

**Universidad Torcuato Di Tella**

**MBA Thesis**

**“Framework for creating a successful dot com with minimal capital”**

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## **Acknowledgements**

I would like to thank all the members of our industry who have made the effort to create an entrepreneur friendly industry.

## **Abstract**

The web is not only a great industry to be an entrepreneur in because it has made many millionaires, but because it has made millionaires who started companies with almost no funding. The main objective of this thesis is to show and provide a framework for an entrepreneur to create a startup with minimal capital. Throughout this thesis all the major areas of a startup will be covered through a low spending lens to provide a guide for a bootstrapped startup.

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## Introduction

The purpose of this thesis is to show aspiring entrepreneurs who cannot count with much capital that success can be achieved even with minimal capital, without the need for high profile investor, venture capitalist or any other of the sort. This is a thesis that does not contain any magic recipes with a get rich scheme, it will simply try to guide you on how to spend as little as possible on your way to success. The backbone of this thesis is a framework that will cover all the main areas of any start up with the lowest possible cost so you can go ahead, take the leap and begin your own startup.

I do not wish to define an exact number to minimal capital, as this amount will depend greatly on factors such as where the startup founders are located, the market they are after, among many other factors. In all cases, however we will like to define minimal capital as an amount that most aspiring entrepreneurs will be able to get their hands on.

The main pillars of the framework are:

- Marketing
- Technology and Design
- Workspace
- Human Resources
- Legalities

As a base of my hypothesis, I have to define certain key points. At the very core is “successful start up”. In [Jeff Molander's podcast](#) with Nisan Gabbay of <http://www.startup-review.com>, Nisan provides the following criteria:

- Big exit
- Strong business model
- Renowned name

Now to re-define this so it relates more closely to the hypothesis:

1) Big Exit: 10 times investment return under one year of labor or 20 times investment return for more than one year of work and less than five.

2) Business Model: The start up will have proven to be a successful (functional and ongoing) business model. I believe Nisan's \$40mm plus figure is way to high for a dot com with minimal investment, so I'll define a successful business model as a plan that provides monthly break even point at no longer than one year and total investment break even point no longer than two years after launch. The most difficult point to put a tap in is the "ongoing profit", but for the thesis' sake, we will assume that the startup maintains a healthy profit that will allow the founders to lead a good style of living.

3) Renowned name. This would only apply in the case a startup founder would feel fulfilled if with his startup he just gained a good name for himself. For all other purposes, this point does not apply to this thesis since if the start up cannot meet criteria #2 (which is relatively low since the startup capital is almost null), then a renowned name would do very little good for possible investors.

**A note to the entrepreneurs:** This framework only offers a guideline on how to approach all aspects of a start up with as little cash as possible. It does not intend at any point to be completely comprehensive or include all possible action plans.

## **Marketing**

One of the major issues in a dotcom is “how to get exposure” and in our case, how do we get exposure for minimal cost. Exposure has different meanings for different companies, always depending on the business model. If you are sustaining your company through advertising on your site, then exposure equates to more traffic. If you are selling a product, you are looking for conversions. If you are looking to improve your branding or sell your service, you are looking for better reach and appeal, and so forth. The following is a list of ways on how to get as much exposure as possible even with minimal or no budget.

### **CPC Model**

The Cost (or Pay) Per Click model \*usually\* provides a great bang for the buck when one is looking for traffic. If you can match your company to specific keywords (and cheap ones if you are lucky), then this is a great model to grow on. Examples of this modality are [Google Adwords](#) and [Yahoo Search Marketing](#). These campaigns do not require normally a minimum investment, so they will let any entrepreneur start small and increase the budget looking at the campaign's results.

### **CPM Model**

The pay per 1000 views of your ad model is the eternal player on the online advertising market. This model is (or was) pretty much defacto for increasing traffic to your site. It can either perform outstandingly or be a total flop. The outcome pretty much comes down to the quality of the creative piece and the ability to surprise the user. This method is used for branding as well, especially through [Rich Media](#) campaigns.

(Disclaimer: I work for United Virtualities)

## **PPP (Pay Per Post)**

This “newcomer” allows you to reach the blogosphere by paying bloggers to write about your company/product/service. It is many times perceived negatively, however it could be an effective medium if you know where your audience is in the blogosphere. ([PayPerPost](#) , [ReviewMe](#))

## **CPA / Affiliate Marketing**

If you are looking strictly for conversions, CPA is the best way to go since you don't pay unless you get conversions. For this method you must really know your business and know exactly what is the optimal customer acquisition cost you can manage (balance between getting more affiliates and still making a good profit). ([CommisionJunction](#) , [ClickBank](#))

## **Viral Marketing / Word of Mouth**

“Viral marketing describes any strategy that encourages individuals to pass on a marketing message to others, creating the potential for exponential growth in the message's exposure and influence.” (Dr. Ralph F. Wilson, 2000)<sup>i</sup>

Basically just give a good reason to your existent user base to spread the word about your company. The Hotmail.com Example: The classic example of viral marketing is Hotmail.com, one of the first free Web-based e-mail services. The strategy is simple:

1. Give away free e-mail addresses and services,
2. Attach a simple tag at the bottom of every free message sent out: “Get your private, free email at <http://www.hotmail.com>” and,
3. Then stand back while people e-mail to their own network of friends and associates,
4. Who see the message,

5. Sign up for their own free e-mail service, and then
6. Propel the message still wider to their own ever-increasing circles of friends and associates.

Viral marketing is the cheapest (and maybe even free) method to increase your existing user base and as such, the most recommended. This method is convenient for almost all purposes of company exposure. The only catch is that you have to be \*very\* careful in the technique you use so you don't end up losing your customer base and end up looking like a fool.

### **Media Buzz**

To create as much buzz as possible is a necessary task. The more buzz you create, the bigger the news media that will pick up your story will be. At the beginning you will always start preaching your start up to your family, social friends and industry friends. Your start up will usually will be first picked up by blogs that do not have much following but who will be highly helpful by giving you feedback on your start up and will have their network of connections, although rather small, notice you. Then if the cards are played correctly and you catch a break, a big name blog, one of the industries' must such [TechCrunch](#), will post about you. These bloggers are the ones that are followed by the movers and shakers of the industry, the kind of people who have all the contacts you might need and are the ones referenced by the main stream media. The next step, although rare, is to have one's story picked up by a major outlet, such as [NYT](#) or [WSJ](#). Know, if the mainstream media has covered you, chances are you are more than a successful startup.

Now the question is, how does one create media buzz?

## Network of Contacts

Guy Kawasaki wrote a post about how he created [Truemors](#) with very low cost entitled "[By the Numbers: How I built a Web 2.0, User-Generated Content, Citizen Journalism, Long-Tail, Social Media Site for \\$12,107.09](#)" where he cleverly mentions:

- \$0. I spend \$0 on marketing to launch Truemors.
- 24. However, I did spend 24 years of [schmoozing](#) and “paying it forward” to get to the point where I could spend \$0 to launch a company. Many bloggers got bent out of shape: “The only reason Truemors is getting so much coverage is that it’s Guy’s site.” To which my response is, “You have a firm grasp of the obvious.”<sup>ii</sup>

(Guy Kawasaki, 2007)

What Guy is obviously stating here, is that connections come a long, long way. The more you are connected or the more prominent you are in the industry, your story will be picked up faster. For instance if Steve Jobs or Bill Gates create a new company, every single news outlet, big and small, will quickly pick up the story without hesitation. If Caterina Fake (founder of Flickr) or Evan Williams (founder of Blogger and Twitter) create a new start up, all the major online media outlets and bloggers will cover the news immediately, but not probably the mainstream media. Now if you are a start up founder that does not have many contacts or previous recognition, not to worry, there are many other ways to attract media buzz.

## Beta testers

A very common practice nowadays is to pre-release closed versions of your startup to a few select individuals. These pre-releases are usually called alpha (really green) or beta (more mature, but not quite there and with still a few bugs) versions. These pre-releases are usually

given to the first users who have signed up to become beta testers of your site and your contacts who you know will start creating buzz.

A screenshot of a web browser showing a sign-up form for the Twine beta program. The form is titled "Sign up to join our Beta" and includes a thank-you message and a list of input fields: First Name, Last Name, Email, Organization, Title, and Web Site. There is also a dropdown menu for "Your interest in Twine" with the option "Just interested in using Twine" selected. The Twine logo and tagline "tie it all together" are visible on the left side of the page.

*Screenshot of the webservice [twine](#) inviting users to sign up to their beta program. This screenshot exemplifies a typical beta program sign up sheet.*

These beta testers will not only provide valuable feedback of your development but if they like it, chances are they will spread the word. Another practice is to leave your development in closed beta for a long while, only allowing current users to invite other users by giving them a small amount of invitations. [Gmail](#), Google's web mail solution, made this modality of beta testing popular which attracted many users due to the exclusivity that being a member meant. Michael Arrington (2007) wrote "Startups love this, of course. They've created scarcity around a virtual good and that creates buzz. The most successful products can count on invitations being sold on eBay - something we saw with [Gmail in 2004](#) and [more recently](#) with [Pownce](#)."<sup>iii</sup>

### **New Features**

Once you have gained a bit of attention, the next step is to keep your users expectations in place and hopes high while delivering. The best way to achieve this continuity is to give back to the users what they want. You must hear and process all feedback, both positive and specially the negative, to understand how your users feel about your services and to continue building from there. This is your one chance

you have to keep your users compelled and to come back to you. The more users keep coming back, the more they will recommend it, the bigger your user base will become and the more media buzz you will attract.

### **Tell a Story**

The final stepping-stone is to have an attractive story that has not been heard before. It must be the type of story the masses love, not just the early adopters. If you have a compelling story, your service are in an all time high usage and you have been getting rave reviews, chances might increase that you will be mentioned in the mainstream media. A good how to advice can be found in Penelope Trunk's post: [How to get your blog \(or yourself\) mentioned in print<sup>iv</sup>](#).

Being printed on mainstream media is a major cornerstone in a company (both offline and online) since it usually marks that your start up has [Crossed the Chasm](#). The main benefits of being printed were best expressed by [Darren Rowse<sup>v</sup>](#):

- Branding/Profile/Awareness
- Contacts
- Flow on media attention
- Credibility
- Widening circles of influence

There is, of course, no universal \*best value\* for marketing and advertising, the most effective method will vary from company to company.

## **Technology and Design**

In the thesis there will be a lot of focus on the technology section of the low cost framework because it is one of the main components in a dot com. The main aspects we will be focusing are data transfer, servers, tools, development and design all seen from the lowest possible cost perspective.

### **Datacenter**

An essential part of an online start up is the website itself, and where will it be hosted. Options for hosting vary from simple and cheap (shared hosting) to the outrageously complex and expensive (having your own datacenter.. well Google has several of them!) Due to the monetary constraints on our thesis, we will only be focusing on the achievable solutions. I mean, having our own datacenter may sound mighty cool, but there is no way to do it with less than a good few hundred millions.

Our needs will vary with the amount of computing power our website/service needs. This needs will be based primarily in computing complexity, optimization and amount of traffic our website receives. Processing wise, it is not the same a website that simply shows images than a website that is an online auction. Even though both websites might have the same amount of traffic, they might need very different server solutions, since the online auction might need much more computer power and image hosting will need more data transfer. Now going from cheap/simple to expensive/complex the options are:

#### **Shared Server**

A shared server solution is when your website is hosted in the same server as many other users, thus shared. This by far the cheapest solution, where we can find hosting plans from even \$1 dollar a month! The hosting companies will place many constraints in your account such as bandwidth usage, processing power usage (which translates directly to amount of traffic x processing power used by user per request to your server), number of domains you can use, no

modification options and many others. This option is really not recommended for any startup taking itself seriously for three main reasons. First, the quality of your server's requests response is usually not great. Second, there is always the chance one of the other users that is sharing your servers has so much traffic your site is down (albeit for only a little bit). Third and most importantly, the processing power usage constrain means your site cannot suddenly grow, because if it does, your account will be suspended. And when the only real no-no for a website is zero downtime, this is not something to gamble with, unless you find a hosting company that complies exactly with your requirements.

### **Grid Shared Servers**

This relatively new modality seems like an interesting alternative, although technology wise it has not reached complete stability yet. The concept behind grid shared servers is pretty much the same as a shared server, where you have many websites sharing the same server, except in this case, they share a cluster ([grid](#)) of servers which is many servers together that have much more power. So if in a shared server you have 1000 websites on one server, in grid shared servers, you may have thousands of websites all sharing the same cluster of servers. This method provides more robustness since it will leverage on the unused resources of ALL the servers in the grid. Companies offering this service are [mosso](#) and [MediaTemple](#).

### **Virtual Private Server**

VPS provides an intermediate solution between shared servers and dedicated servers. It allows one server to be divided into smaller accounts where each user can have as much power over his account as a dedicated server but is still sharing the server between a few users. If in a shared server you might be sharing with 1000 other websites a server, in a VPS it usually not above 5. The cost usually goes from less than \$15 to \$100 a month. A VPS is a great starting

solution where the price is not too high and the computing power it provides is acceptable.

### **In-Office Servers**

A not so safe route that some companies take is to host their own servers and network. This might be acceptable if you only need a couple of computers but it is not suitable for real live needs, mostly since the cost of building and maintaining an enterprise level service is extremely high. For this task you will need to invest in infrastructure, that is usually split among many clients in a hosted solution, all by yourself, in addition to the manpower needed to keep things going.

### **Elastic Computing**

Amazon is fore fronting on the new method called [Elastic Computing](#). This term basically means “computing on demand” where you can rent servers by the hour. For elastic computing to work you have to create an “image of your server software configuration” which is essentially one big file with all the software and configuration you wish your server to have, so once you have it ready, you simply upload the AMI (Amazon Machine Image you just built) and then tell Amazon “For the next 3 hours I want 5 servers available with my image”, then you can simply switch to only 1 server. The great advantage on elastic computing is you can scale as much as you want, with no upfront costs whatsoever. So if you see your website is growing in popularity, simply add 1 server on the fly; if your website got [slashdotted](#) or [digged](#), simply add more servers for the time necessary.

### **Dedicated Servers**

A dedicated servers is basically, well, a server dedicated for you. The hosting company will charge you a monthly fee ranging from \$100 to a \$600 for a server just for you, in this price the computer rental will be included as well as a certain amount of data transfer (usually around

1TB) and all the other amenities a datacenter provides. Many hosting companies will also be able to provide for you a larger architecture if needed, putting together many dedicated servers so you will have more computing power. There are tons of companies that provide dedicated servers such as [SoftLayer](#).

### **Co - Location**

Co - location is another standard practice for websites that have a need of high processing power. In this case, you will rent from the datacenter rack space where you will be able to place your own servers in the racks. The rental fee is very variable (about between \$400 and \$2500 for a 42 unit rack) and includes bandwidth, power usage and all the other great [amenities](#). With Colocation you can have your own engineers do the work on the servers or some datacenters have engineers on call for a fee. The biggest disadvantage is the upfront cost of buying you own hardware.

### **Grid Servers or Virtual Private Datacenters**

This shared the same idea behind the grid shared servers but with the huge main difference, that all the servers in the grid are just for you. Companies who provide this are [3Tera](#) and [GridLayer](#).

This small but comprehensive list shows that there are many different ways and services to host your site, all with advantages and disadvantages. The decision to which is the perfect solution will depend on 1) Your Budget, 2) Your Service Type and 3) Your Traffic Level.

### **Data Transfer**

If your dot com is based on high traffic levels and with heavy content in file size, then the data transfer costs might become a big bulk on your budget. Of course we are not pretending to be able to provide a way to maintain a YouTube style site for cheap (they were allegedly pouring \$1 million a month

on Bandwidth!<sup>vi</sup>), but we will attempt to discuss the different ways to provide quality bandwidth to the website for as little as possible.

## **CDNs**

The [Content Distribution Networks](#) are big big companies that provide the very specific service of giving highly scalable bandwidth that will be able to support any traffic surge you may have.

Advantages of using a CDN is that their bandwidth is of great quality, they usually have datacenters around the world (not all companies), so they will serve the content to the user from a server that is closest to their country of connection. CDNs also provide added value, many times in the form of reports, supporting multiple formats such as live windows media or flash. But the biggest advantage of all, as before, is that CDNs will always be able to support any amount of traffic your website may have as well as providing a set of tools that will empower your data serving.

The only disadvantage (albeit not minor at all) is their pricing. To discuss this in detail, we will be comparing prices with the price per TB (terabyte) that the services charge. Most CDNs charge between \$400 to \$3000 the TB. The less you pre-commit to, the more you will be charged. For a 1 TB monthly precommitment on a 12 month contract, CDNs will average \$2000 per TB. This will scale down to about \$400 per TB for high bandwidth usages and in the extreme usage cases, for instance YouTube, the prices come down considerably. For our framework purposes, we will very unlikely reach this level of usage for low cost, thus CDN prices will be too high and thus not a recommended solution.

## **Amazon Simple Storage Service (S3)**

Amazon realized in 2006 that they have so many servers and so much excess capacity, that they should take advantage of this and

commercialize it. This means that Amazon started selling their bandwidth (a.k.a becomes a CDN). Among other services. The biggest upside of Amazon S3 is their value. Their price/quality of bandwidth is unmatched today.

Their charging scale:

Storage:  
\$0.15 per GB-Month of storage used

Data Transfer:  
\$0.10 per GB - all data transfer in  
\$0.17 per GB - first 10 TB / month data transfer out  
\$0.13 per GB - next 40 TB / month data transfer out  
\$0.10 per GB - data transfer out / month over 50 TB

Data transfer “in” and “out” refers to transfer into and out of Amazon S3. Data transferred between Amazon S3 and Amazon EC2 is free of charge.

Requests:  
\$0.01 per 1,000 PUT or LIST requests  
\$0.01 per 10,000 GET and all other requests

You can find [here](#) a nifty Amazon S3 price calculator.

Another great advantage of Amazon is their “[SOA](#)” [architecture](#). Opening up their services so websites can automatically coordinate with Amazon services have enabled several websites to dramatically change the way they work. For instance [Webmail.us](#) has saved 75% of costs by switching to Amazon S3<sup>vii</sup> among many other [success stories](#).

A setback for Amazon S3 is that is still in somewhat green, i.e. the service is not yet finished and as such may still contain errors. There have been minor “slow transfer times” when the quality of the bandwidth went down dramatically with only one [2 hour massive outage](#). Another possible disadvantage is that Amazon S3 may not have servers distributed around the world but centered in the US and Europe (Amazon does not divulge where their datacenters are.) My

personal testing has always produced satisfactory results for many different continents (North/Central/South America, Europe and Asia) so this may not be a disadvantage at all.

One other major disadvantage of Amazon S3 is that it provides a very poor Service Level Agreement (SLA). Many users still use the system though because it is widely assumed that a company such as Amazon won't do anything to damage their reputation.

### **Data Transfer Tricks**

The focus of the thesis is low cost and yes, we can go even cheaper than Amazon S3. If we are willing to do slightly more work and forgive at times the quality of the bandwidth, there are several neat tricks:

Use multiple cheap hosting accounts that provide a lot of transfer for little money. For instance [Lunar Pages](#) offers a \$7.95 per month (with a 2 year contract) with 3.5 TBs of bandwidth per month! That is about 80 times cheaper than Amazon (around \$600) and 800 times cheaper than a regular CDN (around \$6000)! But wait! How can the hosting companies afford this, I am sure you are asking? Hosting companies reach the prices they advertise because they oversell. That means they \*assume\* in average their users won't even consume 10% of what they offer, so they will be able to attend to the very few exceptions that do take advantage of their full package and there is always the chance, they won't be able to grow as your service grows. So there is no catch? Not really, well the quality of the bandwidth is usually worst than the CDNs and the hosting companies put constraints on your accounts so you also do not overuse the requests per second (how many files are requested to the servers per second). Is there any way around this? Great you asked, well one way to try to avoid this issue (and this a tad more complicated), is to have less requests per second. To achieve this you can create one big image with smaller images. Then using Cascade Style Sheets (CSS) and JavaScript (Browser programming language) you can dynamically cut that image into smaller images.

Now if your website has more transfer or requests than one host could provide, you can balance your content requests through different hosts.

Advantage of this solution is simply cost, there is no cheaper way than this. The disadvantage is the quality of the bandwidth and possible outages or banning by your provider.

These solutions are only recommended for startups looking to really cut costs and are willing to sacrifice possible downtimes. However it is still a valid approach.

In conclusion, if our data transfer needs are not that of a high volume and we need a reliable solution, Amazon S3 is the best solution. If we have a high volume and absolutely need very small costs, then we always have cheap tricks. I personally believe CDNs provide great service and values, however most startups will have a problem affording them or hopefully their pricing will go down.

### **Technology and Design Development**

“Bootstrapping is a potentially very exciting prospect to an entrepreneur. But it is fraught with risks - and the primary risk you need to guard against is software development failure. Two thirds of outsourced projects fail, so there is a high likelihood of failure.”<sup>viii</sup> (Matt Rogers, 2005) What Matt is saying here is: Be very careful with your development, it's the core of your company so do not screw it up. And for our thesis' sake, don't screw it up meanwhile doing it with the lowest cost as possible.

Development of tech and design will be, in most cases, the biggest bulk of the cost of your startup. To try to cut as back as much as possible the following are low cost options:

#### **Developer Founder**

A major plus for any start up is to have one of its cofounders be a hands on tech or design person. This will not only allow for lower cost but it will also give the startup a sense of security that the technology or design are heading in the right direction since the person that has the

most to win (and lose) will give his/her best to up the odds of success. There are also many cases where the founders will build all the technology or design from scratch and there may not even be any cost to either hire personal or outsource.

“I’ve come a long way in the last 3 years, today I’ve single handily built the largest dating site in the world with no employees. The site generates more relationships than match.com yet only makes a tiny tiny fraction of Match.com’s 300 Million a year. So today I sit at a turning point, the site has over 1.1 billion pageviews and 45 million visitors a month”<sup>ix</sup> (Markus Friend, 2007)

These are the words of one (if not the) of the biggest success stories from a one-man company, PlentyOfFish.com, built by Markus Frind to be one of the 50 largest sites in North America and generate revenues of more than 5 million per year<sup>x</sup>.

If it is not your case that you got the tech or design skills, not to worry, there are many options out there to build your technology or design even though you understand nothing about it.

### **Outsourcing**

A relatively common practice is to outsource your development, either in full or parts, to external development teams that will charge by the hour, pack of hours or by project. In this cases it is always best to provide the external development team with as much information as possible. If you can prepare all the use cases, thorough test cases, most aspects of the usability experience and such, you will end up saving tons of money. First, you will be saving the hours that the outsources will be charging to do the application design for you and second, you will have thought of (almost) all the possible scenarios so that there will end up being less modifications translating into a lower cost.

To spend as little as possible outsourcing, try to have the developers give you a final price for the package for the whole development. This modality has the upside that you will know how much you will be

spending and there are also plenty cases where the develops will do more than asked.



Comic by [www.doubtsourcing.com](http://www.doubtsourcing.com)

If you are looking to spend next to zero cash and are willing to forego a bit of ownership, there are developers or small consultancy companies that are willing to work for equity. If you will be going down this route, make sure that they will make a darn good job and that you have all the legal paperwork in place so there aren't any future issues, specially in the case there might be a sales exit.

Most companies outsource to developers or companies that they know and trust, which in most cases means that they are in a close proximity geographically. If you don't live in South America, Asia or Eastern Europe, this means you will be paying more than you necessarily have to. Of course it is always recommended that you outsource to companies you trust, but this might not be the best option economically speaking, although it might be the best option value wise.

Something that you don't often see a lot written about in new media is the strong trend by startups to outsource their developments.

"I was sitting around thinking about how this would play out. My background in school is in computer science. I wrote a scoping document to a friend, who is a developer. The friend said it would take two or three weeks to create and cost 700 bucks, so I said, 'Let's go for it.'"<sup>xii</sup> These are the words of Kevin Rose (2006) on how he first built Digg by outsourcing the job through elance.com for 10\$ / hour for a grand total of \$2,000. He also paid \$1,200 for the domain Digg.com and \$99 / hosting per month. Nowadays Digg has over 30 millions of unique users monthly and has signed an advertisement deal with Microsoft worth \$100 million in revenues for three years. Although Digg ended up taking over \$11 million in funding, they did receive a buyout proposal by Jason Calcanis for \$5 Millions before taking any money.<sup>xiii</sup> Other sites such as Slideshare, illumobile.com have gone down a similar path.

### **In-House Teams**

Hiring developers and building an in-house team to grow the technology and design is probably the most common route startups take, although it is not the cheapest of the options. Having an in-house team allows the startup to work at full throttle with closer communications all under one roof with all the benefits this brings, but on the other side of the spectrum your costs rise exponentially since you will need a bigger office, the payroll rises (this will be discussed in a later chapter) and other hidden costs such as office supplies and so forth.

### **Inshoring, Nearshoring and Offshoring**

In our context, x-shoring means having contracted employees working on a full time basis but physically outside of the company headquarters (although in many cases the company's HQ is a one man ops in his

apartment). In inshoring these employees are located in the same country as the company's HQ, nearshoring that they are located in a near country and offshoring implies that they are further away. In many cases x-shoring works wonders meanwhile keeping the costs as low as possible.

### **Pre-Built Scripts**

If you are looking to build a site that does not have any extraordinary features, there might be a pre-built website script out there that might suit your needs, for a very low cost. There are pre-built scripts for forums, social web 2.0, search engines and so forth that with a simple download and install a bit of customization are ready to run. There are many downsides to using pre-built scripts, specially when it comes down to website performance and scalability. These scripts are in most cases pitiful when it comes down to performance, meaning that if your site grows, you will have to spend a lot of time and money either to improve the performance or rebuild the site from scratch. Now if it is the case where you need to upgrade your performance, then great news, you are having some success.

You can find success stories among all the above options, but there is no one solution fits all, it simply comes down to which way the founders are most comfortable working while keeping inside the budget.

### **Development Tools**

In this section I would simply like to make sure that you do not, under any case, use any commercial software tools where you have to pay actual money for a license for where there are really high quality, free (and many times even open source) tools that have as high of a quality, if not better. So here is a brief list of this wonderful free tools:

## **CVS/SVN**

CVS stands for concurrent versioning system and SVN is short for subversion. Both of these are systems that create versioning of your system sources all the while multiple developers can work on the same code. Although there are commercial applications for these tasks, TortoiseSVN and TortoiseCVS are both pretty straightforward, simple and free implementations.

## **BugTrackers**

These are used to control and have a good follow up on all the issues that arise. Some of the most popular are [MantisBT](#) and [BugZilla](#).

## **Wiki (or any other content sharing system)**

“A **wiki** is a collection of [web pages](#) designed to enable anyone who accesses it to contribute or modify content, using a simplified [markup language](#)” (Wikipedia.)<sup>xiii</sup> Wikis in a startup are many times used for the founders and employees to share thoughts and ideas, and to keep track of the progress made and the next steps.

## **Graphic Editors**

Image editing is one of the few points where the free alternatives are not as good as their paid counterparts, especially in the Adobe CS arena. The acceptable alternatives are [Serif Photoplus](#) and [Gimp](#). Luckily, it will be in most cases, that you will be outsourcing your design needs and they will be the ones needing to pay for the software licenses.

## **Open Source Languages and Development Frameworks**

Choosing your tech structure, programming language, operating system, web server and database server is a major decision in a startup. This will not only decide the faith of your development but will

also mark which type of developers you will hire, where you will host and in some cases, how people will view your tech knowledge.

A common software bundled that is used is LAMP:

- Linux – Operating System
- Apache – Web Server
- MySQL – Database Engine
- PHP – Development Language

All of the above are free and open source solutions, which are proven technologies, are used in some of the biggest websites in the world. Now if you are really into Microsoft's development suite, they offer the "Microsoft Startup Program"<sup>xiv</sup> that cuts back on its normal costs for startups.

## **Business Tools**

### **Customer Relationship Management**

If your startup is based around direct paying customers, using a web based CRM for your sales team to track your sales activity is highly recommended. A very popular choice for this is [SugarCRM](#) with its open source version. If an open source solution is way overhead technology wise, then you can opt for an on demand hosted solution either from SugarCRM or [Salesforce](#).

### **Accounting**

All companies, either big or small, should keep their books straight and for that there are some good options out there such [Microsoft Office Accounting Express](#) (free for startups).

## **ERP**

If your company is in the needs of enterprise resource planning software don't be afraid of the word enterprise since you have open source options such as [opentaps](#), [openbravo](#) and [compiere](#).

## **Office Suite**

When it comes down to the office suite software package that you will use to for editing documents, spreadsheets or presentations, there is absolutely no need to go spending a few hundred bucks in Microsoft Office when there are acceptable free replacements. For desktop ("offline") document editing, there is Open Office and for web there is the Google Docs suite, all for no charge.

## Workspace

A main point of error for many entrepreneurs is the undesirable desire to have an office. A space where they feel they are masters of their universe and from where anything and everything is possible. Albeit the feeling is right on track in a startup, the cost of having a steady cash burn rate of maintaining an office highly outshines the benefits it brings. Don't get me wrong, there are cases where having a private space is a necessity, but in most cases in the early stage it is absolutely not needed, it will just be burn holes in your pockets. For instance, [Automatic](#) the parent company of [WordPress](#), has been valued at over \$150 million<sup>xv</sup> with more than 3 billion pageviews a month with only 20 employees and no offices<sup>xvi</sup>.

Now if you feel that you need a place to embrace your ideas and spend all day with the force, the following are cheap recommendations:

### CoWork

“Coworking is an emerging trend for a new pattern for working. Typically work-at-home professionals or independent contractors or people who travel frequently end up working in an isolated way. Coworking is the social gathering of a group of people, who are still working independently, but who share values and who are interested in the synergy that can happen from working with talented people in the same space.”<sup>xvii</sup> (Wikipedia 2008)

The coworking spaces usually provide an individual workplace, web access, meeting room and a kitchen. The cost is relatively low compared to the other options. The following is a list expressed in dollars of full time access per month<sup>xviii</sup>:

- Argentina \$165
- Australia \$450
- Belgium \$300
- China \$150
- England \$600
- Spain \$487

- USA \$160

### **Alternative Space**

An extremely popular practice among startups is to work in alternative spaces, such as garages, attics, basements or any other place that would not have many other uses and thus are very cheap.

The garage startup story has been most popular by Sergey Brin and Larry Paige, Google's founder, who eventually ended up buying the garage and the house it came in, as memories of the company's roots.

### **Office**

The most common, albeit not the cheapest, is to rent a conventional office for the startup. Having an office will usually become a quick cash burner for the startup, but if you must cave into the corporate devils, try to avoid the typical neighborhoods that will overcharge and go look for the unconventional neighborhoods where rent will be cheaper.

In the above cases, one must equip the office with chairs, tables, computers and the typical infrastructure. The following are cheap alternatives:

Chairs, tables and furniture can be found at very low prices in firesales of bankrupt companies. Not to worry, this practice won't bring bad karma; it will just save you a few good bucks while providing adequate furniture. If you are in a town that does not have much of a startup scene, second best option is the Do It Yourself stores such as Ikea or simply buy the materials and get hands for a few hours with your co-founders.

Computers are, of course, an absolute must and not a point to trade quality for a few cents. For cheap but acceptable options you can look at striking deals with resellers in exchange of all possible future purchases or simply buy from one of the online refurbished sellers such as [dells refurbished](#) computers, but remember, don't save on this. Another option, is if the founders can use their personal computers.

Communication wise, there are great cheap options for telephony, especially in the VoIP arena. It might take you a little extra time to

setup, but using an Asterisk BPX will provide a lot of savings very quickly. A second option is to use a service such as [Skype](#) that for a low monthly cost can provide a phone number that people can reach you at, this way avoiding all hardphones (hardware based phones) and you can switch straight to softphones (software based phones). Another option, which is used as well, is for each person in management (and in some cases employees as well) to use their regular cellular phones, where they each pay their bills separately from their own pockets as they were used to.

## Human Resources

Some of the most successful low cost startups have been a one man show; however there are many startups out there that need the manpower to grow, and in a start up there is nothing more important then the people who compose it. Salaries in a startup are like a pyramid, thin at the top and thicker at the base<sup>xix</sup>. Meaning the higher you are in the company (more stock you own) the more you will sacrifice salary wise, meanwhile the employees who own less or no stock will be earning more.

For the founders, it is very important for them to know and have clear what is the minimum income they need and to establish this as a basis amongst the founding team. In some cases one of the founders will be earning more monthly cash where the others will have other incentives such as more ownership, sales commissions and so forth. It is highly recommended to have the capitalization table<sup>xx</sup>, or summary of who owns what stock and under what terms, so there is no future issues between the founders.

For the contractual employees, there are several different methods that are used to compensate for average (or less than) salaries:

- Equity: Stock options, restricted stock, appreciation rights, phantom stock, performance shares, and other equity sharing tools<sup>xxi</sup>. Many times this is the biggest incentive an employee can get, although their equity portion might be very small. A best practice on this front is to give equity not when the employee has been hired but when he has met a formal goal (time spent in the company, product delivery, sales goal, etc).
- Deferred Compensation: The startup might not be willing to give out equity, but it might be willing to give a big compensation on a company goal such as the sale of the company, sales goal, etc, usually in the form of cash prices.

- Profits Splitting: Another way to compensate your employees if they are working for low wages is to split early profits. Only go down this route if the capital is not needed for other core activities and cash flow is small, but healthy.
- Be attractive: A great way to keep infected people<sup>xxii</sup> working at full energy without much monetary compensation is to make your startup look hot. There are many ways to achieve this, it could either be through making a revolutionary product, good press, an incredible work atmosphere and so on. In most cases, being attractive does not necessarily have to come with a big price tag.

All in all, obtaining a great workforce for your startup does not have to come in exchange of a hefty number on the right column of your balance sheets. Simply see what is the best your company has to offer in exchange for cheaper man-hour costs, but always keep in mind, people is all that matters in a startup.

## **Legalities**

In all startups, the one place one does not want to save is on lawyers. If the time will come where you will want to sell your venture, having all the legal papers, company statues and so forth up to date will be literally priceless. So the best way to look at these operations is to see them as investments and not expenses<sup>xxiii</sup>.

There are several models that can be applied to cutback costs. Many companies use a one-time fee for the setup of the company and then try to avoid any operations that might require external aid. Others will seek a monthly retainer fee that might lower the initial cost and would spread out through many months. If you are looking to really cut back, the only way left is to work with lawyers that will accept working for little or no cash and instead obtain shares or options of your startup.

If you are looking to build a company around intellectual property, the legal cost to patent all your wonder inventions might just be a little too much for the scope of a low cost startup.

## Conclusion

Throughout the framework in this thesis, we have seen how to approach all the major areas that compose a startup with the lowest cost possible. If one would follow the options laid in this framework or any other innovative low cost solutions, one would end up with a startup that has had virtually no costs associated to it. Now if you make your startup a successful one, either through revenues and profits or through the sale of the company, then you would have accomplished the dreams of many and have joined the ranks of people like Markus Friend of PlentyOfFish.com, Alex Tew of MillionDollarHomePage.com<sup>xxiv</sup> or Scott Rafer of MyBlogLog.com<sup>xxv</sup> who have all made it big with absolutely no funding whatsoever, thus proving that it is in fact possible to be successful starting from scratch with not much else than aptitude and determination. Even more, 41% of Inc 500 CEOs class of 2002 started their business with less than \$10,000 in startup capital<sup>xxvi</sup>.

After reading this thesis one might argue that it is in fact possible to create a successful startup with virtually no money, but now the main question is, why should I bootstrap? The main reason behind entrepreneur who decide to bootstrap fall into one of three categories:

- **No funding.** Many founders who cannot get their hands on money and they have no choice but to bootstrap.
- **No dilution.** If your company accepts funding, then the investor will be looking to get a handsome share of the pie, especially in the first stage of the startup. There are many entrepreneurs out there who want to give out as less as possible of the company so when the exit finally comes, they will pocket more.
- **Absolute control.** To be the king of your kingdom, to have the ability to make all of the decisions without needed approval of a third party, is the third major reason why entrepreneurs bootstrap.<sup>xxvii</sup>

Before you go venture out, have very clear why you are bootstrapping, this will probably affect your long-term business and managerial decisions.

Now that we have covered the major areas of a startup and know how to knock them down with almost no budget, gear up and simply go for it!

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