The Art of Bootstrapping Outline

Forward

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Preface

The inspiration behind this book is the same as the inspiration behind my first book, Start-Up Guide for the Technopreneur. It is too help founders of tech start-ups reach their full creative potential and reap a fair share of any returns derived from their considerable sacrifices in developing a sustainable business around their innovative product or service. This book also represents a continuation of the first book in that conceiving and executing a bootstrapping strategy requires both thinking from a strategic perspective and utilizing the conceptual tools presented in the first book.

What prompted me to write the Art of Bootstrapping is the strong realization that the start-up landscape has been drastically altered in the past few years resulting in the increased importance of bootstrapping for start-ups. This increased importance can be attributed to the fact that the era of big early-stage venture capital deals is fading away as start-up life cycles have lessened. Thus, there is less margin of error in decision-making, an increased need for efficiency and greater reliance on alternative sources of funding. It has also made me realize that a revised definition of the term "bootstrap" is useful to more accurately perceive bootstrapping as an overall strategy encompassing far more meaning than what it has been associated with in the past. A further impulse for me to write this book is a worrisome recent and growing prevailing notion among start-up Founders that every aspect of a start-ups' existence can be approached scientifically and the need for creative and strategic business thought and planning is no longer necessary. This could not be farther from the truth. Although new processes and methodologies such as Lean and Agile give valuable guidance on how to conduct customer and product development efforts successfully, ultimately fits well within an overall bootstrapping strategy and may serve as a decisive factor on whether the innovation created by a tech start-up is commercially successful it still does not necessarily mean the founders will be able to secure the necessary resources in a timely manner nor eventually enjoy a successful exit in financial terms. As I have argued in my first book the two biggest reasons why tech startups fail is because of either starvation or suffocation. Starvation occurs when the start-up does not have sufficient resources to execute its plans. Suffocation occurs when too much decision-making control is granted to non-founders, particularly during the earlier stages. Devising a bootstrapping strategy is intended to avoid both situations.

The mission of this book is to present an effective framework in which founders can devise a favorable bootstrapping strategy appropriate for their particular start-up given both their current internal and external conditions to acquire the financial, knowledge-based and relational resources they are in urgent need of and under the right terms and at the right time. What follows is an illustration of how bootstrap decision-making is conducted given the different factors effecting each individual decision and the more broad prevailing contexts in which such decisions must be made. Beyond making and executing strategic decisions the identification and pursuit of opportunities that can be pursued to attain the strategic objectives of the business must be carried-out. This requires resourcefulness and artful thinking.

Being a successful entrepreneur requires the mastering of both the scientific and artistic aspects of decision-making for your venture. Indeed creativity is needed to fully apply all of what has been learned and is a perfect partner to the accelerated real learning that can be achieved as a Lean startup. This book intends to focus on the more artistic and opportunistic aspects of decision-making which I will argue can still provide a decisive advantage in the start-up arena.

Overview of the Contents

The book is basically organized into three parts.

Part I - Bootstrapping

In the first two chapters a firm basis is presented to fully understand the points to be made throughout the remainder of the book. In Chapter One we first answer the following questions:

What is Bootstrapping?

Why is Bootstrapping an art?

To answer these questions we expand on the traditional definition of Bootstrapping and re-define it as a strategy and customize the definition to fit the present realities of tech startups. We than describe the attributes required for effective bootstrap thinking to demonstrate the artful attributes associated with bootstrapping cannot be replaced with scientific methodologies and remain a critical factor in the potential success of a startup. A review of the various type of resources critical for a tech startup, what comprises a complete founding team and the various types of bootstrapping aligned with the different types of resources will be given before the chapter concludes with a listing of the general benefits and disadvantages associated with bootstrapping.

In Chapter Two the prevailing contexts in which Bootstrap decision-making must occur and what more specific internal and external factors founders must consider when making bootstrap decisions is presented.

Part II – Bootstrapping for Resources

Chapters Three through Five represent the second part of the book in which we explore the different types of decisions and opportunities that exist to secure the different types of resources presented in the previous chapter. Chapter Three focuses on financial bootstrap decisions and opportunities. Chapters Four and Five will examine knowledge-based and relational bootstrapping decisions and opportunities respectively.

Part III – Bootstrapping Majors

In Part Three each chapter will focus on one of what I have labeled the bootstrapping "majors." The bootstrapping majors represent the most notable bootstrapping opportunities based on availability and the amble provision of all three types of resources. The bootstrapping majors include co-working spaces, incubators, accelerators, crowd sourcing and strategic partnerships. A chapter will be devoted to each major. In each chapter we will define and present multiple variations of each major followed by an examination of how each of the three types of vital resource is provided. The potential challenges and risks of each major will then be given followed by illustrative experiences. Each chapter will conclude with a discussion on the factors to be considered in choosing to pursue each major followed by a brief overview of prevailing trends.

The book concludes with Chapter 11. This chapter walks the reader through formulating a bootstrapping strategy and articulating this strategy in a bootstrapping plan. The chapter begins with a brief review of the different bootstrapping plan components discussed throughout the book including the "minor" bootstraps introduced in Part II and the "major" bootstraps discussed in Part III. The chapter then proceeds to formulating a bootstrapping strategy before climaxing with the actual construction of a bootstrapping plan.

Hopefully this book will help founders of tech start-ups better understand and navigate through the new global startup environment and better understand the importance, relevance, means and benefits of bootstrapping.

Chapter 1 Bootstrapping

Bootstrapping is a common term understood as and indeed has become synonymous with the self-funding efforts of founders of tech start-ups. However, as we will examine, bootstrapping entails much more than self-funding, involves much more than just financial resources and represents a bona fide strategy in which the success of virtually every start-up cannot be understated. Consequently, a re-definition of the term “bootstrap” is in order. The primary intention of this book is to re-define “bootstrapping” from merely a set of means to finance a start-up to an actionable strategy whereupon both the environments in which start-ups choose to operate and the various resources needed by each start-up is thoroughly considered. Each type of resource critical to the success of a start-up has its own set of decisions and opportunities to be made and pursued respectively.

“Necessity Breeds Innovation”

This is a well-known expression and very appropriate in linking innovation to resource-starved start-ups. Those entrepreneurial ventures that can endure and excel in such constraining environments are more likely to conceive and develop truly innovative business models, processes and products. Indeed, many start-ups fail either due to lack of resources (starvation) or having an overabundance of resources and its associated obligations (suffocation). In the latter case either critical incentives or effective control have been diminished or entirely stripped away. The subject of this book is the art of bootstrapping, the path through which start-ups can endure and excel.

From a financial perspective a start-up is in a race to reach financial sustainability at the earliest juncture. Once they reach this point and exit survival mode they are in a strong position to negotiate favorable funding agreements in terms of both valuation and control.

Venture capital from institutional investors should be seen as a last resort. It preferably should only be sought when the venture is facing an immediate period of exponential growth in which current revenues will prove insufficient to fund such growth and before cash flows are sufficient to secure non-dilutive bank lines with comparably low costs of capital. The only possible exception to this rule of thumb being to secure an immediate and relatively large amount of funds to seize a golden, but fleeting, market opportunity. Basically venture capital should only be solicited when there are no other alternatives to acquiring an essential resource(s) that needs to be acquired in a sufficient amount and in a timely manner without incurring an opportunity cost exceeding the cost in terms of both equity dilution and loss of control. Many like to boast that a start-up has proven successful by securing funds from an institutional investor. To me the most impressive start-ups achieve a sustainable business without the need to secure highly dilutive venture funds.

How do they accomplish this?

The answer is consciously or unconsciously following a bootstrapping strategy.

All too often a start-up venture relies by default on traditional fund-raising, soliciting prospective equity investors to acquire the means to purchase resources or accepting a cookie-cutter convertible note with disadvantageous terms for the founders offered by venture capital firms who are unwilling to share in your risks. The costs in terms of both equity dilution and loss of decision-making control, particularly for early-stage start-ups is too excessive. Additionally, founders often focus too much on raising investment funds and overlook the importance of securing other types of valuable resources equally important to the potential success of their start-up that may not require money to be acquired or, if so, at nominal cost. There exists numerous alternative means to secure such valuable resources. This book is my attempt to present some of these alternative means, which can be categorized as either a "Bootstrapping Decision" or a "Bootstrapping Opportunity."

A good starting point for this introductory chapter is to ask the following questions:

What is Bootstrapping?

Why may it be considered an art?

Once these questions are answered than we can proceed to why Bootstrapping opportunities are pursued and what are the benefits and shortcomings of Bootstrapping activities in general. To accomplish this we will examine the types of resources to be secured through bootstrapping and the types of bootstrapping that exist. The chapter will then conclude with a description of the benefits to be attained and the disadvantages that may be presented.

What is Bootstrapping?

Historically bootstrapping has been a term used to describe the efforts of individuals to overcome a nearly impossible obstacle or to improve oneself through self-sustaining efforts requiring no assistance from others. The saying, "to pull oneself up by one's bootstraps" has been a common Western expression during the previous two centuries. In modern business language bootstrapping has primarily meant funding a new business without external funding or other forms of outside help and/or funding growth through internal cash flow (revenues).

In the glossary of the first book I authored titled, Start-Up Guide for the Technopreneur, the following simplified definition of Bootstrapping was given:

"Practice of sustaining operations and development without raising external capital."

Both the conventional definition of bootstrapping and the simplified definition I gave in the preceding book require expansion beyond the avoidance of needing to secure external capital in any discussion concerning bootstrapping and the formulation of a bootstrapping strategy.

By definition an entrepreneurial venture is a business undertaken knowingly without initial resources sufficient enough to achieve its objectives. The resources critical to be acquired by any entrepreneurial venture include financial, knowledge-based and relational resources. Any decision or pursuit through which a start-up tries to acquire any one or a combination of such resources at a cost, in both financial and non-financial terms, less than the cost of securing funding needed to acquire such resources through an equity sale or other traditional financing may be considered a Bootstrap. Efficient financial management, minimizing the amount of investment funds required, reducing your cost of capital or elevating your valuation by mitigating risk, funding your venture with minimal external monetary and non-monetary obligations, cost-effectively acquiring the necessary talent and information and accelerating on learning curves related to customer and product development efforts represent the various means to bootstrap a business.

For high-risk tech start-ups in highly dynamic markets utilizing rapidly advancing technologies the dimension of time, accelerated learning and exposure are critical elements that need to be efficiently mastered to increase the probability of success. Buying time for your start-up venture to acquire all the vital resources is the essence of bootstrapping and often the primary determinant of start-up success. Time is also vital in creating the necessary, oftentimes global, exposure required to initially attract investment capital, eventually execute a commercial launch, sustain growth and ultimately enjoy a lucrative exit. Consequently, the value of bootstrapping extends into the later stages of a start-up as well.

We have all heard the expressions “Time is money” and a “penny saved is a penny earned.” However, in regards to start-ups, “a penny saved is more than a penny earned.” This is true if one considers that a typical successful exit for a start-up is considered 5 to 10x ROI. Thus, a penny of investment money saved may equate to 5 to 10 pennies earned. A start-up has a monthly burn rate it needs to endure before it generates enough revenue to pay its expenses. The longer it takes to generate such sustainable revenues from its innovative product or service the longer the start-up will need to secure funding from other sources. Thus, any actions an entrepreneurial venture can execute that reduces the amount of time and/or expense required for any necessary activity or reach a worthy objective may be deemed a form of bootstrap. Consequently, both relational (social) and knowledge-based resources need to be included in the definition of bootstrapping.

Why is Bootstrapping an art?

According to Wikipedia the study of creative skill, the process of using such creative skill, a product of creativity or the participants' experience with such creativity can be considered forms of art. However, application of science to create something new does not represent art.

Why is bootstrapping a form of art, not a science?

Bootstrapping calls for creative thinking to identify alternative means to secure much needed resources. Bootstrapping often times cannot be planned and requires founders to be opportunistic. Bootstrap decision-making represents a process of using creative skills to acquire vital resources in a timely manner and this book represents, in part, the study of such creative skills.

Science can be taught. Founders of entrepreneurial ventures all have the capability of learning and applying the scientific aspects of a start-up. Whether this represents composing a business plan, software architecture, selecting distribution channels or negotiating a funding agreement all these skills can and should be acquired to increase the probability of success. However such skills do not provide the differentiation and competitive edge often required for a start-up to be successful. It is often the case that a business opportunity is identified at the same time by several entrepreneurs. The entrepreneurs may follow the same business model, the same processes and employ the same technologies in targeting the same customers, however, the entrepreneur who is most familiar with the subtle behaviors and preferences of the prospective customers' and the hidden dynamics of a new market possess a valuable foreknowledge giving them a decided advantage. Consequently, bootstrapping is a form of art in that experience often trumps study.

Sun Tzu in his infamous work, The Art of War, asserted that foreknowledge cannot be elicited from the study of past analogies or calculations. It must be made by men who know the enemy situation. *(1)* This truism holds true for a trail-blazing start-up venturing in a new market with a high-tech innovation whose enemy is not an opposing army or the terrain to be traversed but rather an elusive target market and the unknown disruptive potential of their own innovation. Not being able to primarily rely on history or quantitative analysis implies that the decision-making process is more of an art and that an opportunistic approach is ideal in dealing with prevailing unknowns. Consequently, bootstrapping is both an art and a strategy.

Acquiring such "foreknowledge" or experience permits the formulation of more effective planning which results in greater discipline and flexibility. A combination of discipline and flexibility permits decision-makers of every stripe to be ready to pounce on any opportunities that may arise. This is the acme of skill for both military leaders and founders of start-ups.

The "foreknowledge" required to seize bootstrapping opportunities permits the pursuit of an opportunistic bootstrapping strategy. Identifying and taken advantage of available bootstrapping opportunities is the means to both shorten the amount of time required and to increase the amount of time one has to secure the vital resources required for a successful start-up venture.

True entrepreneurs are more similar to artists than scientists in temperament and mind set as well. Accepting an experienced corporate executive onto an early-stage founding team may look good on paper. The corporate executive may be well trained on the scientific aspects of your business. He or she may be well-versed in the technologies and software architecture utilized, the best practices to follow, knows how to conduct business planning, make professional presentations and manage projects, etc. However, will this experienced corporate executive possess the appropriate skills and attributes needed to contribute to a successful entrepreneurial venture? Some may as they have unknowingly been entrepreneurs in both mind and spirit previously trapped in the corporate world. Indeed, for a corporate executive to leave a stable well-paid job to join a start-up may be evidence that he or she is an entrepreneur at-heart, has had their epiphany after working in the corporate world as I had, and now willing to assume the inherent risks, sacrifices and potential upside of being an entrepreneur. However, will that former corporate executive be able to apply the very different problem-solving skills and exhibit the thrift and resourcefulness required in a more cash-starved environment? Will this newly minted entrepreneur have the requisite diagnosis abilities and be able to "think-out-of-the-box" as will be demanded in dealing within much more dynamic environments and new markets in which the needs of customers will need to be learned, not found in a downloadable market or research report? In other words, a new market for an entrepreneur is similar to the blank canvas starring in front of a painter. No scientific approach or brushing method is sufficient to create an unforgettable masterpiece or sustainable innovation.

Entrepreneurs are different than artists in one important respect. They do not enjoy the luxury of time to create their masterpiece and a lucrative post-mortem exit is not acceptable. Entrepreneurs will need to bootstrap to buy themselves this precious time. In this way they become artists in manner of thought, the objects they create and the unique bootstrapping attributes they emulate. It is these bootstrapping attributes we will turn our attention to now.

Bootstrapping Attributes

To be effective at bootstrapping the following represent the unique artful abilities and attributes most often associated with entrepreneurs.

Creativity, ("thinking-out-of-the-box")

I often consider the financial management of a tech start-up to being in a perpetual state of crisis management as the significance of virtually each decision and dimension of time is so critical in the decision-making process. This reduces the amount of time available to formulate a thorough rational consideration of a decision and its associated consequences. Consequently the creative ability to “think-out-of-the-box” is often required and a very valuable attribute possessed by an individual founder or a founding team as a whole.

Artful Diagnosis

To me bootstrapping is an art form because it requires strong diagnostic abilities in the absence of a scientific (textbook) approach that can be universally applied as high-tech ventures are typically operating in highly fluid and dynamic environments offering very few analogous cases that can serve as a meaningful precedent for specific scenarios the decision-makers of a tech entrepreneurial venture will encounter. New markets represent an exploration into a new frontier. The nature and magnitude of problems that lurk ahead are often difficult to conceive, difficult to recognize once they are posed and often require a timely solution. Without precedents as reference the diagnosis skills of founders needs to be uniquely geared to thinking in such unexplored environments. Time is money and the longer it takes to diagnose a problem the more costly it is to resolve or make a “pivot.” Making “pivots,” as we shall see, is an integral part of the life of any high-tech start-up following the precepts of Lean- the predominant methodology for tech start-ups today.

Dilemma Solving

During the life of a start-up many of the crucial decisions the Founders will face involve trade-offs. As we will discover shortly the Wealth vs. Control Dilemma creates such potential trade-offs. Bootstrapping can be considered more of an art, rather than a science, because there is no absolute right answer for such decisions requiring such a tradeoff. The priorities of the founders often is a major factor in determining a particular course of action as well. Maintaining the optimal balance between two inherently conflicting factors is indeed an art that cannot be taught.

Thrift

The virtue most commonly associated with bootstrapping is thrift. Bootstrapping actions are not only intended to cost-effectively secure a valued resource but also represent how the venture is to be perceived. Bootstrapping is an art because the bootstrapping decisions made by the founders of a start-up convey its nature and aspirations. It is advantageous for a start-up to be able to convey thriftiness as valuable assurance to prospective investors and strategic partners that their contributions and efforts will be efficiently utilized.

The identification of bootstrapping opportunities currently available and the process of bootstrap decision-making is an art requiring conceptual approaches to evaluate such bootstrapping opportunities and validate bootstrapping decisions. In the proceeding chapter we discuss such evaluation processes and tools.

Resourcefulness

Founders often have to either be instinctive or "discover" via non-traditional means the information required to make optimal decisions or identify opportunities to acquire much needed resources. The markets that start-ups typically target are either new or niche and very likely there exist little, if any, market research reports to reference are other companies to emulate. Resourcefulness is especially important in the fund-raising activities of start-ups as they possess very limited resources to conduct such activities and many funding options (i.e. traditional bank financing) are not available to them. Being resourceful is a hallmark of every successful entrepreneur. Indeed, serial entrepreneurs enjoy an advantage because prior entrepreneurial experience has served to improve their entrepreneurial instincts and acquired the savior faire to recognize short-cuts to make such "discoveries" more rapidly. They also likely have raised funds before and have already established good relations with investors.

A founder(s) that possess the above attributes will be well-equipped to formulate and execute a winning opportunistic bootstrapping strategy and effectively deal within a relatively unknown, volatile and dynamic environment. As we will discuss further, assembling a founding team it is advisable to select those prospective partners that exhibit such attributes.

So what are the types of resources opportunistic Founders should be aware of and vigilantly seek?

Resource Categories

There are three broad categories of resources essential for the success of every start-up. They include financial, knowledge and relational resources.

Financial

Financial Resources include all monetary assets (derived from investment, borrowing or revenues) and tangible assets acquired or to be acquired. It also includes the range of external opportunities or decision-making that can be pursued or made to either reduce the amount of financial resources needed or reduce the cost of acquiring such resources.

Knowledge

The Knowledge Resources of a start-up includes the aggregate skills and experiences of the Founders, employees and advisors, the learning achieved, Intellectual Property secured and the principles and processes (i.e. Lean, Agile) that are adhered too. It goes well beyond just the human resources possessed. The learning achieved includes institutional knowledge and what has been learned on the target customers, marketplace and product. The principles and processes to be adhered to include the values and organizational structure of the start-up and the processes followed to reduce waste and improve execution. The Lean Process and Agile methodology are examples of such processes. Working relationships with external knowledge-based institutions (i.e. universities, R&D institutions, trade/educational conferences, association memberships, etc.), joint ventures and use of best practices are other forms of knowledge-based resources from which knowledge value can be derived. It also includes the range of decision-making that can be made to induce acceleration on a learning curve, reduce the amount of knowledge-based resources needed or reduce the cost of acquiring such resources.

Relational

The Relational Resources of a start-up include the personal connections of the founders and employees, online presence, the chemistry, incentive and morale of the team and the working relationships with external parties such as media, bloggers and PR firms, vendors, distributors, government regulators and trade associations. It also includes the range of external opportunities and decision-making that can be pursued or made to gain greater exposure for either your venture or innovation, expand your social networks, reduce the amount of social-based resources needed or reduce the cost of acquiring such resources. Branding represents the most potent relational resource. To enhance branding the most valuable asset for a young start-up needs to be built- Trust. Accumulating relational resources is about establishing a high level of Trust with both internal and external parties. A strong corporate governance regime is the primary means to establish Trust.

Complete Bootstrapping Founding Team

To efficiently secure and manage the vital resources to be utilized by a start-up requires a complete team. Each individual will play a leading role in acquiring and managing the various resources associated with their area of expertise. A complete team consists of the following characters:

Hacker

Coder. This Founder is responsible for the development of the innovation. This includes serving as chief architect, hiring and managing the development team and managing relations with IT providers and other vendors related with the product inputs. Typically this person is designated as the CTO.

Hipster

Designer. This Founder is responsible for creating the overall design concept and user interface experience. This will entail hiring and managing a design team, selecting the appropriate design tools to be utilized and managing the relations with vendors providing such tools and mediums.

Hustler

Biz Development. This Founder is responsible for all the sales and marketing functions of the venture. This will entail devising a marketing strategy, hiring and managing sales and marketing personnel, expand the venture's online presence and directly deal with media and PR external parties. Typically this person serves as the Director of Sales & Marketing.

Haggler

Fund-Raiser. This Founder is responsible for all financial management and fund-raising activities. This includes financial planning, preparing prospectus documents, preparing for funding presentations and negotiating funding terms. Typically this person serves as the CFO.

Assembling a Founding team with skills and experiences in each of these areas of expertise will establish a strong complimentary team and a good start to securing all of the three vital resources for a start-up. All four Founders will need to possess the requisite bootstrapping attributes previously discussed in their efforts to recognize and take advantage of the various types of bootstrapping.

Assembling a complete team exhibiting all the attributes previously mentioned and possessing the complimentary skills just described will provide a solid foundation of knowledge-based and relational resources and allow for a continued build-up of such resources. The importance of initially accumulating these knowledge-based and relational resources for an innovative tech startup to take full advantage of bootstrapping opportunities and make effective bootstrap decisions cannot be understated.

Types of Bootstrapping

Given the vast potential of human creativity there are an infinite number of ways to bootstrap a tech start-up. However, we can classify bootstrapping in three broad categories based on the three vital resources demanded by start-up ventures. Financial bootstrapping is simply any activity, pursuit or decision made to acquire financial resources at a cost in terms of both equity dilution and decision-making control significantly less than the cost assumed by any monetary purchase or equity sale to secure the funding necessary to acquire a resource in demand. Knowledge and Relational bootstrapping are similarly defined, however, specific to the associated resource to be acquired.

Bootstrapping can be further sub-divided into bootstrapping decisions and bootstrapping opportunities. Bootstrapping decisions comprise all internal and external decision-making, structuring, planning, practices or positioning intended to either lessen the amount of a resource(s) required or reduce the costs associated with acquiring a demanded resource(s). Bootstrapping opportunities include external events or programs that offer a means to cost-effectively acquire a resource(s). If one type of resource is to be secured we shall label it as a minor bootstrap. If all three types of vital resources are offered than the opportunity is considered a major bootstrap. The five major bootstrapping opportunities that deserve their own chapter include Co-Working Spaces, Incubators, Accelerators, Crowd Funding and Strategic Partners. These five all offer the opportunity to acquire an abundance of all three resource types.

There are benefits and disadvantages associated with each bootstrapping opportunity. The following is a general list of commonly associated benefits and disadvantages.

Benefits of Bootstrapping

There are many benefits associated with bootstrapping. The benefits include gaining traction in a cost-effective manner, maintaining decision-making control, minimizing the dilution of Founders' Equity and maximizing the potential ROI for every shareholder. They are just some of the primary benefits worth mentioning and do not represent all the conceivable benefits enjoyed by a bootstrapping start-up.

Gain Traction Cost Effectively

Buying the time to earn the maximum amount of traction to command the highest valuation preceding your first external funding, thus, it is extremely beneficial to postpone fund-raising from external sources as long as possible. By doing so you are allowing yourself to build the greatest amount of traction possible to ensure the highest possible valuation before the initial outside funding established a base for future valuations. The higher valuation in this initial funding round will translate into a higher price per share which will serve as a base for subsequent funding rounds. The traction a start-up possesses determines the level of valuation it can expect from prospective investors. The following represent types of traction that can be gained by Bootstrapping or during the time bought via bootstrapping and can lead to a higher valuation:

Revenue Generation. A strong demonstration of commercial viability; If revenue is sufficient to cover the Burn Rate then the perception of risk in the minds of prospective investors has been mitigated considerably and you can negotiate funding terms with a commanding position of leverage.

“skin-in-the-game.” The sacrifices you made and the thrift you displayed while bootstrapping will hearten prospective investors and make a compelling impression that you are fully determined to see a successful exit and that their investment funds will be spent wisely.

Established market positioning and/or the amount of customer development achieved. It takes time to sufficiently learn about the target customer and market. Sophisticated investors, the type of investors you want to attract, are going to want to see that either you have established a favorable market position for your product or you are on track to do so. A strong brand represents one of the best ways to reduce perceived risk in your venture.

Use of Funds. Greater likelihood that their investment funds will be used for more value-added activities as a relatively large amount of R&D has been completed. The perception of risk is less among prospective investors if your venture is funding a commercial launch or growth in which the funds will have a direct and clear effect on the bottom line and the time to exit is closer. For this reason later stage funding rounds usually command higher valuations.

Working Relationships with Strategic Partners. Having an established working relationship with a prominent strategic partner in your “space” will provide the strongest assurance to prospective investors. If a strategic partner has a vested interest in your venture a prospective investor will believe that the strategic partner, with considerable resources, will be working to assure your success. If a strategic investor sees your potential why shouldn’t a prospective investor? Executing Co-Marketing and Licensing Agreements are ways to fortify such strategic partnerships in the minds of prospective investors. However, non-binding Letters of Intent, Pledge Letters and Memorandums of Understanding (MOU) are lesser, but valuable, forms of traction as well.

Public recognition. A public recognition may include a prize won at a competition, participation in a public event or service and any media attention received, such as a blog post or news article.

IP Protection. Securing a patent, trademark or copyright will certainly enhance your perceived valuation and attest to the innovation of your product or service. Developing and utilizing hard-to-replicate software is another way IP can serve as traction.

A Granted Public Designation. Favorable designations include being granted an exclusive concession in a given marketplace, overcoming a difficult barrier to entry such as a difficult licensing process or becoming an official l representative, licenser, marketing agent or re-seller of a reputable product or service.

Maintain Decision-Making Control

By lessening the amount of external obligations your start-up assumes the founders are maintaining the decision-making control of their venture. External obligations assumed that accompany outside investments include the voting rights of shareholders, the control terms that may be found in funding agreements and any other explicit or implicit obligations assumed due to relations with third parties or other stakeholder groups.

Minimize Equity Dilution

By cost-effectively acquiring resources you are reducing the amount of investment funds to be raised through equity sales, thereby, reducing the potential equity dilution to be suffered by the founders. This increases the preservation of effective control and the potential ROI for the founders as well.

Maximize Potential ROI

“A penny saved is a penny earned”

In the case of a start-up a penny saved maybe equal to several pennies earned. Assuming you achieve a successful exit in which the founding shareholders receive a return of some multiple of their investment than every penny previously saved through Bootstrapping may have netted you a multiple of the pennies saved. If bootstrapping enabled you to exit six months earlier than otherwise would have been possible than you would multiply six months burn rate by the ROI multiple to determine the net monetary benefit of previous bootstrapping endeavors. We are only speaking in monetary terms. The strategic value of going to market early and/or exiting sooner can be much greater and likely improved your chances of having such a successful exit.

Disadvantages with Bootstrapping

There are a few notable disadvantages of pursuing bootstrapping opportunities. They include the limited resources to be secured, incurring internal obligations in lieu of external obligations, assuming less conspicuous external obligations and foregoing certain “Good Money” benefits associated with equity investors. This brief list of disadvantages cannot be considered as all inclusive.

Limited Available Resources

The availability of financial resources necessary to create value are often limited from bootstrapping opportunities. That is why they are forms of bootstrapping and why bootstrapping is most prevalent during the early stages when the funding needs of a start-up are not as great and why it may not be realistic to rely on bootstrapping to sustain a start-up all the way to a successful exit.

Although maintaining a higher percentage equity interest for the founders offers more decision-making control vis-à-vis other shareholders, the consequent low cash reserves associated with bootstrapping can restrict decision-making on both the tactical and strategic level. If a company has to delay "going-to-market" because they do not have sufficient funds to execute a commercial launch than they are assuming the costly opportunity cost of postponing revenue generation. Another possible scenario is not having enough cash to higher more support staff or scale your online capabilities necessary to meet the demands associated with an otherwise welcomed spike in growth.   On a strategic level insufficient cash-on-hand may prevent a start-up to take advantage of a short-lived window of opportunity to acquire or enter into a joint-marketing pact with a well-placed partner who offers an advantageous distribution channel. The risk of limited resources does not only have to relate to financial resources. Failure to having a Hustler on your management team may result in missing the identification of a strategic opportunity such as the one just mentioned. Not having a founder or other stakeholder on board who is in position to make the necessary introductions or unwillingness of the founders to attend networking events during which such strategic partners can be met is an example of a costly opportunity cost related to insufficient relational resources.

Internal Obligations in lieu of External Obligations

There may be some new internal obligations created by some forms of bootstrapping. Some types of funding (i.e. public funding) may provide restrictive use of funds, a specific locale or market to operate or impose time requirements. All of such terms can effect internal decision-making. Some forms of bootstrapping may provide short-term capital or other valuable resources for the start-up at the expense of longer-term development or marketing efforts. Deciding on the less expensive immediate option of utilizing licensed software, developing with a more familiar computer language or operating your innovative service on a third party platform may create future difficulty in efforts to scale. Securing the immediate financial sponsorship from a corporation may limit your marketing options as the corporate sponsor may want you to limit your marketing options to what they offer.

Inconspicuous External Obligations Assumed

Acquiring the financial, knowledge-based or relational resources from a current strategic partner may serve your venture well now, however, may tie you to the strategic partner, either in an explicit or implicit manner, diminishing your flexibility in dealing with other potential external parties in your space that may in the future offer a more attractive partnership.

Foregoing Certain "Good Money" Benefits

Foregoing the non-financial benefits provided by "Good Money" shareholders. Although welcoming new shareholders will dilute founders' equity and their effective control of the venture, a distinct advantage of welcoming new equity investors, particularly "good Investors," is they may not only serve as a source of all three resources but, more importantly, have a direct vested interest that matches the interests of the founders. This closer match with the founders' interests and the eventual high-return success of the venture is often not to be expected from a public funding agency, corporate sponsor, co-working space or a strategic partner from any stripe.

Another forsaken benefit may be the credibility associated with securing the interest of notable prospective investors, thereby being in the position of taking advantage of any crowd funding dynamics that may exist.

As previously stated bootstrapping is an art partly because a balancing act is required and factors to be considered are often out-of-your control and fleeting. Such external factors will determine the scale of the opportunity costs just mentioned by not pursuing a bootstrapping opportunity.

Summary

It is necessary to recognize that the term bootstrapping needs to be re-defined and expanded. Bootstrapping can no longer be referred to as a set of means to self-fund, especially in regards to high-tech start-ups whose very survival and ultimate success may depend on their founders' ability to bootstrap in a variety of ways. The objective of bootstrapping is not limited to just acquiring financial resources but also acquiring the critical knowledge-based and relational-based resources just as critical to the success of a start-up. Identifying and selecting available bootstrapping opportunities requires strategic thinking and an opportunistic vigilance as each start-up is unique and the needs of each start-up are in constant flux as it rapidly progresses through different development stages. Consequently a bootstrapping opportunity may be beneficial and appropriate for one start-up and not for another and a bootstrapping opportunity may be beneficial for a particular start-up now but not be beneficial for that start-up in the past or in the future.

Bootstrapping can be considered an art because creative thinking is required to identify otherwise unrecognizable bootstrapping opportunities, assessing its appropriateness for one's particular start-up at a specific point of time and properly executing a bootstrapping opportunity to take full advantage of the benefits it can offer without the time or information to make a fully-informed decision.

Bootstrapping is an opportunistic strategy to be pursued by founders who are best served by the following abilities and attributes of creative thinking, problem diagnosis and solving, thrift and resourcefulness.

Bootstrapping is not only about decision-making and the resources to be secured it is also relevant to how a Founding Team is composed. A Hacker (coder) and Hipster (designer) are needed to both provide and manage the knowledge-based resources acquired and learned. A Hustler (business development personality) is needed to serve as the primary provider and manager of the relational resources acquired and developed. A Haggler (a "finance person") is needed to amass and manage the financial resources to be secured and appropriated. As a team they are to collectively deliberate and decide on a Bootstrapping Strategy.

An examination on bootstrapping is a worthy topic of discussion for start-ups because of the various benefits offered and the disadvantages to be conscious of. The benefits include gaining traction in a cost-effective manner, maintaining effective decision-making control and minimizing the equity dilution of the founders and ultimately maximizing the potential Return on Investment for all shareholders. Some possible disadvantages to be aware of include the limited amount of resources that may be available, incurring internal obligations in lieu of external obligations, assuming certain concealable external obligations and foregoing certain "Good Money" benefits derived from welcoming "Good" shareholders who can offer valuable non-financial resources and with vested perfectly aligned interests.

Now that we have examined what bootstrapping is, why it is an art and why it is important we can next discuss the decision-making process involved in creating, selecting and/or executing bootstrapping opportunities.

Chapter 2 Deciding to Bootstrap

In this Chapter we will explore the various contexts and factors associated with bootstrap decision-making. The chapter will be organized in two parts. In the first part we will examine the four different prevailing contexts in which bootstrapping decisions are to be made. In the next section we will present the various internal and external factors to be considered.

Contexts in which Bootstrap Decisions are made

There are four contexts in which Bootstrapping decisions need to be made. They include the recent phenomenon of shorter Start-Up Life Cycles, Good Money vs. Bad Money, the Wealth vs. Control Dilemma and the commencement of the Lean Era for start-ups.

Shorter Start-Up Life Cycles

A recent phenomenon in the global start-up scene is the shortening of a start-up's life and acceleration through the progression of funding rounds. There are several reasons for this trend. They include:

1. Prolific increase in the number of search, social and mobile platforms has greatly facilitated the ease to reach customers on a larger scale. Previously a relatively large amount of Series A funding was needed to execute a successful commercial launch. The institutional venture capitalists have begun to lose their critical role as the primary Series A funding source.

2. The availability and wide spread use of open source tools avoiding costly licensing fees and making software development efforts more efficient.

3. The greater use of cloud computing and the consequent reduction in server costs

4. Drastic reductions in bandwidth costs

5. Introduction of more efficient development processes such as Lean and Agile methodologies which we will examine in greater detail in Chapter 4.

6. Advancements in online payment systems will continue to create new opportunities to monetize and further reduce operational costs by avoiding the time and expense of partnering with traditional payment service merchants.

Shorter Life Cycles has several important implications:

1. The reduction in the amount of investment funding required.

2. A diminishing time frame to negotiate funding

3. Earlier exits for start-ups.

4. The greater importance of non-financial resources

In the last several years I have witnessed this phenomenon first-hand. Previously a Seed Round may have required $250,000 to $500,000. Now $50,000 to $100,000 is usually sufficient. Before a Series A Round may be in the $1 million to $3 million range. Now Series A funding rounds infrequently require more than $500,000. In many cases a Series A round can be skipped entirely for some consumer internet ventures that have successfully utilized existing online platforms to both reach customers and collect payments. In many other circumstances a Series A funding Round is not to fund a commercial launch but to operationally scale following launch to meet the demands of exponential growth. This traditionally was the use of Series B funds.

Indeed, there has been a growing belief that institutional investors, particularly larger VC's, are becoming less and less relevant, particularly in the early stages. Consequently the shorter life cycles have both increased the value and relevance of bootstrapping by altering the venture capital industry. Larger venture funds have had to cede a growing portion of the industry to incubators, super angel funds and a recent proliferation of crowd funding platforms. Smaller funding amounts makes it more difficult for large VC organizations in terms of both practicality and money because the incremental cost for a large VC to execute each funding deal is much higher than that of its much smaller and nimble venture capital brethren. Additionally, there is a reduced amount of time to negotiate funding terms. This is significant for larger VC's whose funding terms are generally more complicated and less attractive in respect to control terms due to the greater fiduciary responsibilities associated with managing a fund and investing other people's money. The occurrence of earlier exits have the effect of increasing the Returns on Investment (ROI) for earlier stage investors and decrease the ROI for later stage investors as well. Unfortunately for larger VC's they find themselves investing later in the start-ups' life cycles because only at these later stages do start-ups need investment funds in a sufficient amount to justify larger fund investments due to the incremental costs previously mentioned.

Furthermore, incubators and super angel funds offer the valuable knowledge-based and relational resources needed by start-ups in a much more cost-effective manner and at the increasingly more important earlier stages of start-up life cycles. Indeed, a much larger percentage of a start-ups' funding needs is covering the salaries of their staff who provide the essential knowledge-based and relational resources for any innovative venture. A bootstrapping strategy incorporating the pursuit of bootstrapping opportunities as provided by incubators and other more agile funding sources offering non-financial resources permits start-ups to effectively take advantage of this recent trend of shorter start-up life cycles which is expected to continue in the foreseeable future with the advent of greater distribution and monetization opportunities increasingly offered by the various social media platforms.

The proliferation of incubators and super angel funds has increased the source of "Good Money" that can be secured by start-ups because they offer a wide variety of non-financial resources while less frequently demanding a board seat or other control levers as can be expected from institutional investors.

Good Money vs. Bad Money

In my previous book I asserted that often the primary determinant of the success of a tech start-up is determined by whether it receives "Good" Money" or "Bad" Money." "Good Money" is received from a funding source that is a willing source of intimate knowledge of your technologies, business and market (i.e. "Know your space"), possess the same objectives of the founders', sufficient incentive is retained for management to achieve such mutual objectives, will not impede future fund-raising efforts or decision-making abilities and offer other forms of non-financial support. (1) Conversely, "Bad Money" is received from funding sources that offer very little non-financial resources, possess interests that conflict or potentially conflict with the interests of the other shareholders, impose funding terms that siphon away any reasonable incentive for the decision-makers of the venture, establish barriers to future fund-raising efforts and place severe constraints on the decision-making abilities of management. (2)

Consequently in discussing bootstrapping opportunities one needs to expand the definition of "money" to include knowledge and relational resources as well. Indeed, a "Good" investor, by definition, offers valuable knowledge and relational-based resources, in addition to their financial investments, by sharing their knowledge of your "space," lending precious credibility and permitting you to leverage their existing valuable relationships via their extensive social and professional networks.

Bootstrapping opportunities, especially the "Major" bootstrapping opportunities we will later discuss that offer all three types of resources, usually represent "good" sources of vital resources. However, a Good Money/Bad Money assessment remains to be made. Does the resources to be secured worth any obligations to be assumed in the form of impediments, limitations and risks created?

A Good Money/Bad Money Assessment will assist you in determining if funding from an external source should be accepted. However, there are internal motivations that must be considered as well. What is a higher priority for the shareholders, maintaining control of the venture or building value to create wealth? Can they be simultaneously pursued or should they be exclusively pursued? We will turn to these fundamental questions now.

Wealth vs. Control

Entrepreneurs need to realize and fully comprehend the Wealth vs. Control dilemma that exists for every start-up that will need to acquire important financial, human or social resources to some degree, which come at a cost. The costs are in the form of money, control or assumption of some obligation.

In securing financial resources the most recognized way in which a tech start-up raises funds is through the sale of a portion of their equity. In return for investment funds the investors demand some degree of control. As shareholders they inherently acquire control of your venture through shareholder rights. The scale of the control is determined by both the percentage equity interest they secure and the terms of the funding agreement in which they may be granted additional control rights, such as a board seat or their required consent on specific decisions. Welcoming a more passive angel investor may help you both secure much needed financial capital and maintain more effective decision-making control. However, the trade-off is in terms of the amount of knowledge-based and/or relational resources that could have been gained if the investor was more active. Securing funding through other means, such as a debt note or public funding programs, may require the assumption of certain obligations that place certain constraints on your decision-making. A debt note may constrain future fund-raising efforts because it is senior to any equity class and the debt holders may hold your collateral IP as hostage. Public funding may have strict use of fund terms, compel you to develop in a particular jurisdiction or create reimbursement obligations.

Acquiring knowledge-based resources is also vital to wealth creation. The associated costs of attracting exceptional individuals include demands on their work environment, the direction of the business and some form of upside compensation (i.e. stock options). Licensing a technology or entering into a joint venture may create financial, marketing and operational commitments as well.

Acquisition of relational resources such as joining an association or forging a strategic partnership can limit your future ability to relate with other organizations or enter into other partnerships. Indeed over dependence on one strategic partner may limit your exit options as potential acquirers of your venture represent competitors of your strategic partner.

Noah Wasserman, in his book The Founder's Dilemmas, masterfully articulates this dilemma and provides compelling evidence that those founders' who believe they can fulfill their desires for both wealth and control often do not succeed. His analysis convincingly demonstrates that those wealth-seeking founders who are willing to accept a "smaller piece of a larger pie" usually are rewarded with greater financial returns than a control-preserving founder whom typically attains a "larger piece of a smaller pie." In his study involving 460 start-ups Noah discovered that founders who had maintained control of both the office of CEO and the board found themselves with equity stakes that were 52% as valuable as those founders who accepted the loss of such control. (3)

Most importantly Noah asserts that founders who make decisions consistent with whatever their motivations are based on, wealth or control, are more likely to achieve their objectives. (4) Consequently the founders' motivations must be considered when devising a bootstrapping strategy so decisions pertaining to acquiring the various vital resources can be consistent.

In my previous book I argued that the primary long-term goal is to maximize financial returns for the founders. This required that an optimal balance be achieved when making decisions that involved increasing the expected return (enlarging the pie) while maintaining the highest percentage equity interest for the Founders (keeping a larger piece of the pie). However, achieving this optimal balance is difficult to do given the Wealth vs. Control Dilemma. Bootstrap decision-making and taking advantage of bootstrapping opportunities provides a way to enlarge the pie while not carving out an otherwise larger piece of the pie. The objective of any bootstrapping strategy is to acquire vital resources while avoiding the forfeiture of a relatively large amount of control and/or Founders' Equity associated with welcoming on board individual or institutional investors via a traditional equity sale.

However, exclusively following a bootstrapping strategy to exit is likely not going to permit you to enlarge the pie to its full potential. Although valuable resources are acquired at relatively low cost permitting the size of the pie to grow, such growth will likely have occurred at a much lower rate. Thus, at some point a crucial decision needs to be made during the life of just about every start-up- When to abandon the bootstrapping strategy and pursue the exponential growth in revenues and profits. We will explore this question later in this chapter.

The importance that the founders place on either wealth or control will play a part on when, which and to what degree bootstrapping opportunities will be pursued. Do you prefer to own 50% of a two million dollar company or 20% of a ten million dollar company? When founders possess all the equity interest than this decision can be made amongst themselves. However, when other shareholders are involved the decision-making founders need to understand that they now have a fiduciary responsibility to the other shareholders to make decisions in their best interests as well and those interests are more likely inclined to wealth creation than control. This represents just another reason why maintaining control, particularly during the early stages, is critical because not only is the pursuit of the founders' vision in peril but also their pursuit of any control-maintaining motivations.

There are additional Wealth/Control dynamics at-play when considering bootstrapping decisions and maintenance of a favorable structure for innovation. To maintain an edge in innovation start-ups need to be structured in a way to assure four things:

1. Possess “just-sufficient” funding. This requires a suitable balance within the Wealth side of the equation. If resources are perpetually too scarce being in “survival mode” will impede the creative energies of the team and limit their ability to experiment and learn. If resources are too abundant than the “risk-incentive” is lost and there is a greater possibility for inefficiency and waste. A respected colleague of mine from a neighboring start-up ecosystem where public funding is readily available made a profound statement at an event he organized in our start-up community when he noted that our start-ups have an advantage because we do not face the issue regarding the disincentive caused amongst many start-ups in his home country due to ready access to public funding.

2. Effectively Manage ROI Expectations. Another risk I cited in my previous book associated with securing more funding than is immediately needed in the current fund-raising stage is the unnecessary increase in the investors’ ROI expectations. If investors expect the typical ROI of 8-10x their investment. A $500,000 investment would create an exit expectation of at least $4 million, whereas a $1 million investment would result in an exit expectation of $8 million.

3. Founder Control=Founder Incentive. The founder control I am referring to is their percentage equity interest in the start-up and favorable funding terms that assure an attractive upside if the venture is successful. Receiving “Good Money” is an important source of incentive, thus the potential for future success. The importance of receiving “Good Money” and maintaining sufficient incentive amongst the founders cannot be understated. Indeed JFDI.Asia, a very successful accelerator program in Singapore with a very competitive selection process, cited one major reason why applicants were not selected in their second program batch was their acceptance of a bad deal with a previous investor that left little incentive for the founders. (5)

4. Founder Control=Innovation. The founder control I am referring to is their control of decision-making. As I argued in my preceding book start-ups that lose effective control of their decision-making before commercial launch are invariably doomed. The founders of the start-up from whom the original vision was conceived are far more likely to be equipped and incentivized (“their baby”) to working towards the fulfillment of the founders’ vision which is invariably related to the satisfaction of the prospective customers, not on the purely financial focus of equity or debt investors, the strategic interests of strategic investors which may diverge from the founders’ vision and the KPI’s of a public funding source which may also diverge from the founders’ vision. In regards to funding from public or corporate sources Dave Mcclure, Founder of 500 Start-Ups, provided an excellent example in which he hinted on the danger that South East Asia start-ups may direct their focus away from their customers and towards the agendas of either the public agencies or corporate sponsors they have received support from. (6)

The Wealth/Control Dilemma as commonly described fails to differentiate between extrinsic value and intrinsic value. The standard distinction between intrinsic value and extrinsic value are varied. However the following represent what I believe to be the most clear and concise differentiations between the two.

“The extrinsic value of something is its worth for the sake of something else, in the sense that it is valued because it will obtain, or allow you to achieve, some other thing or goal. The intrinsic value of something is its worth for its own sake.” (7)

“Intrinsic Value is derived from anything or action that was designed to solve a specific human problem.” “Extrinsic Value on the other hand is any value that can be added to any entity or event design for whatever reasons best known to the designer and that can be completely removed from it or done away with without affecting its original underlying intrinsic value.” (8)

“Extrinsic values are centered on external approval or rewards; intrinsic values on more inherently rewarding pursuits.” (9)

For the purposes of our discourse I would define intrinsic value as the value associated with providing a solution to a problem faced by a set of prospective customers. Intrinsic value is accumulated as a founding team learns more about the behaviors, preferences and needs of their prospective customers and develops a solution to pains faced by their target market. Having a solution to an identified problem is in itself not sufficient for any benefit to be derived. Is the innovative product commercially viable? Will the required resources be obtained in a timely manner to execute such a commercial launch? If so, which stakeholders, if any, will reap the derivative expected benefits? Once the delivery of such a solution is executed in a manner in which some other objective, financial or non-financial, is obtained extrinsic value is created.

The purpose of pursuing a bootstrapping strategy is to commit greater focus on obtaining the non-financial resources necessary to accumulate such intrinsic value without the use of financial resources obtained by demonstrating extrinsic value. Intrinsic value can be directly associated with the accumulation of both knowledge-based and relational resources that have been largely excluded from the definition of bootstrapping up to this point. This is a significant omission because intrinsic (pre-commercial) value is best created by the founders of the start-up who possess the unique entrepreneurial skill sets and attributes required to develop a truly innovative product. Consequently the relinquishment of control by the founders, particularly during the early stages, may result in a diminishment of intrinsic value creation. The importance of such differentiation cannot be understated because increases in the intrinsic value of an innovation may have exponential consequences for its eventual extrinsic value. In the case of building intrinsic value there is no clear trade-off between value creation and control.

The implication for innovative start-ups is that intrinsic value needs to be attained before extrinsic value can be created.   If maintaining control is positively correlated with building intrinsic value than the distinction between intrinsic and extrinsic value becomes a significant omission from the conventional view of the Wealth vs. Control Dilemma.

The Lean Process, as we will briefly examine next, places an initial premium on intrinsic value over extrinsic value by stressing that it is more important to learn about the desires and motivations of your prospective customers (an intrinsic value) rather than immediately going out there to generate sales (extrinsic value).

The Lean Era

Lean is a production practice and management philosophy that focuses on creating the most value with the minimal amount of work and expenditure. Any expenditure or effort expended on non-value added activities is considered waste. The most recognized and celebrated example of Lean Principles in practice is the highly successful Toyota Production System (TPS) which catapulted Toyota into one of the largest auto makers in the world. Toyota accomplished this by reducing the infamous “seven wastes” they identified in production.

In 2008 Eric Ries conceived an articulated the “Lean Start-up” approach which incorporated the Lean manufacturing principles epitomized by the TPS and the customer development model articulated by Steve Blank . Mr. Blank called for founders of start-ups to leave their work places and directly engage their prospective customers in order to discover their true demands. The central tenants of the “Lean Start-Up” include validated learning through scientific experimentation and reducing product development life cycles via iterative product releases. To acquire the objective valuable customer feedback progress needs to be primarily measured through qualitative analysis. Lean principles appear especially appropriate for tech start-ups developing innovative products and services using cutting-edge technologies within dynamic environments in which new markets are to be identified.

Scientific experimentation calls for the conception and testing of hypotheses to identify the prospective customers and their expected desires and behaviors. To test such hypotheses a progression of testable “Minimum Viable Products” (MVP’s) are developed. MVP’s serve as the vehicle in which a “build-measure-learn” feedback loop is established and validated learning can thus be achieved. (10) The rationale behind developing a Minimum Viable Product perfectly illustrates how Lean precepts runs counter to maximizing the extrinsic value of a product or service in the short-term and elevates the accumulation of intrinsic value to a level of paramount importance.

What differentiates the Lean Start-Up” approach from previous product development approaches pursued by tech start-ups is the question initially posed. Before Lean the predominant question was, “Can we build this product?” Pursuant to the Lean approach the more appropriate question is, “Should this product be built?” (11)

As we will examine in greater detail in Chapter Four following the Lean Process is in itself a highly desirable form of bootstrap because the high costs associated with failed commercial launches, instituting inappropriate operational infrastructures and executing doomed marketing efforts can be avoided. Consequently innovative products and services can be introduced to the correctly identified customers in the minimal amount of time and the subsequent growth of the business can occur with maximum acceleration. Reducing the amount of time required and accelerating growth are at the heart of the bootstrapping efficiencies to be realized via the faithful pursuance of Lean principles.

However, at this point it is important to highlight the profound implications the current leading start-up paradigm has had in the planning, structure and decision-making of Lean start-up ventures and how such implications will affect decisions related to identifying, selecting and securing the resources at the appropriate time, at the appropriate amounts and from the appropriate sources.

Business Planning- In the initial stages short-term objectives will be non-financial and more qualitative. Learning is measured. Deciding to bootstrap by focusing on generating revenues at the expense of following Lean Processes (i.e. focusing more on the acquisition of knowledge-based and relational resources) may prove counter-productive. Consequently, those that adhere to Lean principles are more likely to appreciate the value of non-financial resources to be acquired and will plan accordingly.

Financial Planning- In the initial time frame required to truly understand your customer funding will need to be secured from primarily non-institutional sources due to the delay in revenue-generating activities. Consequently, the financial plan in the earlier stages will need to consist of non-quantitative measurements and convincing demonstration of such measurements in prospectus documents. Greater emphasis will need to be placed on the building of intrinsic value as opposed to extrinsic value and presenting the gaining of intrinsic value as worthy traction.

Incentive Structure- A more qualitative incentive system for both founders and employees will need to be established to account for the new qualitative measures of value creation advocated by Lean proponents and used by bootstrappers. Maintaining proper incentives is a valuable type of relational bootstrapping that cannot be underestimated. In this area a combination of employing a “Dynamic Incentive System” as advocated by Noah Wasserman in The Founder’s Dilemmas and implementation of an “Innovation Accounting” system as presented in Eric Ries’ book, The Lean Start-Up, may prove very useful. According to Noah’s Dynamic Incentive System co-founders are urged to consider the financial and non-financial long term contributions of the other founders to the value of the venture when deciding the equity share of the founders. Such equity allocations can be revised based on any relative change of values delivered by individual founders using this very dynamic approach. (12) It was devised to acknowledge that the contributions of the different founders come in varying degrees and at varying times in a start-up's life cycle. It is a way to prevent disputes amongst founders, ensure that the start-up does not totally disband with the departure of one or more founders and provide sufficient incentive for individual founders to remain with the start-up and apply their best efforts. Indeed a strong founding team will consist of members with complimentary skills, thus, individual contributions are likely to be made unevenly throughout the venture's life cycle. For example the visionary and the largest seed capital founding investor may make their biggest relative contributions early. The founding Hackers and Hustlers may be providing the greatest value during the R&D stages. The founding Hustler will make his biggest contribution upon commercial launch and thereafter. The founding Haggler will add their considerable value during funding rounds with institutional investors and once the venture is post-revenue and scaling for high growth.   Now that fair equity splits ensure proper incentive amongst the founders there needs to be an effective system by which progress can be measured. The Innovative accounting system postulated by Eric Ries is an effective way to measure progress, particularly for lean start-ups who need to measure the efficiency at which their hypotheses are being tested as opposed to only following more traditional quantitative metrics. (13) Mr. Ries refers to these later metrics as "vanity metrics." (14) In effect he is proposing measuring the accumulation of intrinsic value as opposed to extrinsic value by examining learning curves as opposed to growth curves.

Decision-Making- To effectively execute in a Lean environment decision-making must be simultaneously very inclusive and quickly deliberated. This increases the importance of maintaining founders' control and, subsequently the selection of funding alternatives to traditional equity sales. The relational value of strong alignment amongst the founders is critical in decision-making.

In sum, the Lean Process epitomizes the bootstrapping mentality of efficiency and acquiring all the necessary types of resources vital to innovative start-ups in the accumulation of intrinsic value.

Factors in Bootstrap Decisions

Not only are there the four broad contexts in which bootstrapping decisions are to be made but there are also specific relevant conditions faced by each start-up in their particular circumstances. Consequently, there are both internal and external factors to be considered in bootstrap- related decisions.

Internal Factors

Financial status

A venture facing an impending cash flow crisis or insolvency may have to re-consider the full pursuit of their bootstrapping strategy or components thereof. The necessity of securing a relatively large amount of funds in a crisis situation may provide no other alternative than to accept an interested equity investor. The creditors of a venture facing default will not accept the accumulated non-financial resources of your venture as collateral. A venture's financial position may be a determining factor in which bootstrapping opportunities may be appropriate. For example a venture possessing sufficient cash on-hand or generating a nominal amount of revenues in the near future may be in a position to consider accepting a public funding scheme in which specified expenses can be reimbursed. A company needing a relatively large amount of funding to execute a commercial launch, make a small acquisition or take advantage of a short-lived market opportunity may have little choice but to seek an equity investor as the available bootstrapping opportunities will not provide a sufficient amount of funds in a timely manner. To the other extreme a venture that previously accepted funding on draconian terms may have no choice but to forget about trying to attract equity investors and be compelled to aggregate funding from several different available bootstrapping opportunities.

Development Stage

A venture's current stage of development will be a determinant for the types of bootstrapping opportunities that may be available, the possible bootstrapping decisions that can be made and appropriateness of such bootstrapping decisions and opportunities. Eligibility for many types of public funding programs may only be available to early pre-revenue seed stage ventures. During the early stages it may be difficult to find equity investors who are willing to invest in your R&D efforts in the absence of any traction. This would compel a venture to seek funding from bootstrapping opportunities or make bootstrapping decisions to reduce or defer costs. As we have already examined the earlier the stage of development the higher the priority needs to be given to those bootstrapping decisions and opportunities that will allow the founding team to maintain a high level of control of decision-making. Accepting a convertible debt note from an institutional investor also wanting a board seat during your seed stage is probably not a wise decision. However accepting the same funding deal as a bridge financing during a later stage may be a good idea.

Wealth vs. Control Preference

If both objectives cannot be simultaneously pursued, as is often the case, which objective is to receive higher priority by the shareholders? As mentioned earlier it is advisable that a choice is made and that decisions are consistent with the priority chosen. If control is chosen as the highest priority it is best to follow a bootstrapping strategy whereas each decision reflects such preference. For example if you have been admitted into a six month incubator program but anticipate not being ready for a commercial launch upon graduation you should be more inclined in applying for an accelerator program are moving to a co-working space after graduation as opposed to accepting an equity investment to cover your monthly burn expenses, particularly office rent. However, bootstrapping decisions and opportunities do afford the potential to gain some wealth while maintaining a relatively high level of control.

Founders' Risk Tolerance & Incentive

Bootstrapping allows founders to maintain a greater equity interest in their venture but also the concurrent assumption of greater financial risk. Particularly in the later stages founders may be more willing to lessen their personal risk and/or lock in gains by selling some of their shares. However there is a balance to be maintained between risk assumed and proper incentive. Without sufficient incentive a vital relational resource such as incentive and/or morale may be lost.

These internal considerations will need to be evaluated in concurrence with the following external factors.

External Factors

Time represents perhaps the most important external factor in assessing the appropriateness of a bootstrapping decision or opportunity.

The less the amount of time a venture has to build intrinsic value as opposed to extrinsic value the more critical it is for a venture to pursue an effective bootstrapping strategy or opt to not pursue a bootstrapping strategy at all. There are several factors that may shorten the time period during which a start-up can bootstrap. The following represent just some of these factors:

Obsolescence. High-tech start-ups operate in an inherent environment of rapid technological advances. Innovative products and services may only have a limited commercial life during which to generate substantial revenues before new technologies appear that make those products or services less innovative. Abandoning a bootstrapping strategy earlier to secure the large amount of funds required to maximize revenue generation in terms of both duration and market share during such a short commercial opportunity may be advisable.

First-to-market advantages. Accelerating a commercial launch may be advisable due to first-to-market advantages to be attained as well. This is particularly true for start-ups who have identified a hot market along with many other competitors. There is a race to be the first one to market because the first one will enjoy a decided advantage in terms of sustainable competitiveness. In this case bootstrapping may be a losing strategy.

Short-lived Windows of Opportunity. I have often witnessed many times the prospects of a venture's innovation suddenly sky rocket due to a regulatory change, a newly available highly-favorable distribution channel or the misfortune of a leading market player. The ability to seize such a golden opportunity is short-lived and a substantial amount of resources needs to be utilized quickly. In these situations a rapid reassessment of a bootstrapping strategy needs to occur.

On the flip side for those ventures with products not so technology-dependent, protected by a strong barrier to entry, have a captive market through an exclusivity arrangement, strong IP protection, are "ahead of their time" and/or are going to be introduced into a marketplace requiring more education on the prospective innovation may afford greater time to develop more advantageous positioning (intrinsic value) once the market is ready. Under these circumstances a bootstrapping strategy is most appropriate.

The vibrancy of the local IT start-up community

There will simply be more bootstrapping opportunities available in a vibrant start-up eco system and greater choice amongst bootstrapping options that provides leverage. As we will cover in greater detail in the last chapter of this book the vibrancy of a start-up ecosystem can be measured by the variety and scope of bootstrapping opportunities available. Without the existence of co-working spaces, incubators, accelerators, supportive public agencies, cooperative educational institutions and strategic partners willing to engage start-ups it is difficult to conceive how a start-up can bootstrap to effectively secure all three types of precious resources that are in such high demand. Having competition amongst and between the various bootstrapping opportunities will exponentially increase the potential to devise and pursue a bootstrapping strategy. It is advantageous to have the luxury of choosing between different co-working spaces who may offer different degrees of the three types of resources critically needed by start-ups. Indeed, variety is the spice of life for a start-up in relation to bootstrapping opportunities as it offers potentially more precise matches to the immediate objectives of a bootstrapping strategy. For example in a hypothetical local start-up ecosystem there exist two important but very different co-working spaces. One is a larger space and may be perceived as providing better facilities for a larger start-up team who is primarily interested in minimizing their financial monthly burn. The smaller more intimate space active with start-up events might appear more ideal for individual or smaller teams who are more interested in collaboration and networking, representing knowledge-based and relational resources respectively. Another example of how competition is advantageous is it compels competitors to offer more attractive terms to start-ups. Additionally the existence of super angel funds may force venture capital institutions to demand less control terms. The existence of a crowd funding platform may put added pressure on local angels or an accelerator to offer more non-financial assistance to start-ups.

In considering all the internal and external factors presented founders will be better able to answer the primary question:

Are the resources to be acquired from a Bootstrapping opportunity worth the costs, risks and obligations assumed?

Summary

In this chapter we covered the different aspects of bootstrap decision-making. The chapter progressed from a presentation of the four prevailing decision-making contexts to the various bootstrapping internal and external considerations.

The chapter commenced with an examination of the four prevailing contexts in which bootstrap decision-making needs to be made. They included shorter start-up life cycles, Good Money vs. Bad Money, the Wealth vs. Control Dilemma and the Lean methodology.

Shorter start-up life cycles due to advances in media and technologies, the introduction of efficient product and customer development processes and notable changes in the venture capital industry both the amount of funding needed by start-ups and the time to exit has decreased. This has created new bootstrapping opportunities for start-ups and increased the importance of bootstrapping by elevating the need to identify and engage alternative funding sources and increasing the relative importance of acquiring non-financial resources.

Ensuring that the value of any resources was worth any associated costs, risks or obligations incurred is at the heart of the Good Money vs. Bad Money assessment. The definition of "Money" in regards to bootstrapping needs to be expanded to include non-financial resources that can offer either knowledge or relational value. Good Money is received from a source that offers an opportunity to create a relatively substantial amount of wealth creation and/or maintenance of decision-making control for the Founders without a correspondingly large cost of resources.

Founders need to understand the tradeoff between wealth vs. control commonly faced by high-tech start-ups. Start-ups inherently commence with a limited amount of critical resources. Acquiring such resources comes at a cost. The cost typically takes the form of a diminishment of founders' decision-making control vis-à-vis investors. This not only accentuates the value of bootstrapping as an alternative to traditional equity investment but often forces founders to decide whether creating wealth or maintaining decision-making control is the highest priority.

Priorities can and must change. During the early stages of a venture control-orientated decisions may be preferable. In later stages, particularly post-revenue, wealth-orientated decisions may become more favorable. However, at some point in the life of a successful start-up the decision to abandon a successful bootstrapping strategy in favor of wealth creation maximization invariably is presented. This decision reflects an omission from the standard description of the wealth vs. control dilemma- the difference between intrinsic and extrinsic value. Intrinsic value does represent creation of wealth, however, not tangibly. Accumulation of intrinsic value demands a sufficient level of founders' decision-making control during the early stages. Once sufficient intrinsic value has been accumulated to serve as a basis for rapid creation of extrinsic value than the critical decision to abandon the bootstrapping strategy can be made.

The Lean Process, the prevailing product and customer development methodology, places a premium on creating intrinsic value before the pursuit of amassing extrinsic value on the form of revenue and profits. The objective of the Lean Process is to create the most value while minimizing effort and expenditures. The Lean Process is a scientific approach that calls for direct interaction with potential customers to conduct experimentation to achieve validated learning. Validated learning represents an acceleration of the customer development process to shorten product development cycles. The Lean Process involves conceiving and testing hypotheses about the customer and product. Developing testable Minimum Viable Products to subject to a "build-measure-learn" feedback loop is the primary method to answer the ultimate question- Should this product be built? Any efficiency achieved or objective successfully reached is nothing but waste if the product should never have been built in the first place. Lean principles are premised on eliminating waste and efficiently utilizing the scarce resources possessed by start-ups. This is totally consistent with the objectives of bootstrapping.

Current internal and external factors will need to be considered in addition to the prevailing contexts when making bootstrap decisions. The internal factors of a start-up to be considered include the financial status of the venture, the current stage of development and the founders' risk tolerance and preference regarding wealth vs. control. The vibrancy of the local start-up community and time factors represent the primary external factors. All of these factors effect bootstrap decision-making by either shortening the time period during which bootstrapping can be deemed preferable or be a determinant of the number and variety of bootstrapping opportunities available.

The next chapter will commence Part II focusing on the various resource-specific bootstrapping decisions and minor bootstrapping opportunities that can be enacted and pursued.

Part II Introduction – Bootstrapping for the Three Resources

Before any value is to be created start-ups will need to acquire the three types of resources vital to every start-up's success. They are financial, knowledge and relational resources. A deficiency in any of these three types of resources at any particular time can prove disastrous for any start-up.

The next three chapters will examine how each of these resources can be acquired in a cost-effective manner as part of a well-crafted and properly executed bootstrapping strategy. Each chapter will be organized into two sections- bootstrapping decisions and bootstrapping opportunities. Bootstrapping decisions are actions, policies and structuring that can be taken internally or decisions that are undertaken to reduce both actual financial and opportunity costs, increase efficiencies and reduce the time necessary to attain objectives or successfully complete development efforts. Any decision to better position a venture to take advantage of any bootstrapping opportunity either planned or may arise may be deemed a bootstrap decision as well. A bootstrapping opportunity is any external activity or program that can be leveraged to effectively bootstrap. In the respective chapter sections in Part II we will be examining "minor" bootstrapping opportunities. "Minor" bootstraps are minor in that these opportunities primarily or exclusively offer only one of the three resource types to be acquired. There are several bootstrapping opportunities that simultaneously offer all three resource. They are referred to as bootstrapping "majors," which will be the topic of Part III.

Chapter 3 Financial Bootstrapping

Financial Bootstrapping encompasses all the decisions and opportunities through which the founders of a start-up can acquire resources, reduce costs or avoid expenses at a cost significantly less than the cost in terms of financial cost, equity dilution and decision-making control incurred by acquiring funds through an equity sale. The importance of executing financial bootstrapping decisions and taking advantage of financial bootstrapping opportunities is the direct beneficial effect it has on reducing the aggregate amount of investment funds that would eventually need to be secured. We have already discussed in Chapter One how this improves the probability of a successful exit and increases the expected Return on Investment for all shareholders, particularly the founders.

This chapter will proceed with an exploration of the various financial bootstrapping decisions that can be made. They include the founders' contributions and decision-making on both strategic and tactical levels. Decisions covered include "Just-in-time-financing," planning on a time stream, budgeting, cash management, monetization & pricing, employee compensation, internally develop vs. outsourcing and possible re-location to a lower cost community and/or greater access to venture capital and exit opportunities. Financial bootstrapping opportunities will next be identified and discussed. They include immediate sources of internal cash flow such as project-based and non-project based revenue, alternative financing, public funding, prize money, cloud computing and sharing or receiving services for free.

Financial Bootstrap Decisions

Financial bootstrap decisions are those decisions a founding team can make that would allow them to acquire financial capital or avoid/reduce the financial expenditures necessary to purchase critical resources on terms significantly more favorable than otherwise they would enjoy given their current cost of capital or the degree of equity dilution as a result of an equity sale. The financial bootstrap decisions we will now examine include both the financial and non-financial contributions to be made by the founders and a variety of decisions that can be made on both a strategic and operational level.

Founders' Contributions

A set of important financial bootstrap decisions need to be made at the commencement of any innovative venture. The first major financial bootstrap decision involves the composition of the founding team. As we discussed earlier in Chapter One a complete founding team consists of a Hacker, Hipster, Hustler and Haggler. Building a founding team with the experience and expertise to initially fulfill and eventually oversee all the vital roles for an innovative start-up avoids the cost of hiring salaried staff to fill these roles. Delaying the time when the first hire(s) needs to be made maintains a low burn rate for the venture especially important in the most cash-starved early stages.

The second major bootstrap decision is where to work. From a financial perspective the best place to work is a rent-free space. The proverbial “working out of the garage” concept remains a viable option for start-ups today looking to bootstrap. The primary drawbacks associated with “working out of the garage” of a founder is the availability of sufficient IT infrastructure and not enjoying the non-financial benefits derived from working alongside fellow start-up ventures at co-working spaces and incubators.

At inception and throughout the life of the start-up founders can bootstrap by personally offering both financial and in-kind contributions. This can be in the form of Founders’ Capital, which is the amount of funds each founder is willing and able to invest, and/or other tangible and intangible assets that can be made that avoids the expense of purchasing. Besides receiving seed funds from friends and family another major source of seed funding is the use of personal credit cards. Although this represents relatively high-interest unsecured personal debt it is often more preferable than the alternative of a highly dilutive early-stage equity sale or comparable high-interest senior debt note that is secured with your company’s core assets (i.e. your IP) and the accompanying control terms. Use of a computer personally owned by a founder is an example of a tangible asset that can be contributed. Contributing any protected intellectual property or proprietary process are examples of intangible assets that a founder(s) can contribute to a start-up.

Strategic Level Planning/Decision-Making

A business plan composed in accordance with Lean Principles and a financial plan based on the bootstrapping attributes listed in Chapter 1 and a bootstrapping strategy discussed in Chapter 2 will provide a working blueprint for founders to refer to through the countless pivots and the ever changing internal and external conditions of the venture.

Is it necessary to plan given the shorter start-up life cycles and utilization of the Lean Process for product development?

Answer: Yes. Indeed planning is more important now than before.

In the mid-nineteenth century Helmuth Von Moltke, the infamous Prussian Chief of Staff and eventual German Field Marshall made the following observation later condensed to state,

“No plan survives contact with the enemy” (1)

Later Dwight D. Eisenhower, Allied Commander during World War Two and future U.S. President would similarly state, "In preparing for battle I have always found that plans are useless, but planning is indispensable" (2) Dwight D. Eisenhower

Similar to war the life of a start-up will seldom proceed according to plan. Similar to a general staff during war the founders of a start-up are in a constant state of crisis decision-making. However, those that have a well-conceived plan often are in better position to make more decisive and better-informed decisions in reaction to the frequent unforeseen occurrences inherent in such fast-moving environments. Armed with a plan the implications of any notable change or event affecting decision-making factors and any response to such changes or events are more readily apparent to the founders. Being able to make a rapid assessment of any situation in a holistic manner is the key to making decisive and well-formed decisions. Furthermore, to meet the efficiency demands of bootstrapping, possess the ability to successfully revise tactics and strategies in reaction to the inherently constant changes and advances occurring within dynamic start-up environments and execute well-informed pivots as a Lean start-up the importance of effective planning is only magnified.

Financial Planning for efficient just-in-time financing

A financial plan progressing through the various fund raising stages will permit founders to determine their funding needs on a timeline and only solicit just enough funds to reach the next fund-raising stage thereby minimizing the amount of equity dilution and/or control forfeited by the founders and maintaining an effective balance between sufficient incentive and sufficient necessity. For example at the seed stage only the funds necessary to complete your initial customer and product development efforts consistent with the Lean Process should be sought. Costs associated with a commercial launch, marketing and execution are only required in Series A and later stages. A financial plan will serve as a valuable guide in selecting the appropriate bootstrapping opportunities at the appropriate time. Indeed a primary use of a financial plan is determining how most, if not all, the funding needs of the venture in each stage can be secured or reduced by pursuing the bootstrapping opportunities currently available in that given stage. The bootstrapping opportunities available within each fund-raising stage will be a key component of any financial plan.

Planning on a Time Stream

A major advantage of planning is that it is articulated on a time stream permitting not only the best decisions to be made but also the optimal timing of such decisions as well. The best example of this is the decision to abandon a successful bootstrapping strategy in pursuit of more rapid growth. When is the optimal time to make such a decision? Usually the answer to this question is contingent on the achievement of some operational or financial objective elaborated in either the business or financial plan. For example a commercial launch may be contingent on concluding testing the final product hypotheses specified in a Lean business plan. Maybe the decision to abandon the bootstrapping strategy is based on the actions of a competitor, a regulatory approval, when a new shareholder compels decisions to be wealth-oriented henceforth or the venture has simply commenced to generate sufficient and stable revenues to cover the burn rate.

In the next chapter we will examine how reference to a financial plan also provides an opportunity to execute better informed pivots as a Lean startup.

Operational (Tactical) Level Decision-Making

There are many decisions that can be made at the tactical level that can effect a reduction, deferment or avoidance in cash expenditures during the earlier stages when the costs of acquiring the financial capital is high in terms of equity dilution, cost of capital or decision-making control. The decisional areas include budgeting, cash management, monetization & pricing, employee compensation, internally develop vs. outsourcing and location of start-up.

Budgeting

The most obvious decisional-making area at the operational level is budgeting. Budgeting is all about setting priorities and minimizing the burn rate of the venture. For a start-up in its early stages the most essential expenses, which include those expenses required to continue the existence of the venture, receives first priority. These expenses include governmental registration and filings, minimum allowances to team members sufficient to sustain a "ramen noodle" lifestyle, rent/utilities and bandwidth. The second order of priority is those expenses required to push forward the customer and product development of the innovation. For an early stage start-up learning and building intrinsic value takes precedence over marketing and building extrinsic value. The third order of priority is funding the pursuance of bootstrapping opportunities that offer the possible generation of revenues in an amount exceeding the expense outlay to pursue such an opportunity. We will discuss such opportunities later in this chapter. The fourth order of priority is funding for capital expenditures and the build-up of extrinsic value. The accumulation of extrinsic value will climb up the priority spending list once the point of abandoning the bootstrapping strategy has been attained. Solid budgeting is important in terms of both formulating a bootstrapping strategy and fund-raising. The founders will want to know the burn rate to determine to what extent they need to bootstrap. The selection of bootstrapping opportunities can be determined by matching available bootstrapping opportunities which reduce or eliminate expenses at the higher levels of priority. Prospective early-stage investors want to know your burn rate as well. From their perspective the burn rate will only include those expenses falling under either the first order of spending or the first and second orders of priority. A lower burn rate reduces the perception of risk.

Now that you have listed all of these expenses in a prioritized order it is time to search for ways to mitigate the cost of each expense type, beginning with the highest priority items. Much of the remainder of the book will explore the various types of bootstrapping opportunities that can help start-ups reduce or eliminate specific types of expenses found at all four levels of priority.

Effective Cash Management

The prioritization spending list just mentioned will prove useful in the second decisional-making area- cash management. Effective cash management is concerned with regulating a venture's cash inflows and outflows to avoid any cash crisis (loss of decision-making flexibility) and reduce the cost of any financial obligations by receiving or paying cash at the most advantage time possible.

It would perhaps be a gross understatement to say the cash flows of an early-stage start-up can be very volatile and unpredictable and it would be equally difficult to understate the importance of cash management for a cash-starved start-up. The following are just some decisional areas in which effective cash management can be applied.

Prioritize Spending. Possessing a list of spending priorities allows you to reduce or eliminate the amount of funding allocated to a lower priority item when faced with a pending cash flow crisis. The electricity or internet bill needs to be paid. Upgrading non-critical software, purchasing a new desk or buying a new computer may be postponed.

Offering Credit. Any upfront expenses incurred by your start-up to service customers should be timely compensated with an associated charge to customers to cover the immediate expense incurred. Many start-ups make the mistake of offering products, services and related support now to customers and not expecting payment for the products or services rendered until some date in the not so immediate future. It seems logical advice to adhere to, however, this is a very common oversight missed by many start-ups and perhaps the primary reason a cash flow crisis occurs. You likely do not have the luxury to serve as a bank for your customers.

Accounts Payable. Efficiently timing payment of accounts payable is another way to manage cash flows. If you are able to secure favorable credit terms from a vendor by all means fully take advantage of it. If you are currently cash-starved and have a commercial launch scheduled in six weeks or expect reception of investment funds within the next month it is probably advisable to take advantage of the 120 day terms offered by a creditor.

Accounts Receivable. Use of a third-party collector and customer pre-payments can help receiving cash early and in a more stable and predictable manner. For example if you can execute a deal with an online retailer who assumes responsibility for billing and collections and you are able to periodically invoice the third-party for all the revenue-generating activities regardless of whether they have collected from your clients than you are leveraging their "banking" services. An example of customer pre-payments is the purchase of credits or virtual currency to purchase your product or service. As advances in online payment systems continue there will be more opportunities to leverage third parties and collect timely payments from customers.

Monetization & Pricing

Monetization and Pricing Strategy is another area in which a start-up can either receive payments before the associated expenses are incurred and/or establish a more stable revenue stream. Recurring revenues such as subscriptions are highly favorable because they provide an opportunity to enjoy a stable revenue flow regardless of short-term market disturbances. The ability to collect longer-term subscriptions (i.e. annual subscriptions) also allows start-ups to collect a greater percentage of their revenues upfront that can be used to finance the exponential growth sought. The basis of a strong monetization policy is to first identify every point at which you deliver value to your customer. These points represent opportunities to monetize. However, it is not that simple. Such monetization and pricing strategies are dependent on what monetization channels are available and the willingness of customers to pay in accordance to such pricing. Again, advances in online payment systems will create a greater variety of monetization options to choose and facilitate the customer's ability to pay. However, this does not address the challenge of determining the willingness of prospective customers to pay. Just because a customer receives a value from your product or service does not mean they readily recognize the value delivered or are willing to pay for any value they do recognize. If there are multiple points to monetize a customer may not want to be "nickled-and-dimed." Only certain combinations of charges may be deemed acceptable as well. A big reason why your customer development efforts in accordance with Lean dictates needs to be direct is because discovering how your offering can be monetized is just a s important in receiving feedback on the quality and demand of the product itself.

Employee Compensation

Founders should seriously consider offering commission-based compensation to their employees whenever such an opportunity exists. This holds particularly true for sales and marketing staff. Salaries are a fixed expense and typically the largest component of a start-up's burn rate whereas commissions are a variable expense and an appropriate incentive. In lieu of paying higher salaries offering equity-based incentives may be advisable. This will have the same effect of minimizing the burn rate and providing sufficient incentive and risk sharing.

The use of volunteers and interns is another way to lower the financial burn. A former client of mine used early adopters addicted to their service to serve as volunteer online assistants who helped new subscribers set up their presence in the new online community they were joining and advised them on what other related physical equipment or accessories could be purchased from third-parties that would enhance their experience with my client's innovative service. The volunteer facilitators were more than happy to serve without pay as they had a vested interest in expanding this new exciting online community they were already members of. This not only saved a lot of money for my client but also generated a lot of knowledge-based value (volunteers attaining expertise and providing valuable feedback on the new member experience) and relational value (goodwill) between new subscribers and the facilitators (the face of my client) who offered a pleasant, genuine and helpful sign-up experience.

Internally Develop or Outsource?

Should we internally develop or pay a third-party for a particular service or project that needs to be completed? This is a question often presented to a founding team. There are many factors to consider when faced with this question. Determining factors include the team's capabilities, comparative costs, time to implement, ability to customize/support, control issues and whether the task or service at-hand is core or non-core to your innovation.

Team Capabilities. The primary reason I have witnessed why a start-up outsources work is because they simply do not have the in-house capability to complete the pending work. Maybe a particular development project requires Java coding. It is a minor and temporary project not justifying hiring a Java developer, however, Java coding is certainly advantageous in this specific task at-hand.

Comparative Costs. Outsourcing a particular assignment may be cost effective in terms of actual monetary cost and/or opportunity cost. Maybe some relatively simple php work needs to be done. In your local there are plenty of development houses or freelance developers who can do the work for a much lower cost than what it would cost you to divert your higher paid expert developers from focusing on the more challenging and innovative aspects of the development effort.

Time to Implement. Maybe your team does have the capability of doing a particular job and the comparative costs would be similar, however, such job has a pressing deadline and without additional help the deadline or a window of opportunity would be missed.

Ability to Customize/Support. A strong reason not to outsource is the future inability to customize or support if using code written by a third-party or having to rely on the support capabilities of a third party. Maybe third parties will be using a standardized format, template or theme that limits a certain level of customization required of your innovation. What if the work to be completed requires future specialized maintenance or support that your team does not have the capabilities or inclination to do?

Issue of Control. There may be an issue of control in outsourcing work to a third party which may unintentionally be given the ability to affect your future decision-making. For example outsourcing marketing work critical to your commercial launch to a third party could have a delaying effect on your launch date if the third party fails to make sufficient preparations in a timely manner. Outsourcing back-end work critical to your scaling efforts when you are on the precipice of exponential growth may prove costly if your contractor can not deliver with urgency.

Core or Non-Core. The last consideration to pose is whether the work to be done is core or non-core to your innovation. You certainly do not want to outsource work deemed to be proprietary or giving you a competitive edge. This not only includes the development of valuable intellectual property but also any work that may serve to accelerate your teams' learning or have a direct effect on your brand. On the flip side there may be a comparative advantage for a third party to complete work not core to your development and future business.

Re-location to a Lower Cost Start-Up Community

Another decision that may prove core to the success of your venture is location offering greater access to venture capital and exit opportunities. If you are a founder of a start-up you probably had to make the difficult decision, along with your co-founders if any, to quit your day job and subside on your meager personal savings or the meager pooled founders' capital during the pre-revenue stages of your start-up. After making such a leap of faith would it be a stretch to consider re-locating to a location where your meager funds can sustain you and your team longer and the costs of acquiring the knowledge-based and relational resources is comparatively lower? What do you really need as an early-stage start-up anyway? The answer is a low burn rate, comparatively affordable pool of tech talent, cheap/fast/reliable internet and a cheap/fast/reliable source of caffeine. If you combine this with an early adopter population for your innovation willing to serve as alpha/beta testers and a functional start-up community offering the variety of bootstrapping opportunities we will be discussing throughout this book than you have all you need to complete the Lean early-stages of your start-up.

Anna Vital, a startup evangelist and infographic author, wrote an excellent article in which she did an impressive comparative study of notable and not so notable start-up communities around the globe and identified the best start-up communities to bootstrap by region. I am pleased to say that Thailand, my current home, received high marks from her. In her article she also made a very important distinction between business-friendly countries and bootstrap-friendly countries. She found that business friendly countries in terms of access to capital, low taxes, ease of incorporation and other like pro-business attributes may not be the most ideal bootstrapping countries because the more business friendly countries tend to have higher costs of doing business. (3) This distinction is important to note because I will submit bootstrap-friendly countries offer the best locales to build intrinsic value whereas the business friendly countries offer the best environment to rapidly build extrinsic value via exponential growth. There is a strong possibility that the point at which your team decides to abandon their bootstrapping strategy may be the point at which to consider registering an entity or re-locating to a more business-friendly location. This is actually a common scenario in the region of the world I currently reside. Thailand is an excellent country to bootstrap a start-up as evident by the large numbers of tech expats that have re-located here. Singapore, our more expensive and pro-business neighbor to our south has rightfully earned its distinction as one of the best places in the world to operate a business. Singapore also offers a more mature venture capital environment and a capital market offering attractive exit opportunities, whether one contemplates an IPO or being acquired. Fortunately the start-up communities in both countries have worked closely together to leverage the strengths of each other. It may prove equally rewarding for founders of individual tech start-ups to identify and take advantage of such differences in start-up communities.

Financial Bootstrap Opportunities

Financial bootstrap opportunities are opportunities external to the start-up that would permit a start-up to either acquire financial capital or avoid having to incur financial expenditures to purchase critical resources on terms far more attractive to the start-up than securing funds based on their current cost of capital or the degree of equity dilution to be suffered from an equity sale. Financial bootstrap opportunities include project-based and non-project based revenue, alternative financing options, cloud computing, public funding, prize money and sharing or receiving services for free.

Internal Cash Flow (Revenues)

It is strongly advisable that start-ups should identify sources of revenue as early as possible that will not disrupt or delay the development efforts directed towards the scalable and sustainable innovative product or service that promises high-growth and high returns. Potential sources of internal cash flow include project-based revenue, revenue from mobile applications, ad revenue, consultant fees, affiliate programs/e-commerce revenue and re-seller commissions.

Project-Based Revenue

For project-based revenue to be considered a financial bootstrap the following three characteristics must exist:

1. The revenues generated is sufficient to not only pay for the project development effort but additional revenue is generated to allocate to funding the development efforts for the high-potential innovative product or service.

2. It is advisable that any project work should help in accelerating the learning curve in developing the innovative product or service and such knowledge-based value can be gained, not lost. In other words it is preferable that the type of projects to be accepted is similar to the innovative project that is being developed or has some other learning value that can be gained by utilizing the same technologies and processes.

3. Key members of the development team for the innovation need to remain dedicated to the development of the potentially high-return innovative product or service. Diversion of such knowledge-based value from the development of the innovation can easily nullify any nominal extra project-based revenue that can be generated. This will most likely require that two teams be established. One team dedicated to revenue-generating project work and the other dedicated to the development of the innovative product or service. Periodic meetings between the two teams should be scheduled whereby those working on the revenue-generating project work can share what they have learned with the innovative development team. The staff working on the project work should be granted a vested interest as well in the upside potential of the innovative product or service to be fair, maintain proper incentive, good working relations and moral of the entire team.

The latter two points are examples of how knowledge-based and relational value respectively should not be diminished at the expense of generating revenues. A relational value often gained with project-based revenue is increased confidence in oneself and amongst the team. A knowledge-based value derived is the increased institutional knowledge gained by working and learning together as a team and any insights or skills acquired while working on a project that will accelerate your team on the learning curve once development on the innovation proceeds.

Non-Project Revenue

There are many varieties of non-project based revenue that can be tapped with minimal effort and diversion.

Revenue from Mobile Applications. With the proliferation of mobile application ("App stores") established typically by large media and telecom companies start-ups have been provided with a new opportunity to generate revenues more immediately in a cost-effective manner. The complimentary development of a high-potential innovative platform or service in tandem with a related mobile application can be done relatively easily. The costly expense of commercially launching the mobile application has been absorbed by the App stores. Indeed very little, if any financial resources or re-allocation of any resource type is necessary. In the next two chapters we will discuss how the development of mobile applications can contribute knowledge-based and relational value as well.

Ad Revenue. Online advertising has significantly increased in importance for advertisers due to the relatively low cost of reaching target audiences and the relatively easy means offered to track and measure online activities enabling better informed decisions related to creating and adjusting marketing pitches and campaigns. This has presented a golden monetization opportunity for most tech start-ups whom have intentions to establish an online presence needing at least a website from which to receive valuable customer and product development feedback, eventually serve as a marketing tool to promote their own innovation and possibly provide a channel for purchase. The more viewers ("eyes') visit their site the greater the learning and marketing opportunity but also the greater the probability they can attract the attention of paid advertisers to advertise on their site and the greater the ability to generate revenue from such pay-per-click, contextual and in-text ad services such as Google Adsense, Clicksor, Chitika and Infolinks. In addition to these online ad services a little direct marketing directed towards those businesses you have identified that offer complimentary products or services to the same target viewers of your site offers a reasonable chance to secure some recurring revenue without affecting your development efforts.

Affiliate Programs. Affiliate programs offer another source of online revenue that requires little effort and expense. Basically an affiliate is only required to permit a merchant to place promotions on their sites for the merchants' products. The merchant handles effectively everything from processing orders, payments and shipping. Once the affiliate program is established the affiliate is not required to do anything else except collect commissions on each commission-earning action of the visitors referred by the affiliate to the merchants' website via an affiliate link. Becoming an affiliate is a relatively easy process usually only requiring a simple online registration process. The most notable affiliate programs include Amazon Associates, LinkShare, ClickBank and Google Affiliate Network.

Consultant Revenue. Consultant fees are a viable revenue source for start-ups, particularly if they use an innovative model, process or use of a technology that can be applied to other businesses. If a local start-up is a strict adherent to Agile methodology in their internal development efforts a potentially good source of side revenue for them is charging for Agile coaching services and workshops. It is common for a start-up to acquire expertise in a particular "space" through their customer development efforts. The knowledge value accumulated by progressively answering hypotheses related to prospective customers is a valuable source of information that can be aggregated or custom packaged and sold to other businesses or organizations who would find value in the data your venture has compiled.

Re-Seller Agreements. Re-Seller commissions can be earned by a start-up to cash-in on any relational value possessed. A Re-Seller Agreement is an arrangement between two parties whereupon one party (“the re-seller”) agrees to sell, market or distribute a product of the other party for a commission. Becoming a re-Seller and executing a re-seller agreement(s) with providers of products or services in support of or complimentary to your innovation is an excellent way to earn revenues prior to and after a commercial launch of your start-ups’ innovation. On the flip side re-seller agreements can be executed with other parties possessing favorable distribution channels through which to re-sell your innovative product or service once your innovation is commercially available. The re-seller commissions paid is considered an expense, however, it may be considered a financial bootstrap if the cost of marketing and/or distributing your product through an alternative channel is more expensive. An important difference between a re-seller agreement and a licensing agreement is that the intellectual property rights of the re-sold product or service is retained by the original creator in the latter case.

Licensing Revenue. Licensing fees is another source of revenue that can be earned before commercial launch of the primary innovation and derived from the knowledge value possessed by a start-up. However, typically a start-up will need some form of intellectual property protection such as a patent before an enforceable licensing agreement can be executed. Before entering a licensing agreement the loss of any competitive advantages will need to be assessed and consequently the terms of use for the licensed technology will need to be prudently crafted.

Alternative Financing

Factor Financing (Factoring)

Another financial bootstrapping opportunity made possible by doing project or consultant work for established and credit-worthy clients is securing a factor financing deal with a bank. Factor financing is a form of financing in which a business (a start-up for our purposes) sells one or several accounts receivable(s) to a third-party, usually a bank. The purchasing party accepts the credit risk and responsibility of collecting the receivable and its willingness to accept this deal is based on the creditworthiness of the entity to which the accounts receivable is owed, not the seller. Long time or recurring customers who have had a clean payment history with the seller will positively influence the closing of the deal. The purchaser will send the seller (the start-up) a high percentage of the amount of the accounts receivable minus a few nominal fees. The percentage amount of the accounts receivable not forwarded by the purchaser (bank) will be held in escrow until purchaser collects the receivable. At this point the purchaser will refund such amount to seller minus some interest. Under the right conditions this is a very attractive form of financing as the terms are much more favorable than a traditional bank loan and the creditworthiness of the client is being leveraged to improve the probability of securing such a financing. The ideal scenario for a start-up to seek factor financing is when an existing or past client would like your venture to do more project work for them. However, there are several upfront cost you will need to incur to conduct the project and they will only be paying you upon completion of the prospective project. Factoring offers an appealing financing solution to this cash flow issue.

Creative Credit Terms

Seeking favorable and creative credit terms with key vendors represents a little appreciated financial bootstrap opportunity that may reduce and/or defer the amount of investment funds to be secured or expended. There are several examples of creative credit terms that can be negotiated with open-minded creditors and vendors. Equity warrants and revenue share arrangements are just two of the possibilities.

Equity Warrants

Offering equity warrants to advisors and other professional service providers with high exercise prices (above current perceived price per share) may be a reasonable financial bootstrapping opportunity that could present itself. Professional service providers who understand they assume some of your downside risk when they provide you with their services may be agreeable to accepting equity warrants in lieu of cash to share in the potential upside of your venture. The attraction of offering equity warrants versus issuance of equity shares is twofold. The warrant holder does not enjoy the rights of a shareholder until the warrant is exercised, thus helping to maintain founders' control. If the exercise price is higher than the current share price than the equity dilution to be suffered by the other shareholders either will not occur (if warrant holders do not exercise) or reduced in the event they are exercised. The following question remains to be answered. Is the potential equity dilution and granting of decision-making control acceptable given the amount of cash payments being avoided?

Revenue Share

A vendor with a strategic interest in your success and a strong belief in your venture may be willing to consider a revenue sharing arrangement in lieu of cash payments. Entering a revenue sharing deal transforms the cost of the service rendered from a fixed to a variable expense reducing the risk of a crippling cash flow crisis. Depending on the terms of the agreement and the amount of future revenues, the revenue sharing agreement may or may not cost more than what otherwise would have been the total cash payments.

Possessing a well-conceived financial plan proves invaluable when identifying and pursuing such alternative financing opportunities.

Public and NGO Funding & Incentives

Funding from public agencies and non-governmental organizations (NGO's) are one of the first bootstrapping opportunities to be searched as they generally offer funding with few strings attached and at the most favorable terms. Many public agencies also offer various incentives such as tax holidays, promotional assistance and regulatory exceptions with little or no requirements. Sponsorship money from NGO's such as entrepreneurial organizations are frequently unconditional (except for maybe some ad banner space on your site) and should be accepted with little reservation. Grants are generally the most appealing form of public funding as no equity dilution or pay-backs are required. Basically they represent "free money" that should be diligently sought. Grants usually stipulate use of funds terms. As long as a start-up does not have to markedly change their product or plans to satisfy these use of funds terms grant money should be accepted. Public funding reimbursement schemes can be an attractive means to secure much needed immediate funding provided that the specified time when a reimbursement payment(s) are to be made occurs well after the expected time when the venture is generating revenues or secures investment funds. Equity matching programs may only be deemed a financial bootstrap if the public agency receiving equity in your venture will be a more passive shareholder not inclined to influence your decision-making and/or the price per share of the equity issued to the private investors was higher due to the issuance of the matching equity to a public entity.

Prize Money

Pitch competitions and hackathons offering prize money can be a rewarding form of financial bootstrapping and winning such events increases traction, thus, the possibility of higher valuations (less dilution of founders' equity) in subsequent funding rounds. Recently a local pitch competition rewarded the winners with $10,000 USD, a sizable amount for a local start-up operating in Southeast Asia. The additional traction attained by winning the competition and receiving favorable press will also serve them well in future funding negotiations. Angel Hack, originating out of Silicon Valley and considered the largest hackathon in the world with 6,000 hackers in 30 cities, offers generous prizes including a mentorship program, an all-expense paid trip to Silicon Valley and the opportunity to compete in Silicon Valley for the grand prize that includes an investment deal. A successful Indian start-up named d.Light Design recommends start-ups to enter start-up competitions to win seed funding to get your innovation off the ground. The founding team of d.Light Design did just that by entering and winning a start-up competition and awarded $250,000 for their efforts. D.Light Design has since secured venture funds in multiple funding rounds and their solar lanterns have enjoyed impressive sales and distribution in more than 40 countries. (4)

Cloud Computing

The rise of Cloud Computing is a contributing factor to the reduction of start-up costs discussed in the previous chapter and a “must” tool for any start-up. Cloud computing is an expression describing the concept of a large number of computers connected through a network such as the internet. For it to work to maximum effect computer resources are shared to achieve economies of scale. This is accomplished in two ways. Through the network multiple users can share the computer resources and the cloud environment permits each user to use these resources as per demand made possible by the location of users in multiple time zones. Cloud computing allows start-ups to save costs on many levels. The initial costs to be saved are upfront infrastructure costs as the necessity to purchase and set-up servers is reduced or eliminated. Time is money and the speed at which a cloud computing environment can be established and utilized is a substantial opportunity cost saver. The effort and costs associated with otherwise maintaining a complex system of dedicated hardware is also avoided and the ability to pay as per-demand results in ongoing savings as well. The improved ability to manage loads, so important for a scalable online business operating in all time zones, is also a crucial risk management tool that can be utilized to avoid costly downtimes. The only drawback has been the relative lack of security with storing proprietary and customer data in the cloud. Now that such concerns have been increasingly alleviated with new advancements in cloud security the use of cloud computing has become more practical and a no-brainer for a vast majority of tech start-ups.

Sharing or Receiving Services for Free

Cloud Computing is not the only example of sharing resources to bootstrap. There are occasions for almost every start-up where they have a temporary project or task that needs to be completed, however cannot justify or afford the cost of either hiring or outsourcing the job to a freelancer or a professional service. Here lies an opportunity for two start-ups with complimentary expertise to agree to perform specific services for each other. A start-up with a strong C++ developer may offer his/her services for help from an expert infrastructure operations engineer working for the other start-up. Another shared service I have seen is between a cash starved start-up and a professional service group. An accountant may be willing to “do your books” for assisting them in maintaining their website or constructing a new CRM for them. In both sharing situations the only cost to be aware of is the opportunity cost associated with the time diverted away from core work on your innovation. However, in the latter case if the professional is a prospective customer and the work you perform for them helps in your customer or product development efforts than such an opportunity cost may be more justified.

Sometimes there is an opportunity to receive services for free by serving as an alpha or beta tester for another start-up. Software-as-a-service or platform-as-a-service type ventures often are more than happy to further their customer and product development efforts by offering free use of their work-in-progress innovation and perhaps offering future discounts to past testers once the product is commercially launched. Having an early look at a potentially ground-breaking innovation can pay long-term dividends as well. Two cautionary notes must be given. One must ensure that the product or service to be tested is actually a good match in terms of your needs and be prepared to deal with the potential problems associated with using an untested product.

Identifying such cost-saving opportunities is the epitome of being a resourceful founder and the savings can add up to be significant.

Summary

In this chapter we examined how a variety of decisions and opportunities can be executed to acquire critical financial resources while minimizing the associated costs, equity dilution to be suffered and potential loss of decision-making control.

Financial bootstrap decisions encompass all decisions a founding team can make to either generate immediate revenues in a cost-effective manner or reduce the amount of financial resources to be needed. The first set of decisions to reduce the amount of financial resources to be acquired is both the financial and non-financial contributions of the founders and the completeness of the founding team. There are many decisions to be made at the strategic level to achieve the same positive effects. Pursuing “just-in-time” financing and planning on a time stream from a financial perspective are strategic level decisions that can help founders better manage their financial resources. At the operational level there are several decisional areas in which there are opportunities to efficiently source and allocate financial resources. These decision-making areas include budgeting, cash management, monetization & pricing, employee compensation, the decision to internally develop or outsource and possible re-location to a lower-cost, higher-value start-up environment and/or have greater access to venture capital and exit opportunities.

After the exploration of the varied financial bootstrapping decisions we turned to an overview of the many financial bootstrapping opportunities widely available in start-up communities throughout the world. There exists many ways a tech start-up can generate revenues in a cost-effective manner and prior to the commercial launch of their primary innovative product or service. In this section we first discussed possible opportunities to earn project-based revenue and what criteria was to be considered before a project could be pursued as a financial bootstrap opportunity. Many types of non-project revenue was then described and assessed. Non-project based revenue included advertisement revenue, affiliate commissions, consultant fees, licensing fees and re-seller commissions. Alternative financing such as factor financing and soliciting creative credit terms including issuance of equity warrants and revenue sharing arrangements represents another category of financial bootstrapping opportunities. Public funding and prize money are other revenue sources that is readily available in functional start-up communities that usually causes either no or comparatively very little equity dilution or loss of decision-making control. To conserve the amount of financial resources possessed or drastically reduce an otherwise costly expense we demonstrated how cloud computing could be favorably leveraged. Sharing or receiving services for free was the final area of financial bootstrapping opportunities that founders should seek and include in their overall bootstrapping strategy.

Now that we concluded our examination of the different bootstrapping decisions and opportunities to acquire critical financial resources or eliminate otherwise expensive outlays we will look into what decisions and opportunities are related to acquiring the equally critical knowledge-based resources needed by tech start-ups to ultimately build a sustainable business around a truly innovative product.

Chapter 4 Knowledge Bootstrapping

Knowledge Bootstrapping encompasses all the decisions and opportunities through which the founders of a start-up can acquire knowledge-based resources at a cost, both in terms of monetary costs and equity dilution, that would be far less than otherwise incurred via an equity sale to secure the funding needed to directly pay for or hire such knowledge resources. The importance of executing knowledge bootstrapping decisions and taking advantage of knowledge bootstrapping opportunities is the direct beneficial effect it has on the acceleration of any learning curve to advance both customer and product development efforts and the requisite savings in terms of financial and opportunity costs associated with a more protracted or misguided development effort. We have already discussed in Chapter 1 the various knowledge resources vital to a tech startup. They not only include the skills and experience of the founders and development teams but also the business model and processes through which they work under and the technical and market information secured.

This chapter will proceed with an exploration of the various knowledge bootstrapping decisions that can be made. They include adherence to the bootstrap processes provided by Lean and Agile methodologies, lean business planning, engaging experienced mentors, building a complete founding team, assembling an experienced advisory board and re-location for greater access to knowledge resources. Knowledge bootstrapping opportunities will next be identified and discussed. They include securing related project work, feedback from peripheral activities, knowledge bartering, participate in alpha/beta testing and attend workshops, trade shows and pitching events to stay informed, sharp and up-to-date.

Knowledge Bootstrap Decisions

Conserving financial resources by taking the time to sufficiently discover the needs of the customer before allocating for costly execution, acquiring market and competitor intelligence in a resourceful manner and accelerating the progression on learning curves are effective forms of bootstrapping. There are a number of Knowledge Bootstrapping decisions that can accomplish these worthy objectives in the realm of processes, planning and individual decision-making.

Bootstrap Processes

The culture and processes under which the founders and developers make decisions and conduct their development efforts respectfully can result in better informed decisions and more efficient development efforts. Two of the most notable methodologies consistent with an effective bootstrapping strategy are the Lean Process and Agile.

The Lean Process

As described in previous chapters, the Lean Process represents a method to acquire valuable knowledge on the prospective customers and target market, avoiding a costly misplaced commercial launch. The advantage of applying scientific method is improved execution. However, what is most important is learning what it is to be developed. This is especially true for start-ups operating in new or relatively unknown markets. It is much cheaper to have an idea fail than to have a product fail.

Here I will cite a few appropriate and profound statements in Eric Ries' masterful book, The Lean Startup.

"The goal of a startup is to figure out the right thing to build- the thing customers want and will pay for- as quickly as possible." (1)

In describing a company's product launch that failed to attract an acceptable number of customers Eric remarks, "They had achieved failure- successfully, faithfully and rigorously executing a plan that turned out to be utterly flawed." (2)

While contemplating how to measure progress Eric Ries posed two questions, "What if we found ourselves building something that nobody wanted? In that case what did it matter if we did it on time and on budget? (3)

According to Eric the best way to avoid achieving failure is validated learning- empirically proving that valuable truths were learned about the venture's business prospects. (4)

A recent trip to Sri Lanka to attend the 2013 World Summit Awards provided a perfect example of how understanding the complete user experience, accounting for non-rational motivations and following Lean precepts for product development would have avoided failure. This example was presented by Sri Lankan MP Harsha de Silva in his opening note on the last day of the conference when he described the development of a real-time online tool to assist bidders in the venerable and world famous Tea Auction in Colombo, Sri Lanka. The product basically allowed a tea bidder to participate in the auction online. However, despite the added convenience the product did not succeed because the auction participants preferred to physically attend the Tea Auction due to the sense of camaraderie they enjoyed there. (5) The developers did not conduct direct research of the bidders missing the opportunity to discover this very important social component of the auction place. Neither the logic of the product or any market research report would prove helpful in this case nor in many other cases.

The scientific approach using time-consuming trial-and-error methods provides a means to eventually recognize the real needs of the customer and the most optimal manner to reach them. As we will soon illustrate with a real life example adhering to lean principles incorporated into an overall bootstrapping strategy can prove to offer a decisive advantage vis-à-vis better funded competitors.

Agile Development

For tech startups a big dilemma universally faced is the need to balance maintaining an autonomous and creative environment for the team while ensuring that management decisions can be done in an effective and timely manner. Furthermore, this balance needs to be achieved in a cash-starved and high-paced environment. Bringing on board managers is usually too costly and bureaucratic for most tech startups. You can hire employees that can "manage" themselves," however, how can you get the team to make collective decisions in a timely manner, get the entire team to buy-in to each decision and ensure someone is held responsible for each decision to be effectively executed.

How can this be accomplished?

My personal observation of startups for an extended period of time and my recent experience as CFO of a very successful software development firm who were fanatical practitioners of Agile has provided me with the answer. Yes, I have consumed the Agile Kool Aid.

What is Agile?

Agile Development was conceived as a replacement to the traditional waterfall method of software development in which product features are determined and fixed at the beginning of a project and the cost and schedule is left variable. The traditional waterfall methodology has proven to be very inefficient as the expectations or stated goals of each of the variable factors of time and cost are inevitably exceeded and the fixed features initially agreed upon ultimately turned out not to be the features the customer ultimately wanted or needed. In Agile Development the time and costs are fixed and the variable that remains open is the features to be developed. This is consistent with human reality in which priorities change as new learning and developments occur. Agile evangelists will quickly point out that Agile is a culture, not a process. Processes are inherently wasteful as it represents potentially non-value added work. Agile can be deemed as a culture as it is based on the attributes of accountability and transparency and human nature is accounted for in its practice, including formulating assumptions and making estimations. Most importantly Agile is not feature driven, it is value-driven. Therefore Agile is a radical departure from both a technical and business sense in regards to software development and decision-making. This is the key to the inherently greater efficiencies it offers and why it can serve as a complimentary tool to adherents of the Lean Process and serve as a vital component of any bootstrapping strategy.

What are the main features of Agile Methodology?

Fixed Time & Costs. Those that conceived and adhere to Agile acknowledge, accept and adapt to the unknowns in developing complex features and the risks involved. To better deal with the complexity and associated risks Agile practitioners utilize a methodology in which short fixed-length iterations (usually only two weeks) of fixed costs to develop a variable set of features in a more effective prioritized manner. This significantly reduces the risk of the project as the highest priority features are developed first and new discoveries during development and external developments can be accounted for in a facile and immediate manner. For Lean startups the important value of Agile is that it provides an effective means to merge product and customer development efforts and enable the execution of crucial and timely pivots by focusing on more immediate and practical functionality in an incremental manner. This has the effect of maximizing value and minimizing waste.

Working in Short Iterations. Usually iterations are two weeks in duration and seldom more than four weeks. At the beginning of each iteration the team and the customer, or the customer development team, meet to prioritize the features to be completed in the upcoming iteration. At the end of each iteration a demo of the work completed is presented to demonstrate tangible results in the form of working software. The customer is happy to see real progress and is now in a position to offer actionable customer feedback. For the purpose of accelerating on the learning curve the team incorporates this valuable feedback and conducts a retrospective on the iteration to extract what can be learned and used in future iterations. These short iterations are the essence of Agile allowing for quick directional corrections and a significant competitive advantage.

Test Driven Development. Working in short iterations and demonstrating working software at the end of each iteration requires a highly automated and ongoing integration process. The process requires each developer to define stand-alone unit tests that confirm their code is delivering the desirable value. Once the unit tests are passed the code is checked into an automated Continual Integration (CI) source code control system. The end result is working software from which business value is delivered and learning can be gained.

User Stories & Story Point Estimation. Through a value-based user story system the working software being successfully tested is not just functional, but of business value to the client. A User Story is a statement of functionality that is worded from the customer's perspective.

A typical user story is worded as such:

"As a ____ I want to _____ so that I may be able to _____."

The following is an example of a user story statement:

“As a Subscriber I would like to conduct an advanced search so I may be able to find the latest news on digital photography.”

Once a set of user stories has been created the team meets together to estimate story points to be attached to each story. Humans are not very good at estimating absolute values, but are much more attuned to estimating in relative terms. Agile accounts for human nature by utilizing a story point estimation system in which the different user stories are rated amongst each other and with User Stories completed in prior iterations in relative terms of complexity and value. The Fibonacci sequence of numbers is used to prevent arguments over small estimate differences and ensure that consensus can be more easily reached. The development and testing of User Story A may be deemed nearly twice as difficult as User Story B. Thus, User Story A may be assigned 5 points whereas User Story B may only be assigned 3 points. The value of estimating story points is more effective planning. At the end of each time fixed iteration the total number of story points completed and successfully tested is tallied. This sum represents the velocity of development. A rolling average of the velocities of consecutive iterations serves as an effective productivity metric that can be used to estimate how many more iterations will be required. Furthermore, velocity permits a team to be “Agile” by trading out point-assigned user stories when a priority change or pivot needs to be made. The beauty of this metric is that as the number of iterations are completed the accuracy increases as the ability of the team to estimate story points improves. A user story must be concise, valuable, estimable and testable to permit story point estimating. Here is where it becomes readily apparent that Agile is value-driven, not feature driven. Additional benefits of Agile Planning include:

*Separate effort size from duration offering greater flexibility in planning

*Velocity measures the productivity of the team, not individual team members.

*The team members have a greater understanding of the product value

*The associated transparency and increase in team participation builds trust, credibility and morale.

How do the team members participate?

Team members are organized into small cross-functional teams and participate in daily stand-up meetings.

Use of Dedicated Cross-Functional Teams. A cross-functional team consists of developers, designers, testers and infrastructure staff who are dedicated to a single project. They are dedicated in that they remain focused on the project at-hand and their productivity is not allowed to suffer due to distracting commitments to other projects. The team shares joint responsibility for the successful development and testing of the user stories and each team member voluntarily selects the next priority card they are capable of completing. In this way every team member has a better understanding of the interrelatedness of the different functional areas in the project. Consequently each team member can maximize the value of their individual contributions and brainstorm collectively to solve a complex challenge. Organizing cross-functional teams is an effective way to internally allocate knowledge-based resources and effect a more rapid acceleration on learning curves for all team members.

Stand-up Meetings. Whether physically or remotely every member of the cross-functional team and a contact person of the customer or customer development team participate in brief daily stand-up meetings during which everyone is too remain alert and standing. The customer representative shares any changes in priority and customer feedback. The individual team members take turns discussing any user story they completed since the last stand-up meeting, what user story they are currently working on and possibly what the next user story they intend to select next. For each user story what was learned and if there are any challenges or issues is shared. At the conclusion of each individual briefing the other participants are welcomed to make any comments or suggestions. It is always amazing to me when I attend a "stand-up" how focused and productive each meeting is and how a very difficult and challenging issue presented by an individual team member is collectively and effectively broken down by teammates with diverse functional point of views to identify a consensus solution.

A big criticism of Agile methodology is that it requires too much planning. Yet being an intimate witness to its practice in the last five years I unquestionably see the tremendous savings in both development time and money that easily justifies the extra ongoing planning. In summary Agile allows a startup to develop the most value-added features first, complete development efforts on time and at minimal cost. This is the essence of Bootstrapping.

Both Lean and Agile represent highly effective forms of knowledge bootstrapping to be practiced by any serious tech startup. Whereas for Lean advocates the greatest form of waste is developing a product no one wants, Agile evangelists would point to the biggest waste being the development of features of lowest priority first or the development of features ultimately unwanted.

The trust building attributes of accountability, transparency and objectivity are certainly exhibited through Lean principles and Agile practice. As we will discuss in the next chapter building trust is the crux of sound start-up governance which is an important component of any bootstrapping strategy for the acquisition of valuable relational resources. The practice of Agile will be found to be consistent with any bootstrap strategy.

Lean Business Planning

Business planning in accordance with Lean precepts is an essential ingredient of any winning bootstrapping strategy in conjunction with a well-conceived financial plan discussed in the previous chapter. Whereas a well-conceived financial plan will help you identify adequate financial resource needs at the various stages in your venture's life cycle and determine the feasibility of your venture, Lean planning will help ensure that a business model is conceived that offers a clear means to determine the minimum amount of resources required to create optimal value in a minimum amount of time.

Lean Business Canvasing

Currently Lean startups employ a Lean Canvas, an adaptation of Alex Osterwalder's original Business Model Canvas, to illustrate their business model. The Lean Canvas, as devised by Ash Maurya, is a one-page presentation of several components of a business model diligently organized into sections within two major areas- product and market. In the product area one finds sections devoted to Problem, Solution, Key Metrics and Cost Structure. In the market area there are sections covering Unfair Advantage, Channels, Customer Segments and Revenue Streams. Straddling both areas is a section indicating the venture's Unique Value Proposition. The following Figure 4.1 is the widely-used template currently utilized by a large percentage of Lean start-ups. (6)

{Insert Figure 4.1 Sample Lean Canvas}

The advantages of a Lean Canvas over a traditional business plan include the speed at which it can be constructed, its portability, conciseness and ease to update. Founders of a Lean start-up seldom need more than a half-day to construct a Lean Canvas. Because it is displayed on only one-page it is much easier to share and more likely to be read by a larger audience. It is very concise revealing the high points of your business model in an easily decipherable format for both prospective customers and investors. It is also easy to update making it much more effective as a working document. (7) This is particularly critical in the online world we currently conduct business in.

I am a big advocate of the Lean Process as it is a vital component of any bootstrapping strategy for startups to efficiently conduct their integrated customer and product development efforts in a timely manner. I do agree with Lean advocates that a lengthy traditional business plan is wasteful and no longer appropriate in the Lean era. In my previous book I set forth the benefits of having a business plan despite the conventional wisdom that a business plan is no longer needed because VC's no longer want to see one. The variety of benefits I identified were divided into both internal and external benefits. Internal benefits included:

*Serving as a thought-provoking exercise helping to set goals, priorities and strategies via “discoveries’ made during composition as a result of thinking of the business in a holistic perspective.

*Serving as a working blue print to maintain focus, keep the team on the same page and better understand the consequences of any actions (8)

I believe that the Lean Canvas adequately fulfills these internal uses. Indeed much more effectively than a traditional business plan because the Lean Canvas enables Lean startups to better select the proper hypotheses to be tested and in the correct sequence. As a working blue print it is invaluable to maintain that synergy between customer and product development and create a better understanding of when and how to pivot with a greater awareness of the effect of the pivot being contemplated. The Lean Process demands a greater frequency of revisions to the working plan. Thus the ease at which this one-page illustration can be updated is a significant advantage. This benefit is a characteristic of the most successful diets which include the diets people are willing to stick too.

As a prospectus document the standardized format of the Lean Canvas has been widely accepted by the investor community whom have almost universally recognized that validated learning is the new form of traction and new innovative accounting metrics is the means to measure progress on the learning curve. Indeed many of the questions I cited in the first book often asked by investors that stumps unprepared founders are either no longer directed to a Lean start-up or is clearly articulated in the Lean Canvas. This accepted standard is a major improvement from previous times when different prospective investors had a wide range of acceptable business plan formats. However, the Lean Canvas presented to prospective investors does not provide all the information needed for an investor to make an investment decision and will need to be accompanied with a brief Lean Summary.

What is a Lean Summary?

A Lean Summary (LS) provides information of particular interest to prospective investors not covered in a Lean Canvas. This includes information on the management team, strategic partnerships, traction, funding requirements and exit. A Lean Summary is slightly longer than a traditional one or two page Executive Summary. However, it is far shorter than the traditional business plan it is replacing in that fewer sections are necessary. Fewer sections are necessary because much information has already been presented in the Lean Canvas such as Defined Problem/Solution and Product Description while other sections like Operational/Expansion Plans and Company Objectives are not relevant to an early-stage Lean start-up. As will be discussed shortly the traditional business plan sections to remain, such as Traction, Financials and Exit Strategy, will have a much different look than what you would see in a traditional business plan.

Composing a Lean Summary

A Lean Summary is composed of a brief introductory vision statement and sections on the management team, strategic partnerships, traction, financials and exit.

Vision Statement. The Statement of Vision is composed to clearly convey the mission of the venture. Why have the founders committed to such a mission? Who stands to benefit from the efforts your team has committed too? What would the future hold if an ideal solution is identified and delivered by your team? This section is important to ensure that the interests and expectations of the founding team and the prospective investor are properly aligned.

Management Team. The Management Team section is written the same as it would be written in a traditional Executive Summary. Presenting the skills, qualifications and experience of the individual founders and management team members is not sufficient. The value of their social networks (relational value) must also be included and the collective strength of the founding team must be highlighted. This can be accomplished by presenting:

1. The skills, experience and professional connections of each founding team member. The "skin-in-the-game" opportunity costs assumed by each as well to display commitment.

2. Describe examples when the founding team worked together with good chemistry or successfully utilized their collective skills or mutual support in the face of an enormous challenge or a difficult situation or crisis respectfully.

3. The entire team needs to be represented in summary form as complete and committed. It is recommended to fortify this position by presenting the same attributes of any mentors or board advisors whose assistance have been secured. (9)

Strategic Partners. The Strategic Partners section is written the same as it would be written for a traditional business plan. This section should commence with an explanation of your overall strategy of why strategic partnerships are to be pursued and your plan on how and when you intend to approach potential partners. In this section you need to clearly articulate why each strategic partner would want to partner with you and why you would like to partner with them. (10)

Traction. This section will include both the more traditional forms of traction, if actual, and innovative accounting metrics achieved to illustrate the progress that has made on your customer development learning curve. The metrics to help track progress on the validated learning curve will be based on Lean innovative accounting metrics. Pursuing the achievement of innovative accounting metrics will help ensure accountability, objectivity, transparency and focus.

Financials. The Financials Section in a Lean Summary will be radically different than what you would find in a similar section of a traditional business plan. You will not see any pro-forma statements. What you will see is an estimate of the time and costs to complete the currently planned customer and product development efforts. Such estimates may be presented as a product of expected time and burn rates as well as the variable costs associated with each hypotheses to be tested. A brief Capital Structure illustration, Funding Requirements and Use of Funds will also need to be included in this section as would be traditionally included in a traditional business plan.

Exit Strategy. In a traditional business plan an exit strategy is articulated to answer How, Who, Why, When and How Much. The How is usually either an IPO or merger/acquisition. If the later than the Who is answered with a list of prospective suitors. The Why is answered by providing valid and credible reasons they would want to merge or acquire your venture. The When is simply the expected time horizon to reach a possible exit opportunity. The How Much is the projected ROI for any prospective investors currently being solicited. An early stage Lean start-up composing a Lean Summary may not be in position to adequately formulate and express a specific exit. Although it may be too premature or unnecessary to answer the When and How Much. The How, Who and Why should be presented based on the ventures' stated vision.

Please Refer to Appendix I – Sample Lean Summary

Need for a Traditional Business Plan at Later Stages

Although the Lean Canvas provides all the internal benefits previously provided by a traditional business plan and adequately serves as a prospectus document alongside a Lean Summary in the early pre-commercial stages of a start-up a more traditional business plan will need to be drafted once the tech start-up matures into a full-blown commercial entity generating sizable revenues, interacting with strategic parties, requiring executive management and more complex operations.

Better Execution of Lean Pivots

A central premise of Lean is failing fast and learning from such failures. Failure is an opportunity to learn and learning is an opportunity to create value by executing pivots when necessary. Regardless of stage a benefit of referring to a Lean Canvas concurrent with a well-crafted financial plan is better execution of pivots. The more effective such Lean planning the faster successful pivots can be executed and the greater the acceleration of learning. Consequently, the faster an innovation can be successfully commercially launched and the less the amount of financial resources to be expended, hence a bootstrap, prior to such an event. Learning often by failure is a necessary by-product.

Thomas Edison, the infamous American inventor, pronounced,

“Just because something doesn’t do what you planned it to do doesn’t mean it’s useless” (11)

On the flip side of what Thomas Edison was quoted as saying one can say, “Just because something does what you planned it to do doesn’t mean it was useful”

In my previous book one of the dictums I stated was that, “a bigger and better product does not necessarily lead to bigger and better profits.” A real example I presented to prove this point was a former client who faced a start-up competitor developing a media product in a niche market. The competitor was first to the market and raised nearly 5x more investment funds than my client. However, my client ultimately proved the victor because he only developed the features essential to capture the maximum amount of advertising revenue that could be secured and not unnecessarily spend money to develop and deploy impressive features that would not translate into additional ad revenues. The competitor failed soon after my client entered the market because the competitor’s media product was much more costly to both purchase and maintain. Well ahead of the time my client had successfully conducted a Lean customer and product development effort while adhering to a strict bootstrapping strategy necessitated by possessing far less resources than his direct competitor. His Lean development compelled him to make fortuitous pivots away from non-value added features the prospective clients would not be willing to pay a premium for. His frequent reference to his financial plan enabled him to execute such pivots more effectively by impressing upon him the financial imperative to not waste any actions and providing a means to evaluate such pivots from a financial perspective. In referring to his financial plan there was simply no justification to solicit more investment funds and dilute the founders’ equity, suffer a substantial loss of control and the increased ROI expectations of all shareholders to fund the development of features promising no additional financial returns. In effect his financial plan compelled and helped him test his suspicions that what the customer demands is different from what the customer is willing to pay for. My client perhaps unconsciously was answering the question when considering competing with his competitor toe-to-toe on features, “Should this feature be built,” out of necessity as opposed to the better funded competitor who perhaps was simply selecting his feature mix by determining how many of those features expressly demanded by the prospective customers could be built. In other words, “Can we build this product?” My client’s Lean approach to product development integrated within a thrifty bootstrapping strategy proved victorious over a better funded competitor who enjoyed first-to-market advantages. Therefore Lean thinking combined with a bootstrapping attitude and a financial plan can prove to be a decisive advantage.

For a bootstrapping start-up there are three documents used for planning purposes. They include a financial plan, a Lean Canvas and a Bootstrapping Plan we will construct later in Chapter Eleven. There are only two essential prospectus documents- a Lean Canvas and a Lean Summary.

However having a strategy, a tolerance for pain and a plan is not enough. Access to knowledge resources through mentors, a complete founding team, board advisors and, if necessary, re-location can prove invaluable.

Engage Experienced Mentors

There are two types of mentors, those that coach and offer general advisement and those that have a particular area of expertise in a specific field.

A great coach is someone that can share his or her personal experience and wisdom to help you make better decisions by placing those decisions faced by founders in the proper context and considering them from a proper perspective. A great coach has such value because they have already "been there and done that." Coaches serve as excellent sounding boards for new ideas, can provide enlightenment on alternative ideas and identify shortcuts worthy of pursuit. Furthermore they can be invaluable in your strategic planning by helping you understand your business in a more holistic manner.

Steve Blank, distinguished startup author, in an article described how he benefitted from four different mentors during his earlier entrepreneurial days. One taught him how to think. Another taught him what to think about. A third taught him how to think about customers and a fourth showed him how to turn thinking into direct action. (12) Indeed profound praise for mentors from a well-respected startup sage himself and an excellent indication of the many ways a mentor can positively affect how you perceive and direct your startup. Another important item to note is that it may be advisable to solicit the support from multiple mentors who can perform different roles. Having an Agile coach as a mentor to guide development teams has become popular for innovative startups seeking a competitive edge and an example of a how a mentor can have a direct and specific role.

The other type of mentor is one that has a specific area of expertise that offers one of the three types of critical resources we have discussed throughout this book. The mentor may be a financial advisor in position to help you prepare for planning, pitching and negotiating. A mentor may serve as a valuable knowledge resource in that they have expert familiarity with a certain technology, business model or market. Another mentor may have a valuable social network that can be leveraged to make valuable introductions to key customers, vendors or strategic partners.

How do you search for mentors who are the right fit for your venture?

The first step is determine exactly what the objectives of your venture is through the planning you have conducted and identify those areas in which your founding team may have a weakness. Does your team suffer from a lack of experience? Does your team often find it difficult to agree and effectively make decisions? If you answer yes to one or both of these questions than maybe you should seek a coach. Does your team have a deficiency in one of the three critical resources? If so it may be good to seek an expert mentor who can fulfill such a weakness.

A mentor should be selected based on personality fit, experience in your "space," and area of expertise. Regardless of whether you are to search for a coach or an expert as a mentor it is important that they are impartial, trustworthy and respected by the entire team.

Build a Founding Team with Complimentary Skills and Experiences

We already discussed how building a complete team is a financial bootstrap by avoiding the necessity to hire or contract the conduct and/or supervision of certain work. However, the value of a complete team goes beyond this and encompasses more than just the duties that can be willingly performed but also the expertise they have that can be shared.

In today's startup world technology has decreased in importance as a factor in the success of a startup. Increasingly a well-conceived business model, effective online marketing and a winning team in a unique position to effectively execute a unique strategy to establish a sustainable business have become more decisive factors. When you combine this with shorter start-up life cycles (shorter time to exit opportunities) and the necessity to merge customer and product development efforts (Lean Process) the advantages of having a well-rounded founding team at an earlier stage has dramatically increased.

Composition of a Complete Founding Team

A founding team consisting exclusively of techies are increasingly finding themselves at a competitive disadvantage as they are less in position to acquire and utilize the various three resources essential to the success of a startup. In the previous chapter we discussed how important having a complete founding team is to cost savings and assisting in your fund-raising efforts. In the next chapter we will illustrate how a complete founding team can play an important role in enhancing your relational resources. Here we focus on the importance of a founding team in regards to knowledge. Knowledge-based resources not only include the technical skills of your development team members but also the processes within which they work, the business planning, modeling and marketing of your venture and leveraging those with experience in your "space."

What Comprises a Complete Founding Team?

A complete founding team consists of not only lead coders (Hackers) and UI designers (Hipsters) but also online marketers and business development individuals (Hustlers). It is advisable to include a founder with a financial background (Haggler) for the purpose of more effective financial planning and management of scarce resources at the earliest stage possible.

The importance of online marketing as a decisive factor in the success of so many recent start-up ventures and the prevailing Lean methodology that merges customer and product development efforts are two large reasons why welcoming Hustlers to a founding team earlier than later is critical to the success of a startup. Unfortunately it is often the case that a founding team consists exclusively of Hackers and Hipsters and Hustlers are not sought until just prior to a commercial launch. This often proves costly in terms of both time and money because once a Hustler joins the team it is often discovered that the platform is not scalable or otherwise suitable for serving the many segments of the target market and/or the innovative product or service needs to be altered to increase its commercial viability and/or matching the most desirable distribution channels. The need for such costly and time-consuming re-work could have been avoided if a business development founder was on board to commence providing valuable input during the earlier development stages. In accordance to the Lean process waste is the biggest enemy and the biggest waste is developing something that no one wants. Hustler input offers an opportunity to avoid such waste.

How about Hagglers?

I am a bit biased as I am a Haggler. However, I think it is inconceivable to understate the importance of effective financial planning from the beginning of a startup's life and the wisdom of having someone manage the scarce resources inherently possessed by a startup. A Haggler usually is not sought after until a commercial launch or the commencement of fund-raising efforts if at all. This is often a fatal mistake in terms of both financial planning and management during the earlier stages, failed efforts to attract investment funds, being outmatched in funding negotiations and conceding too much financial decision-making control to the new business partners following a successful fund-raising round. The two biggest reasons why tech startups fail is due to either financial starvation (mismanaging the scarce resources at-hand or failed fund-raising efforts) or financial suffocation (ceding too much control to new business partners or failing to properly manage exponential growth). A Haggler on a founding team will have both the financial expertise to bear and vested interests completely aligned with the founders and other non-institutional shareholders to help prevent either starvation or suffocation.

There is evidence that clearly shows that having a more diverse founding team with technology and business backgrounds amongst the team greatly increases the probability of success for a tech startup. The Startup Genome Project found that balanced teams with one technical founder and one business founder raise 30% more money, have 2.9x more user growth and are 19% less likely to scale prematurely than technical or business-heavy founding teams. (13)

Assemble a Diverse and Experienced Board of Advisors

If it is not practical, particularly challenging at the early stages, to establish a complete founding team it is advisable to compensate for such a shortcoming by assembling a Board of Advisors. This represents an excellent source of knowledge-based resources particularly as it relates to decision-making at the strategic level. Board Advisors experienced in the marketplace you are targeting possess unique insights into the dynamics of the market ("foreknowledge" as mentioned by Sun Tzu) (14) that otherwise could not be acquired. How is the market segmented? What are the likely responses from our prospective competitors? Which methods of monetization are the most sensible and acceptable? These questions are best answered or hypothesized by those with experience as opposed to public sources of statistics. Indeed many of the Lean hypotheses that need to be answered by your team can either be directly answered by an experienced advisor or the advisor can at least steer you in the right direction in testing the underlying assumption, thereby saving you valuable time and avoiding the expenditure of valuable resources.

Distinction between Mentors & Advisors

Vested and performance-driven board advisors often serve to be a greater and more committed source of knowledge then mentors simply because they have more to gain and their interests are more aligned with that of the shareholders. Mentors usually serve on an ad hoc basis and they are not accountable for the assistance they give. Whereas Board Advisors serve a start-up on a more committed basis in which value-added outcomes are demanded. Furthermore being vested gives added incentive to ensure that their activities create real long-term value and their interests are closely aligned with the shareholders. The nominal amount of equity interest issued to Board Advisors usually proves to be well worth the dilution.

Re-Locate to Have Greater Access to Knowledge Resources

In the previous chapter we explained the conditions of what makes a community attractive as a financial bootstrapping destination. Acquiring critical knowledge resources is another strong justification to locate or re-locate a tech startup.

What conditions makes a community an ideal location for knowledge bootstrapping?

A startup community with a vast pool of available tech talent, mentors, startup advisors, co-founders, startup organizations, co-working spaces, incubators, tech universities and research institutions represents a location ripe with knowledge resources. A local economy with a large number of early adopters is also an important potent source of acquiring knowledge resources as they serve as ideal alpha and beta testers for your innovative product or service. A crucial ingredient to successful customer development efforts, particularly as it relates to the Lean Process. Another possible knowledge-based rationale for re-location is stronger IP protection whereupon the knowledge resources acquired or built is afforded greater protection and value.

Knowledge Bootstrap Opportunities

In addition to the various decisions just examined to facilitate the acquisition of knowledge resources there are many knowledge bootstrapping opportunities to pro-actively pursue. They include securing related project work, utilizing feedback garnered through peripheral activities, knowledge bartering, participating in alpha/beta testing and attending various workshops, pitch events and trade shows.

Securing Related Project Work

Not only is acquiring project work on the side a good way to financially bootstrap your start-up, working on projects related to the development of your innovative product permits your team to accelerate on a learning curve faster. For example if your team is currently developing an executive search platform a project working on the back-end of a jobs portal may offer some accelerated learning for your team.

Feedback from Peripheral Activities

There are some founding teams who specialize in a particular “space” they have intimate knowledge in and see an opportunity to develop products or services complimentary to the development of their innovation that can offer valuable feedback that can serve to accelerate the learning curve for the development of their innovative product or service. I have been mentoring a startup that is developing a theme-based platform based on a certain human emotion. They have astutely identified a way to develop mobile applications that will assist them in collecting valuable data on their prospective customers. Although the mobile applications are not expected to be a profitable enterprise for them the cost of developing the apps is more than justified by the accelerated learning they expect to gain. Their mobile apps serve as a valuable tool to enrich their customer and product development efforts for their platform-based innovation.

Knowledge Bartering

Knowledge Bartering is the sharing of knowledge resources between two or more startups in which each startup has valuable information, insight or expertise in an area wanting by the other startup partner(s). The knowledge resources are exchanged amongst the bartering partners without any monetary charges incurred.

Sharing notes with founders of other like start-ups pertaining to what has been learned about similar mutual target customers, processes, technologies, business models and/or distribution channels is one example of knowledge bartering in which two or more startups may be either operating in the same space but have complimentary products or services that do not compete with each other or have similar products, business models or technologies but are targeting two different industries or sets of target customers. An example of such knowledge bartering may be a start-up developing a match-making service for an online dating site and a startup desiring to develop a match-making service for a more niche professional networking site.

Founders of two start-ups may also share their expertise by exchanging their advisement to each other if their expertise is in complimentary fields. Teaming up with other start-ups offering complimentary areas of expertise is an excellent way to create a win-win bootstrapping situation. Recently I have had the pleasure of mentoring and introducing two start-ups to each other with complimentary strengths. One start-up is developing an e-commerce site. The sole founder has vast expertise and experience in online marketing ("Hustler") and UI Design ("Hipster"). However she would probably not claim herself to be a strong programmer ("Hacker") and infrastructure person. The other start-up has a larger team consisting of talented software developers and infrastructure people. However, they have serious need for a good design and marketing person. They are now working together to leverage each other's areas of expertise. Eventually they will need to complete their team with a co-founder(s) and/or employee(s) to form a complete team before seeking funding, however, for now it is a no-cost win-win relationship for them. Bartering remains a viable median of exchange in the information age!

Participate in Alpha/Beta Testing

Another way to work with other startups to get an early glimpse of potentially valuable tools or vendors is to participate in the alpha/beta testing programs of other startups. Tech founders of startups usually can easily double as early adopters for an innovative product or service being developed by another startup. Additionally early adopters of one technological innovation may be suitable early adopters for other technological innovations. It is not always easy to identify and attract a sufficient amount of early adopters. Cooperating with other startups and sharing each others' pool of early adopters is a cost-efficient way to acquire such treasured early adopters whose feedback is invaluable to your customer development efforts.

Attend Workshops, Pitch Events & Trade Shows

Attending workshops, trade shows and pitching events is an excellent way to stay up-to-date, informed and sharp. In every healthy startup ecosystem there are frequent opportunities to attend technology or process-based workshops to provide instruction on the latest technology advancements (i.e. cloud computing) and newest working processes (i.e. Lean and Agile). I would strongly recommend that the entire startup team should attend a workshop together to ensure that the whole team fully understands the implications of anything to be learned. Trade shows offer a good venue to collect valuable data on the dynamics of your marketplace and the competitive landscape. Participating in pitch events and business plan competitions is an opportunity never to be missed by founders of a start-up. Practice does make perfect. You never want to make your first pitch in front of investors. I vehemently urge all startups to practice pitching at least once a month. One local startup noted during a panel discussion that he pitched eighteen times before he received funding. Frequent pitching is the best way to refine your pitching skills and keep pace with the rapid progress in your customer and product development efforts. At a recent business plan competition I mentioned during an opening panel discussion that I have found based on personal experience that the success of a start-up is more correlated with how many competitions a team participates in and less with whether and how many competitions they won.

Summary

As we defined at the beginning of the chapter Knowledge Bootstrapping includes all the decisions and opportunities through which the founders of a start-up can acquire knowledge-based resources in a cost-effective manner.

Knowledge-based resources include the human resources of the startup, intelligence on the prospective customers and target marketplace and the business model, planning and processes that enable founders of a startup to adhere to their bootstrapping strategy.

There are several decisions that can be made by founders to efficiently acquire knowledge-based resources. The first set of decisions is the selection of the appropriate processes through which their entire management, development and marketing teams will work together. The Lean and Agile Processes are the leading startup methodologies marrying customer and product development efforts. Central to Lean planning is a Lean Canvas constructed to serve as both an internal working blueprint and external prospectus document. The content will be pursuant to Lean precepts and expressed in Lean terms as a replacement of a more traditional business plan that has become antiquated in the era of Lean. The Lean Canvas will need to be supplemented with a Lean Summary as a prospectus package offered to prospective investors.

However, proper planning and processes are not sufficient. Building a complete founding team with complimentary skills and experiences is an essential part of establishing a smart startup. Any knowledge-based deficiencies of the founding team should be compensated with a supporting cast of experienced mentors and vested board advisors. Finally the decision to re-locate may be necessary to be more proximate to knowledge-based resources.

There are many knowledge bootstrapping opportunities that can be found within just about every vibrant startup community which founders should take full advantage of. Whenever there are opportunities to secure project work to financially bootstrap the development of your innovation you should select project work related to the development of your innovation either from a technical or business perspective. Working on related project work will allow your team to accelerate more on the learning curve in the development of the high-potential innovation. Another alternative way to accelerate on the learning curve is to identify creative ways to acquire such accelerated learning through additional supporting activities or development efforts. Next we defined knowledge bartering as the sharing of knowledge resources between two or more startups in which each startup has valuable information, insight or expertise in an area wanting by the other startup partner(s). Two startups can also cooperate by sharing their pool of alpha/beta testers. Founders need to become active within their startup communities by attending and participating in all types of startup events such as workshops, trade shows and pitching competitions. In this way founders keep themselves up-to-date and sharpen their networking and presentation skills.

Now that we have examined the various ways to bootstrap to acquire knowledge-based resources we will proceed to the next chapter and discuss how bootstrapping for relational resources can serve to accentuate the value derived from the knowledge-based resources acquired through improved governance, communication and branding.

Chapter 5 Relational Bootstrapping

When discussing the success traits of a budding tech start-up the conversation is usually dominated by the skills and experiences of the founders or the ability to raise funds. However, the value of relational resources are becoming increasingly more important as tech start-ups require less financial resources and technology is becoming less of a differentiator amongst tech ventures.

Relational Bootstrapping encompasses all the decisions and opportunities through which the founders of a start-up can acquire relational resources at a cost, both in terms of monetary costs and equity dilution, that would be far less than otherwise be incurred via an equity sale to secure the funding needed to directly pay or contract for such relational resources or the real and opportunity costs associated with developing the resources in-house. The importance of executing relational bootstrapping decisions and taking advantage of relational bootstrapping opportunities is to have the ability to maximize the amount of leverage in the use of the financial and knowledge-based resources your start-up currently possess and place you in a more favorable position to acquire such additional resources.

We have already discussed in Chapter One the various relational resources vital to a tech startup. Relational resources include the strength of the social and professional network that can be leveraged to secure early adopters, strategic partners and potential investors. It also includes the morale and chemistry of your team and the goodwill, credibility and trust of your venture as perceived by external parties, particularly potential customers and investors. All of this serve as a basis for your brand, the ultimate relational resource.

The most valuable asset for a young start-up is trust. Accumulating relational resources is about establishing a high level of trust with both internal and external parties. Trust represents the greatest relational value for a start-up. A strong start-up governance regime and a value-based business culture are the primary means to establish trust. Other factors relevant to the creation of trust include composition of the founding team, establishment of a respected advisory board and operating within a location where trust is fostered.

This chapter will proceed with an exploration of the various relational bootstrapping decisions that can be made. They include re-locating to a more vibrant and functional startup ecosystem, assembling a well-connected founding team supported by a very well-respected advisory board and establishing a strong start-up governance regime creating a strong value-based business culture that will result in a desirable work environment and building a winning brand. Relational bootstrapping opportunities will be set forth and examined next. They include leveraging the credibility of third parties, proper selection of vendors, securing captive audiences and participating in start-up events.

Relational Bootstrap Decisions

There are several relational bootstrap decisions that can be made to enhance the relational strength of a startup venture. These decisions center on selecting the right location, building a founding team with strong professional networks, attracting an esteemed advisory board and establishing a strong startup governance regime.

Re-Locate to a More Vibrant ("Stacked") Start-Up Ecosystem

A "Stacked" startup community is one that is dynamic and active, offering a great number and rich diversity of startup events, co-working spaces and organizations through which to network. A startup community would also be considered stacked because of the vast pool of accessible IT talent and experienced former entrepreneurs who provide a large prospective selection of potential co-founders, recruits to build strong startup teams and engage with experienced mentors and board advisors.

From a relational perspective other reasons to re-locate include better IP protection, greater perception of rule-of-law, a locale offering better branding for your innovation and freedom of speech. These factors external to your venture serve to enhance trust, both internally and externally, in your venture.

Strong IP Protection. In a start-up community located in a jurisdiction whereupon strong intellectual property protection laws exist and are stalwartly enforced in a timely manner will instill confidence both among the staff and external stakeholders that any intellectual property developed by the start-up venture will increase the value and competitiveness of the venture in a sustainable manner.

Perceived Rule-of-Law. A start-up located in a jurisdiction where there is a low perceived rule-of-law will find it more difficult to enter into binding legal agreements with external parties and implement any internal policies and processes beneficial to both the venture and its internal stakeholders. For example in a country where there is perceived weak protection of consumer rights or commercial contract law it will be difficult to garner the trust of potential online customers or provide confidence to prospective strategic partners to enter co-marketing or other agreements with your venture. Furthermore in countries where there is a low perceived rule-of-law there is usually a high perception of the existence of corruption. This can represent an additional cost and risk for a start-up. Internally, weak perceived rule-of-law may make it more difficult to offer attractive incentive plans to staff or encourage currently independent IT professionals to join your team as an employee.

Branding. For start-ups based in countries where there is a high-perceived rule of law, enjoy a strong economic base, have a well-connected and highly-educated population, possess a reputation of supporting entrepreneurship and sustain a robust advertising market any innovative product or service offered by a start-up will enjoy a higher level of credibility and trust in both the local and global markets.

Freedom of Speech. A tech start-up, particularly those launching an e-commerce, consumer internet or e-content business, will find it challenging to offer value-added content competitive with other potential competitive start-ups located in jurisdictions enjoying a greater ability to provide content assisting their customers in either making purchasing decisions or utilizing the content provided. A tech start-up working behind a firewall where any form(s) of public censorship is prevalent will find itself at a large competitive advantage when trying to offer valuable and actionable content to its customers and viewers. On the flip-side many forms of public censorship are crafted in a way to provide local businesses with an unfair advantage. This may help a local start-up in the short-term by acting as a protective barrier-to-entry but will not prove to be sustainable or encourage the innovation required to be competitive in the global marketplace. Liable laws are another important dimension of freedom of speech that can have a direct effect on the perceived value of the online content a tech start-up may provide. In locales where it is relatively easy to sue other parties, whether individuals or businesses, for making negative comments, whether explicit or implied, deters an online business from providing consumer reviews and other reports in an objective manner. In this day of age this becomes more critical as the value of objective content that can be used by online customers to make purchasing decisions has increased. For example a consumer internet business will usually be operating in a very competitive space in which those online sites providing the most trusted consumer reviews will attract more viewers and generate more business for itself and/or its affiliates. If a site is compelled to only post favorable reviews what will it do to its perception of objectivity in the minds of its viewers? Will they be placed at a competitive disadvantage to other sites in their space but located outside such a prohibitive jurisdiction? Unfortunately there are countries where strict liable laws or adamantly enforced and this places local start-ups at a tremendous competitive disadvantage in addition to the disservice to its domestic consumers. Furthermore, if this relationship of trust between content provider (i.e. an online start-up) and its customers has been compromised what does this do to the value of the venture, its attractiveness as an investment opportunity and becoming a trusted brand?

All of these characteristics of a start-up ecosystem can enhance or detract from the attraction of your venture to potential co-founders, innovative risk-taking talent, customers, investors and strategic partners and represent major considerations when determining whether to re-locate and, if so, where.

Build a Well-Connected Founding Team

In the previous chapter we discussed the importance of having a complete founding team from the perspectives of acquiring sufficient knowledge to successfully acquire and supervise knowledge resources. Here we will examine the importance of having a complete founding team from a relational perspective.

The value of having an initial core of socially successful co-founders for establishing great working relations with external partners and building a strong team cannot be under stated.

Well-connected founders have the ability to secure valuable market insights from their professional connections, negotiate more favorable terms from vendors and attract strategic partners.

A valued prospective co-founder and/or key employee is more likely to be attracted to joining a great team of individuals rather than an idea that will inevitably change with time. From this perspective one can argue that in commencing a startup one of the first priorities of a founder is to find a co-founder(s) with a social network and standing that would facilitate building a great team. (1) From this perspective founders who possess an extensive professional and social network are valued as they can leverage their influential position or utilize their persuasive powers to help identify and attract skilled employees. The success or failure of a startup can rest on the ability to convince such superior talent to join the team. Having socially skilled founders on board is especially critical for startups that do not have a track record or the brand recognition typically required to attract such outstanding talent. Top talent may be willing to work at Google or Microsoft for a pay cut but likely not your new venture.

Another relational value is emotional. Operating a startup is an emotional roller-coaster as any experienced tech entrepreneur will profess. The strength of a founding team can be measured by the emotional support amongst the founders. (2) However, one must caution that the obvious observation of selecting co-founders with only prior social relationships may be counter-productive in regards to securing more emotional support and stability in a start-up. In his book, The Founder's Dilemmas, Noah Wasserman astutely observes based on his extensive research that such emotional support secured by choosing co-founders with prior social relationships but no prior working relationships may prove counter-productive. Co-founding team with prior social relations, but no past shared work experiences, had a high co-founder departure rate of 28.6%. Indeed his findings show that founding teams consisting of co-founders with only prior working relationships and teams consisting of complete strangers have proven to be more stable and enduring. Noah postulates the reason for such unexpected results is that Co-founders may elect to make suboptimal business decisions to avoid jeopardizing their long-standing social relationships. Consequently the business suffers, tensions amongst the founders rise and their social relationships suffer to the point whereupon a co-founder may depart. (3)

To enhance relational resources a founding team should include someone with entrepreneurial experience. In his book, The Founder’s Dilemmas, Noah Wasserman again presents compelling evidence of the increased probability of success for start-ups with a serial entrepreneur on the team. (4) Any shared entrepreneurial experience would certainly prove valuable in improving the founding team’s overall decision-making and its positive effect on morale and branding throughout the startup’s life cycle. An additional relational value for founders is to retain a high-level of decision-making control through successive funding rounds. Founders possessing a large amount of social capital can leverage such status vis-à-vis investors to help the founding team maintain such decision-making control as investors are more apt to trust the respected founder. (5) Again trust and acquiring relational resources are synonymous.

Christian Mischler the co-founder of Hotel Quickly, a successful Thai-based start-up with a mobile application offering steep discounts to boutique hotels on short-notice bookings, recently shared with me his thought process in assembling his winning team. As founder of several previous start-ups Christian was determined to utilize this valuable experience to carefully select a winning team that covered all the bases. The first co-founder he approached was Tomas, a former business school classmate who he collaborated with in winning several academic competitions. Following graduation Tomas earned some entrepreneurial experience operating a small tech incubator. Although Tomas did not have the relevant technical background Christian highly-valued their past winning chemistry and his entrepreneurial skills. Tomas would soon introduce Christian to their Hacker, Michal. Michal was a talented software architect and coder who had won several innovation prizes for his work at a previous start-up. He was the logical next addition to a team needing a lead geek to commence product development. Christian next needed a Haggler who could share the financial and management decision-making responsibilities with him. He reached out to another former classmate Mario who, similar to Christian, earned some banking experience in Switzerland following graduation. Mario’s specific expertise in M&A will come in handy when exit opportunities arise and his willingness to leave a high-paying position to join the Hotel Quickly team is a strong demonstration of his level of commitment and the team’s overall “skin-in-the-game.” Last but not least is Raphael the Hustler. As former Managing Director of Food Panda in Vietnam his strong operational and sales experience became apparent by Christian who served awhile as COO/CTO of Food Panda. His Chinese language abilities and his relationship management skills made him the perfect man to manage relations with participating hotels and government officials in some of their key target markets in Asia. (6)

Christian has assembled a winning team with complimentary abilities, a demonstrated commitment, prior working relationships and strong entrepreneurial backgrounds. The thought process used and factors considered by Christian is a winning methodology that is fully consistent with the findings of Noah Wasserman.

The challenge for many start-ups is identifying and attracting co-founders with entrepreneurial experience. If this proves to be too challenging than it may be advisable to establish an advisory board and attract such influential and experienced individuals to serve on an advisory basis with a vested interest in the venture.

Assemble a Trusted and Influential Board of Advisors

In the previous chapter we discussed how a well-selected advisory board can be a form of knowledge bootstrapping by leveraging the experience and knowledge of the board advisors. Perhaps the most valuable aspect of attractive a wining advisory board is the considerable relational value board advisors can offer both individually and collectively.

A strong advisory board will offer valuable relational resources including influential contacts and lend critical credibility. Board advisors who are “centers of influence” (COF) are very much coveted. An introduction by an influential board advisor is often the best avenue to forge a strategic partnership.

An experienced entrepreneur or reputable business executive on your advisory board can lend such credibility to your startup to assist you in attracting investors. A prospective investor will certainly be heartened to see notable individuals making a commitment and have a vested interest in your venture. This is particularly true at the seed stage where a common challenge for many promising tech startups is getting the first angel investor to invest. There is often a need for “social proof” whereby interested investors are awaiting to see if other more prominent investors commit to your startup. Indeed, a strategy often set forth to resolve such a situation is to offer very favorable terms to an “anchor tenant” who is welcomed as a board advisor. (7)

Once you have a strong and complete founding team, a stand-out staff and a supporting influential advisory board it is now time to install a startup governance structure that will spurn innovation, instill teamwork, provide effective communications, improve decision-making and enhance the venture’s brand recognition.

Establish Strong Start-Up Governance Regime

Implement a strong start-up governance regime in which decisions and processes are transparent and the motivations of all internal parties are based on a high level of accountability and objectivity. Building trust internally can be accomplished by making certain relational bootstrapping decisions. By taking advantage of relational bootstrapping opportunities trust can be built vis-à-vis external parties. To establish a high-level of trust both internally and externally requires an investment in building a value-based business culture.

Trust-building is the best way to both improve your chances of securing all three types of resources and maximizing the value of the utilization of these secured resources.

How does one build trust internally via relational bootstrap decision-making?

There are two primary factors in building trust amongst founders and employees. They are chemistry and morale.

To ensure a productive level of team chemistry requires hiring employees who will fit well into the business culture you are trying to create and a transparent working environment in which the team is collectively held both responsible and accountable. In this way everyone is on board and on the same page as it relates to the processes used and the objectives sought.

Recruiting the right employees is critical to maintain a healthy level of team chemistry to achieve optimal productivity so important for a resource poor start-up. Consequently it may perhaps be the most important task for a founding team. The ideal recruits will be a good match in terms of both heart and mind. We have already discussed the importance of hiring employees of the right mind who possess superior skills in their respected areas of expertise and have skills complimentary to the skill sets possesses by the other members of the team. From a team chemistry perspective it is equally important to welcome new employees onto the team with their hearts in the right place. In other words they need to be passionate about their work, share the aspirations of the start-up and possess a high level of integrity to not only enhance the brand image of the start-up but to be a trusted and respected member of the team that will contribute to team chemistry. With these attributes and motivations one can reasonably expect a prospective team recruit to be a "good fit."

For example a previous client had two primary preferences when hiring developers for his team. He first looked for geeks because he felt they would have great passion for their work (almost would work for free), would be very open to learn new things (i.e. new computer languages) and be enthusiastic about confronting complex technical challenges. The passion and open-mindedness he felt he could expect from geeks would enhance the business culture he was trying to foster. His second preference was to hire younger less experienced programmers who have not been already exposed to antiquated development processes. None of his hires new the predominant computer language used by his development teams (Python), however, because he hired inquisitive geeks it only took about three weeks for them to learn the language and become productive members of the team. The only rare situations in which he had to let go a worker is when it was discovered he did not buy into their working process or culture thereby was serving as a drag on team chemistry. These workers were usually more senior having been corrupted by antiquated development methodologies or culture of a big corporation.

“Winners” (or Leaders) are an ideal type of employee to hire. Every successful start-up team I have worked with has at least one winner. A winner is simply someone who makes everyone on the team better, similar to a winner on a sports team. The productivity multiplier effect may be considered in itself a form of bootstrap. Winners come in various stripes. Some are vocal leaders that issue challenges, “talk a big game’,” provide constructive criticism in a tactful manner or offer words of encouragement or inspiration. A winner can also quietly lead by example. Some winners just serve as a leader by their very presence. Usually they serve as inspirational figures with either a winning track record or having a background of successfully facing down difficult challenges. Winners can either be founders, board advisors or employees.

Being transparent in all internal processes and decision-making is another means to ensure team chemistry. Introducing the Agile Process is just one example of instilling a transparent culture in which both founding management and development team members stay tightly engaged and on the same page at all times through cross-functional teams and daily stand-up meetings. Agile can ensure transparency on an operational level. Founders must have mechanisms in place to share any strategic level decisions made as well. For tech start-ups every strategic-level decision will likely have an enormous impact on each individual member of the development teams who likely have assumed substantial opportunity costs and other personal sacrifices to join this high-risk venture in pursuit of the shared dreams and potential upside expected by the founders. Founders are obligated to communicate the venture’s prospects and notify employees of any pending cash flow crisis or other possible events with negative consequences. The staff are entitled to this pertinent information because they are sharing the risks with the founders.

Decisions related to improving morale include perceived level of fairness, incentives, recognition and type of work being performed.

Founders of tech startups usually are in better position to be fair in comparison to their executive counterparts in larger businesses where promotions and office politics are generally more rampant. However, for startups fairness can be best exhibited by the compensation offered. Compensation includes the comparatively low salaries paid and the non-monetary incentive based forms of compensation whereas employees want a share of the potential upside commensurate with their perceived contributions. To satisfy these perceptions can be difficult because staff members offer contributions that vary in form from their co-workers and their contributions may reveal themselves at different points of time and in unexpected ways. Another way to exhibit fairness is how recognition for achieving certain accomplishments is distributed.

It is particularly important to ensure that the team is properly incentivized as they have likely turned down higher paying and more stable opportunities to work for your start-up. The founders of a local online business has had success in building a great team throughout its early to growth stages despite the founders being foreigners in the country they are based. They have discovered that there are many ways to maintain strong morale by satisfying the non-monetary needs of their employees. Their most important finding is the psychological and social need to be recognized by both their superiors and their peers. Employees being recognized for making a valuable contribution to the future success of the venture trumps receiving a little more pay or a few more days off.

A founder of another software development firm I advised operating under similar circumstances has discovered that selecting customers offering project work both interesting and challenging to his staff is an excellent way to maintain a high level of morale amongst both his staff and the independent contractors that work with them. For founders of tech start-ups it is especially important to ensure that the sense of accomplishment of their staff will be sufficiently fulfilled and they are working on truly inspiring work.

Human nature often trumps cultural differences when attracting and satisfying the needs of creative employees.

How does one build trust externally via relational bootstrap decision-making?

The way to build trust with external parties via relational bootstrap decision-making includes a winning branding strategy and transparent stakeholder relations.

Branding

The valuation of every business whether a startup or a major multinational corporation is determined, to some degree, by the amount of perceived goodwill it possesses and/or a positive association. Having an established market positioning or some other form of traction can help with brand image. However, acting in ways to contribute to the local business or start-up community, including social and/or environmental benefits derived from your innovation or in the way you operate your business and acting with integrity at all times are less costly, more immediate and just as effective ways to enhance your venture's branding. When you can associate your venture with a worthy social cause or be perceived as an eco-friendly alternative such branding will greatly increase your chances to attract investors, strategic partners and coveted employees who support the cause and/or can leverage such association to enhance their own brand. There are many quality investment firms that focus on forwarding a social cause. Strategic partners, who often lack the in-house capabilities for innovation, often rely on acquiring or partnering with tech startups utilizing more cutting edge technologies or offering products or services complimentary to their public relations campaigns promoting certain causes. Two examples of the later may be a large energy company working with a startup that provides an innovative way to conserve energy or a large media company supporting a startup with an ingenious way to promote musical performers located in remote areas. If you are a mobile applications developer with an app that assists handicapped individuals to locate accessible venues from their wheelchairs maybe seeking a partnership with hospitals or a medical services provider presents a golden opportunity to mutually enhance brand image.

Another avenue to enhance brand image, especially with prospective customers, is selecting a catchy name and logo that is easily recognizable and can easily be associated and eventually become synonymous with a particular solution. The McDonald's Golden Arches and the Nike Swish represent unmistakable symbols that stand the test of time due to their simplicity and distinctiveness. (8)

The name of your venture should be carefully selected as well. This may sound obvious to some, however, I lost count of the number of start-ups who name their company or product with a torturous name that reads like the code they are writing. For the purpose of effective branding the name of your venture should be catchy (easy to recognize and remember), simple and easy to say. If you want to be obvious what type of product you will be developing you can actually include the name of the product in your business name. This is what Burger King did. Others take an opposite approach and select names that are somewhat ubiquitous and are able to trigger some intrigue. Apple and Amazon have chosen such names that have nothing to do with their products or market. In an attempt to be both descriptive and unique some companies choose names that are a combination of two names. Hotmail, Microsoft and eBay are perfect examples. (9)

It must be noted that a super logo and catchy name does not guarantee effective branding. Ultimately the behavior of your company and the quality of your product or service will be the primary determinants of your brand image. However, a great name and logo can initially build much needed trust and association with possible positive long lasting effects. A common saying is, "perception is 90% reality." Effective branding can build valuable trust in tandem with a quality product.

There are several other relational-based decisions that can enhance brand image. Zappos.com provides one excellent example chronicled in Tony Hsieh's riveting book, Delivering Happiness. Zappos made a fortuitous decision to open and operate its own distribution facility for its shoes despite its enormous expense and being outside their core competencies. The decision was made to improve quality control and responsiveness to its customers as opposed to relying on such branding-imperative functions to a third party. A more personal example was a bit of profound mentoring advice given to an aspiring e-commerce entrepreneur by a local founder of a popular e-commerce platform. His simple but valuable advice to e-commerce ventures is to ensure your customers are perceived as your customers. This implies that your customers need to be paying you directly and you need to be serving them directly. If not they may be perceived as someone else's customers and you may not receive due credit from prospective investors nor stand to benefit from a branding perspective for the superior value you deliver. A venture partner of a local company providing logistical services to e-commerce ventures stated to me that the e-commerce business clients he preferred were those that could handle branding and sourcing themselves. They could do everything else for them. To me this substantiates the argument that possessing the relational resources to successfully brand your product and establish strong relations with the most appropriate suppliers is critical differentiator, especially for e-commerce businesses.

Value-Based Business Culture

What is the primary determinant in the behavior of your company and the quality of the product or service your venture will deliver?

The answer is the business culture you establish.

What kind of business culture should be established?

The answer is a value-based culture.

A value-based business culture is based on a set of core values that governs the behavior of the company at all levels. Because these core values permeate the entire organization and defines its mission a shared commitment is created and individual decisions within the company have a consistency and predictability to them. This builds the perception of integrity both inside and outside the company. Creating a value-based business culture has a powerful positive influence on one's espirit d'corps (internal morale) and brand. To illustrate these points I offer two notable examples of two very distinct companies with great brands- Ritz-Carlton Hotels and Zappos.com.

The most enjoyable job I ever had was serving as bellmen for the flagship Ritz-Carlton Buckhead Hotel in Atlanta, Georgia. Not only did I meet celebrities on a daily basis, for more than seven years I worked with a very motivated and dedicated team that had tremendous pride in their work. The company we worked for had legendary ("case study material") employment training (both upon hire and ongoing) and daily stand-up meetings totally focused on serving the customer in a highly personal and respectful manner. The Ritz Carlton also created truly innovative tools for us to use to that end and granted a substantial amount of empowerment to perform our duties.

Recently I finished reading the aforementioned book, Delivering Happiness, written by Tony Hsieh, the founding CEO of Zappos.com. In the previous section we discussed how Zappos had enhanced their branding externally. His book also vividly illustrates the story of how

Zappos.com had successfully build their superior brand internally through instilling core values exhibited by all its Zappos employees at every level on a daily basis. Following these core values led to a powerful espirit d'corps that made Zappos one of the best places to work and a revolutionary type of customer service making it the premier online shopping place.

Although both companies operated in very different markets and, indeed, performed their customer service in very different manners they both had similar philosophies articulated in a set of core values thoroughly instilled in every employee, a high degree of empowerment granted to each employee to translate these core values into superior customer service and various means to WOW the customer.

To me these similarities are striking. At the Ritz Carlton we had our core values codified in a Credo Card that has attained infamy. We first receive this card, consisting of twenty credos, upon hire. Receiving this card is like receiving your wings as a pilot and each employee is expected to possess it and prepared to produce it to guests upon request at all times. Every day each department have stand-up meetings during which one of the credos are collectively recited. The first credo is, "We are Ladies and Gentlemen serving Ladies and Gentlemen." This sets the tone of how we treat and communicate with both are internal (co-workers, vendors) and external guests. At Zappos.com there exists a set of Ten Core Values that reflect the collective views of its employees and articulated in a Culture Book shared with all employees, vendors and customers. (10) Their core values epitomizes their "branding through customer service'" strategy proven to be the important driver for Zappos growth which has relied on repeat customers and word of mouth. (11)

Employees at both Zappos and the Ritz Carlton are granted a high degree of empowerment to serve the customer on the spot and not having to resort to calling on a manager. At the Ritz Carlton one of the credos is to anticipate guest needs. We are not allowed to have guests depart unsatisfied. To this end all Ritz employees go through extensive conflict resolution training and have an allowance of "x" amount of dollars to be used at their discretion to resolve any issue experienced by a guest. For Zappos employees the business culture is similar. Zappos employees are encouraged to think-out-of-the-box to bear personal attention to customer needs and are instructed to assist regardless of the time it takes or whether the issue is associated with the business. (12)

This empowerment enables each employee at both companies to deliver the "WOW Factor". A WOW is a pleasant surprise delivered to an unsuspecting recipient, whether a customer, employee, vendor or shareholder. The WOW is an act exceeding the expectations of the recipient and usually a product of creative thought that often is delivered in an unexpected manner. For a WOW to be a WOW it must elicit an emotional response from the recipient that will leave a lasting impression. The objective of a WOW is not only to impress but to elicit loyalty. (13) At the Ritz Carlton we have the renowned Guest Recognition Program. Whenever any employee discovers, unintentionally or through inquiry, any specific desire, need or personal detail of a guest we are to submit it to the Guest Recognition Department where it is stored in a database and instantly shared with Guest Recognition Departments throughout are hotels world-wide. Information may include the birthday of a daughter or favorite candy etc. Each day each employee at each property reviews a Guest Recognition report noting the personal needs of each guest to check-in or currently staying on that particular day. This information is used by the empowered employees to WOW the guests when giving the opportunity. At Zappos the employees regularly exceed the expectations of their unsuspecting customers by offering perks like free shipping upgrades, etc. (14)

What is the relationship between trust and branding?

Through their branding and customer service philosophies both the Ritz Carlton and Zappos.com have been able to accumulate over time three of the major trust-building attributes- integrity, transparency and the performance imperative. Ritz Carlton bases its perceived integrity by consistently providing a high standard of easily recognizable customer service that has differentiated them from the competition and have positioned themselves as the premier hotel brand. Zappos.com has earned a stellar reputation as the place to work and a place to shop online where customers can easily expect to receive genuine personal care and unexpected WOW's. Although the customer service practices of each company are very different what's similar is their personal attention to details and elevated level of customer expectations that have created the predictability that is associated with integrity. Both companies communicate with their guests, vendors and employees in a highly transparent manner and make their core values publically available. The Ritz Carlton accomplishes the later with Credo Cards available upon request for inspection and Zappos.com publishes and discusses their core values online via their widely-followed blog. Both the Ritz Carlton and Zappos.com operate in market places which places a premium on customer service. Their laser customer-centric focus is consistent with the performance imperative and has resulted in establishing leading brands in the hospitality and online retail space respectively.

Establishing a strong business culture builds trust and serves as an essential prerequisite to building a winning team and a successful brand.

Stakeholder Relations

The area of governance of significant importance is stakeholder relations. How healthy and productive is the relationship between your start-up and shareholders, strategic partners and vendors?

The first step to ensure that relations with all your external stakeholders are healthy is to recognize that they are, in varying degrees, sharing the risk of your high-growth potential venture. This acknowledgement should be a factor in every strategic level decision you make and be made readily apparent to all your external stakeholders. Acting with transparency is the best way to demonstrate this recognition and is the best means to build trust. The following are just some of the ways to act in a transparent manner and build trust amongst external stakeholders.

Proper Disclosure. It is important to offer disclosure to external stakeholders of any recent, current or planned event or activity that would have a material effect on the interests of each stakeholder. Periodic distribution of a shareholder letter is one example of being transparent and accountable. Another example of proper disclosure is when a pending cash flow crisis may inhibit your ability to make payments to key vendors or fulfill your obligations to a strategic partnership. It is much better to serve notice before the crisis occurs as opposed to delivering the news once it occurs.

Sponsoring and Participating in Worthy Events. There are several ways in which sponsoring and participating in worthy events helps a start-up build relational value by earning the trust and respect of third parties. This is accomplished by demonstrating you have interests beyond just the bottom-line, are willing and capable of making positive contributions to the community in general and the consequent bonus PR a strategic partner or investor stands to gain by working or investing with you. Most importantly it shows you have a broad and long-term business perspective thereby increasing the prospect that you will be a strong and enduring venture armed with valuable foresight. Acting responsibly through extra-curricular activities demonstrates integrity and builds trust.

Effective Crisis Management. Managing crises in a transparent manner is also critical to establishing a positive brand. A crisis can either doom your venture or present a golden opportunity to build an enduring high level of trust between your venture and external parties, most notably your customers.

During a crisis how does a venture act in a transparent manner?

The answer is by accepting responsibility and providing accurate information in a timely manner. Important pieces of information to be shared include when the crisis started and when it is expected to end. This will allow those external stakeholders, notably customers, to make informed decisions on how to deal with the crisis given their particular circumstances. It will also pre-empt any inaccurate speculation that could cause irreparable damage to your venture's brand image. Once the crisis has dissipated it is now time to publically provide a summary report which will include the duration of the crisis, chronology of events, the cause, what was learned and what actions were done to prevent such another crisis to occur again. (15)

Building trust both internally and externally is the crux of building relational value that can be leveraged to support all types of bootstrap decisions and pursue all varieties of bootstrapping opportunities.

Relational Bootstrap Opportunities

There are many relational bootstrapping opportunities available to tech startups that can be utilized to build trust, gain valuable exposure and facilitate relations with external stakeholders. They include a variety of opportunities to leverage the credibility of third parties, selecting the most suitable vendors, securing captive audiences and participating in startup events.

Leveraging the Credibility of Third Parties

In the previous section we discussed several relational bootstrap decisions to be made in building external trust. Another means to build external trust is seizing opportunities to leverage third-party credibility. In accordance with human nature promotion of your innovation or venture is far more credible when sourced from third parties, who are perceived to be more objective than you. Whether the opportunity to leverage the credibility of a third party is free or comes at a comparatively higher cost such opportunities warrant serious consideration as powerful sources of relational value.   There exist many opportunities to leverage third-party credibility. They include free PR through tech media outlets, participation in electronic communities, utilizing the services of a reputable independent auditor and executing non-binding Memorandums of Understanding (MOUs) to serve as prospectus documents.

Third-Party Tech Media Outlets

As we discussed in Chapter Two the costs of developing innovative products and services has been drastically reduced in recent times due to technological advances, more open dissemination of information and reductions in IT infrastructure costs. Consequently an increasingly higher percentage of investment funds sought are needed to be allocated to marketing. An ideal way to maximize your marketing dollars is to pursue free PR opportunities via tech media outlets such as tech blogs and online media.

How do you pitch to tech media outlets to secure coverage for your venture?

Some of the manners discussed when dealing with stakeholders and effectively developing a favorable brand image are equally applicable here. The following are well-founded advice when pitching to tech journalists:

1. Build a relationship with a target journalist before you make your pitch. Ways to develop a relationship include commenting on or linking to their posts.

2. Be concise and provide substantive proof on why it is urgent and significant to write about your venture.

3. Transparency works well here as well. Disclose whether you have received previous media coverage and if you are currently approaching other media outlets.

4. Present a story that would be interesting to the audience of the target journalist.

5. Avoid commonly used buzzwords but write in layman's terms. In other words avoid Geek Speak which I defined in my previous book as articulating in complicated technical terms indecipherable to a non-geek.

6. Reduce the effort required of the journalist to prepare their article to cover your venture by providing any research they would otherwise have to dig up themselves. (16)

Participation in Electronic Communities

Another way to maximize your marketing dollars, earn relational value points (i.e. enhance brand image) and target the most passionate members of your target market is to either establish or become an active participant in an electronic community. An electronic community is an online place where those who have a passionate interest in a particular product or subject can go and exchange information, insights and perspectives. There are hundreds and thousands of members within thousands of electronic communities within Yahoo, Google, Microsoft and LinkedIn that cover specific subjects. By establishing or participating in an electronic community(s) related to your product or service offers you a relatively highly-focused and inexpensive advertising medium in which you have the capability to measure audience reactions, solicit valuable feedback, display a shared passion and personal engagement with your target audience and have the opportunity to leverage third-party credibility by soliciting the endorsement of notable figures in the space. (17) For example if you have developed and would like to commercially launch an innovative product that offers a tool for customers to better manage their personal finances wouldn't it be better to secure an endorsement from a celebrity financial advisor such as Suze Orman in the United States? Maybe you offer a website facilitating the exchange of cooking recipes. In the later case wouldn't it be nice to get an endorsement from a famous homemaker such as Martha Stewart? Such high-profile experts in particular subjects can be reached through electronic communities because they themselves frequently review and participate in such electronic communities via blogs and forums.

Oftentimes participation in an electronic community proves to be a much better alternative than executing expensive advertising campaigns in which you do not gain many of the aforementioned selection of valuable capabilities.

Reputable Independent Auditor

The level of trust placed in your financial reports and prospectus documents by stakeholders is a powerful relational value that cannot be underestimated. Although employing a reputable independent auditor may prove costly the extra cost may well be worth it if the perceived risk in investing or partnering with your venture has been sufficiently mitigated to provide final assurance to invest or partner with you.

Use of Memorandums of Understanding (MOU's)

An effective fund-raising tool I have used with success for many years is a variety of non-binding legal agreements that can be generally classified as Memorandums of Understanding (MOU) signed by key vendors or strategic partners that I have presented as prospectus documents to prospective investors. I have always asserted that if you can demonstrate a good reason why a strategic partner would be willing to partner with you than you can make a strong case to prospective strategic investors of why they should invest in you.

In Chapter Ten on strategic partnerships we will discuss in greater detail and provide examples of how such MOU's can be utilized in fund-raising efforts. For now it is important to note how the overall reputation and brand image of strategic partners can be fully leveraged.

Select the Most Suitable Vendors

We have just discussed how your relationship with key vendors is an important component of startup governance as it pertains to relational bootstrapping. Selecting the most suitable key vendors is another crucial decision that needs to be made by many tech startups.

When selecting the vendors to work with it is important to consider the following three factors:

Strategic Value of Relationship. Does the prospective vendor have a vested interest in your success beyond just the payments it expects to collect from you? If so this may allow you to seek better terms and ensure that they are more receptive to any issues that may arise. They would also be more likely to provide other forms of assistance such as valuable market information and perhaps make potentially valuable introductions for you.

Can the vendor scale with you? This is a critical consideration often overlooked by tech start-ups. To be successful a tech start-up should anticipate a period of exponential growth in their future. Is the vendor providing a critical input able to continue to provide such a critical input in a sufficient and timely manner during such a potentially rapid phase of growth? Does the vendor have the ability to cater to your needs once you begin to expand to additional markets? These questions not only need to be answered from a capacity perspective but also from a technology and marketing perspective. Will they be implementing cutting edge technologies and willing to explore new distribution channels in their “space” as you will be in your “space” to remain competitive?

Will the vendor be agreeable to working out cash flow issues? As a tech start-up your cash flows will likely be volatile, at least during the early stages. Will the vendor be empathic, willing and financially capable of working with you when your venture faces a cash pinch? We already mentioned in our earlier discussion on start-up governance how transparency can make a vendor more receptive to working with you when a cash flow crisis does arise.

Establishing healthy relationships with the most suitable vendors will improve the prospects of success for your fledging venture.

Secure Captive Audiences

Professional relationships and strategic partnerships can be a means to secure early adopters as alpha/beta testers or paid customers with little or no effort. Bundling software into hardware offerings is the most recognized means to reach a captive audience. Affiliate and re-seller agreements are two other common ways to gain access to a receptive pool of customers who are current customers of another party. There is other less recognizable and less complicated ways to secure captive audiences. Recently I mentored a start-up who had developed a project management tool and identified a mutual interest with a professional consulting firm. The consulting firm had a client base that would find their project management tool useful. The two parties agreed the consulting firm would provide the helpful project management tool to their clients first for alpha testing and eventually for purchase. This served as a much welcomed opportunity for critical customer development and an initial source of revenue for the start-up.

In Chapter Ten we will illustrate in greater detail how a variety of strategic partnerships can help a start-up win access to coveted captive audiences.

Start-Up Event Participation

Startup events such as Bar Camps and other un-conferences is a great place to find fellow geeks interested in being a co-founder or joining a startup team. Indeed startup events are a much more preferred venue to meet ambitious, creative and independent tech partners with relational “soft skills” as opposed to job fairs or job portals. Earlier in the chapter we discussed the need to assemble a complete founding team with diverse experience and professional networks. If you need to find a Hipster what better place to find such a person than attending a

UI design presentation at an un-conference. At these conferences interesting non-mainstream topics covering the local start-up environment, target market, new innovative processes and technologies may be delivered by more experienced attendees who could serve as possible mentors and/or board advisors. Start-up organizations such as Three Day Start-up (3DS), Startup Weekend and local start-up clubs or associations offer excellent opportunities to network and share notes with other aspiring entrepreneurs and meet potential mentors and board advisors as well. In an active startup ecosystem there will be available a large number of more casual networking events where tech entrepreneurs meet after work. In our local start-up community we have frequent Beer Camps where members of the local start-up community meet for a drink at a rotating list of local pubs and restaurants. Much corroboration has originated at these less conspicuous meet ups.

I must emphasize that attendance at networking events is not sufficient. Participation at networking events is far more valuable. When you attend a un-conference conduct a presentation. If you go to a more formal tech conference conduct a workshop or participate in a panel discussion. Participate in event activities such as hackathons. Participation elevates the branding image of your venture and is the surest way to attract potentially valuable relationships with fellow attendees.

Summary

The third and final resource category to be discussed in which bootstrapping decisions and opportunities can be made is relational. Relational Bootstrapping is defined as all the decisions and opportunities made and pursued for the purpose of securing such relational resources at a cost notably less than otherwise would be incurred via an equity sale or a debt note to fund such acquisitions. Having the capability to optimally leverage the use of existing financial and knowledge-based resources possessed and being in a better position to secure additional resources represents the significant importance of accumulating relational resources.

The types of relational resources to be acquired includes far more than the aggregate social and professional network of the founders, board advisors and all other stakeholders. The morale and chemistry found within your venture are crucial relational values that can provide sufficient incentives, encourage innovation and optimize performance from an efficiency and effective communications perspective. Externally the level of goodwill generated and credibility established is imperative to improve the prospects of attracting investors, talented employees, strategic partners, key vendors and customers. The primary objective of acquiring both internal and external relational values is to build the greatest relational value for a tech start-up- Trust.

In the chapter we noted four decisional areas in which the founding management team can cost-effectively acquire relational resources. Deciding on whether it is necessary to re-locate and, if so, where was the first decisional area explored. Factors to consider if a start-up ecosystem is favorable include factors in three broad areas- available human resources, activities and conducive legal and business environment. A "stacked" ecosystem will have an abundance of tech talent and experienced entrepreneurs, a large diversity of start-up events, organizations and co-working spaces, and an environment in which intellectual property rights are strongly protected, opportunity to develop a strong brand on a global level is possible and offering value-added content crucial to marketing an innovative product does not face severe prohibitions such as limited freedoms of speech. Building a well-connected and respected founding team is an important means to build relational value. With such a well-rounded team a more expansive aggregate social and professional network offers a higher probability to attract talented employees, attain valuable market and competitive intelligence, possess stronger negotiating abilities, establish a strong base of mutual emotional support and increase the ability to retain more decision-making control vis-à-vis investors and external parties. Assembling a trusted and respected board of advisors is a way to support the founding team by filling gaps and deficiencies in the above relational values. A respected and well-known board advisor can lend critical credibility to a young start-up and can serve as an "anchor tenant," that can attracting investors, particularly those factoring "social proof" in their investment decisions. Internally there are many actions that can be taken to increase trust through strengthening morale and team chemistry. Such actions include recruiting the right employees who will "fit" well within the desired working culture, ensuring your employees are working on projects interesting and challenging to them, establishing transparent processes and decision-making structures and treating employees with fairness, giving deserving recognition and offering sufficient incentives.

The most important relational bootstrapping decisional area discussed is the establishment of a strong value-based business culture for the purpose of accumulating trust both internally and externally. A value-based business culture was defined as a culture derived from a set of core values that governs the behavior of the company at all levels. Because these core values permeate the entire organization and defines its mission a shared commitment is created and individual decisions within the company have a consistency and predictability to them. This builds the perception of integrity both inside and outside the company. Creating a value-based business culture has a powerful positive influence on one's espirit d'corps (internal morale) and brand.

Building trust vis-à-vis external parties requires particular attention to enhancing the venture's brand image through positive contributions to the start-up ecosystem and local community and acting in a transparent manner with external stakeholders through proper disclosure and effective crisis management.

Ultimately the successful implementation of these relational bootstrapping decisions will lead to an inspiring and productive workplace and a compelling brand.

Following our discussion on relational bootstrapping decisions we delved into the various external opportunities to relationally bootstrap. The first set of opportunities discussed pertained to leveraging the credibility of various third parties. The third parties to be leveraged include online tech media outlets offering free PR, electronic communities providing a large forum to engage with the most passionate segments of your target market and potential key endorsers, reputable independent auditors to give instant credibility to your pro-forma statements and business assumptions and leveraging the credibility of strategic partners willing to sign non-binding legal agreements that can be used as prospectus documents and marketing material. Selecting the most suitable vendors is the second opportunity discussed. Vendors are to be selected based on the strategic value they offer, their ability to scale with you and their willingness to work with you if any issues arise, particularly cash flow issues commonly occurring when working with cash-starved tech start-ups with little or volatile revenues. Securing captive audiences via bundling your innovation with other more established product or professional service offerings, affiliate agreements and re-seller agreements is the next opportunity reviewed. The audiences to be captured include both early adopters as alpha/beta testers and customers. Active participation in start-up events was the final opportunity presented to secure relational value by enhancing the brand image of your venture by making a positive contribution to the local start-up ecosystem and attending the best venue to meet the creative IT talent and experienced entrepreneurs so valuable to expanding your existing professional network.

This chapter concludes Part II in which we introduced the various bootstrapping decisions and “minor” bootstrapping opportunities that can be made and pursued to primarily acquire one of the three vital resources. In Part III we will turn our attention to the bigger fish in the pond- “major” bootstrapping opportunities that simultaneously offer all three types of resources essential to start-ups.

Part III Introduction - The Bootstrapping “Majors”

In the following Chapters Six through Ten we will examine the five most significant bootstrapping opportunities I refer to as the bootstrapping “Majors.” They are “Majors” because they are global, experiencing rapid proliferation and offer the possibility to simultaneously acquire all three types of resources sought. The Majors” include Co-Working Spaces, Incubators, Accelerators, Crowd Sourcing and Strategic Partnerships.

A chapter will be devoted to each bootstrapping “major” and the chapters will be similarly organized. The chapters will commence with a proper definition and description of the Major followed by an overview of current variations. Our attention will then turn to the pros and cons of each Major, which will consist of a section describing in what ways and to what extent all three resource types are offered and a section listing the challenges and risks posed. For illustrative purposes we next examine real start-up experiences before a section examining factors to be considered in deciding if and when to pursue this bootstrapping opportunity. The chapter will conclude with highlighting current trends including recent proliferation of the major opportunity.

Chapter 6 Co-Working Spaces

What are two of the most valuable inputs for a tech start-up? Answer: Caffeine and bandwidth. For tech start-ups co-working spaces have proven to be the most pleasant source of both and much more. Co-Working spaces can provide numerous ways to make valuable connections both online and offline.

What is a Co-Working space?

The standard definition of a co-working space is simply a shared working environment in which those not sharing the same employer work. Most co-working spaces require a membership to use. The most frequent members are independent contractors (freelancers), those that travel frequently due to their work obligations (road warriors) and work-at-home professionals. The motivations for these three groups are avoiding having to work in isolation and escaping the distractions of home respectively. However, small start-up teams have increasingly become co-working space members. They have been attracted to co-working spaces based on the need for accessibility, collaboration and community. In other words, to work in a physical location where all three types of vital resources can be acquired respectively- financial, knowledge and relational.

For purposes of this chapter we will narrow our definition of co-working spaces to only include those co-working spaces primarily established to cater to tech start-ups and serve as an integral part of its local start-up community by sponsoring and/or hosting start-up events and serve as a promoter and nexus of information for the local start-up community.

The chapter will commence with an overview of the different variations of IT-focused co-working spaces. Variations include the size, atmosphere and focus of a co-working space. The chapter will then proceed to an illustration of how co-working spaces provide all three types of resources vital to tech start-ups. The challenges and risks of working at co-working spaces will then be examined followed by real-life examples of start-up experiences of tech start-ups at co-working spaces. The next section will consider the factors in choosing the most appropriate co-working space for your start-up venture. The chapter concludes with a discussion of current trends in the co-working space environment.

Variations

Co-Working Spaces vary in three different respects- size, atmosphere and focus. Tech founders should consider these variations in determining the most suitable co-working spaces for their team.

Size

Co-working spaces come in various shapes and sizes. Some co-working spaces are small, quiet and intimate. Professional IT freelancers and road warriors typically prefer such spaces which are designed for shorter-term use are more conducive to focused work, however, do offer the opportunity for social interaction. Larger co-working spaces with more expansive facilities and amenities have increased in number recently. These co-working spaces have been designed more for larger start-up teams to use the space for longer periods of time. Larger spaces also offer a more suitable venue to host start-up events and often private office space occupied by start-up organizations. These larger spaces usually serve as vital hubs of activity for their local start-up communities. In our local start-up community our two leading co-working spaces offer a distinct size variation providing an ideal selection for local founders, IT professionals and visiting expats. Our first co-working space is smaller, more intimate and in a more quiet location. It is the preferred destination for local IT freelancers and visiting expats. This has become the leading venue for smaller start-up events and start-up related workshops. Our other leading co-working space is much larger offering a more extensive list of amenities and variety of work areas. It is located in a more bustling commercial district. It has become the preferred space for larger start-up teams and host of larger start-up events. Fortunately for the benefit of our local start-up community such complimentary distinctions are acknowledged and fully leveraged through the close cooperation of the founding management teams of each co-working space.

Atmosphere

The atmospheres of co-working spaces can range from professional to artsy. Spaces giving the more professional vibe are conducive to business-like focus and hosting visiting prospective investors, strategic partners and customers. Spaces with professional atmospheres and prestigious addresses can convey a more professional image and enhance a brand. Spaces with a more artistic feel are ideal for creative productivity and collaboration. A co-working space located in an office building is more likely to be in a more professional setting. Co-working spaces located in renovated residential houses, former retail spaces or commercial shop houses/ lofts are likely to have a more relaxed vibe and creative atmosphere.

Focus

As mentioned at beginning of chapter for a co-working space to be considered a co-working space as an integral component of a local start-up community the space has to have a conscious minimum amount of community focus. Community-focused spaces are primarily concerned with their role in the local start-up community and serving as a nexus of people and ideas. Hosting and sponsoring start-up events are important community functions which serves as the best venue to meet co-founders with complimentary skills and shared entrepreneurial ambitions. It is an exceptional environment for cross-fertilization of ideas to occur as well. The local co-working spaces I frequently visit is Bangkok are heavily community-oriented. They consider themselves much more than just an affordable work space. Providing a supportive community for local or transient entrepreneurs is deemed a primary function evident by the many support groups and workshops they host. They are also interested in expanding the existing community by forging partnerships with other co-working spaces within Thailand and in neighboring countries as well.

There appears to be a growing and very welcomed trend for specialty co-working spaces themed and centered around a particular entrepreneurial grouping or discipline. For example a co-working space may be specifically established for creative professionals or social entrepreneurs. Such a co-working space creates a very conducive environment for brainstorming and collaboration amongst like minds. There are a few local examples recently opened in Bangkok. MA'D Co-Working Space opened specifically for social entrepreneurs and those that want to support social causes in some fashion. MA'D will have outdoor areas for an organic garden and sponsor events to promote and raise funds for social causes. The recently opened Pah Co-Working Space has been designed for creative professionals such as designers, writers and architects. Their facilities will include an impressive multi-functional media room and a gallery for creative works to be displayed. Both intend to serve as a nexus for the local social entrepreneurial and creative professional communities respectively.

Focused co-working spaces play a critical role in the development of vibrant start-up communities as we will examine in greater detail in the last chapter of this book.

Provision of Resources

As we mentioned at the beginning of the chapter the attraction of co-working spaces to tech start-up founders is accessibility, collaboration and community. It is accessible due to the relative ease and affordability to become a co-working space member and be noticed. It is a great venue for collaboration where people of like minds, passions and complimentary skill sets congregate. However, perhaps the biggest attraction which differentiates it from incubators and accelerators is its community focus.

Financial Resources

Co-working spaces represent a financial bootstrapping opportunity for tech start-ups. Compared to working out of a coffee shop the necessity to buy a cup of coffee every day at a coffee shop may prove more costly than a co-working space membership. Co-working space membership is almost always cheaper than lease payments on traditional office space as well. The terms of membership are usually much more flexible as well in regards to initial costs, duration and range of membership plan offerings accounting for the variation in the needs of potential members. As we mentioned in Chapter 1 “time is money.” It is invariably true that becoming a member and commencing the utilization of a fully-serviced co-working space can occur much faster than negotiating a traditional office lease, awaiting preparation of the space for use, purchasing and/or positioning office furniture & equipment and arranging for utilities and IT infrastructure. Once the office is organized than the management of the office represents an additional effort. For a cash-starved start-up whose founders and employees are living a Ramen-noodle lifestyle such cost-savings and convenience cannot be understated. For many young founders they have little choice as they either cannot afford the upfront deposit and/or possess the personal credit required to sign a long-term office lease. As we will soon discuss the option of working out of their proverbial garage or at a coffee shop will result in a deficiency in the other vital resources essential to their venture.

Knowledge Resources

Through shared learning and collaboration co-working spaces offer an exceptional knowledge-based bootstrapping opportunity as well as they are typically inhabited by IT professionals of shared values, entrepreneurial spirit and complimentary skill sets. Co-working spaces have frequently been the setting for entrepreneurial alchemy and Eureka moments whereby a synergy of viewpoints results in a vision for a future start-up or a solution to a real problem is discovered. Co-working spaces are also an excellent place to find early adopters willing to try your product or service for free in return for valuable feedback.

Earlier in Chapter Four we discussed the importance of having a complete founding team and the benefits associated with having founding team members with diverse backgrounds. For early-stage start-ups not having the opportunity to build a complete founding team or for later-stage start-ups looking for continued innovative thinking being a member of a co-working space is a golden opportunity to leverage the benefits associated with operating in a diverse working environment.

Co-working spaces serve as the primary venue for the cross-fertilization of ideas. The cross-fertilization of ideas occurs when a group with diverse backgrounds seizes the opportunity to communicate with each other to actively learn the innovative ideas and best practices of others. Members of a co-working space often have a great diversity of interests, experiences and expertise. The similarities of co-working space members are creative talent and entrepreneurial ambitions. When you mix creativity and entrepreneurial ambitions in a cauldron of diversity what is produced is a diverse stew of innovative product ideas, tech solutions, processes and business models. Whereas the marriage of customer and product development proposed by the Lean process offers tech entrepreneurs the ability to more accurately discover real customer pains and the associated technical solutions, a co-working space membership provides a venue for the discovery of innovative business models and best practices. Either observing or being exposed to the business models and processes through which other tech startups operate can and is often a great source of innovative ideas that may be effectively applied to one's own start-up. "Sharing notes" with other like-minded entrepreneurs is the essence of co-working space membership and the most continual and efficient means to acquire knowledge-based resources.

In Chapter 4 I mentioned cases where I witnessed the occurrence of knowledge-bartering. The knowledge-bartering I witnessed occurred in local co-working spaces where fellow members shared their complimentary expertise and experiences for the mutual benefit of both start-up teams. This is just another way co-working spaces serve as start-up cooperatives.

A venue for such cross-fertilization of ideas, collaboration and mutual support serve as important catalysts for any vibrant start-up community. We will now discuss how co-working spaces is a vital source of relational resources and the pivotal role it plays within any start-up community.

Relational Resources

As we mentioned in the beginning of this section, co-working spaces differ from incubators and accelerators in their deeper integration into the local start-up community. Those co-working spaces that organize and host start-up events and various types of workshops afford its members a steady stream of ideal networking opportunities. Co-working spaces have proven to be fertile ground for the formation of founding teams and is perhaps the best venue to find talented IT talent willing to think out-of-the-box and assume the risks associated with joining a start-up venture. I believe this is an important point to note because I see time and time again founders having a difficult time attracting the best IT talent. This is because the strongest IT talent is in the luxurious position of being offered a plethora of high-paying job opportunities to choose from. Competing for IT talent more interested in a large and stable paycheck is not the competition a cash-starved start-up wants to engage with large and prominent corporations. Those start-ups that attract the top talent usually search at venues such as co-working spaces where they will find highly-skilled but independent-minded geeks who are more apt to join a start-up offering an exhilarating work environment, more innovative and challenging work and the potential upside in lieu of a steady paycheck.

Financially bootstrapping by working from home does not afford the opportunity to acquire such critical knowledge-based and relational resources ideally provided by co-working spaces and leverage the tremendous benefits to be reaped by being plugged into the local start-up community.

The greatest value that may be offered by a co-working space is the community-based knowledge and relational bootstrapping opportunities such as collaboration with other members, workshops and networking events.

How does one optimally leverage their co-working space membership to acquire all three types of valuable resources?

The answer is posing and answering the following questions related to the different resource types while observing the activities of other tech entrepreneurial members:

Financial:

Did they secure investment funds and, if so, from whom and how?

How do they compensate their founders and employers?

How do they purchase their physical assets and what service providers do they use?

Do they have any good cost-saving ideas?

Knowledge-Based:

How are they resolving similar challenges?

Are their monetization opportunities in their business model that may be suitable for our business?

What processes do they follow and are they applicable for our team?

Do they have a coach and/or board advisors and, if so, what are their backgrounds?

Relational:

Where do they find their best talent and how do they keep them?

How do their founders handle adversity and attempt to maintain high morale?

What events do their founders attend?

Have they experienced crisis situations and, if so, how did they deal with it?

By answering these questions and many others not mentioned here pertaining to the best practices of other member start-ups you are participating in the great cross-pollination experiment that is a co-working space and vastly improving the probability of success for your venture.

Potential Challenges & Risks

Although co-working space membership represents an excellent opportunity to acquire all three of the valuable resource types there are some potential challenges or issues to be conscious of when becoming a member. Distractions, limited space and privacy represent a few more notable examples of potential challenges to be faced at a co-working space:

Distractions

The public nature of a co-working space can create distractions for your development teams. Although this should not be a deal-breaker when considering a membership one needs to make preparations for such an eventuality in your plans to deploy your team there. Maybe you have to take measures to time when your team does creative work or perhaps create a more "private area" for your team at the space.

Limited Space

As a successful start-up team grows in numbers it is a possibility that they may simply out-grow the co-working space. A venture may need to acquire, install and use cumbersome physical assets that either require too much space or make too much noise to be reasonably deployed in a public co-working space. Either situation can prove to be impractical for co-working space members.

Privacy

For those start-ups utilizing proprietary technologies or processes one needs to address the lack of privacy issues associated with working within a public area. Although most co-working spaces offer private office areas for founders to discuss strategies and conduct meetings, in the common area it is very easy for other members to intentionally or unintentionally catch a glimpse of what is on your computer screens. Again precautions can be made to maintain the confidentiality of your work at a co-working space and secure your proprietary technologies and processes.

Experiences at Co-Working Spaces

The experiences of tech start-up founders at co-working spaces is evidence of the varied benefits to be enjoyed, the challenges to be faced and the decisions to be made. One such tech start-up based in Betahaus, a co-working space in Berlin, Germany, is a perfect example of how all three types of vital resources can be acquired at a co-working space.

Coffee Circle was founded as a social impact venture to funnel a certain portion of coffee bean sales proceeds into social impact programs in Ethiopia, a country famous for its coffee beans.

Martin, the founder, shares his positive experience at Betahaus. As a financial bootstrap Martin was able to rent just a few desks as opposed to an entire office space. Betahaus served as an excellent knowledge-based bootstrap by providing valuable exchanges with the diverse background of fellow members. An immense challenge for any sole founder or initial founding team is being a jack-of-all-trades. Access to programmers, designers, PR professionals and other entrepreneurs was a luxury to Martin. The easy access to journalists to secure valuable PR was a relational bootstrapping opportunity of enormous benefit to Martin and his team as well. (1)

Another tech start-up based at Betahaus is Orderbird, which has developed a mobile application for hospitality businesses that permits them to replace the use of cash registers and provide real-time data. Its experience illustrates the trade-offs that may need to be made and decisions associated with being a co-working space member. A trade-off they had to accept for the valuable social component of co-working was the occasional distractions this would entail. Ultimately they had to make the decision to leave the co-working space once they reached eight employees and desired to separate their sales and development teams. (2) Out-growing the space is a common reason why co-working space members eventually need to move out.

Natee Jarayabhand, founder of Thai start-up FitMe based in Bangkok's Launchpad Co-Working Space, has shared with me a nice variety of benefits he and his team have enjoyed as a co-working space resident. When he first became a member he enjoyed substantial cost savings compared to the alternative of paying office rent and all the associated monthly bills. However, once his team exceeded six he no longer enjoyed the cost savings, however, was more than happy to keep his larger team there to avoid the hassle of managing an office and a whole list of other benefits that simply cannot be attained at a regular office setting. Being the largest co-working space in Bangkok, Launchpad is a popular destination for both local and visiting investors and there are frequent pitching opportunities organized and hosted by Launchpad that FitMe has participated in. The valuable collaboration with other co-working space members has helped him and his team acquire technical knowledge and insights only borne out of experience that they could not otherwise have garnered. They also have met some experienced advisors at the space who have eventually become partners, testifying to the relational benefits offered by a co-working space community. Natee did mention to me that sometimes the distractions and lack of privacy are drawbacks they sometimes experience at this expansive and bustling co-working space. (3)However you take the good with the bad. Being an accepted member of a close-knit community is worth the occasional distractions for him and his team.

Shortly after my discussion with Natee I took a survey amongst 26 members of local co-working spaces asking them to rate the importance of the following benefits in their decision to become a member. The financial benefits included in the survey were cost savings and access to investors. The Knowledge benefits were workshops and collaboration with other members. The three relational benefits rated were recruiting IT talent, finding a co-founder and finding an experienced mentor/advisor. The respondents were to rate each benefit in level of importance from 1 (lowest priority) to 5 (highest priority). The results indicate that in Thailand the current order of priority for joining a co-working space is knowledge, financial and relational. The benefit that received the highest rating was collaboration with other members (4.3478) a knowledge value. Second place went to cost savings, a financial value receiving an average rating of 3.0455. Workshops, another knowledge benefit, took the third position with an average rating of 2.9444. Consequently the resource category which received the highest average rating was knowledge (3.6461) followed by financial (2.7727). The relational value ratings (2.4974) were not very far behind and thus seeking relational benefits was not an inconsequential factor in deciding to become a co-working space member amongst the respondents surveyed. The respondents to this survey graciously cited additional motivations for joining a co-working space including the following:

*More professional and convenient than working in cafes

*Legal advice

*Competitor analysis – identifying a potential competitor

*Meeting fun and interesting people

*Inspiration

In a subsequent survey asking a sample of founders where they met their co-founders co-working spaces ranked third at 8.11% of the 37 responses received. Meeting their co-founders at school (32.43%) and through personal introductions (10.81%) were the only two locations with a higher frequency of meetings. (4)

Choosing a Co-Working Space

In choosing a co-working space there are many factors to consider regarding the characteristics of the space and the priorities for you and your team. The following questions will need to be answered in relation to your team and venture:

What resources are you primarily interested in?

For those primarily interested in the cost-savings aspects of a co-working space one obviously needs to look at membership fees and fees for services, the costs associated with commuting to the space and the frequency of prospective investor visits and hosted events, such as pitch events and certain workshops, that welcome attendance of prospective investors.

If Knowledge-based resources are of paramount importance than factors such as proximity to educational and research institutions, frequency of workshops, the level of collaboration currently observed will be the primary factors in your selection decision. Specialty co-working spaces serve as ideal spaces for founders primarily interested in collaboration with other members in their particular discipline.

The frequency of networking activities and events and the overall integration of the space with the local start-up community will be characteristics most closely assessed in making a decision to join as a member if acquiring relational resources represent the top priority. Indeed, when visiting a co-working space for the first time the best qualitative inclination of the space is what is on their schedule board. Specialty co-working spaces serve as ideal spaces for founders primarily interested in networking or organizing activities with other members in their particular discipline.

Your resource priorities will also determine the space variation most suitable for you and/or your team. If collaboration is your highest priority than maybe a co-working space with a creative atmosphere and/or specialty-focus would be preferred. If amenity offerings are of paramount importance, size may be the most important consideration. If networking opportunities is the greatest benefit sought than a larger space with a packed calendar is what is desired. If you or your team needs a space permitting a greater concentration on work than a smaller, less bustling space is ideal.

What are the real or potential challenges or risks presented by each available space?

How susceptible is your team to distractions and is it feasible to plan for the potential distractions within the co-working space being considered for? Does a contingency plan need to be created for the possibility of out-growing the space? Faced with this contingency do you split your team? If you gain productivity by operating in cross-functional teams is this practical? Is there available proximate office space that can be secured? Finally, how do you deal with issues of privacy? Does the layout of the co-working space allow you to arrange seating or other actions to create a more private space? Does the co-working space offer private areas such as conference rooms where you and your team can meet in-private? The design and layout of a co-working space is an important consideration to ensure your team can be productive.

There are several other considerations in the name of productivity. Other considerations include location, IT infrastructure (sufficient bandwidth and speed), layout, level of service and physical facilities/amenities offered. Caffeine and bandwidth represent the two most important inputs for a tech start-up and the reliable flow of such supplies need to be assured and important factors in selecting a co-working space.

To effectively choose the right co-working space for your team one needs to, at a minimum, visit the co-working space. The following represent additional ways to qualify a co-working space for you and your team:

1. Participate in a trial membership if offered. A trial run will help gage the working atmosphere and test the performance of the IT infrastructure.

2. Ask current members what they like or dislike about the space. This is the only way to discover any, otherwise undetectable, challenges and risks.

3. Review their Calendar of Events. What is the frequency and variety of events they host? Are there many workshops? Are there many networking events? Are there fees charged for attendance?

4. Tour the surrounding area. Is the location accessible at different times of the day for you, your team and any potential visitors? Are their many places nearby that can serve as either a casual or more professional meeting place? Are there 24-hr. food outlets? How proximate are you to educational and research institutions, existing start-up organizations and other venues for start-up events?

Selecting a co-working space is not only a financial commitment but will have a significant effect on your team's productivity. Taking advantage of a trial membership and conducting the other types of due diligence mentioned above is well worth the effort.

Once you have selected a co-working space and become a member it must be said that to fully reap the benefits offered by a co-working space one can neither be shy or paranoid. The social component of the co-working space and the mutual need of trust amongst its members must be recognized, appreciated and engaged.

Current Trends

Are co-working spaces here to stay and proliferate? If so how can they be expected to continually develop and evolve?

The answer to the first question is yes, they are here to stay and yes they will continue to proliferate throughout the globe.

The following are favorable factors supporting the proliferation of co-working spaces throughout the world:

Increasing number of professional freelancers, particularly in the IT fields. The diminishment of the perception that employment with large companies mean greater job stability and the realization that true innovative work is more difficult to achieve in more hierarchal organizations have contributed to the increase in the number of IT professionals willing to earn a living as freelancers and the greater acceptance of large companies to contract with such independent professionals and smaller development shops.

Katy Jackson in her master thesis, "Making Space for Others," argues the recent rapid growth in the co-working space movement can be attributed largely due to the displacement of power from the organization to the individual and the consequent birth of the "free agent." The individual is becoming the fundamental economic unit and that individual is free to work anywhere. (5)

Companies are increasingly pressured to reduce their operating costs. Both large corporations who face greater global competition and cash-starved start-ups have a substantial interest in finding ways to reduce their operating costs. For large corporations who have a large number of creative white-collar employees requiring office space and salaries with full benefits the options of allowing their employees to telecommute are increasingly outsourcing work to freelance professionals has become desirable alternatives. As mentioned earlier co-working space membership has become a no-brainer for tech start-ups to drastically lower their burn rates.

Greater availability and affordability of online collaboration tools. Greater access to online collaboration tools has served as the great enabler for workers to work remotely.

Increasing need for business travel in an increasingly global world. The globalization of business has dramatically increased the need for business travel. However, road warriors need a place to work when they are on the road that provides both sufficient IT infrastructure and a professional work environment whereupon they do not have to depressingly work in solitude.

The perceived benefits of working in a community-focused and collaborative environment. This is particularly the case for IT freelance professionals and start-ups. For this reason co-working spaces are increasingly becoming hubs for the local start-up communities. As I have observed a big motivation to get up every morning and go to work at a co-working space is sharing and learning with like-minded individuals and feeling a part of a mutual support community.

The perceived advantage of working in motivational work environments. Working in a dry traditional office space where one has to deal with administrative routine and office politics it is easy to be de-motivated. Working at home alone or working in a coffee shop designed for and attended by those looking for relaxation can be de-motivational as well. There is a passion and positive vibe felt at co-working spaces that is extremely motivational and welcomed by members whether they be road warriors, IT freelance professionals or founders of start-ups.

What are the prevailing trends in the co-working space?

Greater integration into local start-up communities. Serving as hubs for start-up communities, co-working spaces have realized that increasing and retaining members implores them to promote the community and host start-up events. By doing so they are enhancing the number of prospective members and finding additional revenue sources respectively. The sense of community sets co-working spaces apart from other working environments such as traditional offices, home and coffee shops. The sense of community is a powerful relational value that sets it apart from other bootstrapping majors as well.

Greater Specialization. A recent trend I have seen is greater specialization within the co-working space industry. This can be attributed to the greater recognition of the importance of collaboration and a way for a co-working space to differentiate. A local co-working space has plans to expand and the way they intend to do so is to open new co-working spaces specific to certain areas of interest. For example, their second co-working space will be specifically designed for creative professionals such as designers, writers and architects. Such specialization will create spaces whereupon more instances of brainstorming on particular issues or problems can occur. This will only re-enforce collaborative efforts and lead to Eureka moments.

Growth in Number of Co-working Spaces. According to a survey conducted by Deskwanted.com in February 2013 the growth of co-working spaces has exploded in the last three years by 300%. In the past year the number of co-working spaces has grown by 89%. Europe and America have been the leading regions for co-working space growth. (6) However, as I can personally attest the proliferation of co-working spaces has been exponential in Asia. Currently most co-working space operators consist of only one or two locations. However, growth in the number of co-working spaces may accelerate due to the benefits derived for larger co-working spaces to increase the number of spaces under their operations or franchise. Benefits would include economies of scale and expanding reach of community. (7) Currently we have local co-working spaces forming informal networks allowing each other's members to use the other spaces. Having the ability to travel within a country and throughout a region will be an additional attraction for prospective members and foster personal ties across cities leading to greater collaboration.

Summary

In this chapter we covered co-working spaces, the first of five bootstrapping major to be discussed. Co-working spaces are broadly defined as a shared working environment in which independent workers share office space and amenities as members. For our purposes we narrowed this definition to only include co-working spaces primarily established to serve as an integral part of the local tech start-up community.

Co-working spaces provided far more than just caffeine and bandwidth it also was a venue for members, with a little effort, to perform all three types of bootstrapping- financial, relational and knowledge-based.

The chapter commenced with an examination of the different variations of co-working spaces. Co-working spaces vary in size, atmosphere and focus. The space can be either diminutive and intimate or cavernous and offering a greater range of amenities and working areas. The smaller and more intimate spaces are often preferred by travelling expats or solo professionals. The larger spaces are more suitable to host larger teams. Spaces can either have a professional or artsy atmosphere. Preference depends on the priority placed on concentrated creative work and inspiration or a venue conveying a professional image and address to prospective customers and investors. The focus of a co-working spaces has increasingly become a differentiating characteristic as well. Is the co-working space specialized, catering to professionals or start-up teams working in a particular discipline.

The next section provided an overview of how all three different types of resources can be provided by a co-working space. The opportunity to financially bootstrap is present. The initial and recurring costs of a co-working space membership are typically much lower than the costs associated with entering a lease for a traditional office space. The time required to commence work is much shorter for the former as well thereby providing further cost savings. Co-working spaces also serve as an ideal venue to promote a venture and meet prospective investors. As the optimal venue for cross-fertilization of ideas, collaboration and knowledge bartering co-working spaces offer a great knowledge bootstrapping opportunity. Co-working spaces are likely to be integrated into the local start-up community by hosting various types of start-up events providing numerous networking opportunities with diverse sets of attendees. Co-working spaces have proven to be a leading venue where founding teams are formed and precious IT talent willing to work for a start-up can be found. We can conclude from our analysis that the most valuable component of co-working space membership is the community-based knowledge and relational values that can be derived.

There are challenges and risks that may be associated with working at a co-working space. As a public space the issues of distractions and privacy are always a possibility. The limited space available at a co-working space may not be suitable for larger start-up teams and proves to be a common reason for successful and growing start-up ventures to move out of their co-working space and secure a more accommodating traditional office space.

The next section we provided real-examples to demonstrate how tech start-ups have seized the opportunity to concurrently pursue all three types of bootstrapping and dealing with the challenges and risks faced. The experience of Coffee Circle at the Betahaus co-working space in Berlin served as a perfect example of how financial, knowledge-based and relational values can be secured at a co-working space. The experience of Overbird, another start-up based at Betahaus, illustrates the trade-offs (challenges) that occasionally occur and an example of a start-up outgrowing their co-working space and having to make the decision to move. The case of FitMe presented an example of how co-working space memberships is preferable even for larger teams who do not enjoy the typical cost savings. A survey conducted with local co-working space member respondents indicates that for Thai tech founders the knowledge-based benefit to be derived from collaboration with other members is the number one factor in the decision to join a co-working space. The cost-savings and workshop attendance are the next two priority factors considered.

The next section examines the many factors to be considered in selecting the best co-working space for your start-up venture. This first requires that founders prioritize the different types of resources they currently need and the potential and degree of challenges and risks that would be faced at each considered co-working space. Additional considerations are associated with productivity. Is the co-working space in an accessible area and proximate to other desired venues? Internally does the space offer sufficient IT infrastructure, a layout conducive for productive working, a high level of service and support and a wide variety of useful amenities.

This section thus provides suggestions on how to make an adequate appraisal of a co-working space. Such recommendations include:

1. Participate in a trial membership if offered.

2. Ask current members what they like or dislike about the space.

3. Review their Calendar of Events.

4. Tour the surrounding area.

The chapter concludes with a discussion of current trends in the co-working space environment. First we list the factors supporting the current proliferation of co-working spaces throughout the world. Second we list some of the prevailing trends within the co-working space. The following are favorable factors supporting the proliferation of co-working spaces throughout the world:

1. Increasing number of professional freelancers, particularly in the IT fields.

2. Companies are increasingly pressured to reduce their operating costs.

3. Greater availability and affordability of online collaboration tools.

4. Increasing need for business travel in an increasingly global world.

5. The perceived benefits of working in a community-focused and collaborative environment.

6. The perceived advantage of working in motivational work environments.

The following are the prevailing trends in the co-working space that were examined:

1. Greater integration into local start-up communities.

2. Greater Specialization.

3. Growth in Number of Co-working Spaces.

In comparison to other bootstrapping majors, co-working spaces serve as perhaps the best venue to acquire relational resources. Incubators, the next bootstrapping major to be covered, is primarily designed to assist tech start-ups to optimally acquire knowledge resources in a cost-effective manner.

Chapter 7 Incubators

Before many prospective co-working space members decide to select a co-working space for them and their team it is often the case that their innovative ideas were first conceived and the initial founding team was formed at an incubator.

What is an incubator?

The classic definition of a business incubator is an institution established to provide resources and services in support of entrepreneurial ventures with the objective of increasing the probability a graduating incubate will develop into a sustainable business. The offering of such business resources and services is what differentiates incubators from research labs and technology parks which often host research entities of educational institutions, public agencies, non-governmental organizations and big corporations in addition to entrepreneurial ventures.

For the purposes of this book we will narrow our definition and illustration of incubators specifically established for tech start-ups. The term incubator is particularly appropriate for such tech incubator programs because the primary objective is to provide an optimal environment for incubates to develop ("incubate") their innovative ideas. For tech start-ups an incubator program is the ideal venue where innovations are conceived and development of such ideas commences. The objective for incubates is to complete the development of a working and testable prototype at which point the founder(s) can decide whether to continue the venture and, if so, determine their funding needs and prepare for the solicitation of investment funds from angel investors. Applying to an incubation program usually only requires a reasonable business plan and the duration of an incubator program is typically between six and twelve months. Due to the shortening of start-up life cycles described in Chapter 2 the duration of incubators have trended downwards and pushed down the bottom of the duration range. Indeed, some of the more notable incubator programs have durations of three to four months and this has proved to be sufficient time for a tech start-up to complete their initial development efforts and complete a functional prototype ready for testing.

Although both technology incubators and accelerators are established to assist tech start-ups all too often people mistakenly use the term incubators and accelerators interchangeably. It is important to distinguish the two because they are created for different objectives, have different selection criteria, cater to tech start-ups at different stages and generally differ in duration. For now it is helpful to state that incubators focus on the development of ideas and entrepreneurs whereas accelerators are focused on companies and the final product development efforts just prior to commercial launch. In the next chapter when we define and cover in more detail accelerators the difference between the two structures will become evidently clear.

This chapter will progress in several sections. The chapter will commence with an overview of the different variations of technology incubators. Incubators vary in type of incubator operators, focus and structure. The chapter will then proceed to a review of how tech incubators provide all three types of resources vital to tech start-ups. The challenges and risks of working at the various types of tech incubators will then be examined followed by real-life examples of the different types of tech incubators. The next section will consider the factors in choosing the most appropriate incubator for your start-up venture. The chapter concludes with a discussion of current trends in the technology incubator space.

Variations

Technology business incubators differ in type of incubator operators, focus and structure. They can either be managed by public agencies or private entities with potentially much different outcomes. The variations within and between the public and private realms are important to delineate in setting the proper expectations for a start-up in the selection of the best incubator for them.

Types of Incubator Operators

There are four primary types of incubator operators. They include public incubators, university incubators and the two types of private incubators- Corporate and For-Profit.

Public incubators receive public funds and are operated by public agencies with mandates to achieve economic, social or cultural goals within their government jurisdictions. It is important to note that these public objectives take priority over the ultimate success of the participating start-ups. Another drawback of many public incubator programs is that they are often managed and advised by public officials with little or no private business, entrepreneurial or investment experience. Public incubators, however, have access to a large pool of public resources and the credibility associated with public support can enhance the image of a new unknown start-up. Additionally public incubators almost never ask for equity or other forms of obligation from your start-up upon or after graduation from the program.

University incubators are hosted, funded and operated by educational institutions. University incubators with a business or entrepreneurial focus aim to enhance the educational experience of its students and offer practical business and entrepreneurial experience. A strong advantage of university incubators is the easy access afforded to student participants to the faculty of the various departments. To form a complete tech start-up requires individuals with both tech and business backgrounds. For business students to have access to the engineering or computer science departments and vice versa is a significant benefit. Often universities with a tech focus will operate an incubator program as a means to commercialize any technologies developed within its research facilities by both faculty and students. For university incubators the educational value to be gained and the licensing possibilities to earn income and enhance prestige respectively are the primary incubator objectives. Similar to public incubators a drawback with university incubators is they are typically staffed with academics possessing little or no entrepreneurial experience and offer little or no post-graduation support. University incubators almost never demand an equity interest in its graduates. However, in the case a product or technology is licensed the educational institution usually requires a percentage of licensing fees earned.

Corporate incubators invest their own corporate funds to support start-ups that are related to their core business. Their interest and, consequently their selection process, are strategic in nature. They are looking for start-ups that offer potential synergies or competitive advantages for their core business. Corporate executives usually are charged with operating and serving as advisors of the incubator program offering much desired management expertise, access to a large customer base and a professional network promising a possible fast track to strong strategic partnerships. Corporate-managed incubators typically demand either an equity interest or some form of understanding regarding a future working relationship. For example a telecom-sponsored incubator may demand that any mobile apps developed need to be exclusively offered on their app store or maybe the corporation requires a co-marketing arrangement following completion of the program.

For-Profit incubator operators usually consist of an investment group seeking equity interests in the most promising start-ups. They seek exceptionally lucrative exits. Consequently there are generally much more selective than public incubators and are more willing to consider start-ups in a broader variety of industries or marketplaces than corporate incubators. Perhaps the greatest advantages offered by for-profit private incubators are they are typically manned by formerly successful entrepreneurs who can impart their valuable and relevant expertise and experiences and have ultimate interests very much aligned with the founders and other shareholders- a lucrative exit. Private incubators may demand either an equity interest or first rights and/or discounts in any future fund-raising round.

Public and university incubators are by far the most prevalent in number because the perceived risk of investing in a start-up at such an early idea “incubation” stage is too great for private interests of all stripes. Unfortunately there are no reliable statistics to use here because statistical sources due not break-down incubators in this fashion and, as we mentioned earlier, there has been an unfortunate interchangeable use of the terms “incubator” and “accelerator.” For example the notable Y Combinator has been referred many times in articles as being an incubator and an accelerator.

Focus

Consequently, all four types of incubators have different focus and often the focus of incubators amongst either public or private incubator programs may vary as well.

The focus of a particular public incubator is determined by the KPI's of the operating and/or funding agency. Key Performance Indicators (KPI's) are measurements to be used to evaluate the effectiveness of public agencies in achieving the mandates they are charged to satisfy. A KPI for a public software park incubator may be how many graduating ventures survive for a specific amount of time after graduation and/or how many software developer jobs are created by graduating companies. A public tech incubator may have a different set of KPI's measuring innovation, such as the number of patents filed by its graduates. A tech incubator operated by a public economic development agency may have KPI's to evaluate the economic impact of the program. In some start-up ecosystems where the government is very pro-active there may be multiple public agencies with mandates to support particular industries, such as digital media and mobile, with their own unique KPI's associated with the program's impact on their respective industries. As we will soon see these are very different compared to the measurements of success for typical private incubators.

University incubators are very unique compared to other types of incubators in that the focus is primarily educational. Individual students is the focus, not start-up entities. There is indeed a very low percentage of actual start-up teams that graduate from a university incubator program because typically any student teams formed within the program usually is disbanded once the students graduate. For business-focused university incubators success may be unofficially measured by the number of future successful entrepreneurs that were graduated and any added branding the university garnered for operating the incubator and producing notable future entrepreneurs. Strengthening ties with the business community may not be quantifiable but certainly is considered when internally evaluating the success of an incubator program. For more tech-focused university incubator programs a metric may be the number of patents filed or licensing fees earned.

Private incubators funded and operated by an investment group are looking to maximize their Return on Investment (ROI). Therefore they are interested in becoming equity partners in the most promising high-return start-ups and providing any kind of support that will lead to a big exit. However, the number of for-profit incubators remain relatively small as it is difficult to evaluate the ROI prospects of tech start-ups at such an early stage. As we shall see in the next chapter private investment groups prefer investing in and operating accelerators for later-stage start-ups. For them the economic impact for the local jurisdiction of the specific type of industry is of secondary importance. Private incubators established and operated by corporations are looking to support start-ups that can potentially offer synergies with the corporation's core businesses. For them the industry or marketplace a start-up operates in and the technologies it employs takes precedence over the impact to the local jurisdiction or the eventual exit.

Structure

The structure of public incubator programs is usually characterized as being hands-off. Public incubators place more emphasis on the quality of facilities provided. Being admitted into an incubator program is usually much easier than a private incubator. Applicants to a pubic incubator often only need to submit a reasonable business plan that matches with the KPI's of the incubator operator. Whereas the application process for a private incubator is much more competitive given the financial support and access to experienced mentors offered. Any programs or activities offered usually pertain to issues of general business planning and management. Public incubators vary in the amount of financial support they provide as well. I do not know of any examples of public incubators offering seed funding or follow-up funding after graduation.

University incubators are structured to be aligned with the academic curriculum of that particular university incubator operator. Typically a university incubator is either a required or elective part of a business school or engineering school course of study. It represents the practicum portion of the program wherein the students have an opportunity to apply what they have learned in their lectures. Students are usually provided with lab facilities, academic advisors and opportunities to participate in business plan competitions. No funding opportunities are offered to the student participants.

In contrast a small percentage of private incubators may offer seed funding as further justification for any equity demanded. However, taking an equity interest in such early stage ventures remains uneconomical and difficult to justify if the operator is only offering facilities and IT infrastructure. The structure or program of private incubators can vary considerably. Some private incubator programs are very hands-off creating a less distracting environment where advisors or mentors are simply made available. Other programs are very structured with a planned progression of various workshops and activities for the incubator participants. The more structured programs can also vary in the type of workshops and activities. Some programs may emphasize processes (i.e. Lean, Agile, etc.) whereas others may emphasize certain technologies (i.e. use of open source tools). The selection process for admittance into a private incubator is primarily determined by the investors funding the private incubator or the objectives of the corporation operating the incubator. The type of ventures to be selected into the incubator program is determined by the investment criteria of the investment group supporting the program. Investors may favor companies in their industry of experience or in a particular promising market. Maybe some ventures offer synergies with their primary businesses.

How do public and university incubators differ from private incubators?

There has been overwhelmingly evidence that private incubators have proven much more successful than public incubators. Conventional wisdom holds that incubators operated by government entities or universities are too bureaucratic or academic for an incubation program to be successful. A common trait of almost every successful incubation program is an agile business management style that can quickly adapt to the rapid market and technological changes that occur in the tech space. A strong link to the local business community is often cited as another vital pre-requisite to the success of an incubator program.

There are several specific reasons why I believe this has proven to be true. They include the nature of their respective application processes, the structure of their programs, the experiences and incentives of their staffs, measurements of success and the nature of their relationships to their graduates following graduation.

The application process for a private incubator is much more stringent and selective than a public incubator. Whereas a public incubator requires submission of a business plan that merely demonstrates a reasonable probability of fulfilling a public mandate, a private incubator is much more discerning, wanting to see a business plan and any other prospectus documents that demonstrate a potential high-return venture that will ultimately lead to a big exit or a business plan that offers synergies in the case of a corporate-operated incubator. The investment criteria specifying a favored industry or other preferences maybe much more difficult to qualify for than meeting the typically broad public mandates to be satisfied in applying to a public incubator. Having a more selective application process (choosing the "cream of the crop") has certainly attributed to the higher success experiences of private incubators.

The experiences and incentives of the staffs differ markedly between public and private incubators. For the most part public incubators are staffed with government officials with little or no experience or contacts in the private sector. In contrast, the staff of private incubators are usually mentors or advisors with entrepreneurial or venture capital experience. Extracting the wisdom and personal experiences of formerly successful entrepreneurs and having access to their networks, which helped them achieve success, is unarguably far superior then the more public experience and networks of public incubator personnel. Additionally, the staff of private incubators often have a vested interest in the success of their graduates, whereas staff of public officials merely have their salaries as compensation, which is not affected by the outcomes.

Private and public incubator programs differ considerably in structure due primarily to the radically different expectations. Public incubators are structured to ensure that their graduates are sustainable to offer the greatest probability that public mandates can be met. The type of workshops and activities offered, if any, are designed to merely ensure survivability. Management is emphasized over vision. Risky decision-making and the development of disruptive innovations are thus effectively discouraged. Conversely private incubators are structured to offer workshops and activities that encourage risk-taking and employing innovative processes and technologies to build a venture that can generate the exponential growth required to ultimately lead to a large ROI. Another aspect of structure is the method of promotion. Given the expectations and governmental network of public incubators promotion of their incubator participants are primarily focused on trade shows and conferences. This avenue of marketing has become rather antiquated as tech start-ups are increasingly focused on developing and launching online products as opposed to physical products (gadgets, software packages) and the preferred distribution channels is online and the forging of co-marketing agreements with other tech firms in the private sector. In contrast, there is usually a pitching event at the end of most private incubator programs. At these pitching events the graduates are not only showcasing there innovation(s) to prospective investors but also potential strategic co-marketing partners. Private incubators can leverage their extensive professional networks to make introductions to both investors and strategic partners as well.

The best way to characterize the differences in measurement of success between public and private incubator programs is “KPI’s vs. ROI’s.” KPI’s have little to do with the ultimate financial success of the start-up, whereas ROI’s represent a direct measurement of the ultimate financial success of a start-up for both the founders and investors. The formulation of company objectives and the decision-making of the start-up graduates of private incubators are based on expected ROI’s. Therefore the focus and direction of the company will be more aligned to the expectations of the management team and investors of the start-up. This should logically lead to a greater probability of financial success for the start-up. I have seen several situations where very well-known start-ups that enjoyed exceptionally large exits would have been considered failures based on the KPI’s of some public incubator programs because the exited company did not survive (exited) through a specified time period during which they were to create a sufficient number of jobs in a specified jurisdiction or reached a specified level of profitability.

The nature of the relationship between incubator and incubate is very different. Private incubators have an investor relationship with the incubator participants. Public incubators are merely public sponsors. This distinction becomes particularly pronounced when examining the post-graduation support provided. Typically there are no financial obligations imposed by public incubators, however, graduates of a private incubator have an investor with ROI expectations.

As a vested investor private incubators have the incentive to continue to support its graduates all the way to that coveted exit. Therefore they can be expected to offer greater post-graduate support, both financial and non-financial, compared to public incubators. Public incubators, except for some occasional promotion of the start-up's products or services, see their role as complete upon graduation. Given that the probability of success of most start-ups is most affected by developments after the initial early stages when they participated in an incubator program it is not too difficult to imagine how the mutually vested relationship between private incubator and graduate has a greater opportunity for success.

There have been some attempts by government authorities to take advantage of the considerable public resources available at public incubators and the real business world experience, expertise and networks of privately run incubators. Singapore represents a perfect example in which they have made public funding and other forms of non-financial support available to privately-operated incubators that apply for and meet certain conditions.

Despite the many variations of incubator programs, both public and private, the provision of the different types of resources are similar to a large extent and differ only by degree.

Provision of Resources

For those start-ups admitted into an incubator program the provision of resources are in the following order of value:

1. Knowledge-Based

2. Relational

3. Financial

Knowledge

The acquisition of knowledge-based resources is the primary purpose of incubator programs. This should be no surprise considering incubators are where aspiring entrepreneurs develop their entrepreneurial skills and newly established tech start-ups "incubate" their ideas. The amount and variety of knowledge-based resources to be acquired is directly related to the suite of workshops and activities included in the program. A well-organized program will comprehensively provide opportunities to develop skills and knowledge in processes, business planning, technology, marketing and management. Hearing the stories of experienced mentors/advisors provide an excellent opportunity to extract valuable insights that can dramatically shorten the learning curve to be travelled. Sharing notes with your peers at similar stages of development who are possibly employing similar technologies or business models can offer valuable insights as well. Incubators serves as excellent forums where experimentation can be conducted and valuable feedback can be collected.

Relational

Incubator programs can be a good source of relational resources as well. Perhaps the most valuable relational resource to be acquired through an incubator program is Team Building. Incubator programs is where a large percentage of founding teams initially form. Incubators also often offer promotional opportunities to participating incubates. Public incubators may offer free space at trade shows. All types of trade shows may promote incubates through their own marketing and distribution channels. The branding that can be gained, particularly in a corporate incubator can be a significant relational value. Access to the professional networks of the mentors and advisors involved in the program is another relational value to be enjoyed. It is not too uncommon for incubator participants to find angel investors after graduation through the mentors and advisors they have worked with. Indeed, the initial members of Advisory Boards of incubator graduates often are those that previously advised them during the program. Such advisors and mentors often make other valuable introductions to potential co-marketers, key vendors or the first customers of a graduating start-up. The opportunity to partner with other incubates during and after the program is a relational value that must be mentioned and taken advantage of as well.

Financial

Although the primary purpose of Incubator programs is not provision of financial resources, it can nevertheless serve as a much-needed source of financial resources. Virtually all incubator programs, both public and private, provide free or heavily discounted access to facilities and IT infrastructure, which typically represent a large portion of the burn rate of an early seed-stage venture. Indeed not having to pay for internet and rent is significant and buys time for a start-up to develop their ideas during a time when little traction (a higher valuation) can be gained.

There are some incubators, particularly private incubators, which may provide seed funds usually in the form of a monthly stipend during the duration of the program. Some public incubators may make the participating start-ups eligible for certain public grants or forms of promotional support, such as free representation at trade shows, that otherwise would be a costly marketing expense for most early-stage ventures.

A third source of financial resources that may be made available to incubator participants is participation in pitching events organized by the incubator operator usually occurring at the end of the program. Given the stage of development of incubator graduates the prospective investors at a pitch event are more likely to be angel investors and public funding agencies than institutional equity investors. As we shall see in the next chapter the end-of-the-program pitch event for later-stage accelerator graduates are more likely to be institutional venture capital firms.

Incubator programs offer a nice variety of vital resources relevant for early-stage start-ups.

So what are the potential drawbacks in being admitted into an incubator program?

Potential Challenges & Risks

There are several common potential challenges and risks associated with participation in an incubator program. They include challenges and risks that range from physical to mental to practical. The less professional lab atmosphere of mostly crowded incubator spaces, possible psychological dependence that can be created, the possibility of granting equity and accepting equity dilution at such an early stage and the distracting nature of being bombarded with often conflicting mentoring and advice from multiple sources represent the most notable challenges and risks to be faced.

Less Professional & Inspirational Settings

It is often the case that incubator spaces, especially public incubators, are set in traditional (less trendy) settings. Public incubators are often located in government office complexes far removed from the creative/artistic areas of a given city. Unlike co-working spaces they are not competing for paying members, thus, the facilities may not be as stylish or professional. At such an early development stage emphasizing collaboration over privacy is preferred. Thus, incubator participants are often crowded into cubicles or other relatively confined spaces. This type of atmosphere is neither inspirational nor ideal to entertain prospective investors or strategic partners.

Psychological Nesting

Another challenge is mental. I have seen first-hand how incubators can become a sort of psychological nest creating reluctance for incubates to leave. Many incubator participants of a local public incubator take advantage of loose enforcement regarding the maximum one-year stay and extend their participation indefinitely. Incubator participants simply do not want to leave their comfort zone.

Accepting Equity Dilution to Early

By definition start-ups entering an incubator program are early seed stage ventures. Throughout the course of this book we emphasized the importance of having a bootstrapping strategy to minimize the equity dilution and maximize the control of the founders, especially at the early stages. Although private incubators may offer superior support in terms of all three types of resources just described compared to public incubators it may still be advisable to participate in a public incubator program with no equity dilution or future obligations attached. As we will examine in the next chapter accepting such equity dilution to participate in an accelerator program at a later-stage may be more preferable in start-up communities where accelerator programs are available.

Distracting & Conflicting Advice

Another potential drawback is related to a potential benefit of the incubator program. Although receiving advice from a team of experienced mentors and advisors can be invaluable for tech founders it can also be distracting and disorientating at a time when intense focus is required. This intense focus ought to be directed at the original vision of the founders and can be easily thrown off by the subjection to a large host of biased or conflicting viewpoints. As I argued in my first book a start-up is usually doomed when the founders lose decision-making control of their venture prior to commercial launch. This is because the founders are the ones with the sufficient incentive and in the best position to maintain the proper focus to achieve the vision conceived by them. Good mentoring an advice seldom alters the original vision of a founding team. Rather good mentoring and advice poses thought-provoking considerations that offer alternative options on how to proceed in achieving the original vision. This is particularly relevant with public incubators and corporate-sponsored incubators who are pursuing objectives more likely to supersede the original vision of a founding team.

Examples of Incubators

As we just hinted at for those start-up ventures that enter into incubator programs their experience is very much affected by the type of incubator they participate in.

Public Incubators

As we mentioned before the most prevalent type of incubator is the public incubator. By far the largest public incubator in Thailand where I currently reside is Software Park Thailand. I choose to use them as an example because I am quite familiar with them as I have worked with them for the past six years and I believe they typify what can be expected of most public incubators throughout the world. The recent transformations they are experiencing are also typical of other public incubators desiring to “keep up” with their local rapidly emerging start-up communities.

Software Park Thailand is structured like a typical public incubator. Incubator participants are provided with free or heavily discounted facilities and they do not require an equity share. Incubator participants are not obligated in any fashion to Software Park after graduation. The financial bootstrapping provided is the free use of facilities as opposed to paying for rent and IT infrastructure. The primary bootstrapping opportunity offered is knowledge-based and relational. Software Park possesses two notable strengths that are superior to any private incubators that exist or may be established in the near future in Thailand. The quality and size of their facilities are unmatched. The reasons for this are because Software Park has access to the vast resources of the government, can be planned as a long-term operation and is not beholden to equity investors seeking a high ROI. From a global perspective this is more the rule than the exception. Another advantage they possess is their extensive network of high-level governmental contacts throughout the region. These relationships can be leveraged by incubator participants to access valuable market research and opportunities to penetrate neighboring markets. Hence, an excellent source of knowledge-based and relational resources is offered to the incubator participants.

The leadership of Software Park Thailand has recognized and is making a concerted effort to "keep up" with the tremendous recent progress enjoyed by the local start-up community. More workshops are being offered that go beyond what was before just the traditional range of general business topics such as business planning and management. There are currently workshops offered by Software Park covering more cutting-edge topics. For example this month a work shop titled, "Agile Techniques for Extreme Architecture Design" will be offered.

Software Park has been more actively involved in events. The Director of Software Park is now frequently seen at local start-up events and sometimes participating as a pitch judge or keynote speaker. They recently commenced conducting an annual pitch event jointly sponsored and organized by their Japanese counterpart during which both Japanese and Thai start-up events compete.

However, Software Park remains plagued by three challenges commonly seen with public incubators. One is bad location. Software Park is located in a government building complex far from the more creative and commercial center of the city where much of the local start-up community participants are located. A private incubator would be more at liberty to choose their location and would certainly not select such a remote location. Indeed one local corporate incubator is based in a central co-working space. Another challenge they share with many other public incubators are frequent over stays. Although recently this has become less frequent at Software Park there continue to be cases whereby an incubator remains after their one-year term has ended. Governed more by public mandates and less by financial returns they are less likely to enforce any time limits. A third challenge is the lack of entrepreneurial experience of their staff. Although competent, professional and unexpectedly dedicated the staff lacks the ability to share entrepreneurial experience so critical to the development of successful tech entrepreneurs. To their credit they are attempting to address this by welcoming formerly successful tech entrepreneurs (currently so few in Thailand but not for long) to speak and conduct workshops.

Corporate Incubators

Not to surprisingly there are not many “true” corporate incubators in the world as early-stage ventures are inherently more risky and it is less clear if desired synergies can be identified that can secure a greater competitive advantage for the sponsoring corporation. Indeed, large corporations are the most guilty of mislabeling their programs as incubators when, in fact, their programs are actually accelerators. There has been a very welcomed and rapidly growing engagement of large corporations with start-up communities around the globe due to the recognition that the best source of innovation is found amongst start-up ventures. However most of these corporate-sponsored programs are short duration accelerators not intended to “incubate” early stage start-ups rather to more rapidly help commercially launch products/services our apply advanced technologies that can reap direct and immediate benefits for the sponsoring corporation in terms of either financial returns or synergies. Accelerators are often a means for a corporation to secure the most promising products or teams before their competitors and the primary intent is often the acquisition or partnership with an incubated venture immediately upon completion of the program. However, there are some good examples of successful corporate incubators that are established to “incubate” the ideas of early-stage start-ups. One is the Google Israel Incubator.

On December 10, 2012 Google formerly opened its Google Israel Incubator, Campus Tel Aviv, in the Electra office Tower in Tel Aviv. (1) Google decided to open the incubator based in their desire to contribute to the local developer community, particularly at the early stages where they believed they could have the greatest impact. Google’s incubator in Tel Aviv is devoted to Israeli entrepreneurs with the goal of spurring innovation. The hope within the incubator is that great ideas can grow and ultimately develop into great products and services. Although Google will always remain receptive to good ideas with direct benefits or synergies for Google and reserve the ability to acquire or partner with such ventures, the stated underlying purpose of the incubator is not acquisitions but the “incubation” of Israeli start-ups. (2)

The Tel Aviv Campus will be structured to welcome entrepreneurial ventures not confined to a particular industry. Rather promising ventures from a broad variety of areas such as digital, desktop, cloud and mobile will be considered. The emphasis will be on teams that utilize open-source technologies, an area that Google has championed. There will be several rounds every year. Each round will comprise about 20 “pre-seed” start-ups consisting of a total of approximately 80 people. Each start-up will be expected to graduate within several months to make room for the next admitted start-up. (3) A cornerstone of the program will be the two-week Launch Pad Boot Camp during which Israeli entrepreneurs will receive training and access to Google employees and industry experts. (4)

What will Google look for?

Google will take the approach of looking for the same qualities looked for by equity investors such as a good idea and a strong team who are easy to work with. (5) The importance of being subject to this selection process is that admitted start-ups will have a more realistic impression of what is necessary in preparing for eventual pitching to investors as an entrepreneurial venture. This is further proof that Google aims to produce entrepreneurs, not future Google employees or product lines.

What resources will the participating ventures enjoy at Campus Tel Aviv?

The reasoning for the program is not about funding, thus, this incubator program is not primarily about financial bootstrapping. Google Israel will not provide seed money in exchange for equity. However, participating start-ups will not have to pay rent or the use of IT infrastructure. There are three other financial avenues in which Google may be willing to help. Google will assist participating start-ups with securing loans or finding guarantors. (6) They will eventually establish a program for those in the incubator program to gain support from the Tel Aviv Angel Group. (7) As mentioned earlier there is always the possibility of a direct investment or acquisition by Google as well.

The value in the program is the enormous knowledge-based and relational resources offered. Entrepreneurs will have access to various Google teams and other experts who can share their product and market knowledge along with processes fostering innovation. The training provided during the Launch Pad boot camp will be conducted in a variety of fields ranging from online measurement tools, user interfaces, product strategy and business development. (8) Additionally entrepreneurs within the program will be provided with legal, financial and marketing consultation services. (9)

It is interesting that Google Israel does not advertise Campus Tel Aviv as an incubator because they do not provide investment funds. I believe this is evidence that the term “incubator” has been misused by many others and that Google Israel is attempting to differentiate themselves from the others to rightfully showcase their genuine intentions to produce trained entrepreneurs who will lead successful entrepreneurial ventures in the future rather than future acquisitions.

Although the Campus Tel Aviv program have a duration comparable too many accelerators there short duration has less to do with rapidly launching a product for immediate gains and more to do with the need to make room for additional start-ups to participate. Additionally the prevailing use of open source technologies does reduce the time necessary to achieve the objectives of the program. Indeed the widespread use of open source technologies is a large reason why the prevailing context of shorter start-up life cycles has become a reality as discussed previously in Chapter Two.

Supporting “pre-seed” startups with an emphasis on non-financial resources and with the intent to spur innovation, entrepreneurship, open source and other objectives carrying possible indirect benefits is what make Campus Tel Aviv a “true” incubator. At Campus Tel Aviv ideas are “incubated” and entrepreneurs are developed, not “near ready-to-launch” products.

For-Profit Incubators

Perhaps the most well-known for-profit incubator is the Founders Institute (FI), which is currently experiencing exceptional global expansion.

Founders’ Institute

In 2009 Adeo Ressi, a serial entrepreneur, founded the Founders Institute (FI) and is currently based in Mountain View, California. The mission of FI is to “Globalize Silicon Valley” and help in the development of start-up ecosystems which will produce entrepreneurial talent and create jobs. They have had a great start establishing themselves as one of the largest incubator programs in the world, with over 1,000 companies participating in the local programs spanning four continents thus far. (10)

The structure of the four-month program, which can be completed part-time, consists of the following four monthly modules in progressing order. The program commences with coverage of Idea and Customer Development. In the second month the formation of a Company and Team is examined. The following month the topic is Go-to-Market Bootstrapping and Fund-Raising. The instruction concludes with Product Development and Distribution. (11)The program follows a simple philosophy of “learn by doing.” Complimentary to the structured training courses are practical assignments and feedback from experienced mentors. (12)

Sharing a common characteristic with other incubators, they don’t invest in the participating ventures. Rather FI claims 3.5% of the graduating companies which is divided amongst the founders, mentors and local directors operating the chapter. (13)

Consistent with incubators in general the greatest resources to be acquired are the knowledge-based and relational resources. For FI participants this includes the structured training and expert feedback. As a financial bootstrapping opportunity it is limited to any cost savings to be gained with any free or shared use of physical assets or utilities. However, the network of experienced mentors participating in the program can lead to valuable introductions to prospective investors.

What I like best about FI is that the equity granted does not go to the incubator operator but rather to the participating mentors and their focus are developing entrepreneurs and local start-up ecosystems making them an incubator in the true sense of the term. Due to their focus they are more inclusive which allows them to help more young entrepreneurs. Indeed their application process has more to do with personality traits than any investment criteria. The big advantage of granting equity (giving a vested interest) to the mentors is that it ensures that the entrepreneurs truly get the best advice. Another benefit is that the advice aspiring entrepreneurs receive is less biased, not directing the entrepreneur.

They refer to themselves as an accelerator on their Facebook page perhaps because the term is in fashion. However, they are clearly an incubator according to our definition. Although graduates of FI may not have the number of successful exits or amount of funds raised like there well-known a more selective and investment-focused accelerator counter parts which we will examine in the next chapter, FI compares favorably in terms of the number of aspiring entrepreneurs trained for future success and, consequently, has a greater positive impact on local start-up ecosystems. (14)

All the case examples of incubators just examined reveals the necessity to adjust to the four prevalent paradigms currently transforming the start-up landscape as discussed in Chapter Two. It is also important to note that the decision to grant equity at such an early development stage, in terms of both equity dilution and control, requires careful consideration. This decision requires that the benefits offered particular to your venture in terms of all three resource types is weighed against the potential costs in terms of equity and associated challenges posed. We will now examine the various factors in this important decision-making process.

Deciding to Become an Incubate

There are many factors to consider when deciding whether to seek admittance into an incubator program. The first question to answer is one of timing. What stage of development is your venture? The most ideal stage for a start-up to participate is the early seed-stage. For later stage start-ups the type of resources to be acquired may be insufficient or already acquired. The costs, in terms of equity dilution or other assumed obligations, may be too expensive given your current valuation based on the traction you have already achieved.

The second question to be answered is how the program is structured and whether such a structure will fulfill the current needs of your venture. If the primary need of your team is to acquire technological expertise and there are no workshops or activities related to technology than maybe enrollment in this particular incubator is not as beneficial as hoped. If the only perceived benefit of participating in a particular start-up is free access to facilities and IT infrastructure but you already have these resources cost-free as a student with free access at a university research lab or your father’s garage than maybe than maybe there is not much benefit to incur the opportunity cost of applying to an incubator program and assuming any obligations associated with incubator participation.

The composition and experience of the staff is another important consideration. Given the knowledge-based and relational resources your start-up has the greatest need for can this particular staff deliver? Generally early seed-stage start-ups should prefer incubator staffs well versed in areas typically of greatest need at this early stage. These areas include what forms the basis of successful tech start-ups that need to be implemented from the very beginning. They include processes (i.e. Agile, Lean, etc.), project management and product development. Development of other knowledge-based areas, such as marketing and operations, or acquisition of relational resources, such as access to valuable networks, should be considered bonus benefits at this early stage of development which can be more appropriately acquired at later stages through other bootstrapping opportunities, such as accelerators, which we will cover in the proceeding chapter.

The contingent of fellow incubator participants is another commonly overlooked but important consideration when deciding to apply for an incubator. Sharing notes with other start-ups in the incubator program can prove to be a viable way to acquire the expertise and skills in the vital initial areas just discussed. Who are the other incubator participants and is there a perceived benefit to work alongside them? What can be learned from them? Are there potentially mutually beneficial partnerships to be forged? By answering these questions you may discover that there is a Lean start-up that may be nice to work with given that you would like to become Lean as well. Perhaps there is a start-up with a team of Python developers, the computer language you deem the best to utilize in developing your innovation. Another golden opportunity may exist if your team is developing an online tool to assist a specific category of e-commerce sites and it is discovered that several of the participating ventures are developing e-commerce sites in this very category. Could they serve as potential alpha testers, co-marketers or initial customers for you?

The quality and location of the incubator facilities is another consideration. How accessible is the facility to your team in terms of the commute to the facilities and hours of access? Does it provide a comfortable and functional work space for your team? Is the surrounding neighborhood safe and offer desired conveniences such as late-night eateries? Which space offers faster and more reliable IT infrastructure- your apartment, father's garage or the incubator?

After a thorough analysis of all the above considerations a final cost-benefit analysis needs to be done. Given all the identified benefits is the associated equity dilution, opportunity costs and/or assumption of obligations to the incubator operator worth it?

For those interested in comparing the success of incubator programs vis-à-vis their local start-up communities the appropriate metrics need to be examined. Metrics should focus on # of trained entrepreneurs injected into the startup community and/or the success of graduated founders, including their involvement in later start-ups not participating in the incubator. Metrics measuring the success of the actual graduating ventures may not serve as a true measurement of the positive impact an incubator may have on the local start-up ecosystem because it is often the case that although the failure rates of early-stage start-ups may be high (as expected) the valuable development of the participating founders into future successful entrepreneurs may be the hidden gem of properly structured and operated incubator programs.

Current Trends

Due to the reduction in start-up life cycles one can expect the duration of incubator programs to shorten from six to twelve months to a three to six month range.

However for the very same reason of shortening of start-up life cycles I expect the number of incubators to decrease relative to the number of accelerators. Since the last global financial crisis of 2008 there has been a global proliferation of incubators, both private and public. Since then governments have increasingly realized the importance of innovation and entrepreneurialism to economic development. Large corporations have correctly connected innovation with competitiveness and realize that access and nurturing of promising tech start-ups in their industries is an effective way to improve their competitiveness. Private investors have also realized start-up trends, such as the shorter life cycles, and see the value in securing access to the most promising start-ups at earlier stages. As start-up life cycles shrink one would think that the number of incubators would continue to increase at a high rate. On the contrary the explosive proliferation of accelerator programs will occur instead. A reason for the shortage of start-up life cycles is the reduction in the amount of time for research and development and the marriage of product and customer development in accordance with the prevailing Lean methodology. Traditionally product development was the main activity within incubators and customer development was the primary activity of accelerators. Now that product and customer development are joined is an “incubation” stage becoming antiquated? For corporate incubators that can provide a fast track to distribution channels sponsoring accelerator programs instead of incubator programs make more sense as it offers quicker returns. Is an early-stage incubator program necessary for a mobile app developer who can complete the development of a mobile app in a matter of a few months that would be ready for offering on an app store operated by a big telecom who is also operating an incubator? For-Profit investment groups can more easily justify their demand for equity and expect quicker returns as well from operating a “later-stage” accelerator as opposed to an incubator.

Consequently I also expect that the difference between incubators and accelerators to become increasingly blurred. For those programs appealing to a more altruistic audience I suspect the label of “incubator” would be more preferable. In other cases the term “accelerator” has become more fashionable and much more appealing to equity investors wanting faster exits and the perceived lower risk of investing in a later-stage venture.

Summary

We commenced the chapter by offering a useful definition of incubator as it pertains to tech start-ups and how an incubator is different from an accelerator. For a program supporting tech start-ups to be considered an incubator the applicants targeted are aspiring individual entrepreneurs or early-seed ventures. The selection process is based on the personality traits of individual aspiring entrepreneurs or the promise of ideas conceived. At the conclusion of an incubator program each incubate should have a working, testable prototype ready to present to alpha/beta testers and prospective angel seed investors. In sum, incubators focus on the development of ideas and successful entrepreneurs, while accelerators focus on the development of companies and products. As a founder of a tech start-up you and your team will decide which program is appropriate given your development stage.

The priorities of your team will determine which type of incubator to choose. They differ in operator type, focus and structure. There are four primary types of incubator operators. They include public incubators, university incubators and the two types of private incubators-Corporate and For-Profit. Public and university incubators represent the majority of incubators that exist throughout the world. Public incubators are primarily focused on selecting incubates and helping them develop for the purposes of fulfilling the KPI's of that particular public agency. Public incubators tend to be of longer duration and are usually have a less structured program, emphasizing the quality of the facilities offered. University incubator programs are also numerous and are primarily focused on the development of entrepreneurial skills of the students or commercializing the innovations developed at their research facilities. They are structured in conformity with the academic curriculum and serve as a lab for students to apply what they have learned. Corporate incubators generally select those applicants who possess the ideas that are related to the core businesses of the corporation. Consequently they tend to be more selective than public incubators and more structured, emphasizing the possibility of synergies between corporation and incubate. For-Profit incubators are usually operated by an investment group who want to invest in and support the next big tech powerhouses. Emphasis on innovation and a winning team is paramount. Consequently they tend to be the most selective and structured of the four incubator types.

Acquisition of knowledge-based resources is the primary purpose of incubator programs which is the most important resource for a pre-seed stage start-up to pursue. Structured entrepreneurial and process training programs and access to expert feedback represent the two most common and valuable knowledge-based resources offered at incubators. The acquisition of relational resources is the next most important resource type to acquire at an incubator. Access to the professional networks of the incubator operator and participating mentors/advisors can prove invaluable in building a credible and helpful advisory board or forge strategic partnerships such as effective distribution channels. Beyond the free use of facilities a small percentage of incubator programs provide seed funding which are typically in amounts just covering expenses incurred by the incubate during the incubator program.

There exist challenges and risks associated with entering an incubator program. The unprofessional lab-type setting of many incubator facilities may not be the ideal place to entertain prospective investors or strategic partners. A psychological dependence can develop in which an incubator participant is unwilling to leave the comfort zone of an incubator where many services are provided and a sense of community has developed. The possibility of granting equity at such an early stage of development represents a real risk in terms of equity dilution and control that has been documented throughout this book. The more crowded and structured an incubator program the more likely incubates will be subjected to an overwhelming or conflicting wave of advice that can cause a loss of focus on the original vision of the founders.

To better illustrate the different types of incubators and the benefits and risks associated with each type we then turned to providing examples of the three different types of incubators. We used Software Park Thailand as a typical example of a public incubator. Campus Tel Aviv of Google Israel was our choice in describing a prototypical corporate incubator. To examine the structure and workings of a for-profit incubator we use the example of the one of the most recognizable for-profit private incubator- Founders Institute. The three different incubator programs reviewed gives a very comprehensive range of incubators for aspiring incubates to consider.

In the next section we examine more specific considerations when choosing the most advantageous incubator program for you and your founding team. Does a particular incubator cater to start-ups in our current stage of development? Will the program structure and the background and experience of the staff/mentors/advisors fulfill the current needs of our venture? Are there any gains to be attained by sharing working space with fellow incubator participants? Last but not least, is the quality and location of the incubator facilities adequate and convenient respectively?

The chapter concluded with a discussion of current trends in the incubator space. The duration of incubator programs can be expected to decrease with the continual decrease in start-up life cycles. For the very same reason the number of incubators will decrease relative to the number of accelerators. This should also increasingly blur the difference between incubators and accelerators.

The next chapter will be devoted to accelerators and where it fits into an overall bootstrapping strategy.

Chapter 8 Accelerators

For many start-up ventures that have completed an incubator program and/or currently bootstrapping at a co-working space or their own offices consideration to apply to an accelerator program may arise as they near the end of their seed stage. At this point a commercial launch and the solicitation of Series A funds from institutional investors becomes the center of attention for the founders.

What is an accelerator?

Accelerators are intense, highly-structured programs that are usually conducted in fixed-date batches and typically only have durations of between 5 and 13 weeks. It is meant for late Seed stage ventures that already have a functional founding team and a testable product. An accelerator program is specifically designed to provide that quick burst to complete the pre-commercial development efforts, formulate a “go-to-market” strategy and refine a pitch to investors.

How does an accelerator differ in structure to an incubator?

The application process to an accelerator is much more stringent than the application process for a typical incubator. It is not too uncommon to see acceptance rates in the low single digits for accelerators. Also unlike a vast majority of incubator programs, the operators of an accelerator usually provide seed funding and demand an equity interest in the accepted ventures.

Similar to some incubators the program includes a progressive series of workshops and activities conducted and/or accompanied by a host of experienced mentors and industry experts. Where they strongly differ is the degree of intensity and the topics that are covered. Whereas incubators focus on topics related to building entrepreneurial skills and developing ideas which take time to “incubate”, accelerators concentrate much more on product development, strategy, sales and pitching to investors in preparation for a fixed-date deadline-Demo Day. Virtually all accelerator programs end with a Demo Day where the graduating ventures have the opportunity to make their much anticipated pitch to a panel of actual prospective investors.

This chapter will initiate with a comparative overview of the different types of accelerator programs that exist. The next section will assess the degree to which each of the three types of resources is provided. The risks and challenges associated with the varied accelerator programs are next covered before providing real life examples of accelerator programs. The preceding sections will serve as an excellent basis to next evaluate the factors to be considered in choosing whether to apply for an accelerator and, if so, which type of accelerator is best for one's particular venture. The chapter will then be completed with a snapshot on current global trends and future prospects of accelerator programs.

Variations

All accelerator programs are inherently for-profit. The two major types of accelerator operators are corporations and investment groups. Whereas the most prevalent type of incubator is public, the "for-profit" nature precludes the establishment of public accelerators in most jurisdictions. Although I have not been able to identify any "true" accelerators (as defined above) operated by public agencies, there are a few examples of public agencies sponsoring or contributing both financial and non-financial resources to a private accelerator.

Corporate Accelerators

The mission of corporate accelerators is strategic in nature. Corporations are looking to support start-ups to develop technologies and innovative products/services core and complimentary to their existing businesses respectively. Operating an accelerator is evidence that the corporation acknowledges that it is much more timely and cost-effective to support more innovative tech start-ups to gain such synergies and strategic advantage as opposed to attempting to do so in-house. Therefore it should be no surprise that corporate accelerators select ventures that are operating in the same markets, utilizing similar technology platforms and following similar philosophies of the corporation. Consequently most corporate accelerators are structured to allow a great amount of engagement between accelerator participants and various teams within the sponsoring corporation. In return ventures participating in the accelerator can expect to have favorable access, in various forms, to the target marketplace and resources of the corporate operator. The most prevalent operators of corporate accelerators belong in industries placing a high premium on technology and innovation such as banking, telecommunications and media. I predict the big retailers will be next in-line as online marketing becomes increasingly important for the major brands.

Investor Accelerators

The mission of investor-operated accelerators is to secure equity in the next big tech exit. It is about ROI. Accelerators admit late-seed stage start-ups that have already have a vision, a complete founding team and a product with either traction or exceptional promise. Thus, investor-operated accelerators attempt to get the best of both worlds. One, they invest in a promising venture at a relatively early stage, preserving much of the upside. Second, they are supporting ventures that have already garnered some level of traction or are pursuing a "hot" innovation that is or will be in high-demand or employing a potentially game-changing technology, thus, mitigating the relative downside risk as well. Investor-operated accelerators are structured to prepare the accelerator participants to maximize their ROI and more immediately prepare for the Demo Day at the end of the program. On this day any follow-up funding eventually or immediately secured can result in an immediate return for the investor-operated accelerator whom either have secured a pre-graduation equity interest in the graduating ventures or secured participation in the current funding round at a discounted price. A graduating venture can also expect continued support from the accelerator operator who has a vested interest through to a lucrative exit.

Now that we know why corporations or investment groups fund and operate an accelerator what are the benefits to be derived for an admitted start-up venture?

Provision of Resources

As we discussed in the previous chapter the order of priority in the provision of resources at incubator programs is knowledge-based, relational and then financial resources. However, for accelerators resources to be acquired in order of value is financial followed by relational than knowledge-based. This is consistent with the stages of development of the ventures admitted in each type of program and why accelerators are structured the way they are.

Financial

The main purpose of accelerator programs is to secure financial resources. Indeed, intense accelerator programs are structured to help admitted ventures acquire the last bits of traction necessary to attract investors. During the program admitted ventures are provided with seed funding from the accelerator operator. Free access to facilities and services also offer cost-savings for a participating venture. However, the financial crown for accelerator programs is Demo Day at the conclusion of the program. Demo Day may be a defining moment in the life of a graduating start-up as it provides an immediate opportunity to pitch in front of a large host of select prospective angel and institutional investors. Furthermore, being admitted into a highly selective accelerator program operated by either a major corporation or investor group with vested interest in your ultimate success provides enormous credibility to an admitted venture in the eyes of prospective future investors. David Cohen, a founder of Tech Stars (one of the largest and most successful accelerators in the world), concurs when he points out that venture investors see well-regarded accelerators as an effective filter in identifying the most promising ventures due to the highly-competitive selection process. (1)

Relational

The relational resources to be acquired in an accelerator program can be immensely valuable as well. The overall credibility of being selected into a highly competitive accelerator program can give instant recognition and credibility that can open doors to strong strategic partnerships and enhance one's brand. The more direct relational resources to be acquired include the amicable peer pressure, encouragement and assistance to be received from batch mates and access to the professional networks of your batch mates, the accelerator operators and participating advisors. Indeed, the expectation to plug into these networks and share the experience with kin batch mates is often cited by accelerator participants as the primary reason for applying or the most valuable part of their experience after graduation.

The following relational benefits to be derived from a corporate accelerator are similar to the benefits derived from entering strategic partnerships as we will examine in more detail in Chapter 10. Being admitted into a corporate accelerator program is the fast track to establishing a powerful strategic partnership that can provide an enormous advantage over other start-ups in your space. Membership has its privileges. Depending on the industry the corporation is in there are a variety of benefits that can be derived. The most prevalent and perhaps most valuable advantage is the use of a large and established distribution platform and any associated logistical support. Especially for relatively unknown e-commerce start-ups this has generally been the ticket to success. Indeed, for a start-up this may allow them to concentrate their efforts on sourcing and branding. A corporate partnership can certainly help in these endeavors as well with preferred sourcing through their own supplier networks and co-marketing relationships whereby a start-up can leverage the already prominent brand of the corporation. An additional benefit, particularly in ecosystems with less developed payment solutions available, the use of ready local and global online payment options already in use by the corporate partner can ensure that a start-up can properly scale and monetize their product offerings.

Knowledge

Although not the primary resource sought in applying to an accelerator the knowledge-based resources to be acquired in the name of increased efficiency and competitiveness can be a valuable bonus offered by accelerators. Whereas accelerators can serve as a fast-track to powerful strategic partnerships, well-structured accelerator programs can offer a fast-track to valuable insights otherwise only attained through experience and crash courses in cutting edge processes such as Lean that can accelerate the customer and product development efforts of a start-up.   An accelerator continues to prove to be a perfect vehicle for introducing pioneering approaches for entrepreneurial ventures such as Customer development as postulated by Steven Blank, Lean methodology by Eric Ries and Business Model Canvassing as conceived by Alex Osterwalder. All of these approaches shorten the time to validate ideas and execute a quicker commercial launch. (2)

In assessing the value of applying to an accelerator program the resources to be attained must be weighed with the potential challenges and risks posed.

Potential Challenges & Risks

There are a number of potential challenges and risks to be factored when determining whether to apply to an accelerator program. They include upfront issues in regards to stage of development and readiness, the risk of turning into a raging workaholic due to the intense and condensed structure of the accelerator program, risks associated with granting equity to the accelerator operator and possible lack of entrepreneurial experience and non-alignment of interests between start-up and accelerator operator, particularly so with corporate accelerators.

Readiness

In deciding whether to apply to an accelerator program founders must carefully assess their readiness and stage of development. Then following questions need to be answered:

Do we have ample traction and a complete team given the highly-competitive selection process?

Is it a reasonable expectation that given the structure of the program our team will acquire all the resources necessary to successfully pitch to institutional investors at Demo Day?

Is our team ready to handle the boot camp atmosphere and run through the brutal gauntlet?

Risk of Burn-Out

During the course of the pressurized program it is important to guard against the possibility of burn out and working excessively to the point where you lose focus and productivity. Accelerators are not for every team or founder and will be a radical change of pace found in a typical incubator. Then again handling pressure is a key skill to be possessed by any entrepreneur and an accelerator may pose a welcomed challenge and an opportunity for team-building.

Equity Issuance Risks

As we discussed in the previous chapter a risk for earlier stage start-ups participating in an incubator program was granting equity (i.e. control) too early. For later-stage ventures granting equity to an accelerator operator immediately before a funding round (commencing on Demo day) represents a potential risk, if not structured properly, by possibly reducing the amount of flexibility in regards to negotiating a valuation with prospective investors. The accelerator operator will have either acquired an equity interest or participation rights at a discounted price just prior to the funding round commencing on Demo Day. Therefore either a pre-money valuation or preferential pricing has just been established that may place downward pressure on any valuation to be negotiated.

Lack of Entrepreneurial Experience & Conflicts of Interest

Additional risks primarily associated with corporate accelerators are the potential lack of entrepreneurial experience possessed by the corporate officers operating the program and the potential conflicting interests of the corporation and the accelerator participant. Unfortunately I have witnessed first-hand cases where big corporations mistakenly believe they can operate their accelerator program without outside assistance from formerly successful entrepreneurs or other leading players in the local start-up ecosystem. This may be the cause for the demise of many corporate accelerators that have failed. I have also seen instances when a conflict of interest between a corporate operator of an accelerator and an admitted start-up becomes readily apparent. It is important to note that the objectives of a corporation operating an accelerator and a high-risk, high-return start-up may already conflict to some degree in that the corporation is seeking synergies and corporate strategic interests whereupon the ultimate objective of a start-up is a lucrative exit. The worst-case scenario occurs when the corporation acquires an equity interest with funding terms limiting your ability to forge potentially valuable strategic partnerships with the corporations' competitors or be limited to using only distribution channels approved or provided by your new corporate equity partner. Founders of ventures participating in a corporate accelerator program must carefully review the terms of participation and ay seed funding received to ensure that their future decision-making abilities associated with operational, fund-raising and exit decisions are not to excessively limited.

Examples of Accelerators

To better illustrate the benefits along with potential challenges and risks associated with participating in an accelerator program we now turn to examining some real examples of both investor-group and corporate operated accelerator programs.

Investor Operators

First we will review the first and perhaps most well-known accelerator program – Y-Combinator. Then I will present two other accelerators I have personal experience with and share some real and recent start-up experiences in their well-organized programs.

Y-Combinator

Y-Combinator, the first accelerator in the world, was established in 2005 by Paul Graham after he made a presentation at Harvard titled, “How to Start a Start-up,” in which he urged aspiring entrepreneurs to seek funding from angel investors who had already made money on technology. Soon thereafter he set up Y-Combinator to offer seed funding to start-ups. (3) In 2009 he moved Y-Combinator from Cambridge, Massachusetts to Silicon Valley.

Similar to for-profit incubators like FI, the Y-Combinator offers a course of instruction, expert advice and a valuable network. However they contrast markedly in focus and funding. Y-Combinator focuses more on ventures rather than individuals, thus acting as an accelerator. In the summer of 2014 Y-Combinator revised their funding terms for participants. Before they invested an average of $17,000 based on number of founders for an average of 7% equity. Y-Combinator is now offering $120,000 for a flat 7% equity. They decided to do so for simplicity and compensate for the higher cost of living in the San Francisco area to ensure participant have funding for at least six months. (4) Whereas FI is looking for individuals with the best potential to be successful entrepreneurs, Y-Combinator is looking for promising ventures offering the highest potential returns. Consequently the percentage of applicants being accepted by Y-Combinator (3%) is much lower than the percentage of applicants accepted at FI (30%). (5)

Y-Combinator richly provides all three types of resources. The financial backing and introductions to investors favorably perceiving Y-Combinator graduates are tremendous financial resources offered. The approaches and values imparted by the highly-respected Paul Graham represent invaluable knowledge-based resources. As Fred Wilson, prominent start-up blogger of New York-based Union Square Ventures, has noted, “Paul gives these kids money, but he also gives them a methodology and a value system." (6)

The expansive network of founders, mentors and investors that have been established since 2005 provide an incomparable amount of relational resources. Y Combinator currently boasts a close-knit network of hundreds of founders that willingly and frequently go to bat for each other and new Y-Combinator graduates. (7)

Has Y-Combinator been successful?

In April 2012 Forbes ranked Y-Combinator as the top incubator/accelerator. By that time Y-Combinator had produced 172 graduates with an aggregate valuation of $7.78 billion USD. Dropbox and Airbnb are two of the most notable graduates that have achieved enormous success and valuations. (8)

Y-Combinator provides a perfect example of how an accelerator is typically structured, the resources that can be provided to a start-up and how it is distinct from equally prominent incubator programs. An example of a successful accelerator which is both very agile and growing globally is 500 Startups based out of Mountain View, California.

500 Startups

500 Startups, led by David McClure, has been consistently rated as one of the top accelerator programs in the world and is the first Silicon Valley investors to make a commitment in Southeast Asia. For the past few years they have made exploratory trips to Southeast Asian cities (Geeks on a Plane) to gauge the local start-up scenes and find promising start-ups to welcome into their 500 family. They have implanted a regional representative, Khailee Ng, to actively represent them here and their Batch #7 this past October included our very own Patai Padungtin, founder of Builk. Patai is one of the pioneering successful founders out of Thailand and is considered the “godfather” of the local start-up community, always generous with his time mentoring local start-ups and promoting the Thai start-up community.

500 Startups offers the usual repertoire of accelerator benefits. First, they offer a mix of up to $250,000 in funding for admitted start-ups. Second, they have a fun and very well-functioning co-working space likened to a summer camp by past batch mates, who greatly benefited from the strong mutual collaboration experienced. Many past graduates cite the relationships developed among their batch mates as the most valuable benefit they received at the 500 Startup locations in Mountain View and San Francisco. Third, their network (referred to as “the 500 Family”) can be considered second to none consisting of over 200 mentors and 1,000 company founders who make up a Who’s Who list of start-up entrepreneurs and experts located throughout the world. (9)

However, 500 Startups operates with a few interesting twists that further differentiate them from other accelerators and have contributed substantially to their worldwide appeal and success. First, they have a specific mission to “blow up start-ups” with design, data and distribution. Leveraging the tremendous in-house expertise of their successful mentors they help participating start-ups create a user experience with functional solutions beyond just aesthetic appeal. The 500 Startup team also shares their secrets regarding defining and measuring customer-driven metrics and scaling a cost-effective customer acquisition strategy. Second, they supplement their focused program with a series of events that further spread and enhance the 500 Startup experience. Events include Smash Summit on customer acquisition, Un Sexy sharing the stories of non-flashy successful companies with flashy cash flows and their infamous Geeks on a Plane. (10) Geeks on a Plane must be one of the best jobs on the planet where they globe trot and explore start-up ecosystems in every corner of the world. When I had the opportunity to welcome David McClure and Khailee Ng to Thailand I wondered if they felt like Captain Kirk and Dr. Spock of Star Trek.

Speaking of culture shock our very own Patai of Builk was accepted into their 7th batch and spent some time in the land of America with its predominately non-spicy foods and where there is an interesting ritual in which every company seemingly feel compelled to register in the tiny State of Delaware. Builk is a software-as-a-service (SaaS) platform that allows construction companies to manage their construction projects. It has gained considerable traction here in Thailand and has already secured funding from a strategic partner in the construction industry. However, Patai's decision to head east to Mountain View, California was more about education and networking (acquiring knowledge-based and relational resources) and less about money. He learned three very valuable things during his stay at Mountain View. First, feedback from industry experts confirmed his hypotheses and indicated that the Builk concept was sound. Second, considering the advice received he decided that Bulk should immediately focus on Asia and distribution. Third, he discovered the need to re-do his Site walk app and learned how to better launch new products. Although he learned a lot he cites the network with his batch mates as the most valuable benefit derived during his experience at 500 Startups. (11)

It appears Patai followed the wise advice of another 500 Startups alumnus, Truong Thanh Thuy (co-founder of GreenGar), who recommended that accelerator participants should take advantage of the time available with experienced mentors. She cites that all the mentors at 500 Startups have office hours at least once per month with personal sessions of between 30 and 45 minutes. She advises founders to do their homework on individual mentors, prepare questions to send to them prior to a scheduled session and take advantage of the time they generously make available to you. (12)

In addition to Y-Combinator and 500 Startups there are several other notable investor-operated accelerators including Tech Stars, DreamIt Ventures, AngelPad, Launchpad LA and Excelerate Labs, which is now Tech Stars Chicago.

Corporate Operators

The recent proliferation of corporate accelerators has been dramatic and welcomed. Although in principle they share many characteristics of their investor-operated counterparts. Their goals are often more strategic and industry specific and more emphasis is placed on relational resources. The two corporate accelerator programs I would like to discuss are the new Turner/Warner Bros. Media Camp and Vodafone India Accelerator programs.

Media Camp

Media Camp is a partnership between Turner Broadcasting and Warner Brothers Entertainment, both American media giants. They both share a desire to help develop innovative products and technologies in the media space and help such innovations commercialize more rapidly. In 2012 Turner opened their Media Camp in San Francisco. Six start-ups graduated. They include a mobile gaming company, an online video aggregator and a video platform for live events. (13) In 2013 Warner Bros. will open and operate the 3-month Media Camp Academy in Los Angeles, California. To apply to the program start-ups must be in the media space and already have an existing product. Those that are admitted receive $20,000 USD in seed funding, however, do not have to grant an equity interest in their start-up. (14) Interestingly no office space will be provided. (15) Media Camp Academy participants will also be attending presentations and workshops covering media technology topics and have access to media industry expert mentors. However, the greatest benefit to be derived from the program is relational. The start-ups will be introduced to entertainment executives and the intended outcome of the program is not an equity investment from investors pitched to on a Demo Day. Rather, the objective is the consummation of commercial agreements with major media companies intended to accelerate the commercialization of the resulting media innovations. (16)

Regardless of what industry the corporation operating the accelerator is in the objective of the corporation is usually to harness the creative energies of start-ups that cannot easily be replicated in a cost-effective manner with in-house teams. Consequently, the corporations need to be able to somehow secure the resulting innovative products and/or technologies. This will often require the execution of some form of commercial partnership between the accelerator operator and the graduating start-ups holding the coveted innovation shortly after program completion. The Media Camp Academy is a very good example of a typical corporate accelerator program. However, some corporate accelerators try to get the best of both worlds and organize a hybrid structure of an investor-operator and corporate accelerator model. The recently announced Vodafone India Accelerator is such a hybrid accelerator.

Vodafone India Accelerator

Vodafone is considered one of the largest telecommunications companies in the world. In July 2014 they will commence their 3-month Vodafone India Accelerator for eight selected start-ups developing banking and financial service products in the mobile space. Each Admitted start-up will receive 1 million Indian Rupees (about $16,000 USD) and will share co-location space provided by Carat Media (a division of Aegis Media), a global leader in media and digital marketing.

The program consists of directly working with experienced Carat/Isobar designers and developers in support of the design and development of the start-up's products. Start-ups will also have mentoring sessions with not only industry leaders and experts but also entrepreneurs and investors. (17) The mix of mentors is certainly a beneficial hybrid of the investor and corporate-operated models. Similar to an investor-operated accelerator seed funding is initially granted, however, unlike an investor-operated accelerator no equity is demanded. This corporate accelerator is also somewhat unique compared to other corporate accelerators in that it ends in a Demo Day where the participants have the opportunity to pitch in front of Vodafone, angel investors and brands. (18) The type of investors present at this Demo Day is very advantageous for the start-ups and different from typical demo days of investor-operated accelerator programs in which the investors being pitched to are primarily institutional investors usually offering more complicated funding terms and demanding greater control. The more passive angel investors usually consisting of formerly successful entrepreneurs who can provide sage advice and empathy is preferred. Pitching in front of Vodafone and brands not only holds the promise of investment funding but also the forging of powerful strategic partnerships as well.

In my opinion such a hybrid accelerator structure is the most favorable to start-ups as all three types of resources are optimally provided and many of the challenges and risks associated with either the typical investor or corporate-operated accelerator model is mitigated. This is the essence of a successful bootstrapping strategy- acquiring as much of the necessary resources as possible while minimizing the amount of equity dilution and level of decision-making control as the price for such acquisition.

Assessing available accelerator programs based on such an optimal bootstrapping outcome is the preferred means to selecting an accelerator program.

Selecting an Accelerator Program

There are several considerations in choosing whether to apply for an accelerator program and which one to apply for in cases where multiple accelerator programs are available. Such considerations include the type of experience of the participating mentors and advisors, the diversity and backgrounds of batch mates, the atmosphere of the shared working space provided (if any), the program content, terms of participation and review of appropriate success metrics.

Mentors & Advisors

The ideal experience and skills of participating mentors in an accelerator program is different than the experiences and skills ideal for mentors in an incubator program due to the difference in the type of resources that receive priority attention. For mentors serving in an accelerator program the experiences and skills most coveted is fund raising, scaling (actuating and managing exponential growth) and industry contacts that can lead to strategic partnerships whose branding and distribution capabilities can be leveraged to support such exponential growth. Mentors who have such a background are likely formerly successful entrepreneurs who secured investment funds in multiple funding rounds and remained in a management role through the high growth stages of their venture(s). Another pertinent question to ask is what industries the advisors have expertise in to determine if you will have the opportunity to gain relevant insights into your particular target market.

Batch Mates

The diversity and backgrounds of batch mates is an often overlooked but an important consideration when evaluating the value of participating in a given accelerator program. Your batch mates will be your new family because you will be shoulder-to-shoulder with then all day and every day during an intense three-month accelerator program. Consequently it is wise to learn more about your batch mates and ask questions when appropriate. What industries do they represent or markets they target? Do they utilize comparable technologies or develop complimentary products? Do they have experience in a particular development methodology or process that you would like your team to eventually implement? Are some of the batch mates serial entrepreneurs with experience raising funds and securing strategic partnerships? Doing your research on other applicants or participants in previous batches in answering the above questions will prove worthwhile.

Working Atmosphere

Assessing the atmosphere of the provided working space or online space is another worthy consideration. How fun and collaborative is it? This is a major factor in determining if valuable sustainable relationships can be developed. A poorly structured accelerator program would be one that creates a competitive atmosphere amongst the participants, lessening the level of possible collaboration or camaraderie. Interviewing previous graduates and reviewing the planned activities of the accelerator are ways helpful to gauge whether the atmosphere to be expected is advantageous for you and your team.

Program Content

A more obvious consideration is the content of the program. What topics are covered in the workshops and presentations? Who are expected to attend any planned networking events? Will you have pitching opportunities? How accessible are the mentors, particularly the ones you would most want to gain valuable insights or connections from? Will there be any offsite visits to potential strategic partners for your venture? Basically you are going to take stock of the highest priority resources you want to acquire through participation and want to assure that the objectives of your particular venture can be satisfied.

Participation Terms

Participating in an accelerator does come with costs. If seed money is to be awarded it likely will not be given for free. Almost every accelerator operator will demand an equity interest in your venture. Is the amount of the percentage equity interest in your venture being demanded justified given the resources you have determined to have a reasonable chance to be acquired through participation? Are other funding terms acceptable such as terms of control (i.e. use of funds, voting rights, etc.)? If equity is not immediately granted rather participation rights in the next funding round (i.e. discount price, etc.) is the favorable pricing terms reasonable and will this have a detrimental effect on your future fund-raising efforts? If future commercial obligations are to be assumed in lieu of equity does this have a detrimental effect on your future strategic or operational decision-making? Will this limit your exit options? Does participation require your venture to be locked into the use of a specific technology, process or platform that may not be desirable for your venture in the long-term?

Earlier I cited Vodaphone as a very desirable accelerator to participate in. The reason why their program is so attractive for a start-up is that they answered the above questions in a very favorable manner.

Metrics

In evaluating the success of an accelerator program there are several different types of metrics used. However, there are a few metrics that are less appropriate and there are two in particular that are ideal. Often a metric used is the aggregate amount of investment funding secured by graduates of each batch. Although it can be a useful measurement, it can be misleading because sometimes the most successful programs produce graduates that do not need much follow-up funding and have accelerated to the point that they can fund much of their growth internally. Comparing accelerator programs across different start-up ecosystems with this metric can be very misleading as well because the amount of funding required at the different funding stages can vary considerably between ecosystems. For example in Thailand the need for funding at any fund-raising stage is considerably smaller than a comparable stage in the United States. On a time stream this metric may prove less useful as well because as start-up life cycles continue to shrink, for all the reasons discussed in Chapter Two, the funding needs of start-ups in the same ecosystem but at different points of time will continue to decrease. Another metric that may not be appropriate is any metric related to successful exits of graduates. The problems with these metrics is that successful graduates may become cash cows and decide not to exit or a graduate will not graduate in the immediate future weakening the utility of an exit metric in the short-term.

Success metrics that are more ideal in evaluating the strength of an accelerator program include the percentage of graduates securing funding and the acceleration of growth rates leading to sustainable businesses. Both metrics measured during an immediate period following graduation. The percentage of graduates receiving funding immediately following graduation is appropriate given that acquiring financial resources is the number one reason for most ventures to apply to an accelerator program and provides excellent indication of the viability and future success of the business regardless of the ultimate type of outcome. The utility of this metric is also not diluted by variances in funding needs. However, this metric can be insufficient as many successful graduates may be in condition to continue their bootstrapping strategy and either avoid or delay the need for an equity investment. Indeed some ventures may not be seeking funding but rather relational resources that will improve their growth prospects such as the example we cited earlier of Builk joining the 500 Startups team. Patai of Builk believes his experience at 500 Startups was well worth it and will greatly improve their growth prospects. How do we include startups like Builk in measuring the success of an accelerator? We need to use a business development metric that measures acceleration of growth. Between these two metrics we can make a fairly accurate assessment of whether an accelerator delivers the financial and relational resources most in demand by applicants.

Similar to assessing co-working spaces and incubators location of the working space provided, quality of IT infrastructure and the quality of the physical facilities and other services offered are additional factors to be considered.

Current Trends

The number of accelerators has increased at an impressive clip in the last few years. According to Wikipedia the number of seed accelerators in the US and Europe has increased to 200 as of July 2011. Since that time the global proliferation of accelerators has exploded.

F6S is a notable online portal permitting founders of tech start-ups to apply to multiple accelerator programs. It is also in excellent position to collect valuable statistics on accelerators. Between February 2013 and February 2014 1,564 accelerator programs collected applications through the F6S portal. F6S estimates about 90% of accelerators globally, including most of the top programs, use their platform to accept applications. The following revealing research provided by F6S was based on 62,262 applications from 95 countries.

Being accepted into an accelerator program is no easy task. An average of 3.98% of applicants to accelerator programs were successfully admitted. On a global level this acceptance rate is very consistent. In the United States and Europe the average acceptance rate fell just under 4 percent. In South America, Australia/New Zealand and Asia these figures hovered just above 5 percent. More than half of the start-ups successfully admitted were from the Web Applications/Saas and Mobile space. Media, Marketing and e-commerce ventures rounding out the top five industry representations with an additional one-third of admitted start-ups.

Some additional interesting observations can be made by their research findings. Persistence and submitting multiple applications was the key for many successful accelerator applicants. F6S research shows that many of the admitted applicants succeeded only after failing several times. Those that succeeded tried an average of 3.34 times while those unsuccessful at being admitted only tried 1.8 times. Another perceived trend is that acceptance rates may tick up as more and more accelerator programs are going vertical – focusing on specific industries. (19)

So what explains the exceptional proliferation of accelerator programs throughout the world?

Jon Bradford, Managing Director of TechStars UK, cites several factors that can be attributed to the explosive proliferation of accelerator programs around the world. One, they do not require a large financial investment and instead focus more on mentorship. Two, in developing ecosystems they provide a means to more rapidly develop. Third, experienced entrepreneurs who drive these programs forward can do so more effectively by a nice mix of funding, know-how and connections which they currently possess. Thus they can make a more immediate and tangible impact. (20)

This is consistent with two of the prevailing bootstrapping conditions discussed in Chapter Two. Due to shorter start-up life cycles there is a greater need for short, intense programs in which speed to market and efficiency has become more important. In the Lean Era the Lean Process has become an important influence on the structure and materials covered in accelerator programs. The success of a start-up is no longer centered on ideas, technologies, products and IP. Now it is more about processes, customers, distribution and branding. This shift is reflected in the types of workshops, activities and relationships conducted and forged during current accelerator programs.

In particular the increase in the number of corporate accelerators can also be attributed to another set of factors. Yael Hochberg, a visiting associate professor of finance at MIT Sloan School of Management, has cited a number of these factors. She notes that over the last few decades corporations have shifted more and more to an open innovation model or outsourced much of their R&D. With the recent dramatic drop in costs of developing new technologies it has become more economical to assume the risks of new technology offerings. Corporations can cost-effectively conduct their experimentation with new technologies through supporting tech start-ups whom are specifically designed and focused on innovation. (21)

Another emerging trend identified by David Cohen, co-founder of TechStars, is that accelerator programs will become increasingly funded and operated by angel investment groups rather than VC's. Cohen believes this is a positive trend because the quality of mentoring will improve as accelerators are increasingly operated by angel investors who are typically experienced entrepreneurs. (22) I would certainly agree with Cohen as I have both seen this trend myself.

Indeed this trend is consistent with the more general decline of venture capital entities (with higher overheads) who increasingly find themselves at a disadvantage with smaller more nimble investment entities such as 500 Startups, who can cost-effectively invest in more start-ups at a more rapid pace to better adapt to the prevailing condition of shorter life cycles. I would also strongly concur with the outcome asserted by Cohen. Throughout this book I have argued that the best mentors are experienced entrepreneurs who, not only provide the most relevant insight, but can better relate and empathize with founding teams.

Interestingly there has been recent talk that in some start-up communities the number of accelerators has approached saturation levels. A little competition and variety is not a bad thing and given the low acceptance levels into accelerator programs such saturation fears may be overblown. However a real concern is that the quality of accelerator programs is profoundly tied to the quality of experienced mentors participating. The size of such local pools of experienced mentors is finite and the possible detrimental effects of saturation I believe will first manifest itself in the dilution of the quality of mentorship at the effected accelerators.

Summary

The chapter commenced with a definition of an accelerator and how they differ from an incubator. In summary an accelerator is for later seed stage ventures with a team already in place and a testable product. An accelerator program focuses on team and product, whereas an incubator focuses on individual entrepreneurs and ideas. Accelerators are operated by for-profit corporations or investment groups with strategic or financial priority interests. Consequently, accelerators are much more selective than incubators. Operators of an accelerator invariably provide seed funding in return for an equity share in the participating ventures. Accelerators end with a Demo Day, an opportunity for participating ventures to pitch in front of prospective investors. Given the selectivity, intense structure, operator interests and concluding pitch event the success rates of accelerator graduates in financial terms are typically more impressive than incubators.

Different from most incubators accelerator programs are for-profit. Operators are either investment groups looking for high ROI or corporations with cost-cutting and strategic motivations.

Investor-operated accelerators demand equity in participating start-ups to ultimately secure lucrative exits. The selection criteria, structure and content of their programs is focused on identifying the most promising ventures and assisting them with gaining the traction required to secure follow-up investing and establish a sustainable business. The program typically concludes with a demo day, which is the opportunity for graduates to pitch to prospective investors.

The motivations of corporate accelerators are different. They view accelerators as a way to develop, test and validate new technologies and innovations that can be accomplished in a more timely and cost-effective manner through more agile start-ups than in-house. The selection criteria, structure and content of corporate accelerator programs will focus on those technologies and innovations with synergies with their own existing technology platforms and products and help the participants develop the desired innovations. They accomplish this via access to tools, experienced corporate personnel and existing corporate customers for testing and validation. The program may conclude with the execution of a commercial agreement of some form.

Accelerator programs of every stripe provide the three different types of resources in the following order of value- financial, relational and knowledge-based. The types of financial resources provided include seed funding, heightened credibility vis-à-vis prospective investors and a concluding pitching opportunity- Demo Day. Relational resources to be acquired include enhanced branding, heightened credibility vis-à-vis prospective strategic partners and long-term relationships of mutual support with batch mates and participating mentors. There are also some potentially valuable knowledge-based resources to gain. Valuable insights that can only be acquired through experience may be shared with participating experienced mentors and industry experts relating to such topics as customer acquisition and target market dynamics. Leading start-up methodologies such as Lean and Agile have become common components of instruction conducted at accelerators.

There are several challenges and risks to be considered when applying and participating in an accelerator. An accelerator is very selective and intense requiring an assessment of the readiness of one's participation. There are associated risks with issuing equity to the accelerator operator. Lack of entrepreneurial experience and non-alignment of interests may be a potential challenge and risk, particularly when applying to a corporate accelerator.

To demonstrate both the good and bad of accelerators we presented an example of two investor-operated accelerators and two corporate accelerators. The investor-operated accelerators we examined included Y-Combinator, the first and one of the most successful, and 500 Startups an emerging accelerator representing a new breed of more global, agile and appealing accelerator. We selected two corporate accelerators representing the media and telecommunications industries. Media Camp is a cooperative effort by Turner broadcasting and Warner Bros. and a good example of how strategic interests affect the rationale, structure and content of a corporate accelerator program. Vodaphone India was showcased as an example of a favorably structured accelerator program for participating start-ups by maximizing the amount of resources provided while limiting the associated risks and challenges.

There are several factors to consider when deciding whether to apply to an accelerator program(s). What are the experiences and backgrounds of the participating mentors, experts and batch mates? What kind of environment will you be interacting with them? What content is covered? What are the terms of participation, such as equity to be granted, other funding terms and any commercial obligations to be assumed? What is their track record according to metrics associated with the percentage of graduates that secure follow-up funding and post-graduation accelerated growth rates of previous batches?

The first accelerator opened its doors in 2005. Since 2011 the number of accelerators worldwide has grown twelve fold. This explosive proliferation can be attributed to a decreasing amount of financial investment required, providing an excellent path towards rapid development and commercialization and consists of an effective mix of funding, shared know-how and connections currently possessed by accelerator operators. The short and intense nature of accelerators is perfectly aligned with the prevailing conditions of shorter start-up life cycles and Lean. Indeed accelerator programs serve as a primary avenue to learn Lean processes. Additionally corporations have increasingly seen accelerator programs as a means to harvest the innovative energies of more nimble tech start-ups and more cost-effectively test and validate new technologies and products that synergize with their existing technology platforms and products.

Recently we have seen more and more accelerators operated by angel investment groups rather than VC's. This may prove beneficial to start-ups who will enjoy higher quality mentoring from angels who often are formerly successful entrepreneurs themselves.

Will the continued proliferation of accelerators lead to saturation in some local start-up ecosystems? Variety and competition should be welcomed. However, the real concern is limited pool of quality mentors that may be spread too thin amongst competing accelerator programs.

So which program is better for an entrepreneur or founding team, an incubator or an accelerator?

The answer depends on the stage and priorities of a prospective applicant. For an aspiring entrepreneur or founding team with no previous entrepreneurial experience I would recommend an incubator such as the Founders' Institute. However, if an entrepreneur or founding team possesses previous start-up experience, possesses a tested innovation with some traction, has a relatively short expected life cycle and places a higher priority on funding than an accelerator like 500 Startups may be a better selection.

The following chart compares Incubators and Accelerators.

{Insert Table 8.1 Comparison of Incubators and Accelerators}

Chapter 9 Crowd Sourcing & Crowd Funding

It is often the case that early-stage tech start-ups find themselves in a situation whereupon a specific type of resource is deficient to meet immediate objectives and the previous bootstrapping majors we have discussed are not available. In this scenario the utilization of an appropriate crowd sourcing or crowd funding platform may be suitable.

What is Crowd Sourcing?

Crowd Sourcing is a primarily online activity in which an individual, group, organization or company publically calls for assistance in developing a solution to a specified problem, provision of a specified resource or completion of a defined task. The reception of small contributions from numerous parties will be leveraged to achieve the desired outcome. Basically a start-up utilizing crowd sourcing will be requesting public and collaborative assistance in the provision of one or more of the three types of resources of immediate need to themselves. An open call for assistance is facilitated by crowd sourcing platforms established as online communities composed of members of varied skills, experiences and assets who are willing to participate in activities of mutual support. Increased usage of internet and social media has made crowd sourcing a timely and efficient means to develop innovative solutions, gather market intelligence, determine idea or product validation, increase efficiencies and branding as well as secure financial resources.

The advantage of utilizing crowd sourcing is the ability to compile an enormous amount of information and solutions or acquisition of financial resources from very diverse sources at relatively low cost. There are a variety of reasons why members of the public would be willing to participate. There exist self-rewarding benefits such as recognition or intellectual fulfillment. Altruistic motivations may be at play such as being able to contribute and push forward a noble cause. Often there are more direct benefits such as helping resolve a mutual problem or financial gain. It is a commonly held belief that the person or entity that made the public call will own the resulting collective solution, however, will have an ethical obligation to share the solution to the public from which it came.

An important sub-category of crowd sourcing is crowd funding. So what is Crowd Funding?

Crowd funding is primarily an online activity whereupon a large pool of potential financial donors, sponsors, contributors or investors engage via a web-based crowd funding platform to provide financial support to a mutually desirable project or venture. The type of projects or ventures financially backed by crowd funding initiatives include social impact projects, political campaigns, emergency relief, commercial campaigns, artistic works and start-up companies. Crowd funding fits within the crowd sourcing concept in that the solicitation of financial contributions can be cost-effectively accomplished through globally-scaled online and social media channels. Securing funding and affirming the validation of an innovative product or service represent the most expected gains to be realized by the project owners, those seeking the funds. The self-fulfilling reward of patronizing a worthy cause/project or a potentially lucrative return on investment is the most common motivations for financially backing a crowd funding offering.

This chapter will be organized into several sections. The chapter will commence with an overview of the different types of crowd sourcing platforms, including crowd funding. How the varied types of crowd sourcing deliver the three types of resources will then be examined. The risks and challenges associated with crowd sourcing platforms in general and certain types in particular will be covered before proceeding to the next section where real life examples of crowd sourcing platforms will be studied. This will all serve as a basis to understand the different factors to be considered in choosing whether to utilize a crowd sourcing platform and, if so, which type. The chapter will then conclude with a section on current global trends and future prospects of crowd sourcing.

Variations

There are countless types of crowd sourcing and crowd funding platforms. For our purposes we will only examine those crowd sourcing/funding platform categories relevant to tech start-ups. Such crowd sourcing platforms can be categorized in three general classifications. They are Call for Ideas/Solutions, Collaborative Crowd Sourcing and Crowd Marketplaces. Crowd funding platforms relevant for tech start-ups can be classified into three categories. Crowd funding can be based on donations, rewards or equity investments.

Crowd Sourcing Categories

Call for Ideas & Solutions

The first category of crowd sourcing is Call for Ideas & Solutions. This is information-focused where the objective is to solicit creative ideas through acquiring expert insights or end-user feedback. Crowd sourcing platforms that intend to leverage “wisdom of the crowd” dynamics, such as crowd voting, in which the collective opinion of a group of individuals is solicited would fall under this category. To generate ideas and attain insights directly from experts one can use crowd sourcing platforms that facilitate idea generation and discourse through web-based idea competitions.

Collaborative Crowd Sourcing

The second crowd sourcing category is collaborative crowd sourcing which includes any crowd sourcing platform that enables multiple creative parties to collaborate in the completion of a defined project. In this way a creative party, such as a tech start-up, may either solicit other creative parties to complete a project they own or participate in the completion of a shared project deemed of mutual benefit.

Crowd Marketplaces

Crowd Marketplaces represent the third category of crowd sourcing relevant to tech start-ups. Crowd Marketplaces platforms provide a means for creative parties to offer their innovative works for bidding or purchase by connecting creative parties with currently anonymous end-users.

Crowd Funding Categories

Donation-Based

Donation-Based crowd funding platforms permit financial supporters to donate money in support of a cause. The only benefit expected of the donor is recognition and the self-fulfillment of supporting a cause they strongly believe in. For social impact ventures who often cannot demonstrate sufficient ROI to attract equity investors this is an excellent means to raise the necessary financial resources. It also is an excellent way to build a supportive online community so essential for any social impact venture.

Reward-Based

Reward-Based crowd funding provides a pledged donor some form of reward with monetary value in exchange for their support. Often the production of the reward is funded with the donated proceeds. This is a slightly more effective way for a social impact venture to raise funds as it provides a tangible benefit to the donor. If the social impact venture can convince a public or private sponsor to provide such a gift then such reward can be offered cost-free to the social start-up. For other tech start-ups wishing to utilize a crowd funding platform without the legal challenges of granting equity this is a viable option as well.

Equity-Based

Equity crowd funding platforms provide a facility for financial backers to invest in a start-up. In exchange for their investment funds the backers receive an equity interest in the entity soliciting funds. Equity crowd funding is a logical response to the decrease in the life cycles of start-ups and a great opportunity for start-ups and investors to find each other. In many less mature start-up ecosystems prospective investors may be particularly inaccessible due to the dysfunctional nature of the local start-up community. On the other hand in more vibrant start-up communities where there exists a highly-competitive environment for investment funds it may be difficult to secure funds. A favorable condition for equity crowd funding is the presence of center-of-influence investors whom less-seasoned investors take their investment cues from.

Fund Raising often requires a considerable allocation of time and resources. Crowd funding, when and where available, can offer an excellent means to raise funds on a cost-effective basis. This is particularly true for seed stage ventures that lack sufficient time and resources to dedicate to fund-raising in a successful manner. Founders may also lack the social capital (relational resources) required to execute successful fund-raising activities.

Donation-Based and reward-based crowd funding are the most prevalent. Equity crowd funding, primarily due to the legal requirements of private entities issuing shares, has been the least used type of crowd funding platform.

There are two other types of crowd funding platforms that are worth mentioning but likely not to relevant for tech start-ups. They are debt-based and royalty-based. Debt-based platforms, such as Lending Club, allow for the solicitation of loans. Although they do not face legal issues as challenging as equity-based crowd funding, most early-stage tech start-ups will not be able to qualify for such loans. In royalty-based platforms, such as Upstart, aspiring entrepreneurs can individually offer a portion of their future salaries in exchange for investment capital upfront.

Provision of Resources

Crowdsourcing and crowd funding offer a nice variety of resources. Crowdsourcing is most appropriate when a start-up has limited access to the knowledge-based and relational resources it needs. Whether the supply of such resources are scarce, a greater diversity of views is necessary or insights from more experienced experts or actively engaged players in the marketplace is in high demand crowd sourcing offers the opportunity to address these issues more effectively. The type of platform will dictate which resource types will be a priority. Leveraging the resources of a crowd via an online platform is a relatively new phenomenon but has already proven to be an excellent bootstrapping opportunity for tech start-ups otherwise compelled to pursue costlier and more distracting alternatives.

Benefits of Crowd Sourcing

Call for Ideas & Solutions was the first category of crowd sourcing platforms discussed. The ideas generated and the insightful feedback collected are knowledge-based values to be acquired that otherwise would require a time-consuming and costly traditional market research effort that would compile information in a less direct, less accurate manner. Crowd sourcing allows to source and test good ideas directly from the marketplace before a costly commercial launch.

Collaborative Crowd Sourcing also offers another time and cost-saving knowledge bootstrapping opportunity. Often the development, commercial launch or marketing of an innovative product requires the involvement of multiple parties with distinct skills. A tech start-up simply may not have the means to assemble such a diverse and talented team in a timely manner. By collaborative crowd sourcing a tech start-up can leverage the best expertise on each facet of a particular problem, project or objective without having to build diverse functional teams and conduct the required challenging coordination. Collaborative crowd sourcing can also have a relational benefit by identifying and attracting a diverse and widespread sourcing base for one's innovative product or service.

Crowd Marketplaces overtly serve as a monetization opportunity, thus, of financial value. However, the primary benefits are relational. Crowd Marketplaces serve as a low cost distribution channel and the enhanced branding derived from direct customer engagement through an increasingly popular online channel. Valuable customer development metrics can be measured as market transactions occur on the crowd sourcing platform. This is a knowledge-based value that cannot be underestimated and serve the same purpose as alpha or beta testing but extracting more valuable feedback from paying users.

Benefits of Crowd Funding

The main benefit of crowd funding is the acquisition of financial resources. Crowd funding provides an efficient way for start-ups to raise funds from angel investors. The majority of angel investors often do not have sufficient deal flow and are left out of the most promising investment opportunities by more established angel investors who leverage their reputations and more extensive peer networks to get early access to the best start-up ventures. Crowd funding not only allows less established angels to get in on the most promising deals but also connect with other investors. By establishing a simple and accessible marketplace for early-stage fundraising crowd funding platforms provide an efficient means to generate investor interest and permit founders to concentrate on other aspects of their venture. Another benefit of securing investment funds via crowd funding platforms is that founders of a tech start-up do not grant voting rights and other levers of control to angel investors participating in their crowd funding raise. This makes crowd funding an ideal bootstrapping opportunity for tech entrepreneurs preferring to issue equity to more passive investors and maintaining effective control of their venture at such crucial early stages when they are best in position to pursue their vision.

There are a few ways knowledge-based resources can be acquired through the use of crowd funding platforms. Through direct engagement with the audience project initiators can follow Lean precepts and marry their customer and product development efforts. This is best accomplished when the fund raising party provides progress updates to its audience in return for valuable immediate feedback, via comment features, from the prospective sponsors likely to ultimately be end users of the product or service. In exchange for funding incentives offered to prospective investors or sponsors a start-up can receive good market testing feedback often in lieu of implementing an alpha or beta testing program.

Adding to the aggregate skills and expertise of your start-up team is another critical knowledge resource to build, particularly at the earlier stages. Similar to collaborative crowd sourcing a crowd funding platform can facilitate introductions to talent. Angel List is one example of a crowd funding platform that has provided a forum in which hundreds of introductions have been consummated between talent and start-ups.

Crowd funding platforms also offer an avenue for relational bootstrapping as it provides various means for cost-effective promotion and branding. Klongdinsor, a Thai startup with an education drawing kit for the visually-impaired, launched a crowdfunding campaign with Startsomegood.com. Unfortunately they were not able to reach the minimum campaign fund-raising goals required to secure funding, however, they were able to attract the notice of several paying customers and received favorable media attention for the high social impact innovation. *(1)*The possibility of viral promotion is always present when seeking funding via a crowd funding platform. As we just mentioned financial backers often times double as prospective customers and if they are to make a financial investment they are likely to promote both your investment offering and your product. This is particularly so when a fundraising goal needs to be attained before pledged funds can be invested and the funding round is successfully executed. Following a successful raise the new shareholders have a vested interest in continuing their promotional efforts adding a new column to your marketing team. The new shareholders who are centers- of-influence (COF) can utilize their personal networks and online communities to optimize such promotional efforts for the enormous benefit of the start-up. Another positive marketing benefit has been revealed in the book, The Wisdom of Crowds, by Mr. James Surowiecki. In the book Mr. Surowiecki cites the “wisdom of the crowd” phenomenon in which a propensity of groups is to “produce an accurate aggregate prediction” regarding market outcomes that can lend credibility to a start-up’s ultimate success. *(2)* Evidence of customer interest and word of mouth promotion can also be attained during a crowd funding campaign. In other words a heightened perception of success will lead to a greater probability of funding and healthy sales.

There are two distinct ways a start-up can greatly enhance branding through a crowd funding platform. One way is to enhance one's own brand by offering a compelling project that enhances the reputation of your start-up for developing and launching a well-regarded innovation. Another way is to use the crowd funding platform as a medium to skip the need for a middle-man and forge a uniting relationship with artists and content providers around a brand. RocketHub is a perfect example of a crowd funding platform facilitating the joining of artists and entrepreneurs with a brand.

Potential Challenges & Risks

There are a litany of challenges and risks associated with utilizing crowd sourcing and crowd funding platforms that must be considered when determining whether to initiate a project and which platform offers the best option given the current needs of your venture.

Crowd Sourcing Challenges & Risks

There are several psychological issues and practical challenges associated with crowd sourcing, however, legal issues pertaining to IP protection and proper compensation represent the most pronounced crowd sourcing issues.

Legal issues regarding intellectual property (IP) protection has become a contentious issue with crowd sourcing. If a creative professional contributes an original design or content should that person be entitled to the intellectual rights of such work? The venerable American Institute of Graphic Arts (AIGA) believes so. AIGA has argued that it is unacceptable that creative professionals submit their intellectual works to end users via a middle-man (i.e. crowd sourcing platforms) without direct engagement with their customers. AIGA highly recommends that creative professionals, especially their members, directly negotiate just compensation and rights of their intellectual works with their customers. *(3)* Start-up ventures soliciting creative works through crowd sourcing platforms must keep this in mind and not assume that they will have exclusive use of the creative contributions rendered. Indeed it has been passionately argued on ethical grounds by Henry van Ess that information acquired through crowd sourcing should not be withheld from the public. *(4)* Consequently it is not a good idea to rely on crowd sourcing platforms to secure ideas or solutions that are either core to your innovation or vital to your competitiveness. It is also not a good idea to share core information related to your venture on a crowd sourcing platform as a contributor.

An increasingly vocal group of crowd sourcing advocates of workers' rights have argued on ethical grounds that crowd sourcing platforms have been used to secure the labor and creative designs of others without sufficient compensation. In many countries of the world crowd workers are considered independent contractors, thus, are not protected by minimum wage laws. Although the overwhelming majority of tech start-ups do not use crowd sourcing platforms to secure the services of crowd workers to perform menial tasks, founders should keep in mind that the non-financial benefits associated with contributing to a crowd sourcing platform should be sufficient enough to attract the best and most motivated creative talent to contribute to your particular project and avoid any such criticism of exploitation.

Crowd sourcing creative work also raises other more psychological and practical issues. The problem of social loafing may result in inferior quality contributions to your crowd sourced project. Social loafing occurs when a contributor(s) does not exert their best efforts because they are working in a group rather than working alone. *(5)* This phenomenon is important to note and leads me to believe that the most effective use of crowd sourcing is to extract "wisdom of the crowd" benefits in which aggregate feedback regarding potential customer behaviors is sought rather than the aggregate intellectual efforts of a group of contributors that may be tainted by such disincentive. Another conclusion that can be drawn is the positive correlation between level of interaction of each contribution and the quality of an expected aggregate contribution.

Another psychological barrier to extracting optimal value from crowd sourcing is the possibility of evaluation apprehension. Evaluation apprehension is the notion that an individual's professional performance is determined by the presence of other individuals capable of offering either social rewards or punishments. *(6*) Evaluation apprehension can have a detrimental effect on the quality of what is contributed because without offering sufficient social rewards (i.e. recognition to the contributor) or social punishments (i.e. some form of censoring) the aggregate quality results of your crowd sourcing may suffer.

Production Blocking is a third common challenge in using crowd sourcing, particularly regarding the first two crowd sourcing categories cited earlier related to idea generation and collaboration. Production Blocking occurs when a single individual dominates a brainstorming session thereby blocking the other group members from offering their input. *(7*) For project initiators on a crowd sourcing platform it is important to establish an ideal environment and mechanisms whereby all willing contributors are encouraged and able to express their views. In this way the value of the aggregate information contributed is optimally delivered.

Accounting for the three above psychological phenomenon is necessary to properly present a crowd sourcing project. Preparing a crowd sourcing project is similar to constructing and effective survey questionnaire in that the call for contributions or responses respectively need to be posed in a manner in which any inherent bias or disincentive is eliminated or mitigated. Whereas survey questions are sometimes best asked in an indirect manner to receive unbiased or useful responses, the solicitation of creative works through crowd sourcing needs to be conducted with similar intentions. Kano Analysis has provided an excellent means to craft effective surveys by offering a method of an indirect line of questioning and qualifying product features to enhance team understanding. A similar effort needs to be applied in crowd sourcing a project in which everyone's contributions are to be acknowledged and placed in the context of the entire project. Just as Kano Analysis is employed to draw un-biased responses and create a context to place such responses in a manner the entire team can understand and apply, Lean metrics and innovative accounting will serve as a guide to solicit useful and actionable feedback from crowd sourcing.

Crowd-Funding Challenges & Risks

Crowd funding platforms have their own set of challenges and risks when a conducive environment exists for their establishment. Although the global growth of crowd funding usage has been impressive a majority of crowd funding platforms have appeared in clusters within highly advanced and vibrant start-up communities. Many local start-up communities simply do not have a sufficient pool of angel investors or a minimal number of early-stage start-ups to make a crowd funding platform practical.

If availability is not a problem than there are many other challenges and drawbacks associated with crowd funding. These challenges and risks include legal issues regarding securities laws and IP protection as well as practical issues related to execution, sustainability and management. Credibility and ethical issues are also present when dealing with crowd funding.

Whereas IP protection is the legal issue confronting crowd sourcing, securities laws are the predominant legal issues facing crowd funding. Securities laws exist primarily to ensure that only qualified investors are solicited by private entities not beholden to the disclosure requirements of a publically-traded company or have sufficient means to participate in a risky venture. This rationale is more relevant when we consider that high-risk early stage start-ups with little or no track record to disclose represent the prevalent type of project initiators on crowd funding platforms. According to the widely accepted Howey Test any transaction executed which involves an exchange of money with the expectation of profits derived from a common enterprise whose success is dependent solely on the efforts of the soliciting or another third party would represent a security offering. *(8)* An equity crowd funding platform would meet this test.

Intellectual property protection is a challenge for crowd funding albeit in a different manner than the challenge it poses to crowd sourcing. Whereas IP protection may be deficient for crowd sourcing contributors, insufficient IP protection becomes a real issue for crowd funding project initiators. Crowd funding platforms do not provide IP protection nor are legally liable to provide such protection. Once you post your project the ideas or content you share can be copied. Simon Brown, an inventor advocate, advises innovators to file for applicable forms of IP protection before you initiate a crowd funding project. He also cites Creative Barcode, supported by the World Intellectual Property Organization, as a new option for idea protection. *(9)*

The manner in which investment funds are publically solicited not only presents legal issues but practical issues as well. Are the financial backers sourced from crowd funding the ideal investors for your particular venture? Many crowd-funding investors are pursuing a "follow-the-herd" mentality thereby basing their investment decision on the perception of others, not on their own assessment of the investment opportunity and their particular financial situation. Consequently they may not be suitable business partners prepared to assume all the inherent risks. This is related to the reasoning just mentioned as to why securities laws exist in the first place. Another reason why investment monies secured through crowd funding may be coming from investors who are possibly not the most suitable business partners is the passive participation of the investors. Although a benefit of securing investment funds via a crowd funding platform is maintenance of control, the drawback is the relatively low access to the valuable counsel of an angel investor. For a start-up who has not already secured the services of a valuable experienced angel investor or board advisor merely securing investment funds through crowd funding may prove to be a hollow accomplishment.

There are no guarantees that parties on either side of a crowd funding transaction will honor their commitments and deliver on their obligations. In the absence of a regulatory regime governing crowd funding transactions a fear of abuse or fraud can cause reluctance amongst potential financial backers to engage with crowd funding platforms.

Crowd funding platforms do not offer much assurance either as they do not serve as a financial clearinghouse whereupon financial transactions are guaranteed. Due to the lack of direct interaction with the financial backers it is difficult to gauge and manage their expectations. Project initiators need to be mindful of this because if there is a misunderstanding regarding the use of funds, unforeseen technical challenge or perhaps an underestimation of the total costs required to complete the project promised one can be subject to a legal liability. Managing investor relations with a potentially vast group of anonymous investors with extremely diverse interests and expectations can become a nightmare as well.

Another possible risk with crowd funding is what has been referred to as donor exhaustion. If the pool of financial supporters of a particular crowd funding platform is not large enough to consistently meet the aggregate financial demands of the project initiators the platform may prove to be unsustainable.

Initiating a crowd funding project may be detrimental to your reputation under certain circumstances. When you have successfully met the financial goals of the project and you have also successfully delivered what you have promised your reputation can receive an enormous boost. However, if you fail to successfully conclude a crowd funding campaign or fail to meet the expectations of the financial supporters the reputation of your venture can take a potentially fatal blow. It is paramount that the financial goals set and promises made in behalf of your venture are reasonable.

Unlike acceptance into a renowned accelerator program, initiation of a crowd funding campaign can actually hurt the image of a start-up. This is particularly the case when a crowd funding platform resides in the same start-up ecosystem as prominent accelerator programs. Sophisticated investors may be reluctant to invest in a start-up through a crowd funding platform if they perceive that the start-up is seeking funds through crowd funding as a last resort. This is why the most promising start-ups avoid crowd funding if they have other alternatives. *(10)* There may be reasonable reasons why a start-up may decide to opt for crowd funding than apply to an accelerator. This is a situation where the notion that "perception is 90% reality" applies in an unfortunate manner.

An ethical dilemma, combined with the inability to gauge and manage the expectations of financial donors as previously mentioned, was recently revealed when Kickstarter sold Oculus to Facebook. The financial backers of Oculus were angered by the sale arguing that they were sold out by Kickstarter.

Should crowd funded platforms seek an exit for funded projects?

There is an important distinction to be made when the question is answered based on ethical considerations. Certainly ventures whom raise funds on equity crowd funding platforms are obligated to all their shareholders to maximize financial returns, thus should wholeheartedly welcome any assistance in this regard from the crowd funding platform. However, it becomes an ethical dilemma when a venture is funded via a non-equity based crowd funding platform in which the financial backers are not receiving equity and, consequently, provided the financial support without any expectation for financial gain. Indeed, if they did not financially support a project for financial gain than they must have been motivated by non-financial interests. As proven by the after sale criticism a common motivation amongst many of the Oculus donation supporters were anti-corporation or anti-Facebook sentiments and for Oculus to sell to Facebook was completely against the interests and expectations of a large number of donors. In the case of the Oculus sale the decision-makers and shareholders of Oculus may be benefitting from previously securing financial support without forfeiture of control nor equity dilution, both otherwise worthy bootstrapping strategy objectives. However this may be deemed unethical because the sale is against the expectations of the financial backers that, by implication of the type of crowd funding platform engaged, was clearly not the primary motivation for making the donation. I strongly recommend that if you are operating a for-profit venture an equity crowd funding platform is the most appropriate type. If you are a not-for-profit social impact venture a donor or rewards-based crowd funding platform may be the most appropriate type. Indeed on the other side of the spectrum it may be deemed unethical to accept financial support from equity investors with high ROI expectations if the primary objective of your venture is non-financial, such as maximizing social impact.

Ethical considerations trump bootstrapping objectives in every conceivable situation!

Crowd Platform Case Studies

To better illustrate the pros and cons of crowd sourcing and crowd funding platforms we will now examine some real examples of functioning and notable crowd platforms.

Crowd Sourcing Platforms

Earlier in the chapter we identified three primary types of crowd sourcing platforms most relevant to tech start-ups. InnoCentive will be our example of a Call for Ideas & Solutions crowd sourcing platform. A collaborative crowd sourcing platform to be examined next is One Day On Earth. Australian-based FlightFox will represent an excellent example of a Crowd Marketplace.

InnoCentive

InnoCentive is one of the leading crowdsourcing innovation problem platforms in the world with an extensive network of experts in the business, social, policy, scientific and technical fields competing to provide the best ideas and solutions to the most challenging problems. Solutions sourced from their network of experts are rapidly delivered to their clients (project owners) and filtered through a proven challenge methodology and a cloud-based innovation management platform. Their most notable clients include Booz Allen Hamilton, Proctor & Gamble, Scientific American and NASA.

Clients of InnoCentive are walked through a well-traveled Premium Challenge Process that includes several progressive steps. The first step is reception of the clients' idea or problem of interest. This idea or problem is formulated into a Challenge by making it specific, detailed, actionable and have an outcome that is measurable. In this way the value of a challenge is readily clear to all parties involved in tackling the problem. Next the client specifies, if applicable, how their intellectual property is to be treated. An InnoCentive team is available to fully manage any IP transfers, licensing, etc. Once the Challenge has been properly articulated and the necessary IP treatment executed the Challenge is now ready to be posted to their world-wide network. Experts throughout the world now compete to submit the best ideas or solutions pursuant to the criteria defined in the Challenge ensuring responses of value to the client. Once the posting period ends a pool of InnoCentive experts assist the client in selecting the best solutions to be evaluated by client. A winning solution is than picked by client and Innocentive executes a Solver Agreement any IP treatment and awards the winning solution provider. Many of their clients have attested that utilizing InnoCentive's Challenge process they have discovered ideas and solutions that fit their criteria much more rapidly than if they chose to perform the research in-house. *(11)*

In my opinion the speed of solution delivery is not only attributed to their extensive network but also the actual process of formulating a Challenge which is very similar to drafting "story cards" in accordance with Agile methodology discussed in Chapter Four. Remember a story card is articulated as a business value for a client, thus, everyone on the project team or network (in the case of InnoCentive) is clear of the desired outcome. This time savings translates into substantial cost-savings and speed to market that provides an immense competitive advantage. In this way Call for Ideas & Solution crowd sourcing platforms serve as a worthy bootstrapping opportunity.

One Day On Earth

One Day On Earth is perhaps the best example of a wholly collaborative crowd sourcing platform. Inspired by watching a world-wide collaborative music festival performed the founders decided that this could be replicated in the medium of cinema. Thus, they commenced to steadily grow a grassroots effort of international filmmakers with the goal of launching a global media event in which thousands of participants from every corner of the globe would simultaneously film their individual surroundings during a 24-hour period. In October 2010 there goal became reality and for the first time media was created by participants from every country in the world on the same day. Their community continues to grow and includes participants from such diverse backgrounds as creative professionals, teachers and non-profit employees. Their global platform will permit truly global collaboration whereby each contributor will be internationally recognized. *(12)* One Day On Earth is a true collaborative crowd sourcing platform in that there is no one project initiator or owner and each contributor is necessary for the completion of the project. The primary motivation for contributors is both altruistic (participating in a movement to bring the world closer) and a social reward of international recognition.

FlightFox

In 2012 Flightfox was established by two Australian founders aiming at changing the travel industry for the benefit of the consumer. Their crowd sourcing platform provides a marketplace whereby air travelers can post their travel itineraries on the site and travel experts compete for their business by offering their best deals based on their posted itineraries. The expectation is savings in terms of time and money will be enjoyed by air travelers who are spared and otherwise exhaustive search for the best deals and be assured that, given the number of travel expert offerings, they will be presented with the best possible deal. *(13)*

This is a simple but perfect example of a successful Crowd Marketplace platform that connects consumers and service providers within a given market and provides a pricing mechanism. The parties on each side of the transaction have sufficient incentive to participate to make this a sustainable platform.

Crowd Funding Platforms

There are three types of crowd funding platforms we identified earlier as being the most relevant to tech start-ups. Kiva.org will serve as a good example of a donation-based crowd funding platform. The $1 billion USD Kickstarter platform is perhaps the most notable rewards-based crowd funding platform. We will highlight Angel List to illustrate the operation of a highly successful equity crowd funding platform.

Donation-Based

Kiva.org is a San Francisco-based non-profit organization with a mission to "to connect people through lending to alleviate poverty." Kiva allows "Field Partners," whom include microfinance entities, educational institutions, non-profits and social enterprises throughout the world, to qualify local entrepreneurs and make a personal connection with prospective donors by sharing their profiles on the kiva.org website. A prospective lender (donor) has the liberty to select the entrepreneur they wish to support. Once a selection is made transfers the fund via PayPal, who graciously waives the transaction fee. Kiva than aggregates the donated funds and distributes to the appropriate Field Partners.

Kiva is exclusively supported by grants, loans, donations and discounted services from corporations, national institutions and individual donors. It does not charge any interest, however, the Field Partners typically charge relatively high interest. Kiva works with its Field partners to ensure that the rate of interest charged is not too excessive. However, the relatively high interest rates are usually justified given the high costs of administering numerous small loans in remote locations. Typically the entrepreneurs are located in countries with high inflation rates as well.

Since its 2005 inception Kiva has been a success. Over one million loans have been issued with an aggregate amount exceeding $500 million USD. The repayment rate has been an impressive 99%. The Kiva community currently consists of over 1 million committed donors from every corner of the globe. Many donors re-commit any loan paybacks to newly selected entrepreneurs. *(14)*

Kiva is a good option for social impact ventures and a perfect example of a successful donation-based crowd funding platform. Its success is not only measured by the number and aggregate amount of its transactions but also by the large and growing community of supporters who have the unique opportunity to actually make a personal connection to those they are supporting. Fostering and growing a community is critical to the success of any social entrepreneurial venture.

Rewards-Based

KIckstarter has been one of the most successful crowd funding platforms in the world and an excellent example of a reward-based platform despite the ethical quandary it has recently found itself in that was mentioned earlier. The mission of Kickstarter is to help bring creative projects to life by establishing a platform whereby project owners can go directly to their audiences for funds. The kickstarter model is quite simple. Project owners post their venture and state a deadline and minimum funding goals on the Kickstarter site. Only if the campaign is successful in meeting its deadline and funding goals are pledged funds collected by Amazon Payments. Kickstarter reserves a 5% commission and Amazon charges a 3-5% transaction fee of the total amount of funds raised. Rewards selected and delivered by the project owners receiving the donations is the rewards-based method used by Kickstarter. To facilitate this Kickstarter provides a survey tool to owners of successful projects which provides access to information on contributors such as address and T-shirt sizes. This enables project owners to send rewards of their choosing to each contributor. Another attractive feature of Kickstarter for project owners is retention of all claims of ownership over the projects and the work they produce. *(15)*

Has Kickstarter been successful?

The answer is yes. Early in 2014 they surpassed $1 billion USD in pledges from its nearly 6 million-strong community. $858 million was pledged to successively funded projects. Approximately 135,000 projects have been funded in fulfilling their stated mission to help bring creative projects to life. This represents 43% of projects posted reaching their funding goals. *(16)* These projects covered an amazingly broad range of industries including music, video games, films and stage performances.

Kickstarter is a good example to use not only because of its stellar success but because its model has been emulated by a large percentage of crowd funding platforms since its inception in 2009.

Equity-Based

Angel List has been the pioneering equity crowd funding platform which has successfully matched start-ups with angel investors and incubator programs. As of September 2013 Angel List has helped 1,300 startups raise $200 million USD and hire 3,000 employees by granting access to their extensive network of 21,000 accredited investors and start-up jobs board. *(17)*

Angel List has an interesting revenue model that is very favorable for start-ups and only possible with some already deep pockets. No fees are charged for posting a profile. Instead they ask for 10% of the monetary value of any eventual exit-sale or IPO. Angel List will be entitled to 5% of any syndicate raise, which we will discuss shortly, with an additional nominal percentage going to the lead investor. *(18)*

Angel List serves as a good example of an equity crowd funding platform because it has clear success factors. Their success can be attributed to the fact they offer benefits to every participant on their platform. As we noted earlier creating liquidity and establishing a strong community are pre-requisites of any successful and sustainable crowd funding platform. Angel List has blazed the path on how to accomplish this.

So what are the benefits the key participants are provided with on the Angel List platform?

For start-ups the immense direct exposure to interested prospective investors is the primary benefit. Not only is Angel List a financial bootstrapping opportunity as it attracts prospective investors but it also serves as a relational and knowledge-based bootstrapping opportunity as well. When start-ups list on the Angel List site they are presented with a golden opportunity to market themselves on a highly-respected global platform. Founders also have access to a large start-up jobs board with which they can seek needed talent and a list of incubator programs they can apply for.

For prospective investors there central concern of inadequate deal flow is addressed with over 100,000 start-ups profiled and showcased on the site. Additionally, Angel List recently has launched a program whereby prospective investors can form syndicates. This is important in several respects. Prospective investors now have an enhanced ability to diversify their investment risk by being able to make more numerous but smaller investments. Due to the prevailing condition of shorter life cycles cited throughout this book this improved agility is an advantage that cannot be understated. A key component of the program is allowing a Lead Investor to assume responsibility for the fund raise of each individual start-up. This carries two important benefits. A lead investor with a greater vested interest in the success of the start-up it is promoting will be much more inclined to contribute non-financial support and continue such support well beyond the current fund raising campaign. Secondly, the credibility of a prominent lead investor can be leveraged by a start-up as many prospective investors may be attracted to investment opportunities with a very prominent lead investor whose judgment they trust.

For both start-ups and angel investors the Angel List platform offers a very useful variety of information, resources and tools that help each party better understand current trends and valuations in the venture capital markets and facilitate any deals that may be consummated. Resources available include standard term sheets and automatically generated closing documents. Helpful tools include electronic signature wire information management facilities. Start-ups also are provided with assistance in creating more interactive pitch decks. *(19)*

Angel List, like all equity crowd funding platforms, are poised to benefit from a more friendly regulatory environment for early-stage investments with the passage of the Jobs Act in the United States and similar movements throughout the world trying to stimulate innovation by easing traditionally prohibitive public offering requirements and acceptance of investment funding from unaccredited investors.

Providing valuable content, offering tools to facilitate any desired transactions and getting in front of a trend (growing market demand) are all success factors for crowd funding platforms that have been illustrated by Angel List.

Selecting a Crowd Platform

There are many factors to consider when deciding whether to participate in a crowd platform of any kind. The first considerations pertain to liquidity and its potential effects on your branding. Another important consideration is the size and passion of the community associated with the platform. Customer service and ease of use can serve as decisive factors in assessing the attractiveness of utilizing the crowd platform.

Liquidity & Branding Effects

Is there sufficient market demand for their services?

Related to the obstacle of insufficient participants in the local start-up ecosystem mentioned in our discussion of challenges and risks, the challenge of liquidity is a factor when evaluating the worthiness of any crowd funding platform. Crowd funding, in effect, is creating a marketplace between start-ups and financial supporters. Establishing a marketplace that is credible and attaining a critical mass of participants on each side of the transaction that will simultaneously engage is much more challenging than an online commercial business relying on one-way transactions. The ability to create a liquid marketplace should certainly be a consideration when assessing the value of any crowd funding platform. When deciding whether to participate in a crowd sourcing or crowd funding platform it is important to view a crowd platform as a co-branding partner. Is their mission and brand aligned and beneficial to that of your venture? As we discussed earlier the means at which you acquire resources has a direct effect on your own brand and may not be aligned with the sentiments and expectations of your customers. Indeed your status as a non-profit and for-profit venture will be a determinant of which crowd platform is suitable given the type of prospective financial supporters you are seeking and whether there is an ethical component to this selection decision.

Platform Community

A large, loyal and active community utilizing the crowd platform considered offers perhaps the best measurement of sustainability and success. A more vibrant community simply offers a greater opportunity to acquire all the resources you seek in sufficient quantity to meet your goals. The bigger and more vociferous the crowd the better!

Customer Service & Ease of Use

Customer service and ease of use are two very important considerations in evaluating the attractiveness of a crowd sourcing or crowd funding platform. There are a growing number of crowd funding review sites to source such valuable feedback. One is Crowds Unite which describes itself as a platform that crowd sources user reviews of crowd funding sites. Reviewers use a five-star rating system to measure both customer service and ease of use as well as fund raising success rates. They also provide written feedback on the platform. *(20)*

Current Trends

By 2012 it is estimated that about one million creative workers have utilized nearly 1,800 crowd sourcing platforms in securing between one and two billion dollars in crowdsourcing projects. *(21)* Increased economic development and internet penetration in Asia is expected to result in a fourfold increase in the use of crowd sourcing in Asia during the next five years. *(22)*

Crowd Sourcing platforms will continue to proliferate as shorter life cycles and the prevalence of Lean processes increase the need to acquire financial, relational and knowledge-based resources in a more timely and efficient manner.

According to Massolution in 2011, the year after Angel List commenced, crowd funding sites helped raise $1.47 billion. This amount nearly doubled to $2.66 billion USD in 2012 and is projected to nearly double again to approximately $5.1 billion USD. In 2012 funds were raised on more than 1 million crowd funding campaigns. Massolution also estimates that as of April 2013 there are 813 crowd funding platforms worldwide either active or planned. *(23)*

The massive proliferation of crowd funding platforms, despite legal obstacles, is a logical response to the explosive global growth in the number of start-ups and the prevailing contexts in which start-ups currently operate, particularly shorter life cycles and the Lean Era. Combined these phenomenon heighten the total amount of venture capital funds demanded and the need for greater efficiencies which permit smaller investment amounts in individual start-ups in a more timely manner. Just as the Lean Process has spurned greater efficiencies in customer and product development efforts, the investment process will be more democratized by crowd funding platforms thereby leading to greater efficiencies in the venture capital investment process.

So what are the only remaining speed bumps potentially slowing down the current proliferation of crowd funding platforms and transactions?

At least in the near term use of crowd sourcing and crowd funding will be limited due to availability and legality. The availability of crowd sourcing or crowd funding platforms is usually limited to more mature start-up ecosystems where other more preferred bootstrapping majors already exist. Indeed, establishing a crowd funding platform without a critical mass of participants on both sides of the transaction will remain risky. Currently crowd funding platforms need to possess a globally-recognized brand to overcome this obstacle.

The legal barriers to crowd funding are gradually lifting as more and more securities regulatory authorities recognize the positive benefits of crowd funding to capital markets. Further impetus to facilitate investments in small businesses are the associated economic benefits of increased innovation and jobs growth.

In April 2012 the passage of the Jobs Act in the United States was a watershed date in the legal battle for crowd funding. The path has been set to the legalization and regulation of crowd funding platforms in the United States. As of my writing final approval of Title III of the Jobs Act related to crowd funding has not yet occurred. In October 2013 the US Securities and Exchange Commission finally released its proposed rules governing crowd funding. The following are the main proposed rules companies raising crowd funds will need to abide by:

1. Crowd funding transactions need to be executed through federally regulated funding portals.

2. Allowed to raise up to $1 million every 12 months from non-accredited investors

3. File financial statements for the last two years or less if business recently established

4. Submission of audited financial statements for offerings exceeding $500,000. For offerings less than $500,000 submission of financial statements certified by an independent accountant or the company CFO is required.

5. Once crowd funding is successfully raised company will be required to submit annual reports to the SEC until either subject to Securities Exchange Act rules, closure of business or retirement of crowd funds. *(24)*

The above is only proposed rules and there is much more work to be done. Unfortunately, the proposed rules may make the costs of compliance too prohibitive for many crowd funding candidates and may serve as an impediment to future VC fund-raising efforts.

Hopefully, the efforts to establish a legal regime in which start-ups can have access to smaller investors in a way that protects the smaller investors from fraud is noble, serves as a guide and encourages like legislation around the globe.

Summary

The purpose of this chapter was to review the fourth major bootstrapping opportunity- Crowd Sourcing/Crowd Funding. The chapter commenced with definitions of crowd sourcing and crowd funding. Crowd sourcing is an activity whereby a start-up makes a public call for assistance in solving a stated problem, soliciting a specific resource or collaboration to jointly complete a well-defined task. Crowd sourcing provides a cost-effective way to acquire all three types of resources by leveraging the diverse and aggregate skills, expertise and wisdom of many. Crowd funding platforms serve as an online forum through which start-ups can present their projects or ventures on a global platform where prospective financial donors, sponsors or investors have the opportunity to join other financial backers in making small investments into numerous investment opportunities or worthy projects that they otherwise would not have found or would individually require a larger investment amount than they would consider prudent. For start-ups crowd funding portals offer a cost-effective way to raise funds. The cost and time required to identify and present too many different prospective investors has been dramatically reduced with crowd funding. Investors sourced from crowd funding platforms are typically passive investors who neither demand too much decision-making control nor are as accessible as other angel investors available to offer valuable advice and introductions.

There are countless types of crowd sourcing and crowd funding platforms. For our purposes we will only examine those crowd sourcing/funding platform categories relevant to tech start-ups. Such crowd sourcing platforms can be categorized in three general classifications. They are Call for Ideas/Solutions, Collaborative Crowd Sourcing and Crowd Marketplaces. Crowd funding platforms relevant for tech start-ups can be classified into three categories. Crowd funding can be based on donations, rewards or equity investments.

The first category of crowd sourcing is Call for Ideas & Solutions. This is information-focused where the objective is to solicit creative ideas through acquiring expert insights or end-user feedback. Collaborative crowd sourcing platforms enable multiple creative contributors to work together in finding a solution to a given problem or completing a defined project. Crowd Marketplaces are intended to connect creative project initiators and prospective end-users and establish an easy to use mechanism whereby creative works can be offered for bidding or purchase.

Crowd funding platforms come in three different categories relevant to tech start-ups. Financial supporters can pledge donations to support a worthy project or cause posted by a project initiator utilizing a donation-based platform. Pledging donors are offered some form of gift or discount when participating on a rewards-based platform. Equity crowd funding platforms represent the most beneficial crowd funding platform for start-ups seeking a financial bootstrap. Crowd funding portals provide the forum necessary for start-ups to present their venture on a large stage with an audience of prospective early-stage investors. Often facilities are offered to facilitate the execution of any investment agreements.

Crowd sourcing and crowd funding platforms have proven to serve as excellent bootstrapping opportunities to efficiently acquire all three types of critical resources needed at relatively low cost and with little or no loss of decision-making control. There are several financial bootstrapping opportunities to be seized. Crowd funding platforms provide an amazing online platform for start-ups to solicit funds from interested early-stage investors who are more inclined to invest because they can invest in syndicates whereby they can follow a trusted lead investor and be able to diversify their investment risk through smaller investments in a larger number of start-ups. Crowd sourcing sites offer unlimited possibilities to acquire both relational and knowledge-based resources at relatively low cost and in some cases, such as Crowd Marketplaces, with monetization opportunities.

The relational and knowledge-based resources available on all types of crowd platforms include enhanced branding, global marketing opportunities, collaboration with vast networks of experts and a means to collect valuable user feedback. Crowd platforms allow for the collection of valuable customer feedback at an earlier stage than what would have been otherwise the case. This is significant as it allows Lean start-ups to use such early feedback to drive their product development efforts as early as possible for maximum effect.

There are many challenges and risks related to crowd sourcing and crowd funding. Legal issues regarding IP protection and proper compensation have been particularly contentious. Crowd sourcing creative work also raises other more psychological and practical issues. There are three notable psychological issues to be conscious of when utilizing a crowd platform. Social loafing occurs when a contributor(s) does not exert their best efforts because they are working in a group rather than working alone. Evaluation apprehension can occur when there is a lack of presence of either social rewards or punishments. Production blocking may occur when members of a brainstorming group is less inclined to offer their input due to the dominating presence of a single individual.

There are additional challenges and risks particular to crowd funding. Securities laws is another legal issue faced by crowd funding portals permitting privately-held start-ups to publically solicit for investment funds from possibly unaccredited investors. Than we examined practical issues related to execution, sustainability and management. Issues of credibility and ethics can sometimes arise as well.

To illustrate all the benefits and challenges related to crowd platforms in general and more specific issues associated with the various crowd portal types we turned to a review of successful crowd platforms. InnoCentive, One day On Earth and Flightfox were used as examples of the three different types of crowd sourcing platforms. The crowd funding portals examined include kiva.org, Kickstarter and AngelList.

There are many factors to consider when deciding whether to utilize a crowd platform and, if so, which type. Liquidity and branding were the first factors discussed. The nature of the community that has been built around the crowd platform, the quality of customer service provided and the ease of use are additional factors of importance to be weighed.

Both crowd sourcing and crowd funding platforms have experienced explosive growth and global proliferation in the last several years. This is not expected to change as the demand for the resources that can be timely and cost-effectively acquired continues to climb and legal and other barriers begin to be torn down.

Crowd funding platforms provided a valuable lesson for all entrepreneurial ventures. Whether you are a non-profit or for-profit entity, the primary motivations of your financial backers must be identified and respected before soliciting and allocating any funds received from them respectively.

In the next chapter we will discuss strategic partnerships as powerful bootstrapping opportunity. Whereas crowd platforms provide a means to acquire resources from the anonymous masses, strategic partnerships are one-on-one partnerships with prominent major entities who provide similar types of resources but in a much different manner.

Chapter 10 Strategic Partnerships

Pursuing strategic partnerships has become more and more a viable objective for tech start-ups at earlier and earlier stages in their quest to secure financial, relational and/or knowledge-based resources. It has also become a powerful bootstrapping opportunity to seize upon prior to presenting to institutional investors to greatly enhance any pre-money valuation. In yet a later stage piggybacking (using the distribution platforms of larger strategic partners) has become a common characteristic of start-ups achieving rapid growth and consequent business success.

What is a strategic partnership?

A strategic partnership is any working relationship established between a start-up and a more established entity such as a corporation or organization in which there exist both immediate practical benefits and longer-term strategic benefits for both parties to enter into the relationship. For the start-up a more established strategic partner offers credibility and one or more of the types of resources so vital to their venture. Later strategic partnerships will be categorized based on which type of resource is primarily provided to the start-up. For the larger much more prominent partner the start-up serves as an excellent vehicle to develop and test innovative products or technologies offering synergies with their own technology platforms or product mix. In this respect strategic interests trump financial interests in the long-term.

Many start-ups seeking my advice on raising funds are often impatient and want to commence soliciting prospective investors right away. The advice I often give is for them to search for strategic partners first. If you establish a working relationship with a notable strategic partner who has a vested interest in your progress the mission of finding interested prospective investors improves dramatically for the reasons presented in Chapter One. Indeed, the following dictum can be found at the end of my first book, “If you make a compelling case of why a strategic partner would want to work with you, most likely you have just made a compelling case for why a strategic investor should invest in you.” (1) If you cannot find a strategic partner you need to discover why and the answers may lead to necessary inquiries or new discoveries about your product, target market or business model that will assist you in preparing your venture to be investment-grade.

Why would it be advisable to seek a strategic partner first before seeking investors? You will likely need some traction to attract a strategic partner as well. The difference being that having a working relationship with a strategic partner is less of a risk for them than the risk assumed by an investor committing funds with the hope for a future lucrative exit. This holds true because strategic partners have more at-risk financial resources to commit than a typical early-stage investor, may have some immediate gains to attain by working with your venture and have longer-term much more significant strategic gains to attain through working with you.

This chapter will be organized in successive sections. The first section we will describe the different types of strategic partnerships. The various resources that can be attained with strategic partners and the challenges and risks to be aware of when working with strategic partners will be covered in the next two sections. Real examples of strategic partnerships will be presented to illustrate the advantages and risks of entering into a strategic partnership before examining the factors to consider before deciding to make the leap. The chapter will conclude with coverage of current trends.

Types of Strategic Partnerships

The definition of strategic partnerships is quite broad and for our purposes we will classify strategic partnerships most relevant to tech start-ups into three categories based on the primary type of resources sought.

Financial Partners

For start-ups there are several types of strategic partners that are worthy to seek a relationship with a priority to secure financial resources.

Corporate VC’s

Many corporations hungry for innovation and feeling the increasing competitive pressure in a shrinking global marketplace are realizing that investments in promising start-ups is much more cost-effective with a higher probability of success than allocating funds to attempt to support in-house development efforts that are often constricted with the higher overhead and bureaucracy common in most corporate structures. Consequently in the past several years we see an increasing number of corporate VC’s, venture capital arms of major corporations. For corporations the rational for establishing a venture capital arm is similar to organizing a corporate accelerator. The difference between a corporate accelerator and a corporate VC is the later makes an equity investment directly into a start-up venture and, thus, has a greater vested interest in the ultimate success of the start-up. Whereas a corporate accelerator is meant to extract more immediate benefits from the participating start-ups through a focused program. A corporate accelerator program can be constructed as a farm system for the corporation to develop synergies amongst a batch of start-ups with the mother corporation with the expectation that these accelerator participants may eventually become worthy strategic partners. Corporate VC’s make a direct investment in start-ups whom already possess synergies that can be leveraged immediately or in the very near future. This rationale also differentiates a corporate VC from a traditional VC who is basing their investment decision solely on expected ROI via an exit strategy. Therefore, corporate VC's provide a superior bootstrapping strategy to start-ups in two respects from a purely financial perspective:

1. Due to the immediate benefits perceived by the corporation and there current extensive operations they are more likely and capable to provide various non-financial, but cost-saving, resources to their partner start-up whom otherwise would not be able to emulate due to affordability.

2. Corporate VC's are more likely to give a higher valuation for your venture than a traditional VC because the potential of your start-up to fulfill their strategic interests makes your venture much more valuable to them than to a traditional VC who is valuating based almost exclusively on an expected ROI upon exit. Additionally, corporate VC's can secure more immediate benefits from a start-up, thus, are assuming less investment risk.

There are two other relevant types of strategic partnerships offering a financial bootstrapping opportunity to tech start-ups worth mentioning.

Corporate Sponsors

Corporate Sponsorships is another way corporations can financially support a start-up. The difference between receiving corporate funds as sponsorship money as opposed to VC funding is the later requires the granting of equity and some corresponding control. However the amount of VC funding received is usually greater than the amount of a sponsorship. The two primary reasons why a corporation may financially sponsor a start-up is because they either want to cement a relationship with a start-up before a competitor can, feel the necessity to provide a little seed funding to help a potential strategic partner survive or they see benefits of being associated with a start-up. Benefits of association may include enhancing their corporate brand by being recognized as a supporter of a particular project or cause with which the start-up is championing or representing. Securing corporate sponsorships is a worthy bootstrapping objective of a social impact venture which not only can receive funding but also benefit from being associated with a prominent corporation as well.

Financial Joint Ventures

A third type of financial strategic partnership is the old-fashioned joint venture with a partner who shares the expenses of developing a particular technology, product or conduct of any form of non-technical research. Such partnerships are usually consummated with either other start-ups or smaller corporations with plenty of expected growth in front of them. Joint ventures with larger corporations, non-profit organizations and educational institutions are possible when a working relationship with a start-up is for a mutually beneficial outcome, however, it is recognized the cash-starved start-up does not have the financial resources to support its own financial contribution to the joint effort.

Knowledge Partners

There are two major types of strategic partnerships whose main resource for acquisition is knowledge-based. They are traditional R&D joint ventures and Licensing Partners.

R&D Joint Ventures

Traditional R&D Joint Ventures occur when two partners with complimentary contributions to make work together on a joint project. Sharing the R&D effort is particularly appropriate when a start-up and another business possess complimentary skills and expertise to apply, however, are not direct competitors. Mutual benefits include time and cost-savings and accelerating on the learning curve by mutually leveraging the institutional knowledge of both parties as well as continued brainstorming efforts from two groups from diverse skills and experiences. Joint R&D ventures are involving less start-up to business partnerships and more start-up to educational institution or research organizations. R&D partnerships are increasingly becoming more apparent between tech start-ups, leading technology universities and low-tech Non-Governmental Organizations (NGO's). The tech start-ups benefit from access to the aged and extensive databases of Universities and NGO's and the sheer number of data collection assets at their disposal. The Universities and NGO's benefit from the typically superior online research capabilities of a tech start-up with real time feedback on a shared audience.

Licensing Partners

A Licensing Partnership occurs when one party covets the proprietary knowledge-based resources of another party. Again they are likely not to be direct competitors as the Licensor will be unlikely to assist a current or potential competitor. A start-up can either be the licensor or licensee. As a licensor a start-up can utilize a proprietary knowledge resource in its possession to generate both revenue and valuable feedback from an otherwise unserved or unreachable market segment. The feedback is provided by the license who, pursuant to the licensing agreement, sends feedback it collects from its usage to the licensor pertaining to either application of the particular technology or customer feedback. This feedback can then be used by the licensor (start-up) to improve its own product or customer development efforts respectively. As a Licensee it may make sense to pay licensing fees for a non-core technology, service or complimentary product as opposed to incurring the financial costs, development efforts and allocation of human resources to develop such knowledge resources in-house.

Relational Partners

Relational strategic partnerships is the most prevalent type of strategic partnership entered into by tech start-ups. There are three major types of relational strategic partnerships which include Strategic Service Providers, Exclusivity Partners and Co-Marketers.

Strategic Service providers

Strategic Service Providers are vendors that have strategic interests in serving your venture above and beyond just the revenues to be earned. There exist strategic benefits derived from their services for the start-up as well. Typically a strategic relationship between a start-up and a vendor becomes apparent when both parties offer the other party a means to achieve their strategic objectives which may have some similarities (i.e. regional growth) albeit in different lines of business.

Exclusivity Partners

Exclusivity Partners can either take the form of an exclusivity arrangement with a supplier (vendor) who offers a critical and superior input or service exclusively to you and not your competitors or a re-seller arrangement whereby exclusive rights are granted to sell or market their products or services to its partner in defined geographic areas, distribution channels or market segments. An exclusivity partner such as a consulting company may offer a captive audience whereby their clients have to purchase your online tool or software as part of the services your partner provides. Exclusivity offers credibility through favorable marketing positioning, a potential captive audience and a premium pricing opportunity. Securing an exclusive relationship with a well-regarded brand can serve as a crucial barrier to entry. Due to shorter life cycles the importance of technology as a differentiator has been declining. It doesn't take much effort for a copy-cat to come along and emulate your product or business model. A new and effective way to establish a barrier-to-entry and protect your backside from competitors is too establish an exclusivity arrangement with a prominent brand in your space. Technologies and business models can be replicated but exclusive partnerships cannot.

Co-Marketing Partners

Co-Marketing Partnerships represent perhaps the most prevalent and potentially most beneficial strategic partnerships for tech start-ups. Co-Marketing arrangements can either be promotion or platform based. Promotion based co-marketing partnerships include co-packaging, shared marketing campaigns or each party incorporating the other parties' products or services in their own marketing efforts. A frequent co-packaging arrangement in the tech start-up space has been hardware and software entities bundling their products together in offerings to the customer. Cross linkages between non-profit organizations and NGO's with start-ups is an example of a co-marketing partnership especially popular with social impact ventures.

Platform-based co-marketing partnerships has become a preferred route to instant commercial success for many tech start-ups fortunate to have the opportunity to market their innovative product or service on a well-established heavy traffic distribution platform of a major corporation. The time and effort required to establish a scalable and trusted platform as a powerful marketing and distribution channel for your innovation is substantial. To avoid the effort of such a massive undertaking many successful tech start-ups have opted to piggyback on the online distribution platforms of the largest telecom, media and technology corporations in the world.

Piggybacking is leveraging an existing scaled and trusted online platform that is complimentary to your innovative product and can be used as a marketing and customer acquisition platform for your own innovation. Facebook perhaps is the best example of such a platform that has been piggybacked often.

How does the different types of strategic partnerships compare in delivering the resources in demand by start-ups?

Provision of Resources

As we just discussed the value of entering a strategic partnership with a particular investor is usually based on one of the three valuable resources discussed throughout this book. However, the various forms of strategic partnerships are all worthy of the "bootstrapping major" designation as they often offer a kaleidoscope of resources critical to fueling start-ups.

Financial

Corporate VC's provide an opportunity to secure equity investment funding on preferential terms due to the strategic nature of their interest. I call the preferred investment of corporate VC's as strategic funding. I define strategic funding as investments by corporate VC's with preferential terms due to the strategic nature of their interest. When negotiating terms with a corporate VC a start-up will likely find that the corporate VC's may demand less control and offer a higher valuation compared to non-strategic equity investors. A corporate VC is more likely to have a lower expectation of ROI upon exit as well. Due to the expectation of achieving more immediate shorter-term strategic objectives their longer-term investment risk is somewhat mitigated. Consequently lower perceived risk results in more favorable funding terms for the start-up.

A strategic partner other than a corporate VC making a direct investment may help you in raising funds from future investors by either making an introduction, providing a letter of recommendation or actually pledging to participate in the next funding round. Leveraging the support and vested interests of willing strategic partners and key vendors in writing, whether in binding or non-binding form, is a powerful tool in attracting investment funds. With the use of non-binding letters of commitment the overall reputation and brand image of third parties can be effectively leveraged as well. The weight carried by market assessments made by a strategic partner already established in your target market is far heavier than any market reports included in the prospectus materials of your young start-up venture. It is much more credible to present a written document signed by a strategic partner who attests to their own vested interests rather than your founding team trying to make such a case without such a clear written testament. I will soon give two examples of a local start-up that I advised that were able to secure such a pledge letter from a co-marketing partner.

Strategic partnerships involving collaboration in research & development or marketing efforts will likely result in valuable cost-savings for a cash-starved start-up. Such cost-savings are most evident in joint ventures.

The enhanced branding or captive audiences that a strategic partnership can offer may present premium pricing opportunities. Co-Marketing with a prominent corporation or entering an exclusivity partner arrangement offer the best premium pricing opportunities.

Knowledge

Establishing working relationships with universities and research institutes is an excellent way to both save money and have access to cutting-edge technologies and process that may have applicable uses for your development efforts. Research work conducted at local knowledge-based institutions may also offer valuable information for a startup. Research studies conducted on certain types of consumers may offer a treasure trove of information in support of a startup's customer development efforts. Participation in such research studies may offer an excellent means to gain valuable insights in the development and testing of your own hypotheses associated with your target market. I have witnessed many examples whereupon startups and local educational or R&D institutions agree to assist each other in research efforts. The startups can offer raw aggregate data collected from their customer and product development efforts or behavioral data derived from any online activity on their sites. The educational or R&D institution is more than happy to exchange more processed data for this raw data. It is a win-win situation for both parties.

There are similar benefits derived from a licensing partnership. The knowledge-based resources to be obtained through licensing can assist a start-up in their customer and product development efforts as well. However, the knowledge resource licensed is proprietary and primarily sought and secured by the start-up to gain some form of technological or marketing advantage to differentiate vis-à-vis their competitors. Using a proprietary technology in a product or service offering can lead to a premium pricing opportunity as well.

Relational

Compared to all the bootstrapping majors strategic partnerships offer the greatest variety of relational resources to be attained and the fastest way to establish trust- the most valuable asset for a start-up.

The most powerful relational resource is the opportunity to market your innovation on an already scalable and established distribution platform. An opportunity to platform piggyback needs to be incorporated early into the bootstrapping strategy of every serious start-up. The reason why it is strongly advisable to identify a potential pig as soon as possible is because you may have to incorporate this into your product development efforts, which may need to include a means to integrate with the platform to be piggybacked.

Enhancing your brand image through association with a respected market player can help you attract prospective investors, provide negotiating leverage with vendors and secure your very first set of customers. There is no better way to demonstrate the commercial viability of your innovation than by partnering with an established and well-respected player in your target market.

Strategic partners of every stripe can provide a substantial boost to your go-to-market efforts representing a fast track to commercial success by skipping the difficult and time-consuming process of earning the attention and trust of your target market. The fast track can include qualified sales leads, exclusive marketing arrangements and access to their existing client base who possibly may be a captive audience.

The reason why strategic partnerships qualify as a bootstrapping major is because more often than not they offer multiple resources. The best example of this is evident in the difference between a strategic corporate partner and a traditional operator VC in that with a strategic partner you will not have to dilute your equity share and forfeit more financial decision-making control. You will have the opportunity to leverage the reputable brand and significant distribution platform and share customer feedback data as well. Some other common examples include a co-marketer offering valuable industry insights, an NGO providing sponsorship funds in addition to sharing research with a start-up and a corporate VC offering sales leads.

Potential Challenges & Risks

Although strategic partnerships offer a treasure trove of resources of tremendous value to tech start-ups, the challenges and risks posed can be quite daunting. As with any partnership the ultimate success of a strategic partnership depends on how well each parties’ interests align and how functional their working relationship will be.

The first challenge to be faced is actually attracting a strategic partner. To be successful you will need to identify what the strategic interests are of any prospective party you would like to partner with. Than you have to determine if and when your venture will be in a unique position to offer such a strategic value to them. The next step will then be to prepare an effective pitch and select the most favorable time to do so.

Potential Business Culture Clash

The most common risk associated with partnering with another entity, particularly a larger more bureaucratic one, is the potential business culture clash. The business culture and expectations of a start-up are radically different from a typical business culture of a large multinational corporation, NGO or educational institution. Fortunately this potential business clash is more and more acknowledged by the larger partners. Indeed, the less rigid structure of a start-up is the most optimal environment for innovation, which is likely the primary reason why a larger entity wants to partner with you. Thus, it is in their interest as well not to disturb this dynamic. To mitigate the risk of a business culture clash it is important that the two parties agree on a clear work flow and tacit rules of engagement. Roles have to be clearly defined.

Conflicts of Interest

The potential business culture clash is a general risk, however, there are specific potential clashes regarding conflicts of interest. With the possible exception of a corporate VC the strategic interests of the more mature partner may not always be aligned with the primary interest of the start-up- maximizing the ROI upon an exit. A rather frequent manifestation of this risk is when a Lean start-up decides to commercially launch a Minimum Viable Product while working with a strategic partner who may have serious reservations regarding the potential effect of being associated with such an unpolished offering on its own brand image. A more serious conflict of interest can appear when either partner perceives the other partner as a potential future competitor. Unfortunately I personally experienced such an episode with a start-up I was advising. The start-up had developed a ground-breaking digital signage for outdoor advertising in a very niche and lucrative market. It was a David vs. Goliath situation in which our new product was challenging the market position of the dominant player. The dominant player, a large multi-billion dollar media entity, was utilizing an inferior product and realized this. A “deal with the devil” was executed because we didn’t have the resources to commercially launch the product ourselves and they did not want us to approach their long-standing advertising clients. An exclusivity deal was agreed upon that initially satisfied both our interests. However our interests were never truly mutual. Consequently both parties had to endure a miserable existence in which the larger partner had to give us just enough business to keep us alive but not too much business as to feed a future competitor. In the end the partnership fell apart as honoring their side of the commitment became too risky for them as we gained traction resulting in a legal battle that did not benefit anyone except, of course, the lawyers.

Control Issues

The existence of conflicts of interest can also lead to control issues whereupon a strategic partner uses its levers of control granted in any agreement consummating the partnership to compel founders of a start-up to steer in a direction away from the best interests of the start-ups' shareholders to fulfill their own strategic interests. This represents the greatest risk of any strategic partnership and such potential possibilities need to be addressed prior to formally entering into any strategic partnership.

Overdependence

Another related potential disadvantage to be conscious of is overdependence on a strategic partner. This hazard is best illustrated when examining a start-up piggybacking on a platform of a prominent co-marketing partner. Zynga's recent struggles is a case-in-point as their vulnerability to policy changes, particularly in regard to limiting the use of the platform, instituted by the dependent platform can have considerable implications for their own business. (2) The co-founders of a local start-up also successfully piggybacked on the Facebook platform. However, they revealed to me that the over-reliance issue was a determining factor in their decision to accept an exit offer perhaps earlier than otherwise. Thus, a key decision for a start-up to possibly make is deciding when to dismount the pig.

Exit Option Flexibility

A longer term risk seldom considered is the effect entering a strategic partnership can have on the range of exit options for the start-up. If you have a strategic partnership with a possible acquirer than the prospects of exiting with a direct competitor of theirs may be denied despite the competitor offering a much more attractive offer for your shareholders. For example a co-marketing partnership with Microsoft may prevent you from making a partnership or any other kind of deal with Apple.

Experiences with Strategic Partners

It will be helpful now to examine some real examples of strategic partnerships and what made them work. The first batch of strategic partnerships we will examine are ones primarily offering financial resources. A notable corporate VC will be our first example. The next two cases will illustrate how strategic partners can directly assist you in your future fund raising efforts.

Financial Partners

Many of the most active corporate VC's are originating from the telecom industry. One of the largest telecom companies in the world, Japanese-based Softbank, has a very active venture capital arm called Softbank Ventures Korea Corp. (SBVK) which manages several funds each aligned with a particular strategic interest of the mother company. There funds include Softbank Ranger Venture Investment Partnership fund which invests in IT companies that offer synergies with Softbank, KT-SB Venture Investment fund investing in early-stage start-ups with a potential to become a telecom platform and SB Next On Rush Investment partnership fund which searches for start-ups in the digital entertainment, mobile and online convergence services spaces. Basically if your start-up possesses synergies with Softbank, can become a telecom platform partner and possibly serve its already expansive portfolio of companies or can generate revenues on existing Softbank platforms they have a venture fund for you. Recently they invested in Ini3, the leading Thai mobile gamer representing their first investment in Thailand. According to Daniel Kang, COO of SBVK, Ini3 is an ideal investment for them because they share a similar philosophy, have strong traction and a proven management team. Ms. Pattera Apithanakoon, CEO of Ini3, is excited to partner with SBVK because they will provide them with the resources required to expand regionally and develop a more expansive suite of mobile games. (3) This investment is a perfect example of a partnership between a corporate VC and a start-up. The corporate VC invests in a promising start-up that serves as a perfect addition to their suite of portfolio companies that will have an immediate positive effect on its bottom line- a revenue generator on their existing telecom platforms. In the intermediate term they have made a strategic investment in a start-up poised for regional expansion in a region coveted by the mother corporation. In the long-term the proven products and management team of the start-up is reason for great optimism for an eventual lucrative exit. For the start-up they will receive all three resource types- the funding, expertise and piggyback platform to catapult them as a leading regional player in their space on the way to a lucrative exit.

Softbank provides an excellent example of how getting into the corporate VC business can enhance their competitive positioning. Softbank's venture capital activities has catapulted her past her Japanese telecom rivals, NTT Docomo Inc. and KDDI Corp. The valuation of Softbank has skyrocketed due to the exceptionally high returns it has garnered from equity stakes in about 1,300 technology businesses. As the growth of the Japanese telecom giants flattened due to their reliance on traditional telecom businesses there was a need to find new sources of innovation and growth. Softbank was the first of the three to reinvigorate themselves with their venture capital investments. (4)

A strategic partner can provide a financial bootstrapping assist without making a direct investment such as a corporate VC. There are two recent examples I would like to cite in the use of MOU's as prospectus documents obtained from strategic partners. The first example is a business opportunity that presented itself in the technology media space. This opportunity required to secure leasing space on an outdoor media and an advertising company with large ad clients willing to offer their paid advertising clients for a commission. Both the terms and commitment from both parties would dramatically improve my chances to secure investment funds. What I did was execute non-binding pledge letters from both the advertising company and the outdoor media operator. In the pledge letter from the advertising company I included strategic reasons why the advertiser would be willing to offer their clients, the percentage amount of the commission they would charge, an estimated amount of the monthly ad fees that their ad clients could be charged and their positive outlook for the outdoor media advertising market in general and the specific innovative outdoor media product to be deployed. This simple non-binding letter provided a tremendous assuring effect on prospective investors by diminishing the perceived greatest investment risk as being unable to secure ad clients for the outdoor media product they were to invest in.

Another example where I used a pledge letter was on behalf of a recent client. My client had attracted the interests of a strategic partner who was also willing to immediately provide a nominal amount of seed funding. This amount would not be sufficient to finish development work and execute a commercial launch. A larger funding round would need to be conducted in the not-so-distant future. Fortunately the strategic partner desired some upside in our venture as well. Neither they would be willing to provide the entire funding amount necessary in our next funding round nor did we want to become too dependent on a single party, particularly a strategic partner. To assist us in attracting investors during the next funding round we negotiated the execution of a pledge letter from the strategic partner. In the pledge letter the strategic partner simply stated the strategic reasons for entering this agreement, their positive assessment of the marketplace and the amount of money they were willing to pledge as a portion of the next funding round.

Knowledge Partners

The second batch of strategic partnerships to be studied are forged primarily for knowledge resources. They include a strategic partnership between an Indian e-waste recycler and a local technology university and a licensing partnership between a global media titan and an online media start-up.

Attero Recycling, a successful Indian e-waste recycler, is a perfect example of how a start-up can leverage the knowledge-based resources of a local educational institution. Attero Recycling utilized Phd students at the Indian Institute of Technology to identify ways to improve the efficiency of their recycling process. They also used their working partnership with the local institute to have access to specialized equipment. (5) This equipment may have otherwise been developed or purchased and at considerable time or financial cost. Attero Recycling attained valuable knowledge and financial resources through their partnership with the Indian Institute of Technology. In turn the Indian Institute of Technology were able to incorporate the R&D efforts of Attero Recycling into their institutional knowledge base to assist in their educational efforts. They also receive both local and international recognition for assisting a local start-up to make a substantial positive environmental impact in India and beyond.

From personal experience I will share an example of a strategic licensing partnership between a globally-recognized media entertainment company and an online media start-up I advised. The start-up had developed a ground-breaking proprietary online platform for musicians to collaborate in real-time. We were fortunate to enter a licensing agreement with a dominant player in the music industry. The benefits to be garnered for both parties was truly compelling. For my client all three types of resources valuable for start-ups was in the offering. My client would piggyback and have access to their target market on a global scale. Greater access to musicians willing to participate in promotional activities and use the product was another precious relational resource to be gained. The knowledge resources to be attained was considerable as well. The partnership provided access to the top executives and experts in the music industry. The feedback collected on the platform licensed would be invaluable in enhancing their product, identifying and testing new features in-demand and discovering new additions to their product mix. From a financial perspective it was not only an additional revenue source but it greatly helped in my fund-raising efforts. The licensing agreement we had with this pre-eminent media conglomerate served as a powerful prospectus document. In one case a prospective investor asked if we could cooperate with them in conducting technical due diligence. I simply referred them to the existing licensing agreement and who it was with. Suddenly they no longer thought they needed to go through the time and expense of organizing a technical due diligence process. For the large media partner utilizing this new ground-breaking collaborative online platform provided an opportunity to engage with their existing audience through a new and exciting medium. It also allowed them to tap into a whole new market segment. Interestingly for both parties the licensing fees were secondary to the strategic benefits to be earned. In this respect, the licensing agreement executed represented a strategic partnership and a major bootstrapping opportunity, not merely a licensing arrangement consummated for purely financial reasons.

Relational Partners

The third batch of strategic partners is primarily associated with relational resources. They include one example of a strategic service provider, one example of an exclusive partnership and several notable examples of piggybacking.

For a tech start-up an ideal strategic partnership to forge is with a non-competing service provider who possesses strategic interests complimentary to yours. Strategic Service Providers, as I described earlier, offer such a partnership. I am excited to present a local example of such a strategic service provider who has committed themselves to not only to operate a profitable company but also to have an enormous positive impact on the start-up landscape throughout the region. aCommerce is a well-managed venture with a mission to break the e-commerce bottleneck currently plaguing the booming start-up scene in Southeast Asia. They intend to accomplish this by offering e-commerce start-ups throughout the region a comprehensive suite of logistical services lacking either the financial, knowledge or relational resources to expand regionally. They offer all three types of resources by providing warehousing, delivery, channel management/distribution, customer acquisition/marketing, strategy/planning, technology platform/integration, creative development & production and customer care/call center services. (6) Basically an ecommerce business handles their sourcing and branding and aCommerce can take care of everything else. What makes aCommerce a valuable strategic partner to its clients rather than just merely a service provider is as a start-up themselves they share the same aspirations of their clients, notably a desire for regional expansion, and can truly appreciate what are the real challenges faced by e-commerce start-ups throughout the region. This empathy is reflected in their suite of services which offers solutions to real problems faced by their ambitious clientele. With the prospect of ASEAN regional economic integration and the size of individual domestic markets start-ups throughout the region are increasing aware of the need to have a regional growth strategy to scale at a level to attract the interests of prospective investors and take full advantage of an increasingly common regional marketplace. As aCommerce continues its regional expansion the opportunity for other ecommerce startups to piggyback on them and successfully pursue their regional growth strategies becomes extremely compelling. Indeed with every new country that aCommerce commences operations it represents a new market for its clients to expand their offerings as well. aCommerce clients now have negotiating leverage with local distributors and marketers, enjoy a competitive advantage through differentiation and the ability to scale regionally increasing reach and reducing costs. With every new client aCommerce is enhancing its brand regionally and achieving economic efficiencies in its operations.

Another local start-up I advised forged an exclusivity partnership with an American-based consulting firm. The start-up had developed a very well-conceived project management tool. The consulting firm that advised project managers thought the software project management tool was very helpful to the clientele and their consulting efforts were easily integrated into the tool. Consequently the consulting firm partner decided to sell the software package together with their consulting services affording the start-up a captive audience. The consulting firm partner was also in position to pass very helpful customer feedback to the start-up as a more reliable third-party conduit. The consulting firm was pleased that they were providing their clients with a very useful and well-received project management tool and interacting with all their clients through a common interface.

Exclusive partnership arrangements with prominent brands has become an effective weapon against copy cat competitors. I have advised many Rocket Internet type start-ups who apply a successful business model in one location and introduce it to another. The business model and the technologies deployed are usually not big differentiators. Consequently the biggest fear expressed by Rocket Internet type start-ups I have advised is the prospect that someone else with greater resources will out-compete them in their local target market at some point. Two success factors for such start-ups is local knowledge and establishing a reputable brand. The former can be accomplished rapidly by a local competitor with superior resources. The later takes time to accomplish. My advice is for them to establish an exclusive deal with a reputable brand in the local market. The brand could be local or international. The important point is to create an effective barrier to entry for any would-be competitors who want to leverage their superior resources to beat you with the same business model. The amount of resources now required to compete with you and your established brand has just increased exponentially for any prospective competitor.

Recent piggybacking success stories are too numerous to count. I would like here to present just a few of the more notable examples including:

*Zynga, the social gamer, riding the social network of Facebook

*Paypal piggybacking eBay by offering eBay visitors a much superior payment method

*YouTube sling shooting off of MySpace growth by enhancing the ability of musicians to showcase their talents with a better video experience (7)

There are many lesser known instances where start-ups successfully execute platform piggybacking. Recently Cubie Messenger enjoyed very successful results immediately upon piggybacking on Fortuma's mobile payment platform which allows users to pay for their purchases via their mobile phone bill as an alternative to paying by credit card. (8) This type of platform would be very attractive in many Asian countries where purchasing online by credit card is not widely practiced and serves as a high hurdle for start-ups to monetize online.

How does one select a strategic partner to emulate the success stories just mentioned?

Selecting a Strategic Partner

Selecting the most appropriate strategic partner at the most appropriate time may be one of the most important and challenging decisions founders of a tech start-up may have to deliberate.

As with any partnership for it to work in a mutually beneficial manner both parties need to bring to the table something the other party desires. The start-up needs to identify a partner that primarily offers the resources most in current need or offers the most advantageous mix of resources for the venture. The start-up also needs to highlight to the other party how partnering with them presents an excellent opportunity for them to check-off their strategic wish list. In this way the partnership can prove to be both fruitful and sustainable. If financial resources are in greatest demand than a start-up in the banking space may decide to seek funding from a major bank with a VC arm who may be attracted by their online gamification platform targeting banking clients.

Identifying Mutual Benefits

Knowing the benefits you want to attain and knowing the strategic interests of the counter party will certainly serve you well in any negotiations with a prospective strategic partner.

How can you determine the perceived value of your venture to a strategic partner?

1. What would the cost, effort and time it would take a strategic partner to try to emulate the efforts and progress of your innovation?

2. What are the alternative options available to your strategic partner in emulating a strategic partnership with you giving their intentions and motivations?

3. How much is it worth in either financial or strategic terms to leverage a strategic partnership with you?

Scalability

The next determination to make is their willingness and ability to scale with your business as you enjoy your much hoped for exponential growth. Can they scale with you from a capacity, technology, distribution (multi-channel, geographic) or product mix perspective?

Control & Dependency Issues

Identify any potential control and dependency issues. As we discussed earlier the biggest deal breaker in any strategic relationship is brought about by an unworkable conflict of interest. It is not a bootstrap opportunity if your decision-making enters an untenable zone.

Piggybacking Opportunity

The importance of piggybacking to the current generation of start-ups warrant a little extra consideration. Mr. Sangeet Paul Choudary, an author and start-up advisor based in Singapore, posted an excellent article presenting four key suggestions for those start-ups considering a platform piggyback. They are:

1. Add Value to the Network. This is the best way to garner high adoptability. The aforementioned example of PayPal's instant payments solution for eBay users is a perfect example.

2. Make it Shareable. The more shareable a plug-in or app is the greater the opportunity for viral growth and consequently the greater the scale of adoptability on the platform.

3. Seek Synergies. It is important that your target users be the primary users of the network to avoid any potential breach of trust.

4. Be an early Piggybacker on the Network. The earlier you piggyback on a network the greater the opportunity to enjoy any first mover positioning advantages posed by the given network. (9) The earlier you piggyback on a network the more of the networks' growth can be ridden as well.

A strategic partnership presents a high-risk endeavor. It can either propel your start-up to stratospheric heights or crush your start-up under the weight of the partnership itself. Finding and effectively working with a strategic partner is a worthy endeavor. Indeed it has been the path for most of the recent start-up success stories.

Current Trends

Although there are no published statistics in this broadly defined bootstrapping opportunity that one finds with its aforementioned bootstrapping opportunity siblings there is clear evidence that the mutual benefits and consequent increasing execution of strategic partnerships is consistent with the current needs of both tech start-ups and corporations. For tech start-ups the recent piggybacking success stories has made strategic partnerships fashionable. For large corporations the increasing need to tap into the innovative energies of start-ups to remain competitive and relevant is too compelling.

The formation of strategic partnerships is totally consistent with the four prevailing contexts discussed in Chapter two. Shorter life cycles requires a higher priority on speed to market. Strategic partnerships offer the fastest track to commercial success. For Lean startups leveraging the resources of third parties is an efficient means to uphold Lean principles. Working with a strategic partner compels the correct question to be asked, "should we build this product?" as opposed to "can we build this product?" because a strategic partner is more interested in its commercial applications. A strategic partner often serve as an important participant in the "build-measure-learn" loop so important for the accelerated learning of a Lean start-up. The wealth vs. control dilemma also comes into play. Strategic partners are typically more passive stakeholders than equity investors thus permit a start-up to have their cake and eat it too. That is acquiring resources in greater amounts with a relatively small forfeiture of decision-making control. Strategic partners provide a substantial amount of non-financial resources in exchange for little or no equity dilution making them a source of "good money." They only become potential sources of "bad" money when dependency or control issues become a dominating factor.

For these reasons forging a strategic partnership is a highly prized bootstrapping opportunity and as the four prevailing conditions continue to prevail we should expect the continued growth of strategic partnerships.

Summary

This chapter was devoted to shedding light on how strategic partnerships of various forms serve as a "major" bootstrapping opportunity.

A strategic partnership is any working relationship established between a start-up and a more established entity such as a corporation or organization in which both parties have immediate practical benefits and longer-term strategic benefits to reap. Strategic interests trump direct financial interests for each partner.

The chapter was organized into the following sections. In the first section the various types of strategic partnerships were categorized and defined. The next two sections listed the various resource types to be attained and the challenges and risks posed by engaging in a strategic partnership. To better illustrate the benefits and challenges identified a review of real strategic partnerships in the different categories was given. The factors involved in deciding or selecting a strategic partnership is than considered. The chapter concludes with how and why strategic partnerships will continue to impact the global start-up scene in the foreseeable future.

Strategic Partnerships can be classified according to the primary resources it provides to start-ups. Financial strategic partners include corporate VC's, corporate sponsors and joint ventures. Knowledge-based strategic partners include traditional joint R&D ventures and licensing partnerships. Relational strategic partnerships are the most common and come in the greatest varieties. They include strategic service providers, exclusivity partnerships and co-marketers. The most notable co-marketing relationship marked with the greatest recent record of success is piggybacking. Piggybacking is utilizing the reputable online platform of a trusted corporate brand that can be leveraged as an otherwise unattainable scaled and credible marketing and customer acquisition platform for your own innovation.

The reason why strategic partnerships are deemed "major" bootstrapping opportunities is because regardless of their classification they typically provide a valuable mix of all three types of resources. Strategic partners often serve as an excellent financial bootstrap in that investment funding can be secured, the third-party credibility of a prominent strategic partner can be leveraged to solicit for investment funding, significant cost savings can be enjoyed by leveraging the resources possessed by a partner and there may be created opportunities for premium pricing boosting profit margins. Knowledge-based resources to be attained include access to cutting-edge technologies and processes, collection of actionable customer feedback, enhanced testing capabilities and engagement with top industry executives and experts in the target market. The relational value of strategic partnerships is exceptional. The most powerful being any opportunity to piggyback in lieu of the substantial amount of time and resources required to establish one's own respectable online marketing and distribution platform. Indeed identifying and seeking a piggybacking opportunity should be a component of any current serious tech start-up. Enhancing your brand image through association and marketing assistance such as qualified sales leads, exclusive marketing arrangements and captive audiences through strategic partners are additional relational values that can be extracted. Additionally, licensing allows use of proprietary IP that can be used for differentiation and improved competitive positioning.

There are a number of challenges and risks identified that are associated with strategic partnerships. The initial challenge is actually attracting the interest of a worthy strategic partner. Both parties need to offer strategic value to the other. Perhaps the most common issue to be conscious of is the dramatic difference in business cultures between a young dynamic tech start-up and a venerated highly-bureaucratic corporation. Potential clashes can be more specific such as conflicts of interest. With the possible exception of corporate VC's the pursuit of the strategic interests of a more established corporate partner may be in conflict with the drive of an exceptional ROI upon exit as the ultimate goal of the high-risk start-up. Related issues of control and dependency may impose damaging limitations in the decision-making process. Reduced exit options was the final risk we discussed.

After exploring the benefits and risks we than turned to real examples of strategic partnerships in a variety of forms to illustrate the good and the bad. The examples of primarily financial strategic partnerships include Softbank Ventures Korea (the corporate VC arm of Softbank) and two personal cases of strategic partners providing fund raising assists. Two knowledge-based strategic partnerships were highlighted next. The successful partnership between Attero Recycling (an Indian e-waste recycler) and the Indian Institute of Technology was an excellent example of a joint R&D effort between a start-up and an educational institution. Following the Attero Recylcing case I presented a licensing partnership I was personally involved in between a media start-up and a prominent media and entertainment giant. Relational strategic partnerships were next in line. aCommerce, a local e-commerce logistics provider, served as a strong example of an exceptional strategic services provider. A case of another local start-up and an American consulting firm partner was presented to illustrate a situation whereupon a captive audience could be obtained. Next I used the examples of Rocket Internet-type start-ups pursuing exclusivity deals with reputable brands to establish an effective barrier of entry to protect their simple technology and business model businesses from potential copy cats. Finally I noted many examples of successful start-ups propelling themselves to stardom by piggybacking on the platforms of their bigger strategic partners.

Given what has been covered how does one go about selecting a worthy strategic partner at the most ideal time?

Factors to be considered include the existence of strategic value for both parties, willingness and ability to scale together and any potential dependency and control issues.

What of strategic partnerships in the foreseeable future?

The number of Strategic Partnerships should be expected to continue to trend upwards, similar to its sibling “majors,” as the four prevailing conditions make it more and more appealing for all parties.

With the examination of strategic partnerships we have covered all the “major” bootstrapping opportunities. In the next chapter we will incorporate all the “majors” in formulating a comprehensive bootstrapping strategy.

Chapter 11 Bootstrap Strategy & Planning

Up to now we have been discussing the individual components of a bootstrapping strategy more or less in isolation. Now we will put everything together to formulate a bootstrapping strategy and ultimately construct a comprehensive bootstrapping plan articulating this strategy. Before we proceed to do so we need to revisit what bootstrapping is as defined and reviewed in the first and second chapter respectively and what the objectives of bootstrapping are.

By definition an entrepreneurial venture is a business undertaken knowingly without initial resources sufficient enough to achieve its objectives. The resources critical to be acquired by any entrepreneurial venture include financial, knowledge-based and relational resources. Any decision or pursuit through which a start-up tries to acquire any one or a combination of such resources at a cost, in both financial and non-financial terms, less than the cost of securing funding needed to acquire such resources through an equity sale or other traditional financing may be considered a Bootstrap. Efficient financial management, minimizing the amount of investment funds required, reducing your cost of capital or elevating your valuation by mitigating risk, funding your venture with minimal external monetary and non-monetary obligations, cost-effectively acquiring the necessary talent and information and accelerating on learning curves related to customer and product development efforts represent the various means to bootstrap a business. The means to bootstrap are found in a number of decisions and opportunities that founders of a start-up can make or pursue. Buying time for your start-up venture to acquire all the vital resources is the essence of bootstrapping and often the primary determinant of start-up success.

The primary objective of bootstrapping is to buy time. This can be accomplished in two ways. First, reduce the amount of time required to attain all the objectives set forth. Two, delay for as long as possible, if not entirely avoid, the time when securing external funding through an equity sale is necessary. Bootstrapping is a strategy and an art because it requires a balance. Securing external funding, albeit at a cost in equity dilution and decision-making control, can hasten the ability of a start-up to reach its objectives by providing a means to acquire the necessary resources to be employed in a timely manner. However the associated costs can eliminate sufficient incentive or the decision-making flexibility required of a start-up to ultimately succeed. Success for an entrepreneurial venture defined as a high-ROI exit.

So how do you stay in the fast lane while avoiding an equity sale?

The answer resides in a well-conceived bootstrap strategy articulated in a bootstrap plan which will illuminate a path for your start-up through the progressive stages of development.

To examine the method of formulating a bootstrapping strategy and composing a bootstrapping plan this chapter will proceed in progressive sections. We will first review the various components of a bootstrapping strategy including bootstrapping decisions that can be made and bootstrapping opportunities that can be pursued. Coverage of bootstrapping opportunities will consist of two sections. The first section covers “minor” bootstrapping opportunities covered in chapters three through five. They are “minor” because they predominantly provide one resource type and are usually selected when a specific resource is immediately demanded and an opportunity arises. The next section will review the bootstrapping “majors” discussed in chapters six through ten. The “major” opportunities provide all three types of resources and can be more readily planned, thus, inserted in a bootstrap plan as we shall see. These first three sections will include an overview of the ideal conditions to make each decision and utilize each opportunity. Once all the components have been presented we will devote the next section to the process of formulating a winning bootstrapping strategy. The chapter will then conclude with the actual construction of a bootstrapping plan.

Components of a Bootstrapping Strategy

The first ten chapters of the book was intended to present the various components of a bootstrapping strategy which will eventually serve as the building blocks of a bootstrap plan to either postpone or entirely avoid the dilution of equity and decision-making control while not being derailed from the fast track. Now is an appropriate time to briefly revisit the various bootstrapping decisions and opportunities covered in-depth in Part Two.

Bootstrapping Decisions

As a start-up you need to identify any relevant bootstrapping decisions that can be initially made, especially processes that are best established at the very beginning. Throughout the progressive stages of your venture you will need to periodically revisit the various bootstrap decisional areas to seize any advantageous opportunities and meet any recently developing needs. Consequently bootstrapping decisions can be further categorized into decisions made initially, periodically or when a favorable opportunity arises.

Initial Decisions

There are several initial decisions that are best made as soon as possible to both acquire the vital resources typically needed and provide a base structure that will avoid costly re-structuring later and offer a basis to efficiently make and implement decisions, particularly related to processes. In the very early stages of a start-up the resource in greatest need is knowledge-based resources and it makes sense that the most important initial bootstrapping decisions to be made are for the acquisition of knowledge resources such as instituting Lean and Agile processes, Lean business planning and forming a complete founding team. Although the initial amount of financial resources needed initially is nominal founders' contributions and planning in a time stream are financial bootstrapping decisions that are to be made at the very beginning. Establishing a value-based business culture is a relational decision critical to be immediately implemented in addition to assembling a complete founding team mentioned earlier as an important early knowledge-based bootstrapping decision.

Periodic Decisions

There are also several bootstrapping decisions needed to be made on a periodic basis. Due to the inherent cash-starved life of a tech start-up it should be no surprise that the most numerous bootstrapping decisions to be made periodically are financial. Efficient budgeting, effective cash management, "just-in-time" financing and employee compensation are periodic finance-related decisions that require continual monitoring and assessments. Engaging with experienced mentors that can offer valuable advice or shared experiences is a periodic knowledge-based decision. A periodic decision that has both knowledge-based and relational components is forming an experienced and influential advisory board.

Opportunistic Decisions

The decision to either internally develop or outsource is an opportunistic situation that may appear in which the choice depends on how core a development is to the start-up and the current positioning and financial status of the start-up. An opportunistic decision that can be primarily made for either financial, knowledge-based or relational reasons is the consideration to re-locate.

When we talk about the importance of founding teams maintaining decision-making control, particularly in the early stages of the venture, we are talking about having the opportunity to make the mentioned periodic and opportunistic decisions unencumbered. For start-up ventures having a highly agile decision-making capability is so critical in the inherently volatile business climate of a high-risk, high-return tech venture.

Let us summarize Part II with Table 11.1 illustrating how each type of bootstrapping decision relates to the three different types of resources critically required of tech start-ups.

{Insert Table 11.1 Bootstrapping Decisional Chart}

Minor Bootstrapping Opportunities

In chapters three through five a variety of minor bootstrapping opportunities were presented and described. They represent bootstraps that almost exclusively provide a single resource type. The decision to utilize minor bootstrapping opportunities is based on availability and a recently arising resource need.

Minor Financial Bootstraps

Minor financial bootstraps fall under three sub-categories. The first category include opportunities whereby funding can be secured in lieu of equity investments. These alternative funding options include public funding sources and creative financing, such as factoring, which result in far less equity dilution or forfeiture of decision-making control compared to a traditional equity financing. Such bootstrapping opportunities should be sought just prior to the commencement of any new stage of development when your venture would otherwise solicit for equity investments. Sources of supplemental revenues, particularly online, is the second category. Both project-based and non-project based revenues in addition to winning prize money are common ways tech start-ups bootstrap their start-up and avoid or delay equity funding rounds. Such opportunities should be actively sought at all times and be take advantage of as long as the associated real and opportunity costs are minimal. A preferred time to allocate work to your staff for supplemental revenues is when there is a temporary period of under-utilization. For example once a minimum viable product is completed by the developers there may be downtime for them as the greatest focus is directed at customer development efforts. This downtime finishes once valuable customer feedback begins to be received in sufficient quantities to re-commence coding to improve the product or service. A short-term software development project may efficiently fill-in any such down time periods. The third category concerns cost-savings. Cloud computing and sharing or receiving services for free are cost-savings opportunities to be seized whenever they present themselves.

Minor Knowledge Bootstraps

Minor knowledge-based bootstraps can take the form of various means to collect valuable feedback from related project work, peripheral activities, knowledge bartering and voluntary participation in events and the alpha/beta testing of contemporaries. Whenever you are engaged in an activity that supports your acceleration on a learning curve it is important to identify less conspicuous ways to extract feedback that could prove useful in your future customer and product development efforts. Such activities may include related project work or aggregate data collected from usage of an alternative online revenue source such as a mobile applications. Knowledge bartering is a highly cost-effective way to acquire knowledge resources. The opportunity commonly exists when founders are members of a co-working space or participating in an incubator or accelerator program. It becomes especially appealing when a start-up has little or no access to experienced mentors or advisors and their founding team is not yet complete. Active participation in local start-up community activities such as pitch events, business plan competitions, workshops and alpha/beta testing conducted by peers are examples of knowledge-based bootstraps to be taken advantage of at every opportunity. Practice makes perfect.

Minor Relational Bootstraps

Minor relational bootstrap opportunities usually make themselves available in the middle stages of a start-up when you have something to offer strategic partners and need to engage with vendors. It also corresponds to when relational resources becomes a high priority for tech start-ups. Selecting vendors based on strategic considerations and establishing working relationships on favorable terms is a relational bootstrap whose importance cannot be underestimated. The opportunity to leverage third-parry credibility can provide an instant boost to your brand image and should always be sought particularly when a prospective strategic partner is to be engaged. Securing captive partners, opportunity to directly serve the customers of a vendor or strategic partner, has proven to be an excellent path to build a loyal following. Not only is being constantly active in the local start-up community an excellent knowledge bootstrap but also a valuable relational bootstrapping opportunity as well.

Minor bootstrapping opportunities become particularly valuable when only one type of resource is immediately needed and represents a better bootstrap than an available bootstrapping major that typically carry higher opportunity costs and obligations. Minor bootstrapping opportunities, sometimes in combination, can replace a desired major bootstrapping opportunity that is either unavailable or proves to be unattainable.

An important difference to note between a minor and a major bootstrap opportunity is that relative to a major bootstrap a minor bootstrap generally provides less resources, however, at a much lower cost in term of either equity dilution, control and opportunity cost. Minor bootstraps are generally more available than major bootstraps at every stage of development. The following Table 11.2 offers a comparative view of the various minor bootstrapping opportunities.

{Insert Table 11.2 Comparative Minor Bootstrapping Opportunity Chart}

Major Bootstrapping Opportunities

In chapters six through ten our attention turned to the major bootstrapping opportunities. They include co-working spaces, incubators, accelerators, crowd sourcing/crowd funding and strategic partnerships. Major bootstrapping opportunities represent vehicles through which multiple resource types can be simultaneously obtained. However, each major has a primary resource type for consideration. Thus the ideal conditions to pursue a major bootstrap has less to do with which resource type is in current demand and more to do with availability and which resource type is of highest priority. Resource priorities are closely aligned with a start-up's current stage of development.

Availability is an issue when attempting to incorporate a bootstrap major into your overall bootstrapping strategy. Unfortunately not every local start-up ecosystem have some or all of the majors operating in the community. Indeed the decision to re-locate should be a decision largely based on the availability of a broad selection of bootstrapping majors. Indeed the vibrancy of a local start-up community is directly correlated with the availability of bootstrapping majors.

In the case where not all majors are available one's bootstrapping strategy should be devised to take full advantage of the majors that are available in order to optimize your bootstrapping efforts. For example if there is no incubator than an available co-working space may be the next best option. If a well-regarded accelerator program exists it may be recommended that one applies to it first before resorting to an available crowd funding platform. If no strategic partners can be identified than an available crowd sourcing platform may warrant greater consideration.

In the event your venture is currently based or will re-locate to a very vibrant start-up ecosystem with a plethora of all the bootstrap majors than the resource priorities of your venture becomes the most important factor in determining when and which major to apply, join or participate in.

The resource priorities of a tech start-up is closely correlated with its current stage of development. Initially knowledge-based resources typically receive the highest priority as an idea needs to be developed and R&D efforts represent the lion share of a start-up's focus. At this stage a start-up has little traction to secure either relational or financial resources. Fortunately the amount of financial resources required is relatively nominal, usually sufficient funds to just cover a small burn rate. In the next phase the start-up now has an initial team and an idea that has been validated. R&D efforts on a prototype or minimum viable product needs to proceed. Seeking the advice of experienced mentors, industry experts, sharing notes with peers and seeking collaborative working relationships become important. Thus relational resources are needed for the first time. Once a testable prototype or minimum viable product has been developed commercial validation than becomes a priority. Thus knowledge-based and relational resources continue to receive the highest priority, however, the nature of these resources is different. These resources are now associated with the target marketplace, not technologies employed or product development. Once commercial validation is received than the financial resources to fund a commercial launch becomes the top objective. Once commercially launched supporting a high-growth strategy with relational resources, leveraging the branding and distribution platforms of powerful market players, now demands the highest priority.

So where do each bootstrapping major fit into the natural progression of a typical life cycle of a tech start-up?

Incubators are typically the first bootstrapping major to be utilized by a start-up and rightfully so. The primary resource provided by an incubator is knowledge-based. Here is where ideas are "incubated." It is also where start-up teams are first formed. At the initial stages the greatest expense, besides salaries which are usually deferred, is rent and utilities. Incubators usually provide such facilities at no cost to its enrollees for a specified period of time.

The next bootstrapping major stop is co-working spaces. If an incubator is not available than a co-working space is the next logical choice, although facilities are not provided free of charge. If a start-up graduated from an incubator they likely have the need to continue their R&D efforts and possibly add a new team member(s). Collaborating with entrepreneurial peers and commencing engagement with local start-up community activities now makes sense. Thus, the importance of relational resource first appear along with the continued importance of knowledge-based resources. A co-working space makes an ideal base for a start-up team until the team outgrows the space and for branding purposes need to find its own professionally acceptable individual office space. Crowd Sourcing platforms can serve as the online substitute for co-working spaces through which collaboration and recruiting new team members can be accomplished.

Accelerators fulfill the next set of priorities which includes the final customer and product development efforts prior to a commercial launch and soliciting for Series A funds to support a commercial launch. Indeed the primary mission of accelerators is to prepare for revenue generation and to secure investment funds from institutional investors. Hence, acquisition of financial resources receives the highest priority in the decision of a late seed stage start-up to apply for admittance into an accelerator program. Late seed stage start-ups also can gain valuable market insights from experienced mentors and industry experts as well. The relational value of meeting a strategic partner with favorable distribution capabilities is also a compelling reason to apply to an accelerator.

Accelerators are not always available and when they do exist the application process can be quite competitive as noted in chapter eight. To secure the relational, knowledge and financial resources typically provided by an accelerator program crowd sourcing and crowd funding platforms become worthy alternatives. Crowd sourcing is an ideal means to collect valuable feedback from the target market to commercially validate your innovation as well as use to direct the final product enhancements just prior to a commercial launch. Indeed in many instances crowd sourcing platforms offer a channel to execute a commercial launch. In the case where a start-up has a much greater need for knowledge-based resources rather than relational or financial resources just prior to launch than it may prove more desirable to crowd source as opposed to applying for an accelerator program where issuance of equity or other future obligations may be assumed. In the absence of an accelerator program to apply for a crowd funding platform may be attractive for a venture that needs Series A funding, particularly if the maintenance of founders' control remains a high objective. Utilizing a crowd funding platform works best when a start-up needs a nominal amount of Series A funding, however, possess or have access to sufficient relational or knowledge-based resources either through vested angel investors or an experienced and influential board of advisors.

The last stretch of road to a lucrative exit is achieving exponential growth. This often requires assistance from a market player with greater marketing reach and deeper pockets than you. Strategic Partnerships represent the highest form of a relational resource that can make suitable partners for growth. However, securing a strategic partnership is not easy. Usually your venture needs to be able to show a respectable amount of traction and evidence of sustainability before they agree to partner with you and place their brand on the line. Consequently strategic partnerships typically represent the last major bootstrap to be available. The following Table 11.3 represents a comparison of the different major bootstrapping opportunities.

{Insert Table 11.3 Comparative Major Bootstrapping Opportunity Chart}

Although variances in the local availability of major bootstraps and the resource priorities of individual tech start-ups may alter the natural progression of utilizing the major bootstraps, one can nevertheless decipher a normal sequencing. The following represent an expected order of progression of majors:

Incubator – Co-Working Space – Crowd Sourcing/Crowd Funding- Accelerator - Strategic Partner

Formulating a Bootstrapping Strategy

Efficient bootstrapping is maintaining an optimal balance between minimizing equity dilution and loss of decision-making control while securing resources on a timely basis, in sufficient amounts, on favorable terms and in the most advantageous mix. Thinking in a time stream, setting resource priorities, determining what and when bootstrapping opportunities are to be pursued and measuring progress with an appropriate set of metrics should lead to the formulation of a successful bootstrapping strategy.

Thinking on a Time Stream

For a strategy to be effective it needs to be plotted out in a time stream which is divided into stages delineating when the availability and appropriateness of bootstrapping strategy components varies. The five stages appropriately used include Pre-Seed, Seed, Late Seed, Series A and Series B stages.

Pre-Seed. This is the idea generation and "incubation" stage. During this stage an aspiring entrepreneur or a small initial founding team are trying to determine if an interesting idea has potential. Being in the idea stage it is too early to contemplate customer or product development efforts. Knowledge-based resources is in the highest demand as idea "incubation" proceeds. Relational resources are not yet important because neither the product type or target market has been determined. At this point the source of any financial resources expended is almost certainly from founders' contributions or perhaps nominal amounts from friends and family.

Seed. The beginning of this stage is marked by the decision to pursue a start-up venture based on the idea incubated. A proof of concept demo or, in the case of a Lean start-up, a first minimum viable product is conceived and development work commences. Knowledge-based resources continue to be in the greatest demand, however, the need for relational resources first appear as a product or service concept and target market has been determined. During this stage following Lean precepts initially appears and the marriage of customer and product development efforts is established. A relatively small amount of seed funding may be needed to support these development efforts and cover the increased burn rate resulting from hiring employees and additional G&A expenses.

Late Seed. As the end of the pre-revenue seed stage nears final preparations need to be made for a commercial launch and the most important funding round to support the launch- Series A. Although financial resources is the most critical resource to acquire at this stage, the demand for all three resources are at its highest. Consequently participation in or utilization of a major bootstrap becomes particularly important. Knowledge resources, particularly industry expertise, will help your team select the final features and other enhancements of your product or service before offering it to the masses. Relational resources, particularly from experienced financial advisors and former entrepreneurs, will prove invaluable in amassing the negotiating leverage desired to secure the best terms from likely institutional Series A investors. Relational resources become increasingly important as commencing strong and reliable working relationships with vendors and distributors going into the all-important commercial launch cannot be under stated.

Series A. The demand for relational resources first ascends to the top of the priority list. Commercial success heavily relies on effective working relations with strategic partners with much greater marketing reach than your young venture. Here is the most critical stage to establish strong branding. To accomplish this one needs to build trust and assure that the customer experience is flawless. Your innovative product or service needs to become synonymous as a solution to a large problem. During this stage the start-up is acquiring its initial operational experiences and paying customer feedbacks as well. This incoming information represents a knowledge resource to be processed and transformed into expansion plans in terms of both geography, market segments and product mix.

Series B. Managing exponential growth and scalability becomes important concerns. Hence relational resources continue to have pre-eminence. However, the demand for knowledge resources experiences a resurgence. Leveraging the logistical capabilities and global distribution channels of a strategic partner is paramount during this high-growth stage. Access to the executive management expertise of an established strategic partner in your space is no less important as the organization grows into a more mature company.

Given these stages of development it is easy to see why a typical time stream for the use of major bootstrapping opportunities commences with an incubator and progresses to a co-working space followed by use of crowd sourcing/funding before securing strategic partnerships takes center stage.

Setting Resource Priorities

At the beginning of each development stage the founders of a tech start-up need to set a priority list of specific resources to be acquired during the upcoming stage. As we mentioned before the resource priorities of a start-up may not precisely follow the natural progression of resource priorities just presented. In previous stages a start-up may have acquired more or less of a resource type that was actually needed thus, may have a surplus or deficiency in a resource type(s) in a proceeding stage. Tech start-ups also exist in an inherently volatile environment where immediate changes in technology and market forces can compel a re-assessment of resources required. For Lean start-ups a resource re-prioritization may be necessary with every executed pivot.

Selecting Bootstrap Opportunities

Now that we have examined the different components of a bootstrap strategy and see how to set resource priorities all along a time stream it is now time to select the most optimal bootstrapping opportunities for each stage throughout the time stream.

ACRE Bootstrap Chart

In my previous book I first introduced the ACRE Chart as a tool to assist in selecting the best funding options for start-ups throughout their life cycles. For such purposes its utilization was limited to identifying a limited selection of financial resources. For our current purposes we will now illustrate how an ACRE Chart can be effectively employed to select the optimal bootstrapping opportunities throughout the same time stream to acquire all three types of resources critical to start-ups. ACRE is an acronym that will stand for:

A= Availability of the various bootstrapping opportunities in a given local start-up ecosystem.

C= Cost in terms of both equity dilution, diminishment of decision-making control and opportunity cost

R= Risks and challenges associated with implementing a given bootstrapping opportunity

E= Effect on the balance sheet. The types and amounts of resources secured and how it matches the immediate resource priorities of the start-up.

An ACRE Bootstrap Chart is constructed at the beginning of each stage. Before the chart is constructed the current stage of the start-up and its immediate resource needs are listed. Construction of the chart will commence with a listing of all the minor and major bootstrapping opportunities currently accessible to the start-up on the vertical axis. On the horizontal axis categories will be divided into columns. The first column will indicate the degree of availability of that particular opportunity. Availability information includes requirements for pursuance or participation such as business plans for incubators, application process for accelerators and required qualifying traction for crowd platforms or potential strategic partnerships. The next column indicates costs of engagement. What percentage equity interest is demanded? What are the short-term and long-term effects on the founders' decision-making control? The third column covers risks and challenges associated with that specific opportunity. In the preceding sections we listed the possible challenges and risks posed by each minor and major bootstrapping opportunity. In the ACRE chart those challenges and risks currently relevant and of actual concern for your venture will be inserted. The last column will display the effects engaging this opportunity will have on your resource assets. Which type(s) of resources are to be gained and to what scale in terms of quantity, value and longevity? The last column will be particularly helpful in matching a given opportunity with the current resource priorities you have identified.

The following is a possible scenario to use as an example to construct a Bootstrap ACE Chart. A late seed stage start-up is in the process of completing its final product development efforts and preparing to pitch to investors for $500,000 to fund a regional expansion. The knowledge they immediately require is industry expertise and questions answered regarding scalability. The relational resources they seek pertain to regional and eventually global distribution. The following Figure 11.5 is an example of a Bootstrap ACRE Chart based on this hypothetical scenario.

{Insert Figure 11.4 Bootstrap ACRE Chart}

Based on their Bootstrap ACRE Chart they have determined that neither currently available minor financial bootstrap could individually provide a sufficient amount of financial resources required. Although pursuing both of these minor financial bootstraps could provide sufficient funding the combination would, in effect, lock them into project work for an extended period of time by requiring a significant diversion of an unacceptably large proportion of their staff. Feedback from peripheral activities have served them well in their customer development efforts, however, their immediate knowledge-based needs are to attain expertise and insights into the competitive landscape and best practices of the regional target marketplace and determining a way to scale their offering. Their current peripheral activity feedback is too local and customer-focused to satisfy these needs. There are two minor relational bootstraps available. Being in a vibrant start-up community there are plenty of start-up events to network. However, at these events they are more likely to find mentors or other start-ups to collaborate with. At this stage they need to find different partners, namely strategic partners with either a distribution platform they can piggyback on or a suitable co-marketer to engage with. A regional consulting firm is willing to partner with them to exclusively offer their product to their existing client base. However, this will likely delay their regional commercial launch and does nothing to address their scalability concerns.

The three major bootstrapping opportunities available are a crowd funding platform, an interested corporate VC strategic partner and an accelerator. They duly note that only one of the three majors can be pursued. The crowd funding platform currently available to them has had an impressive track record. However, raising $500,000 will be challenging and the passive investors who typically participate in a crowd funding campaign may not possess or be accessible to provide the needed industry expertise. Identifying a strategic partner or advisor to help address the scalability concern may not be answered with a crowd funding campaign either. Thus the crowd funding option may leave them deficient in the knowledge and relational resources they seek. The corporate VC has expressed interest in providing strategic funding with a favorable valuation. Although the corporate VC can provide sufficient funding, provide access to their in-house industry experts and offer use of their scaled distribution platform, they require that their distribution platform be exclusively used. Their strategic interest is to ward of regional competitors by leveraging the innovation of the start-up. Indeed, it is reasonable to assume that investing in the start-up is a way to co-opt a potential competitor. Thus, despite offering the fulfillment of all the resources required the associated risks of overdependence and a conflict of interest are very real. The accelerator program in consideration appears to fulfill all the resource needs of the start-up with relatively little associated risks of primary concern. Between the seed funding provided and the high success rate of graduates in the accelerator program securing sufficient funding from institutional investors present at the concluding Demo Day event is confidently expected. The accelerator is manned with experts in their industry and experienced entrepreneurs who have scaled ventures similar to theirs. The accelerator is operated and funded by an investment group whose primary objective is a high ROI. Thus there is a lesser probability of overdependence or a future conflict of interest compared to the interested corporate VC.

Through the use of their ACRE Chart they have decided that applying to the accelerator program would be the best option to pursue. The available accelerator would potentially provide all three of the resources required in sufficient amounts. Due to the low acceptance rate of the accelerator program in consideration a plan B and plan C have been settled upon. Both plans consist of pursuing one of the other majors and addressing deficiencies through negotiations, supplementing with an available minor bootstrap or resorting to some bootstrap decisions. Plan B is to enter negotiations with the corporate VC. Although the corporate VC is similar to the accelerator in fulfilling their immediate resource needs, the associated risks were relatively too great to accept. A primary objective in the negotiations would be to address the risks of overdependence and any potential conflict of interest. Maybe exclusive use of the platform is limited to the home market or it is terminated based on a specified duration or set of contingencies. This would mitigate the aforementioned risks faced by their start-up and the corporate VC may accept the trade-off between the nominal loss of competitive positioning and the subsequent higher ROI potential of their strategic investment. Plan C is too secure the financial resources required by factor financing current project work and initiating a campaign on the crowd funding platform. It is hoped that a successful crowd funding campaign will attract a strategic partner to piggyback on to address the scalability issue. They have also reserved themselves to offering favorable terms to an additional board advisor or an experienced COO with relevant industry expertise.

Bootstrapping Metrics

A bootstrap ACRE Chart helps you select the most optimal bootstrapping options but how do you measure and track the efficiency and effectiveness of your bootstrapping strategy?

The answer is using bootstrapping metrics that correlate with the primary objectives of a bootstrapping strategy- minimizing equity dilution and loss of decision-making control. Here we will be referring to two metrics I first introduced in my previous book. They are Rating of Equity Dilution (RED) and Command & Control Rating (CCR).

Rating of Equity Dilution (RED)

The Rating of Equity Dilution is simply the percentage equity interest collectively held by the founders. The larger the rating reduction as a result of engaging a particular bootstrapping opportunity the greater the associated equity dilution. Ultimately the ROI of the founders upon exit is directly related to the aggregate equity dilution suffered throughout the life of the start-up.

Command & Control Rating (CCR)

The Command & Control Rating is used to measure the reduction of decision-making control or options as a result of implementing a certain bootstrapping opportunity. The CCR rating is a relative estimate of the percentage control founders have maintained after implementation of a bootstrapping opportunity. The CCR rating ranges from 0 to 100. A zero rating indicates that the founders are merely puppets whose decision-making abilities are purely reactionary and totally following the dictates of an external party or condition. A rating of 100 means that there are absolutely no impediments to decision-making abilities and the founders are free to execute any decision they deem the most favorable to the interests of the current shareholders.

There are many ways decision-making control can be lost without an issuance or sale of equity. Entering into a highly dependent relationship with a strategic partner is a common cause of losing a substantial degree of control. Limitations on the tactical decision-making level can occur due to exclusive use of a technology or distribution platform. Outsourcing, particularly a core development effort, can also diminish control in regards to quality assurance and timeliness. Also acquiring financial resources can be accomplished with little or no forfeiture of decision-making control. Typically the CCR rating will have a reduction comparable to the reduction in RED (due to granting normal shareholder rights). However if equity is granted to passive investors, on non-voting terms such as warrants or are sold at a much higher price per share than otherwise would be expected in an equity sale given the present valuation than a financial bootstrap is consummated. Cost-saving measures or leveraging the resources of third parties provides a means to preserve your CCR rating by avoiding expenditures of financial resources currently possessed or needing to raise additional financial resources at a cost in terms of equity dilution and/or control.

The beauty of using these two metrics is the value of bootstrapping becomes readily apparent. Whereas according to the Wealth vs. Control dilemma securing wealth (i.e. financial resources) usually results in loss of decision-making control to some degree. Bootstrapping counters this by broadening the definition of wealth to include critical non-financial resources and offer ways to secure such resources without otherwise expending financial resources. Consequently wealth can be built without a relatively large loss of decision-making control traditionally suffered by founders.

Constructing a Bootstrapping Plan

With a bootstrapping strategy formulated it is now time to articulate it in a bootstrapping plan. The construction of a bootstrapping plan can proceed based on the following recommendations:

1. Organize in a time stream based on progressive stages of development.

2. Determine and prioritize your resource needs during each stage.

3. Identify potentially advantageous bootstrapping decisions and available bootstrapping opportunities during each stage?

4. Select the most advantageous bootstrapping decisions and opportunities at the beginning of each stage.

The construction of ACRE Bootstrap charts for each stage will greatly assist in crafting a comprehensive bootstrapping plan. The bootstrapping plan will be constructed by listing the five different stages of development on the vertical axis progressing downwards. On the horizontal axis the following areas will be listed from left to right:

Resource Priorities. Specific resources that need to be acquired during this stage are to be listed.

Bootstrapping Decisions & Opportunities. The bootstrapping decisions and minor & major bootstrapping opportunities chosen to be pursued during this stage.

Resources. A listing of the various resources to be acquired for each selected bootstrapping decision and opportunity with the expectation that they will match what has been presented in the first column to the greatest degree.

Cost. The costs in terms of equity dilution and decision-making control for each selected opportunity are noted. It can be expressed using the bootstrapping metrics- RED and CCR.

Challenges & Risks. Describe the challenges and risks to be dealt with that are associated with each bootstrapping opportunity selected.

The following bootstrapping plan reflects a roadmap envisioned by a tech start-up team initially consisting of two co-founders who are graduate business students located in a dysfunctional start-up community. The founding CEO is a marketing guru and soon-to-be founding Hustler who identified a market opportunity and approached a classmate with a business plan. His classmate is studying finance and represents the soon-to-be founding Haggler. The start-up community they are currently located in is dysfunctional at best. The only existing major bootstrapping opportunity is a university incubator. However, instruction on the Lean process is a component of the program. The two founders decide to find a founding Hacker and develop their idea here and if a worthwhile business opportunity is clear upon graduation they have decided to re-locate to a more developed start-up community a four hour drive from their current locale.

They have estimated that they will need approximately $30,000 to fund their pre-seed stage efforts. Each of the three founders will be expected to contribute $5,000 and they estimate that utilizing the incubator facilities will save an additional $10,000 off of their burn. The $5,000 gap can be covered with the savings associated with "operating in the cloud," prize money from a pair of local business plan competitions they can compete in or maybe a nominal investment from family or friends. The incubator will provide all the knowledge-based resources they need at this stage, which includes idea incubation/testing and becoming Lean.

The commencement of the seed stage will occur at their new location where a more mature start-up community with a greater abundance of bootstrapping opportunities exist. Upon arrival they immediately plan to join a well-regarded bustling co-working space where they hope to build their technical skills, observe best practices of their peers and possibly collaborate in some development efforts. The co-working space represents a significant savings in terms of both time and cost compared to renting a traditional office space. Other important reasons to join the co-working space is to find a founding Hipster to work on their UI design and early adopters to serve as alpha/beta testers. Attending workshops is another way they intend to enhance their knowledge and skills. They estimate approximately $70,000 will be needed during this stage. The costs saving gained by joining the co-working space combined with the decision to outsource a non-core development effort as opposed to hiring an additional developer is projected to slash $20,000 from the amount of funds needed. The remaining $50,000 will be secured from a nice selection of available public funding sources.

In their late seed stage the focus turns to completing their final development efforts, seeking greater industry expertise, market feedback and recognition in preparation for a commercial launch. They estimate a total of $150,000 will be needed to fund their efforts. To acquire the necessary industry expertise and enhance their brand they have elected to participate in start-up events where they hope to garner greater exposure and find potential co-marketers. Offering attractive equity warrant terms to an industry expert to join their Advisory Board to acquire industry expertise and enhance their brand through the distinguished reputation of their new board advisor. A crowd sourcing platform to launch soon offers a channel to attain evaluable feedback from the target market. Unfortunately there is no crowd funding platform available and the existing accelerator program is highly-competitive and not focused on their particular marketplace. They intend to apply anyway but grudgingly expect to secure related project work and factor existing project work to both secure the necessary funding and push for a final acceleration on their learning curve.

From a financial and bootstrapping perspective they foresee the Series A stage to be the most challenging. About $500,000 will be needed to fund their commercial launch. Their does not appear to be any bootstrapping options here. There exists a corporate VC that may be interested in investing strategic funds on attractive terms, however, the founders expect to decline an offer from them because they are a direct competitor to a potential strategic partner that offers their start-up an ideal platform to piggyback on. The opportunity to piggyback is simply too great an opportunity to jeopardize and represents a far better option to pursue at this stage. However, it is duly noted that the prospective platform partner requires a certain level of market traction before they would entertain the idea of allowing their start-up to piggyback off of them and tie their brand to the start-up. The good news is because a successful bootstrapping strategy has been followed up to this point no institutional investors exist on the capital structure of the start-up and little equity dilution has been suffered. Thus, soliciting investment funds from an angel investment group is a reasonable option at this later stage and favorable terms is likely to be secured due to the clean capital structure and amount of traction attained thus far. Additional negotiating leverage can be gained if a Letter of Intent (LOI) with the prospective platform partner can be executed and presented as a prospectus document to the angel investment group.

At the Series B growth stage they estimate approximately $2 million will be needed. It is difficult to conceive a way to bootstrap this amount. A Private Equity firm that can also provide valuable management expertise and market research will represent the best equity investment source.

In addition to management expertise and market research provided by their private equity investor the only remaining major knowledge resource to be acquired is obtained through continued customer feedback on their already commercialized offerings. The strategic partnership secured in the previous stage with the platform partner represents the pinnacle of the relational value to be secured. Additional relational values to be obtained at this stage and ongoing are additional co-marketers, enhanced branding and internally maintaining the value-based culture and high moral of employees, including the successful assimilation of all new employees and executives.

If they articulate what they envisioned in a bootstrapping plan it will likely look like Figure 11.5.

{Insert Figure 11.5 Sample Bootstrapping Plan}

For those techies who have read <u>Start-Up Guide for the Technopreneur</u> and possess far greater technical skills than I a neat trick would be to superimpose a financial plan constructed pursuant to directions in my first book onto the bootstrapping plan. Hopefully a bootstrapping plan will result in a favorable alteration of the financial plan whereupon funding rounds become less frequent, delayed and smaller. This will be the clearest way to gauge the effectiveness of your bootstrapping plan.

Summary

This chapter concludes our discussion of what bootstrapping is, what is to be gained and how a start-up can effectively bootstrap to increase its chances for commercial success and the most lucrative exit. The purpose of the chapter was to summarize what is incorporated in a bootstrapping strategy, how such a strategy is formulated and guidance on articulating a bootstrapping strategy in a bootstrap plan.

Before doing so we opened the chapter with a re-visit of the definition of bootstrapping. Bootstrapping is the related efforts of a start-up venture to acquire the vital knowledge, relational and financial resources throughout their life cycle to secure the most lucrative exit for its shareholders by minimizing the two detrimental by-products of securing investment funding at every development stage- equity dilution and loss of decision-making control. Bootstrapping includes a variety of decisions and opportunities that may collectively enable founders of a start-up to cost-effectively acquire the three primary resource types without having to resort to reliance on costly and obligatory investment funding. The objective of formulating a bootstrapping strategy is to ward of the necessity of soliciting for investment funds from equity investors as much as possible and discovering a path of least resistance to the much lauded exit. This path becomes illuminated by a well-crafted bootstrapping plan.

In the first three sections we examined the major components of a bootstrapping strategy. The first section summarized the numerous bootstrapping decisions discussed in Part II and classified them in three categories- initial, periodic and opportunistic. Initial decisions to be made that serve as a solid bootstrapping foundation include such areas as founders' contributions, planning on a time stream, assembling a complete founding team and instituting Lean and Agile methodologies. Decisions to be made periodically include "just-in-time" financing, budgeting, cash management, employee compensation, engaging experienced mentors and establishing a board of experienced and influential advisors. Opportunistic decisions to remain vigilant for include monetization & pricing, internally develop vs. outsourcing and re-location.

The next section summarized the minor bootstrapping opportunities first examined in Part II. A bootstrap opportunity is considered "minor" because they primarily only provide one of the three types of resources valuable to start-ups and become relevant only when the opportunity presents itself. Financial "minor" bootstraps include project-based work, non-project sources of revenues, alternative financing, cloud computing, public funding, prize money and sharing or receiving services for free. Knowledge "minor" bootstraps include securing related project work, feedback from peripheral activities, knowledge bartering, participation in alpha/beta testing and attending workshops, conferences, pitching events and business plan competitions. Leveraging third party credibility, judicial selection of vendors, securing captive audiences and attending networking and start-up events are examples of relational “minor” bootstrap opportunities reviewed.

The proceeding section provided a summary review of the bootstrapping “majors” discussed in Part III. A bootstrapping opportunity is considered a “major” because it provides all the types of resources critical to tech start-ups in varying degrees. The “majors” include permanent entities or programs. Consequently engagement can be more readily planned. Given a logical progression of resource priorities experienced through the typical life cycle of a tech start-up an expected sequencing of utilizing bootstrap “majors” can be deduced. The sequencing is as follows:

Incubators – co-working spaces - crowd sourcing/funding- accelerators – strategic partnerships

Once all the components of a bootstrapping strategy was presented attention was then turned to actually formulating a comprehensive strategy. The first step was thinking in a time stream and delineating stages of development. These development stages included pre-seed, seed, late seed, Series A and Series B. The next step was to determine the priority of resources needed in each stage. Once priorities have been established it was now time to optimally select the available bootstrapping opportunities to be pursued in each stage. The Bootstrap ACRE Chart was a conceptual tool presented to accomplish this. ACRE is an acronym for availability, cost, risk and effect. This chart provides a comparative view of the different available opportunities and their relative costs in terms of equity dilution and control, the risks and challenges associated with each opportunity and the resources to be acquired. The two bootstrap metrics were then introduced. They included the Rating of Equity Dilution (RED) and Command & Control Rating (CCR). RED measures the equity dilution suffered from engagement with a particular bootstrap opportunity. CCR measures the consequent loss of decision-making control. These two metrics represent very appropriate measurements for a bootstrapping strategy as they directly relate to the primary objectives of bootstrapping.

The chapter concludes with the actual construction of a bootstrapping plan which is simply a chart representation of the bootstrapping strategy just formulated. On the vertical axis are the five different stages of development. On the horizontal axis from left to right are columns displaying the resource priorities made, bootstrapping opportunities selected, resources to be acquired, associated costs and challenges/risks related to each opportunity selected.

It is hoped that a well-conceived bootstrap plan will delay, avoid or reduce the amount of any equity funding rounds to be experienced by a start-up. Again it is more impressive to succeed with minimal or no equity funding than it is to being able to boast a succession of successful funding rounds. Go ahead and impress me!

Afterword

Writing this book has truly been a labor of love for me offering an opportunity to share my experiences as a start-up advisor in both America and Asia and bearing witness to the emergence of a vibrant start-up community in the heart of Southeast Asia, one of the fastest growing and exciting regions in the world.

I organized the book as a reference guide with three intentions in mind. One, to serve as an easy reference for founders facing an immediate demand for a particular resource. Two, to serve as a comparison tool in selecting the most advantageous option amongst a selection of bootstrapping opportunities. Third and most importantly to assist founders in discovering the longest possible bootstrapping path for their start-up.

In many respects the tech entrepreneurs of today enjoy a highly favorable global start-up ecosystem in which there is a rapidly growing number of sources for all three types of resources vital to their start-up ventures. However, the more level playing field that has been created has also resulted in a more crowded and competitive landscape in which more efficient and timely execution is required. Bootstrapping is about enduring and excelling in such an environment.

In all likelihood a start-up will need to seek equity funding at some point. Indeed it will be advisable if the alternative opportunity cost is too great. The challenge is to postpone the time when this is necessary and reduce the amount ultimately needed.

Hopefully this book will assist you and your team in illuminating a yellow brick road leading all the way to a lucrative exit for your venture!

Art of Bootstrapping Endnotes

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