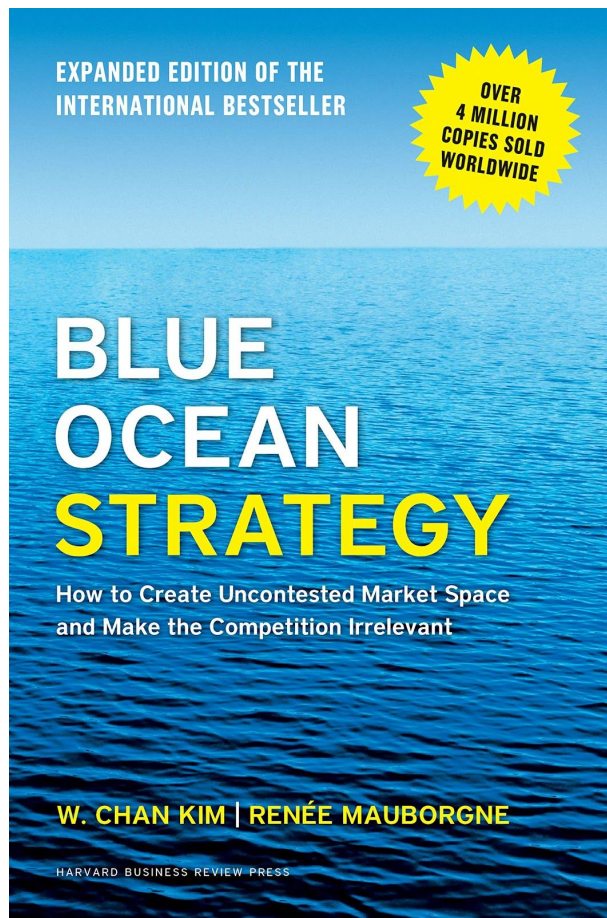
differentiates your product/service from everyone else'? Your product/service must be innovative, unique, or substantially different from anything already on the market. Otherwise you'll never be able to grow.

Take some time in doing a competitor analysis. This will guide your decision on taking the next steps forward. We recommend looking at 2x models to help you with this task, 1x a SWOT analysis, (Strengths, Weaknesses, Opportunities, and Threats). Below is a diagram to assist you.

SWOT Analysis: Subject

		Positive	Negative
Internal	Strengths		Weaknesses
External	Opportunities		Threats

Secondly, we must certainly recommend the Blue Ocean Strategy book. For anyone getting into business or entrepreneurship, W.Chan Kim & Renee Mauborgne outline some very useful competitor analysis graphs and business methods.



START WITH THE END

This advice is by far one of the most important. Create a goal. Envision what the finish line looks like. Decide where you want your company to

eventually get to. There are many companies who set out to solve the next big thing! Sure, go and solve it. But without a clear vision it's highly unlikely your company will grow. Otherwise, you'll be roaming aimlessly without direction. Imagine how you want your company to exit, whether that be IPO, M&A, or just plain growth.

What will your company look like in two years, five years, and ten years? Compile a list of goals for you to reach whilst keeping in mind your exit plan, this will also help you gain traction among VCs. Your company's success is purely down to what you decide it to be. However, many founders view money as success. In this case, then revenue growth is a good way to measure your growth.

Let's say, in two years you want your company to break even, with a 10% rise in clientele. Put together missions on how to achieve this. The five-year plan will generate a profit of 12%+ each year, and a team expansion of over 10%, same thing, create a plan on how to achieve this. Everything you do in your company must have a reason, otherwise you'll struggle to grow, measure, and sustain.

QUICK POINTERS

Now, I've touched on some key areas that will help you build the perfect business plan. However, here is a checklist to keep in mind when developing your business plan.

- **Your business at a glance** – Create an overview of your business outlining the issues in today's World, and how your company is solving those issues.
- **Description** – Describe your company. Keep in mind not to use industry jargon, but rather keep your end customer in mind. Simplify your company's vision so people can easily resonate with your goals.
- **Market Analysis** – One of the most important points. Remember, over 40% of startups fail due to the lack of market need. Research your market extensively to ensure a viable business.
- **Company Structure** – It's not uncommon for a founder to hold many roles within the company. But this can also be bad, don't be afraid to hire and delegate certain positions to free up your time. A

good tip is to lay out all the job roles and allocate the people you'll need to fulfill them.

- **Marketing & Sales** – Of course this is a crucial aspect to think about when developing your business plan. Using a lot of the information you have gathered from your market research it is vital that you develop a strong 'go-to-market' strategy. Otherwise, your product is as good as dead.
- **Funding** – Second reason why startups fail is because they run out of money. Don't ever underestimate the initial capital you need to get you to market (especially in hardware). Be meticulous when calculating the funds you need.
- **Financial Projections** – Finally, you'll need to provide insight into your company's growth vision. By doing so, you'll need to provide your financial status, as well as, predictions/evidence on future growth areas.

Starting a company is nothing far from a headache. There are many things you need to ponder before setting on this journey. Many founders I have spoken with try and handle everything by themselves, which ultimately leads them to burning out. Don't be like them, layout your business plan as best as you can, and work towards achieving your goals. The plan may change along the way, in fact, ***it will change***, but your goals should always stay the same.

As a Startup What's It Like

Working With China?

In many circumstances there is a stigma attached to China and how the country has been branded the manufacturer of the world. This has changed in recent times. With the rise of regions such as the GBA (this is explained in chapter 2), China has made tremendous strides in quality and innovation. As a founder, you shouldn't be put off by some nightmarish stories of past companies, but rather embrace the present day China and what is offered here.

INFRASTRUCTURE DESIGNED FOR HARDWARE & PRODUCT DEVELOPMENT

China's R&D capabilities have improved greatly. There have been more platforms growing across China which support startup technology and their product's development. Previously, as a founder, you'd have to try to navigate the local Chinese ecosystem 'blind' by visiting numerous locations to get individual engineering work done.

However, today, China has one of the most integrated ecosystems on earth, combining expertise, facilities, logistics & distribution, and access to international financial hubs such as Hong Kong, have all reduced the barriers for founders to easily access these resources and greatly accelerate their product's needs.

In the last 10 years, China's startup landscape has grown from almost nothing in the early 21st century to owning over 50% of the world's patents. This said, venture capital is on the rise too, in the early 90's venture capital was unheard of in China, and now, in 2020, there is over \$250B USD of VC funding.

With this remarkable growth it is apparent that many platforms have been built to support the new era of China's tech landscape, by investing heavily in facilities, testing equipment and resources all dedicated to fueling the tech industry.

COMMUNICATION BETWEEN STARTUPS AND CHINESE VENDORS

Unlike what many people have heard, or encountered, the communication barrier in China has also improved, as more and more

people are english speakers, and if not, there are numerous apps which make discussion in another language almost seamless.

If you're an entrepreneur coming to China to develop a product then you'd look toward cities such as Shenzhen, Guangzhou, Ningbo, etc... These types of cities have improved significantly in Chinese-English speakers. At SVV (Shenzhen Valley Ventures) our entire management team speaks English, along with numerous of our engineers, roughly 75% of our workforce.

THINGS TO CONSIDER WHEN DEVELOPING YOUR PRODUCT IN CHINA

The Chinese are incredibly efficient when it comes to timelines and production. To put this in perspective, Zowee Technology (one of the largest manufacturing companies in China) are able to produce over 5M+ smartphones in a month! An incredible scale of time and proportion.

However, this cannot be done without going through a thorough DFM (Design For Manufacturing) process. Without it your product can often end up produced with many defects, as the manufacturing process in China relies heavily on step-by-step assembly guidelines (SOPs) which are followed to almost perfection. Before manufacturing your product this is a MUST as you wouldn't want to be left with 10K+ defected units.

Furthermore, and this of course a given, you must ensure you're sourcing the right manufacturing partner (further tips in chapter 2). There have been many occasions startup companies have partnered with local manufacturing companies without doing a necessary due diligence. The reason why this is important is quality control & trustworthiness. After all the work you've put into designing and developing the perfect product, you'd hate to have it mishandled and not tested properly, which ultimately may leave your customers angry.

Even large manufacturing companies can occasionally have issues with them, that is why we recommend you partner with the right factory rather than a large one (more on this in chapter two). As a startup founder you must also be vigilant of IP (Intellectual Property) theft too. If you're looking at selling your device/product in China there is little or no protection stopping others from selling your IP protected device. So, run a thorough due diligence beforehand.

How To Run A Successful Crowdfunding Campaign

Crowdfunding can be a great way to raise capital for your startup. As a founder you'll face many challenges, and raising capital is vital to your company's survival. But you can't just launch a campaign and hope for the best! Whether it's on **Indiegogo**, **Kickstarter**, or another platform, here are some best practices when it comes to running a successful crowdfunding campaign.

KNOW WHAT YOU NEED, NOT WHAT YOU WANT

Ask yourself, what will you use these funds to do? Do some research to see if it's best to put your money into **product development** costs (for the software and hardware), or salaries (overhead), or logistics and distribution. It's likely you'll need a mix of all three. What does it look like if you have to make 300 units of something?

One of the best ways to research this is to look at what others have done — and most platforms are very open about their successful campaigns! Also, talk to people, explain what you'll deliver, be practical with your

timelines, people understand there will be delays . Explain to your backers how the money will be spent, otherwise your campaign is unlikely to meet its goal.

USING MARKETING TO ASSIST YOUR STARTUP'S CROWDFUNDING CAMPAIGN

You now have a rough idea of how much money you need to raise. It's time to sell the idea, the product, and your team. People are more inclined to contribute money if there are specifics. Point out why the product is needed and why your team is the one to make it happen.

Make a video showing why this product needs to be made. State the problem, and why this product specifically solves it. It's important to create a compelling, professional looking video that can be understood. Have a professional logo made, create social media accounts (Facebook, Twitter, Instagram, etc.) and start building hype around your brand & idea.

Take time to craft a great description of the product, and use that same messaging relentlessly. Go into details about what it is, and how to use it.

You'll build trust as you show potential customers you've thought of their every need.

SPECIAL OFFERS

One of the appeals for crowdfunders is the feeling of "getting in" on the ground floor of an idea. So, add some special offers for these early adopters. Make their donation worth their time. If I'm going to invest \$100 into YOUR campaign I expect \$200 worth of stuff in return. Make your backers happy! A common method is to offer a low-price compared to the retail price. Add promotional items like a shirt, a mug, or anything that you can send now which instills trust.

KEEP YOUR BACKERS UPDATED

Backers took the time to give you their money, and expect updates about how you're doing. It's important to keep backers happy, and one of the easiest ways is to keep them posted on the weekly progress. This could include design work, prototypes, production samples or just a quick note about the status of things. Make sure they understand your timeline, let them know that you're hitting milestones. Even if you're going to miss a deadline, that is absolutely fine! Just let your backers know. Make them feel like they are part of your journey.

You want to start your company with a solid foundation. Create trust, develop a network, build a community around your idea. By following these steps your crowdfunding campaign will be successful, and lead you to fulfilling your promises.

CHAPTER TWO

PROTOTYPING | GETTING IT MADE

What's the GBA? And Why Is It Important?

So, as mentioned in chapter one, what is the GBA or The Greater Bay Area? It is a combination of Chinese cities located in the southern parts of China. Amongst them are well-known cities such as Hong Kong, Shenzhen, Macao, and Guangzhou, all of which make up a strong competitor to California's and Tokyo's Bay Areas. As a startup or corporation, the GBA is most certainly a location which is fast disrupting the World's landscape for innovation, trade & logistics, and financial services.

OVERVIEW OF THE GBA (GREATER BAY AREA)

The entire region is interconnected by the 35 mile long Hong Kong-Zhuhai-Macao Bridge and the staggering 88 mile Guangzhou-Shenzhen-Hong Kong Express Rail. All the cities combined

are triggering an influx in China's GDP which is estimated at over \$1.6 trillion USD, and is expected to surpass \$4.5 trillion USD over the next ten years. The GBA covers less than 1% of China's landmass, and is home to under 5% of its current population, just 69 million people, that's more than the United Kingdom!

The cities within the GBA all play an important role in the region's success. Hong Kong with its financial advantages, Shenzhen becoming the technology & innovation hub, Macao is the tourist attraction of the region, along with Guangzhou, Dongguan, and Foshan all being the manufacturing powerhouses. Combined they create a complete ecosystem, all of which compliment one another across the region.

HOW DOES THE GREATER BAY AREA AFFECT YOUR HARDWARE STARTUP COMPANY?

After reading an overview of the GBA, you can begin seeing the advantages the region has to offer. There are many opportunities for startups within the region. Depending on your product or service, the region will most certainly have the skills, market, and infrastructure to help with your development and growth.

Take into consideration how integrated the GBA's ecosystem is. The top 3 dominant sectors in the region are technology & Innovation, trade & logistics, and financial services. As a startup, you can utilize the region's talents, as well as, take advantage of the fully integrated network. From development, to manufacturing, to logistics and distribution, the region is a logical choice for your startup.

Due to this immense network, a startup's, or corporation's speed is significantly increased. On average we see startups getting to an MVP (Minimum Viable Product) within the first 3+ months of moving their development to the GBA, and a further 9+ months to the manufacturing lines. With an integrated supply-chain, infrastructure, and expertise startups can finally deliver on time, and maintain a steady flow of their products.

However, this doesn't come cheap. Although the GBA is situated within China, there is still a misconception that China is cheap, especially through the R&D phases. Today, China is no longer a cheap labour country, but rather a premium product provider. As you can see, startups no longer come to the GBA in search of cheap labour, but rather the expertise and infrastructure. Especially, with the sharp growth in sectors such as agriculture, medical, sustainable energy, and robotics.

Maybe you've heard of the GBA before, or perhaps this is your first time hearing of it. Regardless, the Greater Bay Area is rising in popularity, and has already raised to a professional status amongst industry professionals. Whether you're an enthusiast, startup, or a corporation, the southern region of China is where you need to be. If you're staying local, and not expanding global, chances are you will miss out on the evolution of this new industry.

How do you plan a bill of materials (BOM)?

Starting a new product is never simple, especially when you're trying to decide what needs to go into the release version. Building the perfect balance between a bill of material (BOM) vs COGS is always a challenge. So how do you know you've reached that fine line? How do you do it?

WHAT IS A BOM?

A BOM (or bill of materials) makes up the fabric of your product. This is a list of all the **components**, materials, and anything that makes up your physical product. There is always a trade-off between lowering the BOM cost but this could risk quality issues. So, it's best to find the perfect balance between your bill of materials, budget, and product quality.

WHAT MAKES A QUALITY BOM?

There is no easy answer to this question as everyone's product will have different features. It should include the production costs, marketing costs, software costs, logistics, and distribution per unit. Thus having a low BOM

cost is crucial when looking to scale. We would suggest your BOM cost be no more than 30% of your RRP (recommended retail price).

IS A \$2/UNIT REDUCATION WORTH \$500K IN ENGINEERING SERVICES?

Let's be realistic, you are a startup with limited money you're going to think twice before investing over \$500k USD toward an engineering service. However, when has engineering ever been cheap?! More often or not that \$2 you save after spending \$500k could potentially be your lifesaver in the future. Let's explain.

You went through an accelerator and your BOM cost is now \$52 USD/unit. The quality/supply-chain is questionable, but you need this product on the market asap. Your backers are requesting those first 10,000 units! So you begin mass producing at a total material cost of \$52,000.

Fast forward a year later. Your first 10,000 units were a success and now you need to sustain a production of 100,000 units/month. Based on your original BOM, you're now spending \$520,000/month on components for the products alone. Your investors are asking to lower this burn rate. Afterall, a "simple" reduction in the BOM cost by \$2 will reduce your

monthly costs by \$200,000. But this isn't so simple since you're already well into production. The stress builds until the product's second version when you can redesign your BOM for maximum efficiency.

For V2, you decide to partner with an **engineering firm** who minimizes your BOM's cost by that \$2 your board so eagerly asked for. Yes it cost \$500,000 in fees, but in reality that's only 2-3 SF-level engineering salaries anyway. And what was the result? A new mass production cost of only \$320,000/month for 100,000 units. That's \$2.4M/year in savings! An ROI of almost \$2M/year, or 3,800%. This is a return you and your investors are, and definitely will be proud of.

So as you can see, with manufacturing it's important to engineer the product correctly upfront. It's a waterfall process where preventing issues upfront can (re)solve your long-term problems.

This is food for thought. As a founder, you must predict and plan for these tiny details which could impact your company significantly. Don't be afraid to spend money on your engineering. Just ensure you're engineering with the right partner. For every \$1 USD shaved off from your BOM could potentially be an extra year of a sustained business.

What to keep in mind when sourcing components for your prototype online?

When beginning your startup company there are many things you need to consider. An important aspect is where to get your components? This can be a rather tricky decision for your product development. However, here are some tips to help your hardware startup get from a prototype to a manufacture-ready product.

COMPONENT DISTRIBUTORS FOR ELECTRONICS

Digikey, Mouser, and other retail channels are good for sourcing parts in low volume, however, the downside to this, is some of the parts they provide may not be the same quality as mainstream supply-chains. Major issues will occur during the manufacturing stage due to the bill of materials, the lead time, and component quality.

Let's talk about the bigger picture. Throughout your product development, whether this be at your POC (proof of concept) stage or your EVT

(engineering validation testing) stage, your product is going to need an integrated supply-chain. Your startup cannot rely on 3rd party unreliable services (when you get to mass production). So you need to integrate. On the other hand, sourcing online parts is not always a bad idea. Especially when you're validating your ideas and developing your product during the early stages of your development.

KEY ADVICE

There are several key factors that need to be considered when selecting/sourcing parts/components online:

- – The balance between cost and performance, the better the balance is, the more cost efficient your BOM (bill of materials) will be.
- – Lead time: DigiKey sells inventory, but in scale production. Most of the parts produced are in order, and there is a lead time attached. This can significantly slowdown your development/manufacturing cycle.
- – The off-the-shelf purchase experience from DigiKey causes the illusion that parts are shipped upon ordering. In reality, lead time

control is one of the biggest challenges in supply-chain management.

- – BOM cost: The price on Digikey is different from the original supplier's. The problem is that there is no fixed ratio between the two; making it difficult to predict what the final cost is for mass manufacturing.
- – Backup/replacements: It's always safer to have multiple pin-to-pin replacement options for a specific component so that when one component has a supply problem, you can switch to another supplier without design changes.

It will be helpful to set up a relationship with a design partner, or contract manufacturer in Asia during the early stages of your structural design so that these partners can evaluate the cost, lead time, and replacement options. You may have already thought of these issues, and solved them, however, if you're in the early days of your startup these are some problems you will want to keep in mind.

5 Mistakes startups make when prototyping

From an engineering perspective, many inexperienced startup founders that begin their prototyping phase often fail to create a functioning one. This is due to the lack of in-depth knowledge that meets a startup's expectations and the expectations of their potential backers and investors.

LACK OF VALIDATION TESTING/FEEDBACK

Whether done in-house or through an accelerator, testing the product is essential to making sure that the product is reliable, and more importantly safe. However, I'd recommend not including the validation tests that are based on mass production just yet as I will explain later on in this book. When testing your prototype, depending on the application, you should be thinking about waterproofing, drop testing, dust-proof testing, needle flame, glow wire testing, thermal shock, and EMC testing (all of which are mandatory for certification, and IPR standards). There could be other tests, depending on your project, which would need to be identified and carried out.

When developing your product, it is best practice to constantly get constructive feedback from your team, and discuss any changes that might need to be made. At certain key points of a prototype's life-cycle, you can begin showcasing your sample builds to your early-backers/investors. Use them as validation points, as well as, keeping them involved throughout the process.

NOT ACCOUNTING FOR THERMODYNAMICS, SEALS

Depending on the application, several concerns should be raised when designing the first prototype, especially when thinking about condensation and pressure loading cycles from the change in temperature. This mainly concerns the electrical side of the product, as the circuitry is likely to be shorted when subjected to condensation on the PCB.

An issue that is likely to be caused by the seals in the product (note that this mostly concerns the rubber ring seals) is mainly because the product is over-constrained by the housing, which eventually leads the product to become broken.

A good design should incorporate extra spacing in the housing of the seals, which allows them to expand and contract without over-constraining the seals, and also have appropriate stress test analysis to be done on CAD, whilst keeping in mind the type of environment the product will be subjected to.

YOUR PROTOTYPE IS NOT THE END PRODUCT

Over-complicating the product at its early phase (3D printing, CNC Milling, sheet metal fabrication etc.) Will significantly waste time, and resources. Since the design will have to change to accommodate the manufacturing process. Don't waste time on perfecting your prototype. The sole purpose of a prototype is to show your (potential/existing) investors, VCs, backers etc. that the concept works to a good extent. There is no need for the sample to be fully functional, as long as it demonstrates its fundamental selling points.

NOT SPENDING YOUR INVESTMENT WISELY

Managing cash-flow is just as important (as we discussed earlier). It's very easy to go off-track when receiving your first investment. Often startups lose sight of what they are working toward and start spending more excessively on non-essentials, rather than the product's development.

There are many cases of these stories from crowdfunded companies, a good example of a product that went downhill is the Lily Camera Drone. After initially raising *\$34 Million in 2013*, they had not been able to get the drone into manufacturing before declaring bankruptcy. Instead of focusing their attention and money toward development, they ultimately failed because they mismanaged their capital.

The best solution to this is to properly plan out a spreadsheet/database of your cash flow, preferably having a projection from start to finish once the money comes in. Keep up-to-date records of your expenses and purchases and make sure you have reserves for unexpected events.

TIME MANAGEMENT

Time management is fundamental to a successful project and assures your investors as it provides them with feasible deadlines. When deadlines are missed it disrupts the whole process, as certain tasks require the previous task to be fully completed before the start of the next. Dividing tasks into their own sections, and breaking more tasks down into their subsections (and even more) gives you a view of how you should plan your tasks daily. Make use of schedule tracking tools that are on the market today, to help with task management/delegation.

Getting to a prototype is an astonishing moment, as it is the first time you can see your idea becoming a tangible product. However, as we've outlined a few common mistakes startups do when prototyping, we hope you're able to avoid them and increase your chances of market success. Stop wasting time on the perfect prototype, but rather, get your product made.

Prototyping Tools to Assist Your Startup with Hardware Prototyping

What is a hardware prototype? In general, a prototype is the manifestation of the core features of a product. A prototype is sometimes also referred to as a minimum viable product (MVP) because the essential and minimally acceptable features are present. When a prototype is conceived, there might be grand aspirations for more features in the future, but the prototype aims to only incorporate those that are necessary. A prototype has been created to begin testing the device and measuring its functionality.

Testing your prototype can also extend to your target audience and use it for market research. It's recommended to get as much feedback throughout your development phases to ensure maximum usability among your end customer. Throughout this article, we will highlight tools to prototype a hardware device and greatly increase understanding of rapid prototyping in Shenzhen.

PROTOTYPING TOOLS USED TO MAKE THE PERFECT HARDWARE DEVICE

Prototyping tools used by startups are usually dependent on what you're looking to build. For example, an IoT device would require certain prototyping tools to test the network so that your IoT device won't interfere with internet service providers & other connected devices. For network testing equipment you'd require an EMC chamber (electromagnetic compatibility) which is mandatory for safety certification. For testing equipment like this, you'd need to consider outsourcing to a 3rd party/partner. Not finding, or outsourcing, to a 3rd party professional engineering company could be the reason for your product not getting to market.



Image of SVV's EMC chamber in Shenzhen, China, for testing connected devices

Simple model making and fabrication are both similar in approach, but fabrication makes use of more advanced rapid prototyping tools and stronger materials to create the perfect prototype which is more durable, more precise, and has many functioning properties. Fabricated prototypes provide a clearer picture of the structural requirements of a product.

Engineers and designers use a variety of prototyping tools like drill presses, chop saws, routers, drills, and welders to fabricate and assemble durable prototypes. Materials used are usually modular systems like aluminum extrusions, to sheet metal, plastics, and other materials.



Image of drilling machines in Shenzhen, China, for testing connected devices

Not all companies have the necessary tools and suitable facilities in-house, but **SVV** provides complete end-to-end engineering, testing, and **manufacturing services**.

MECHANICAL ENGINEERING TECHNOLOGY TO HELP YOU WITH RAPID PROTOTYPING

As a product moves along in development, design and engineering teams need tools that produce prototypes that are consistent with the final product/idea. Mechanical engineering technology tools create custom parts from the same or similar materials and with surface finish and mechanical properties comparable to final products. Engineers tend to use multiple materials and methods to manufacture a single prototype.

3D PRINTING

With a combination of low cost, high speed, and efficiency, 3D printers are the most popular rapid prototyping tool today for startup companies to create compelling and accurate POCs.

3D printers create three-dimensional parts directly from CAD drawings by 'printing' layer by layer until a complete physical concept is formed. 3D printers require no tooling and have minimal setup time when starting a new design, in addition, the cost is much lower when producing multiple iterations of a prototype compared to more advanced machinery such as CNC machines.

Many advanced prototyping tools can be very expensive and require skilled operators, which means startup companies often outsource those processes when prototyping. One of the clear benefits of 3D printing is that it allows companies to create their prototypes in-house. 3D printers require very little space and no special skills, enabling professionals to speed up iteration cycles from days to a few hours!

HEAVY-DUTY MACHINING EQUIPMENT TO CREATE DURABLE PROTOTYPES

Heavy-Duty Machining Equipment includes manual and CNC mills, lathes, electrical discharge machining (EDM) and other subtractive processes. These approaches to prototype development usually start with solid

blocks, bars, or rods of metal or plastic materials that are 'chiseled/carved' into the desired object.



Image of SVV's in-house CNC machine in Shenzhen, China, for rapid prototyping

CNC machines can be very time consuming as they require extra steps for generating and validating toolpaths (CAD to CAM) this is a tedious process and requires special expertise for prototypes which have used a CNC. CNC machining is the most popular as it produces high-precision, repeatable parts from a variety of different materials.

Basic CNC machines can be brought for a few thousand dollars, however, if you're developing a robust/durable innovative device, then we'd

recommend outsourcing this work to an **engineering firm** with the right infrastructure who are using state-of-the-art CNC ing equipment.

RAPID PROTOTYPING IN SHENZHEN

Shenzhen (China) has fast become the most famous area for hardware startups to have their hardware prototypes made rapidly. Shenzhen has a complete end-to-end ecosystem designed to accelerate innovation and assist startup technology in getting to market. The region is laced with tools to prototype a hardware device and is highly reputable among fortune 500 innovation companies.

In many cases, if you're in the hardware space and are looking to develop the next innovative product, there are numerous platforms able to support your startup's growth.

From prototype to manufacturing: A product's journey

Having your prototype eventually manufactured and on the market is an arduous journey that requires a substantial amount of work. Along the way, there are many reasons why startups fail this journey and this is due to numerous reasons. However, let's take a look at what it takes to get your prototype to where you need it to be.

IN THE BEGINNING

You had an idea, it is now a reality. You have conquered the first stages of creating the necessary design files (Gerber, CAD, BOM, Schematics, PCB layout, etc...) and have found the right place to develop your first prototype. Now, what happens from here?

Many founders assume that once their prototype's finished, that is the end, why not start manufacturing? Because it's just a prototype! If we used a scale between 1 - 10 with 1 being the idea, and 10 being the market, you are on a 3. To get you to that 10 requires *A LOT* more work.

A prototype is nothing more than a validation point. You're validating your hypothesis of, does it work? Is it functioning the way it needs to? Are people interested in what you've built? This is what a prototype is, it is an entry point to the market, a first glimpse at what is to come. Don't mistake a prototype as close to complete.

ENGINEERING VALIDATION TESTING (EVT)

EVT is the bottleneck stage of development. You will usually spend over 4+ months on your EVT. During the validation testing, you're testing the design of the schematics, ME (CAD), and firmware, and creating a test plan for all these aspects. You're also validating the key parts such as, selected screens, keyboards, batteries, cameras, etc.. to ensure they are suitable for your desired features.

On average you will produce your first five samples to validate the functionality of the product. This will consist of field testing. Seeing how they act in a real-life environment. For example, if your product is a sport related device which requires instant feedback from the sensors, the field testing engineers are able to determine if there are any issues with either, the feedback speed/strength, and/or the product itself in terms of functionality.



SVV's Environmental Facility – China

Your product will also go through In-lab environmental testing which follows a universal pattern (depending

on your project) which consists of, waterproof testing, drop testing (usually 1.2 meters), dust-proof testing, needle flame, and glow wire testing (important for certification), thermal shock, and EMC testing. These are just a few tests that your product will encounter throughout the EVT stage.

If your product passes all these tests with flying colors congratulations! Passing the EVT stage is generally the most extensive hump to pass. This symbolizes a vital milestone in your product's journey and is then ready to move onto the second validation stage which is design validation testing (DVT).

FAILED EVT STAGE

However, If your product fails any part of the EVT stage, then the engineer should recognize where the failure lies. For example, a product which is

supposed to be sending data to and from one another is not receiving the way it should be during the field testing phase. Then the product needs to be either de-bugged (as it is a connectivity problem) or re-designed. The engineer should be able to discover the root cause of the problems and fix them/it.

Majority of the time a product will encounter problems during the EVT stage, as this is what it's designed to do. EVT is there to seek out all the problems with the current product and provide solutions. If your product fails at this stage it is not a major setback, but rather an opportunity to improve your product.

DESIGN VALIDATION TESTING (DVT)

You have finally passed the EVT testing and validating stage. The DVT stage is now testing the design of the product. This should take up to 2 – 4 months. Put simply DVT is 'cleaning up' the product's design and pushing the project one step further towards manufacturing.

MOLDING AND TOOLING

In the EVT stage, you would've produced the first five samples using soft molds and CNC parts (as it is expensive to produce). At the DVT stage, you

will begin building your molds and tooling ready for production. Your mold is ultimately producing the encasing material in and around your product.



Molds used for injection molding - China

Once the molding and tooling are complete you will begin a factory trial, commonly known as a design for assembly (DFA).

This is the first glimpse into how your product is going to be manufactured. It is also designed to determine if there are any issues throughout the manufacturing process. For example, if your product requires any extra tooling or special requirements before mass production this is where the changes will be made.

Now you've manufactured a small batch of twenty units (depending on your product) and you come across issues on the manufacturing lines. You then need to run a diagnostic to determine where this problem occurs, and why? Usually, an extra step needs to take place during production, or a key part needs to be better handled.

With these 20+ units, you will also run more environmental testing to determine they are still functioning correctly. These tests are just like in the EVT stage however, will be more rigorous. You are also testing that the molds and tooling are not causing any issues. But, in extreme circumstances, some things do slip through the EVT net and can cause major defects during/after production. In this case, your product needs to go back through the EVT process again if it cannot be solved.

If your product successfully passes this stage and is functioning the way you want it to, then it moves onto product validation testing.

PRODUCT VALIDATION TESTING (PVT)

At this stage your product is coming to the end of its development life-cycle, usually, PVT takes up to 2+ months. This stage you're running your first small-batch production run, usually about 100+ units. This is to measure the success/quality rate of that amount of units. Hence, if you're seeing a 10% failure rate (10 units aren't working) then this needs to be investigated before mass manufacturing begins. If the failure rate is 1% and below, then this can be deemed as acceptable and can move onto the final stage, 1st Mass Production (MP1).

During your DVT stage the factory lines would have produced something called an SOP (Standard Operation Procedure). This SOP is a guideline for the factory workers to follow to ensure your product is being manufactured in the correct way. This ensures your product is identical throughout, whilst also maintaining high quality.

MASS PRODUCTION (MP1)

Over the course of your product's development, there will be an engineer called an 'NPI engineer'. NPI stands for New Product Introduction, an NPI's main responsibility is to overlook the development process through to manufacturing. Once you're at the MP1 stage the NPI engineer is the point of reference to oversee a smooth transition into manufacturing. He/she will overlook and handle the product's production.

As you begin this long journey you will uncover the reasons why raising investment is so important. Money aside, the durability of the team behind the project is just as important and can ultimately determine the success/failure of market delivery. A small bit of advice is to find a partner you can trust, who is qualified, and is compatible with your companies' vision. Research as much as possible and be patient.

Chinese manufacturing: What China manufacturing is really like?

You're looking to use Chinese manufacture for your new product in Shenzhen, however, you're concerned about IP issues, communication barriers, and quality control. We all have this idea instilled in our minds that Chinese manufacturing is a low quality, IP snatching industry. But, this is not the case, and can easily be avoided.

Chinese manufacturing has come a long way since the turn of the 21st century, fast becoming the leaders, and adopters, of new innovative tech. Although Chinese manufacturers still rely heavily on their workforce, we have experienced great strides into the future of the Chinese manufacturing industry and we are seeing changes in the quality of products produced by Chinese manufacturers.

CONCERNS ABOUT CHINESE MANUFACTURERS

There are many legitimate concerns surrounding IP (intellectual property) when outsourcing your manufacturing to China. However, not all Chinese factories are like this, quite the opposite, the majority of Chinese manufacturers are more concerned with the quantity you want to

produce rather than replicating your ideas altogether. To overcome this and give yourself reassurance, get the manufacturer and everyone involved with your product to sign a contract, yes these are upheld in China. I advise you to also look into choosing a Chinese manufacturer with a high reputation who's got more to lose than you (i.e a publicly-traded Chinese manufacturer).

COMMUNICATION AND QUALITY AMONG CHINESE MANUFACTURERS

Communication and quality are a concern, that, in our opinion, is one of the biggest issues that scares start-ups from choosing a Chinese manufacturer. There's no single solution to bypass this problem. China is China, and not everyone speaks your language (English). Although, many Chinese manufacturers are aware of these issues and have invested time in hiring English speaking staff.

On the other hand, within an engineering team, there will usually be an **NPI** (new product introduction) engineer, who will be working on behalf of your product, and another on behalf of the Chinese manufacturer. The two engineers will have the necessary communication skills to have your

specifications fabricated correctly in the factory. This is one solution to the communication barrier between your company and the factory.

ALTERNATIVES TO WORKING WITH A CHINESE MANUFACTURER

You may want to consider partnering with a **Shenzhen engineering** team to back you throughout your development process. Shenzhen is a hardware hub and figuring out where you should build will be a big decision too. However, think communicators, think who will help you grow long-term vs short-term. China is full of manufacturers, so ensure you choose the right manufacturer whom you can build a trustworthy partnership with, more often or not Chinese manufacturers value long-term partnerships, so, they'll work hard to satisfy your needs.

Just keep in mind that there are many Chinese manufacturers in Shenzhen who are more than willing to manufacture your product. Many companies choose Shenzhen because of its engineering expertise and electronic supply-chain. On the other hand, there is a long list of procedures your product must go through in order to be manufacture-ready. So make sure you have a strong engineering team

supporting your product, and running the right due diligence on your company's behalf.

It's not hard getting your product 'made in China' just know your concerns can be met, and your product completely developed to your specifications. Shenzhen is changing the accuracy and quality of hardware development, which complements future technology. Of course, as a company you're going to hold your product and ideas close to your chest, however, there will come a time when you will need a Chinese manufacturing partner, so, choose wisely.

Choosing the right manufacturer rather than a large manufacturer

Many start-up founders tend to partner themselves with large manufacturing facilities, however, the majority of them get burned badly. But there are also founders who benefit from this relationship. For this approach, seeing from the perspective of a contract manufacturer will help you have a better understanding.

CONTRACT MANUFACTURERS (CMS)

The core management methodology of an established company is based on KPI (key performance indicator). In the manufacturing industry, the general idea is that low margin per each item, generates profit through large-scale production and shipment. A contract manufacturer is always looking for revenue and profit. So, whoever can hire the factory for large-scale manufacturing, will be given the highest priority.

A startup founder must produce an order the contract manufacturer is satisfied with, or convince the factory manager that there will be a high shipment volume. If not, the startup will be listed as low priority, and the

support from the factory will be below expectations. It's common knowledge that startups begin stagnating at this stage, because they cannot afford high production runs, leaving startups scratching their heads for the next steps.

STARTUP TIPS WHEN MANUFACTURING

When working with a tier one manufacturer, except for the selected lucky ones, it's quite often that the CM assigns their (B), or (C) team to work on a startup's project, while the (A) teams are assigned to serve the more important clients. What this means is, even working with World-class manufactures like **Foxconn** can still be as troublesome as working with local manufactures. Keep in mind CMs can only survive by taking on large production runs, not small production runs.

For start-ups, finding the *RIGHT* manufacturing partner is far better than finding a *BIG* factory partner, here are some elements to consider:

Firstly: Take into consideration the size of your forecast purchase order vs the capacity of the factory. Ideally the percentage is 5-10%, if the percentage is too low, you will lose priority.

Secondly: Management counts, a lot!: during your audit of a manufacturing partner, pay close attention to their management style, in many cases, the size of a company is not equivalent to the management level/style.

Thirdly: The engineering capability. Since a startup's project has more or less many design defects, the engineering capability of a factory will help a lot in the transition of production, making sure the factory owns the engineering capabilities that match the technical challenges of your project.

It's not always easy to find the right partner, however, it is a task that needs to be done. If you are looking for a Chinese manufacturer just keep in mind these tips. Always understand that you won't be the highest priority in a CM's eyes. Whoever you decide to go with, ensure they have the right set-up to maintain high quality, with easy open communication channels, and most of all make sure they are trustworthy!

CHAPTER THREE

MARKETING

Creating a hardware marketing plan

Marketing has a broad definition that, when well thought out can deliver extraordinary results. As a hardware startup, your marketing is as important as the product itself. Well-known companies have used misfired marketing material which has backfired countless times. So, in order to avoid this here's basic advice to help you create a great marketing plan.

UNDERSTANDING YOUR MARKET

It goes without saying, but, understanding your market is absolutely crucial. For example, if your product is in the med-tech space, would you be positioning yourself the same as a fashion brand? Absurd! Of course not. Defining your market is a good way to begin. Look at your competitors, see how they are positioned in the market, this will give you

a better understanding of how you can either replicate or differentiate yourself from everyone else.

WHO IS YOUR CUSTOMER?

Believe it or not, many founders are so caught up in producing the product, they often lose sight of who it's for. Define your customer, who are they? What do they like? Why do they want your product? What are they missing? Etc.. Knowing these questions will help you create a more efficient marketing strategy to target your customers.

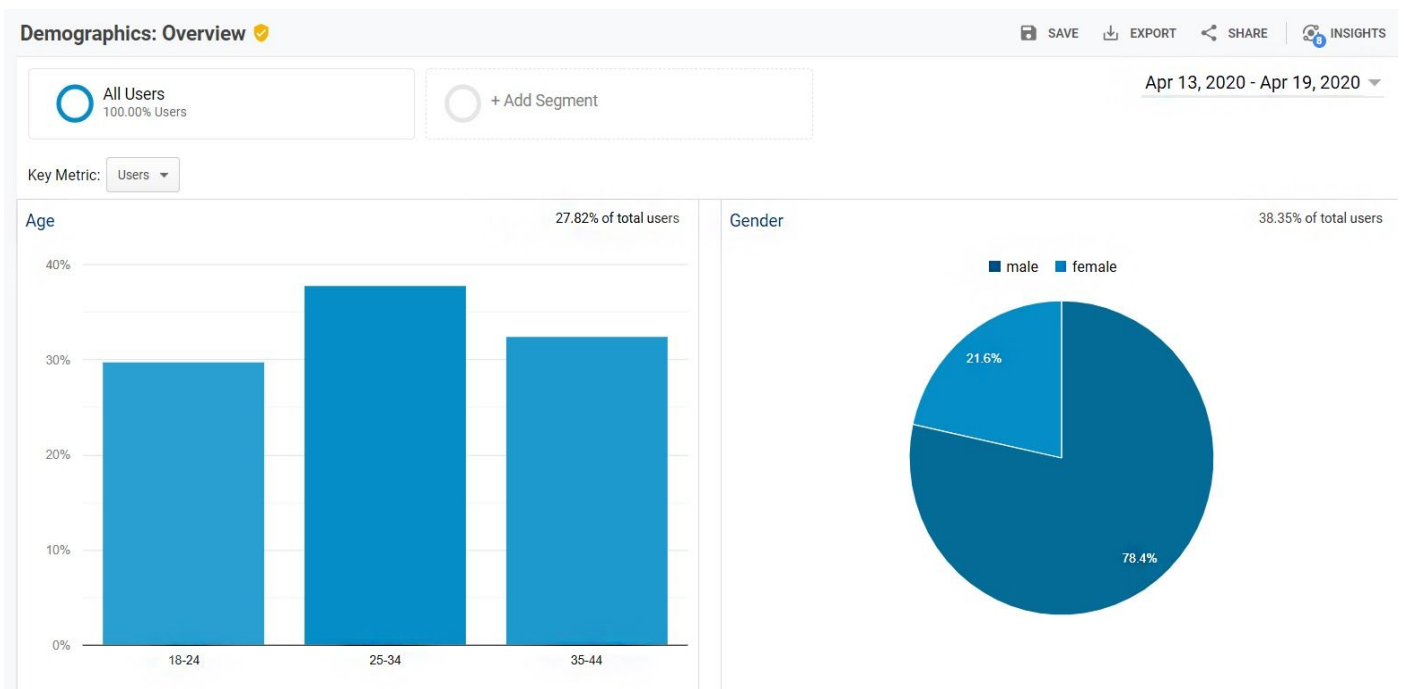
Your customer is and always will be the person you're trying to please/target. If your customer is a luxury brand shopper, and you're marketing in the local market, the customer won't notice your product. Go where your customers are. Don't assume, put in the effort of researching your customers.

When doing your customer analysis, take into consideration the following attributes:

- Age
- Location
- Gender

- Income level
- Education level
- Marital or family status
- Occupation
- Ethnic background

Once you're able to profile your customers, you can begin tailoring your marketing efforts toward them. For example, your customer is aged between 18 – 35, who are located in London (UK), in which 80/20% of your customers are male/female and have university degrees, etc... You can begin distinguishing how you will market your product. Instead of wasting time and money marketing to the wrong audience. *See below a screenshot from Google Analytics.*



UNIQUE SELL PROPOSITION (USP)

What is unique about your product? If you're selling a product to a customer then why do they need it? A customer must be able to distinguish your product's uniqueness from a competitor's. There is no bypassing this question and requires a large amount of attention.

For example, the smartphone market is dominated by companies such as Apple, Samsung, Huawei, etc... finding room in this market is next to impossible. However, what is it about YOUR phone, YOUR product, that stands out?

Perhaps, there is a uniqueness to your product which differentiates you from your competitors. This is what you should be marketing, not a 'same old product' but a unique product that consumers want/need which your competitors can not provide.

TEST IT, TWEAK IT

Once you have defined your product's selling point. Now validate your marketing plan. Test it and see what happens. Listen to how your customers are buying. If you are receiving negative feedback from your

marketing plan then tweak it or change it completely. You could be marketing to the wrong audience.

A strong marketing plan is crucial to your company's survival. You could have an excellent well-made product that fulfills the needs of your customers. But without a good marketing plan, your product is as good as dead. Don't be afraid to invest time into marketing, find the right market, and push it.

How to generate holiday buzz around your hardware product?

Holiday shopping can mean big bucks for sellers but that's no surprise. Also not a surprise: You're competing with the noisiest time of the year for sales. So how do you break through the noise and reach customers for your hardware product? There's no magic bullet answer, but there are some strategies.

FIND THE ANGLE

Everyone has heard all the same promises before, so you can ditch the thesaurus full of superlatives. When pitching to the press, find a specific angle that makes sense for their publication and for your audience. If the two don't intersect somehow, you're not helping anyone.

For example, selling hiking boots in the dead of winter might be difficult unless the boots have added insulation for low temperatures. The angle, pitched during the cold months, is that they'll provide warmer toes during a hike. What sort of unique and interesting features does your product have?

The only caveat is beware of the exploitation angle. That is, trying to grab attention based on news headlines. The results can range from the distasteful to the downright disgusting, and are often a turnoff to reporters.

GET INVOLVED

Despite the fact that everyone during the holidays is busier than ever, an inordinate amount of time is spent on social media. Maybe it's coordinating events or just blowing off steam, but conversations are happening 24/7 on Twitter and Facebook, and likely a product's pages. Engage with potential customers by answering questions or telling success stories. Make these personalized and targeted — focus on the needs and ambitions of potential customers.

One way to do this is by providing valuable information. A how-to for beginners using your product might be just the entry point a new customer was looking for!

It's important to keep in mind social media can be a hornet's nest of opinions and snark, too. Keep your content and conversations relevant

and relatable. There's no need for arguments or trolling, which will turn customers off.

LOOK AT THE DATA

Speaking of content and conversations, what do your customers need? What do the numbers tell you? If the vast majority of customers are under 30, an article about getting ready to retire may be useless. If people are buying X and you're talking about Y, you're probably missing opportunities.

Critical analysis of your customers and site visitors will better inform your media pitches, too. Again, put yourself in the position of a reporter. Crunching numbers takes time and effort, so if you're able to pitch a story that does the heavy lifting you may be more likely to get a mention in the press. Did Black Friday sales show a huge spike in Des Moines? Why? Answer questions with data and use that to create a story.

WHAT'S THE DEAL?

Finally, the easiest way to attract attention is to put things on sale. This is the season for shopping, after all. Consumers are overwhelmed by choice, so a once-a-year discount is more likely to get attention during the last

three months of the year. Even if it's just a discount on something minor, or a trial period, these incentives can appeal to thrifty consumers and those just about to make a purchasing decision. You'll want to give that extra nudge to get them to buy.

Reaching out to the press

Getting the attention of customers means getting the attention of the press. Placement in key magazines, websites or other media can extend your brand far beyond your marketing budget — but how do you make it happen? Writers and publishers are inundated with pitches, and there's no shortage of "bad ideas" that someone thought would lead to favorable coverage.

WHAT NOT TO DO

Here's a bad idea: Link your media pitch to a recent tragedy. Not only is this tasteless, it tells anyone in the press that you haven't got a clue about how the news works. In fact, trying to somehow connect your product to whatever is in the news is a hackneyed premise that causes every writer to roll their eyes. Of course, if it truly makes sense then do it, but make sure the connection is a strong one.

Show too much enthusiasm!!! How many exclamation points are too many? More than one, that's how many. No writer will assume you're bored if you stick to periods and commas and stay away from ending every sentence as though you just won a car in a raffle you never entered.

Too brief. Or, alternately, you could also send a pitch that is simply too long and never gets around to the point or just gives details that the writer might only want if they were to be interested in the story and... See what I mean? Sending a note with "please consider this" followed by a lengthy press release isn't doing anyone any favors. No matter how long your release, give an outline or some quick high points to pique the reader's interest. Gone are the days when writers needed press releases to fill out pages.

IDEAS TO CONSIDER

Make a personal connection. Just like a job recommendation, if you can get an introduction to a reporter you'll be more likely to break through the wall of noise they encounter on a daily basis. For this to really work, it has to be a real connection. That guy you met at SXSW three years ago while drunk doesn't count. The gal you worked with for four years and now works in the press organization you're trying to get placement in *does* count.

Writers are impossibly busy. Even if they're not writing, they're stressing about what to write next. This is why a short, punchy intro to your press release is critical. In a sea of media picking out the interesting bits has become almost impossible. This is well-worn advice because it's been true

for generations: Make a catchy appeal quickly. Visitors to websites make a decision to stay in under 5 seconds, so don't think writers will spend much longer trying to parse your product.

Express genuine enthusiasm about objectively great features. This sounds like common sense, right? But everyday writers get pitches that start with, "We hope you will like our new..." How about this? "The thinnest laptop battery ever is now 30% more powerful thanks to our new manufacturing process." Packing in key differentiators along with specifics signals to a writer that you have a genuine benefit to share, and they can write it up with actual evidence of its awesomeness.

In short, the more work you can do for the press up front, the easier you make their job. Given the deluge of daily information they're dealing with, it's in your best interests to give them the most important facts *and* do it quickly and in a way that catches their interest. Know who they are, who their audience is, and how great your product is and you're a lot closer to getting the press you want.

Conclusion

Starting a startup and sustaining a business can feel like a very daunting path. There is a lot of work that needs to be considered in order to grasp the full concept of, not only the product itself, but the business's direction too. Determining what's best for your company will ultimately be down to you. However, there are huge amounts of resources dedicated to supporting your growth from prototyping to market.

The Greater Bay Area has been a fascination among entrepreneurs, investors, and even economists, as the region's success seems to be attributed to a variety of factors which has been next to impossible to replicate.

As a startup founder, the path has been laid out in front of you. With such an incredibly connected ecosystem, accelerating your product's development and time to market, the far east has most certainly become a haven for entrepreneurs. There is no doubt that for whatever you're looking for, The Greater Bay Area will provide.