Antoine Paquin

Getting the Financing Right: Understanding Venture Capital

A Brief Introduction

When first approached by James Bowen with regard to having entrepreneurs each write a chapter on one best practice topic relating to building a new company, I was excited by the opportunity to address an area of mystery to many entrepreneurs – the realm of venture capital (VC.. I knew that a significant challenge venture capitalists faced in dealing with entrepreneurs was a general lack of understanding of venture capital and a prevailing set of assumptions and misconceptions that entrepreneurs and angel investors had regarding venture capital. Worse yet, was that I had always assumed as a past venture-backed CEO that I understood venture capital; until I saw the industry from within. This realization prompted an urgent call to action for me – if I had been so wrong on so many assumptions, many others were likely to also be wrong. One of the causes of this is the fact that the venture capital industry has done a terrible job of communicating its governing rules and investment criteria that you, as an entrepreneur, are expected to know.

Venture capital initially developed as a cottage industry in Silicon Valley; an industry made up mainly of past entrepreneurs endorsing the next generation of entrepreneurs. As such, Silicon Valley developed through the years a critical mass of cultural knowledge regarding best practices in starting technology companies and it is generally expected that someone wanting to raise money can and should find out for her/himself. The logic there is that if one cannot bother to do their homework, they are not worth sponsoring. That assumption breaks down elsewhere where this culture is different and does not benefit from the same critical mass of knowledge; it even often fails in Silicon Valley as it has grown so much and much misinformation competes with good information. So the solution is very simple; write it down and make the whole process transparent. After all, you as an entrepreneur need to be transparent as you will see in this essay; however, like loyalty, transparency needs to be a two-way street. So I committed to write this chapter and have sought feedback from my peers in start-ups and venture capital.

Having been an entrepreneur, angel investor and now a venture capitalist with experience in the California, Ottawa and New York scenes, I have seen a lot of new companies (start-ups) in search of capital that is deemed required to fulfil an entrepreneur's vision. Generally, most fund raising activities are poorly executed and take far too long because of a fundamental lack of understanding by entrepreneurs regarding the various potential sources of capital, and especially of the venture capital (VC) model. An understanding of the venture capital model helps the entrepreneur, the venture capitalist (usually known as a partner or general partner in a fund) and the industry at large because it allows all parties to marry the proper investment opportunity to the proper investor and investment vehicle. Understanding thus acts as a natural qualification filter. It is important to point out that not all start-ups fit, and thus should seek, venture capital. Many start-ups are far better suited to other sources of financing such as angels, friends and family, executives or even debt lenders.

A central and important point that deserves unique attention is the fact that the venture capital business is fundamentally *a people business*. Companies are conceived and set up by people, reflect people's dreams and ambitions, are managed by people, originate from people's ideas, are made possible via idea exchanges by people, are referred by people, are validated by people and, in the end, investment decisions are made by people. Ultimately, VCs do invest in people that have, in their opinion and as validated by their human networks, the right properties to deliver superior value around their concepts and vision.

While a precise and comprehensive work on the topic would likely require an entire book, the simple intent of this chapter is to provide a high level appreciation of the rules by which the venture capital industry conducts and regulates itself. This chapter on venture capital applies mainly to classical IT/technology ventures; while some concepts have been borrowed by biotech players, some industry specific rules are fairly different there.

It is my hope that this chapter, in its attempt to shed some light on the venture capital industry, provides you, the entrepreneur, with sufficient clarity and assistance in securing the right type of funding strategy in the pursuit of your passion.

Free to Choose[6]

Investing is an act of free will by both the entrepreneur and the investor. Such an act of free will often boils down to the intangibles of comfort, which is highly dependent on truly understanding the human beast. Assuming complete mastery of the embedded tips, which are only the author's perception, will not guarantee financing; it will only demystify the process somewhat. Ultimately, getting an investor is an act of identifying an investor with time, relevant knowledge and interest in the investment opportunity you are offering.

The Concept of Thesis in Venture Capital

One of the central concepts to understand is that any investment, either in a new company or a new venture fund, starts with a thesis based on clear facts and reasonable assumptions that can be validated by an independent third party who makes the investment. Following many years of observation and study that I have performed regarding best practices that have evolved over more than 40 years primarily in the Bay Area in California, I have come to the conclusion that the application of the scientific method to the field of investment has consistently resulted in superior returns for both entrepreneurs and investors.

As this chapter is supposed to be brief, I will save the reader from a thorough review of the scientific process and remain high level. The scientific method bases itself on accepted theory and pushes the limits of that base by proposing a new theory under the form of a thesis. A thesis is based on facts (easy to validate), assumptions and an inferred conclusion; some assumptions can be reasonably validated and others need a roadmap to validate in a defined timeline.

In the case of a new venture, a thesis is typically based on facts, which usually consist of known market dynamics and known scientific breakthroughs, and assumptions made that lead an entrepreneur to believe that he/she can create a new successful company. An interesting conclusion one can draw from this is the fact that risk in a new venture derives mainly from assumptions made, or yet worse, confusing assumptions for facts; thus the popular concept of failing early as a roadmap to success really boils down to the validation or invalidation of assumptions. This is the essence of risk management in a new start-up. Another interesting observation to be made is the reality that most facts and assumptions relate to factors outside of one's control and thus tie directly into the notion of risk.

There is a simple beauty to the application of the scientific method

6 Borrowed from Milton Friedman

to a new business venture: A venture is a living thesis that is constantly reviewed and intellectually repeated by peers (in this case, the investors and the rest of the management team). It removes the arbitrariness of perception with the discipline of fact and assumption checking.

This is an approach that results in internal intellectual honesty and transparency as well as personal and enterprise learning. This requires both a formal as well as an informal approach: the formal approach is needed to clearly capture, communicate and review key assumptions, concepts and thesis whereas the informal approach is needed as human trust becomes a central piece of a peer review process and a culture of transparency.

The applicability of the scientific method relies on a peer review setting: that someone looking at the model, facts and assumptions can validate the model, repeat the experiment and reach the same reasonable conclusion regarding a thesis. This repeat of an experiment, of course, is *ex-ante* and thus the danger lying in assumptions (aka "*drinking the Kool-Aid*" in Silicon Valley-speak). Thus, the difference with the scientific method lies in the fact that the scientific method starts with acceptable theory whereas venture starts with assumptions; assumptions are thus the key discussion point and source of risk.

On a similar note, venture capitalists will typically establish a fund based on an investment thesis for the fund and regarding either a geographical area (e.g. Austin as a hot bed of innovation, as exemplified by Sevin Rosen funds or New York as a media hotbed as exemplified by Rho) or a new emerging trend (e.g. the Internet as pursued by Kleiner Perkins in 1993/4).

The thesis will be based on a model of:

- how many investments
- what kind of diversity
- size of deployed capital
- type of eco-system or business network
- what initial probable return profile needs to be attained in order to generate attractive fund returns

This thesis is presented to the financial backers of a venture capital fund (who are known as limited partners, or LPs of that fund). The venture capital team responsible for the fund (known as the general partner) is ultimately measured by its financial backers against that thesis.

When evaluating the fundamentals of an entrepreneur's company thesis, the venture capitalist needs to model a company investment thesis (what is the probable value, exit strategy and timing) and then map or reconcile it against the pursued fund thesis.

Understanding the Source of Funds that are deployed by Venture Capitalists

The source of money that resides in VC funds comes primarily from large financial institutions that have a strong need for a diversified set of asset classes with varying risk and return profiles. These institutions include the likes of insurance companies and public or private pension funds that look to venture capital as a higher risk asset class capable of generating 2-3 times cash-on-cash return on their money over the lifetime of their commitment to a venture fund (10 years typically).

Many large funds will also rely on gatekeepers known as fund-of-funds that have a solid track record in recognizing funds that can deliver superior returns. And, not surprisingly, this money flows to the best instrument of return (i.e. the best performing venture capital partnerships).

Given the size of the pension funds, they only have to allocate a small percentage of their funds to a venture capital fund to create an effective asset class from a large pool of money (most of these entities manage upwards of $10 billion and need to write sufficiently large cheques in order to effectively diversify their risk and exposure across a wide set of diversified investment vehicles).

As mentioned previously, venture capital funds are formed around a thesis or view of the world. This thesis describes the type of investment, industry and expected trends to define a concrete view of the type of investment opportunities a venture capital fund is going to invest in. Essentially, the VC fund itself can be thought of as an entrepreneurial exercise in which a business plan is created and its product is the return it makes.

Example of a Venture Fund Thesis

A fund thesis will, similar to a start-up thesis, start with a perceived opportunity relative to an underserved market capable of generating multiple high return investments. For example, a new massive wave may be in formation (personal computing, desktop publishing, gaming platforms, internet, computer animatio …) as seen in typical Silicon Valley venture funds (where most waves start due to its critical mass and natural cross pollination of disciplines). Another thesis may be related to a perceived opportunity in a geographical area that is deemed to have much creative talent yet little access to capital locally (for example, Sevin Rosen and the Austin/Texas area).

The general partner of the proposed fund then determines what size of pool it believes it can efficiently deploy in a given market in such a way to sustain classical venture returns (2-3x the total pool over 10 years, or >20% IRR) and how many partners are required to effectively deploy such capital (as well as the personal qualities of each partner required to achieve such results).

Lastly, the fund manager defines the recipe based upon which the complete pool will be deployed in a way to sustain superior results. Very often, such rules are borrowed from the best performing venture fund managers (the top quartile or top decile managers) and relate to the overall fund size, targeted discipline (IT, biotech, energy, ….) in the industry. Examples of such funds include Kleiner Perkins, Sigma, Sequoia and Sevin Rosen.

Such a recipe usually mentions:

- how many companies the fund will invest in
- the maximum exposure of any given company
- how many new companies any one partner will usually finance per year on average
- the ideal stage of financing the fund will target (seed, Series A, Series B, Series C, Mezzanine, ….)
- the allocations and reserves to support a company that is still on thesis
- the sought after returns

As an illustrative example, let's consider a typical investment thesis for a $100 million proposed fund that will target a new wave (a past example would be the emergence of the Internet). Such a fund will be in existence for 10 years as a result of the desired timeframe of exposure large institutional funds that make up the limited partnership (LP) will tolerate. The thesis may be based on the fact that the general partners have a unique insight in this emerging wave based on their past involvement as either entrepreneurs or as investors in companies that are involved in this new wave (in the example of the internet wave of the 90s; networking gear, computer server vendors, operating system vendors, etc.). They have solutions that are deemed necessary to enable new companies to take hold, as well as a natural eco-system of entrepreneurs and managers to exploit opportunities brought to them.

In our example, a $100 million fund will typically target between 14 and 16 companies and result in an average company position across multiple rounds of financing (more on this later) of approximately 6% of the fund (ranging from 2% to 10%, depending on how far a fund supports a thesis through its lifecycle). This results in an average per portfolio company position of $6 million. These investments will, on an *ex-post* basis, vary in size from $2 million to a maximum of $10 million across multiple rounds of financing. The overall exposure is a function of how many rounds of financing a company undergoes in the pursuit of its thesis until its natural exit strategy (unwinding where a thesis is clearly disproved, M&A, or the ultimate success, a properly qualified IPO where ample value creation occurs). The IPO companies will usually return in excess of 10-20x the overall investment, which in the ideal case for such companies is the maximum investment amount of $10 million. Assuming a 10x return, only 2 out of 15 investments thus yield a combined 2x return for the entire fund. Of the remaining companies, between 4 and 5 will usually result in a 1-5x return on approximately $6 million deployed capital. The remainder will usually return between 0 and 1x on approximately $2-4 million deployed.

In order to achieve such *ex-post* statistics, all companies need to look like they have the potential to generate a 10-20x on fully deployed capital on an *ex-ante* case. Put in other words, any investment needs to look like it has the potential to become successful on its own.

One of the key points to understand is that the deployment of capital in a company is never done all at once, unless a round is a qualified pre-IPO round (Series C or Mezzanine). The complete investment into a company occurs over a set of series, typically named A, B and C. Only at the end of Series C would the full investment be deployed in a start-up company (more on this later). This concept of staged investment is a crucial risk management tool used by a venture fund (the best tool being the quality of the entrepreneur and the management team) to address risk associated with assumptions at different phases of a start-up's life cycle).

Venture funds will usually follow a thesis based on an early entry strategy (seed or Series A) or late stage entry strategy (Series B or C / Mezzanine). Most early stage venture funds pursue a Series A strategy. A seed strategy usually is either pursued by angels with deep, specific domain expertise or by funds that have a very focused domain approach and hence the infrastructure and networks to help entrepreneurs build companies. Seed funding usually consists of starting with a credible team with a great business vector, often based on a disruptive innovation in an emerging market, where a fund has specific domain expertise and very deep industry connections related to the business vector. The point of seed funding is to get to Series A and this occurs when sufficient validation of key assumptions has been made. The best form of validation of a seed deal as a preparation for an A-round is interest from partners or customers that can be leveraged as market makers (e.g. Yahoo using Google as a search engine, IBM using a Microsoft OS for a new PC operating system).

I would like to point out, as a conclusion to this section, that in order to generate superior returns, VC funding needs to be an egoless and disciplined exercise where the VC is following a prescribed approach to get the desired returns in the most efficient manner possible. The venture partnership will ultimately be measured to results relative to the fund thesis, which affects fundraising ability for future funds.

Getting started: the key items a VC looks for in trying to determine if a start-up warrants a deeper look

Like all mortals, VCs face two major constraints: a limited supply of time and money. Money is restricted by how much capital a fund has and the fund thesis being pursued. Even more important than money, however, is the concept of time allocation: spending time on the wrong opportunities can easily cost the right one. Therefore, venture capitalists have developed standard approaches, based on 40 years of established best practices, to maximizing their efficiency in deploying both time and money.

In order to maximize efficiency in the investment of both time and money, the following represents a representative standard method of qualification of a venture opportunity (most items in this list are expanded on later in the chapter):

- Is the opportunity referred by a credible and trusted source within the VC's human network?
- Does a company qualify as a standard venture opportunity?
    - Is the Total Available Market (TAM) that is being targeted large enough (usually >$1B)?
    - Is the amount of capital required and exit timeline reflective of venture investments (typically less than 10 years)?
    - Is this a disruptive opportunity in the classical sense, as exemplified by Clayton Christensen's definition of disruptive innovations[7]?
        - Does it provide a solution to an unmet need?
        - Is this a greenfield opportunity[8] that will establish its own rules?
        - Does it hold the future potential to disrupt existing markets once it firmly establishes itself in its initial niche?
- Is the story and value proposition clear and easy to understand?

[7] Clayton Christensen's model of disruptive innovation is a theory that can be used for describing the impact of new technologies (revolutionary change) on a firm's existence as first coined in 1997 in his book "*The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*".

[8] A *greenfield opportunity* is a project that lacks any constraints imposed by prior work or a marketplace that is completely untapped and free for the taking.

- Can this opportunity be validated using a VC's personal knowledge, interest and various industry connections that are within his or her human network?
- What is the culture of the team and/or entrepreneur (see later)?
- Are company expectations realistic?
- Is the entrepreneur proven and/or coachable?
  - ¤ Qualities sought in an entrepreneur and his/her team include:
    - ■ clarity of thought
    - ■ team building ability
    - ■ fundamental culture
    - ■ objectivity
    - ■ discipline in the face of facts
    - ■ clarity in rules and responsibilities in each team member
    - ■ the only ambiguity that is acceptable relates to market assumptions which need to be validated or invalidated as soon as possible
- Are the expectations of the entrepreneur and/or previous investors for new financing realistic? Does the entrepreneur understand what qualifies as a venture opportunity?
  - ¤ Typically, in early stage financings, each venture investor in an investment syndicate will seek to own 20-30%, depending on risk and stage – this is a direct consequence of the fact that a partner in a venture fund will only finance one or two companies per year and must thus own a position sufficient to generate venture returns that meet the needs of his/her fund's overall return targets.
  - ¤ Venture capitalists usually only invest in preferred shares as a result of conditions placed on their fund by their own investors and which reflect best practices.
- Does the company fit within the fund's investment framework?
- Is there a natural investor syndicate that can be formed to pursue this opportunity?

The People involved in a Venture Capital Fund

The individual you, as an entrepreneur, interact with at the venture fund's management company is the point person leading the due diligence effort on a new business plan. He/she is typically a partner in the fund that answers to the whole venture fund partnership, which is comprised of his/her peers (partners).

Most great partnerships are made up of a balanced set of individuals who have a great deal of experience in building successful ventures (as past entrepreneurs and/or professional investors). Most funds require the support of either the majority or all (unanimous) partners for an investment proposal to be approved.

The concept of a partnership boils down to the shared belief by partners that the group makes better decisions than the individual (as any individual will have gaps in their knowledge or experience that may affect their ability to objectively assess the situation) and is essential in securing funds from potential investors in a venture fund (LPs, or limited partners).

The Importance of Human Network in Venture Capital

Venture capitalists rely on trust and comfort as a basis for any investment going forward. At the heart of reaching such comfort is an elaborate human network of known and trusted individuals. Such individuals are trusted as the venture capitalist has typically worked with them, faced adversity and challenge with them and as a result have developed a high degree of confidence in the information and judement they can obtain from such persons; in other words, the venture capitalist can rely and interpret properly the information relayed by such individuals. Thus, it should come as no surprise that VCs rely on known people they respect and whose judgment they have validated.

As an aside, the concept of trust is absolutely central to business; without trust there can be no business. As a basic example, when someone issues a PO, you ship them a product trusting they will honour the PO and ultimately pay you. Similarly, they take a legal commitment by issuing a PO based on their trust that your product or service is as advertised. Similarly in a venture, you need to trust some baseline infrastructure to access information, whether it relates to finding out about a person, a business or an industry vector.

Typically, companies and entrepreneurs are sourced and qualified by venture capitalists via a trusted human network. Thus the single best way to engage a venture capital fund is to be introduced via someone who works well within a given venture capital network and/or is part of a VC's personal network. Such an individual can orient you towards the best investor for your opportunity. If that person has a strong work relationship with a venture capitalist, you are starting ahead of the curve.

One way to attract such individuals with strong venture experience and connections is by having them actively involved on either your Board of Directors or some advisory board; the equity they will cost you offers tremendous leverage for your venture.

Most investments will, over time, require multiple partnerships to underwrite a company; such a group of investors then becomes known as a VC syndicate. One of the best risk management tools for a venture capitalist is to know the value system and judgement/discipline of other investors in his/her syndicate. The human relationship element between various investors becomes key to a functional investor syndicate. Trust between investors usually develops through ongoing interaction in the face of venture adversity. Effective VC syndicates are usually comprised of investors who have a good sense of the risk because they conducted proper and direct homework.

Major Investment Criteria in Venture Capital

When a venture capitalist looks at a company to invest in, the central questions he/she needs to ask of him/herself and his/her partnership are:

1) Is this opportunity aligned with the fund's investment thesis in terms of generating returns? This is in large part made possible by the market size (>$1 billion typically after a few years) and likely growth of the market being pursued by an entrepreneur. Is this an investment opportunity that will warrant the deployment of a fund's full capital allocation on a per company basis, and thus likely to generate important returns (>10x) as a result of the market?

2) Is this a credible plan that is backed by a credible team that has full ownership of the plan? Credibility is often a large item of due diligence, but it starts with how people lay out their plan, and how clearly they express what they know and what they do not yet know (i.e. what assumptions they are making). Another important aspect of credibility is the degree of transparency in clearly outlining facts, assumptions and validation points or plans for the validation of such assumptions.

3) Does the team have a good basic understanding of what constitutes a venture capital opportunity and investment profile? What are the natural financial milestones for this venture (see below)? Financing milestones are those points in time, which if achieved, tell the VC that the company thesis is being validated and the company is headed in the right direction and thus ready to deploy further capital towards the next stage of thesis pursuit.

Not all business ventures should pursue the venture capital route. A fundamental pre-requisite to venture capital is the generation of true new wealth creation, as opposed to normal wealth growth in more mature markets. True wealth creation requires the creation of much output with relatively little input, which is fundamentally tied to the concept of disruptive innovation.

This concept of capital efficiency in an investment thesis thus becomes a critical cornerstone to achieving a fund's desired returns. Typically, capital efficiency is best achieved in markets that represent greenfield opportunities where few established rules apply and can thus be set by a first entrant. The very worst type of opportunity that can be pursued is the one where many rules already exist and are controlled by incumbents. We have witnessed this very concept recently with the Internet infrastructure opportunities pursued by start-ups in the 1990s (Cisco) where very few rules were set as opposed to core telecom equipment start-ups where mountains of rules and protocols existed with strong incumbents. In hindsight, those start-ups in the telecom sector should have been new divisions in large telecom players, not venture capital backed start-ups.

The Classical Investment Series in Venture Capital

As already mentioned, money is allotted to start-up companies in stages or series as this is the best-proven way to manage risk for a VC and reflect the concept of capital efficiency. Entrepreneurs manage their risk by being day-in/day-out involved in the market and the management of their company. Venture capitalists manage their risk by backing individuals who have the right qualities to manage risk (culture of transparency and of going to the market as a feedback loop to validate assumptions). This allows a VC to be aware of the evolution of the investment thesis and thus the exposure to risk. This staging of financing approach has evolved over the past 40 years as a proven method that has now become an industry standard in terms of financing start-ups.

Each stage of venture investment represents a different level of risk that needs to be addressed. One can, in essence, think of venture series as different chapters in the pursuit of a company thesis. One important point to note is that, again as a result of best practices evolution, there is typically a new investor added at every new round or series to provide an objective external view into a company's thesis; every round is thus lead by a fresh new investor that independently validates that the company is on thesis and ready to move on to next series of financing.

The typical levels of validation and risk for each phase of financing are highlighted below, with a rough and typical guideline of the exposure a venture capital fund would deem acceptable for the phase, assuming a $100 million fund[9]:

- Seed

[9] Remember that no two funds necessarily follow the same fund thesis, however these numbers are good approximations.

- ¤ A seed round usually starts with a technological or business innovation that is deemed disruptive.
- ¤ The entrepreneur can be proven or unproven.
- ¤ The entrepreneur is credible and deemed coachable.
- ¤ The seed investment is typically led by angels, who have specific domain expertise and networks relevant to the opportunity, friends and family, or, in some cases, a venture capital fund that has specific domain expertise and relevant networks in the targeted market and application.
- ¤ Some seed investments move on to become Series A VC investments if the capital required and TAM are within the norms of venture capital.
- ¤ A fund would typically restrict its position in terms of fund allocation to a 0.5% ($500k for a $100 million fund) position assuming enough money (usually approximately $1 million) is at the table to get to validation of the seed stage of the thesis. The fund would usually look for 25-30% company ownership given the risk.
- ¤ Most of the capital is deployed on product marketing and other marketing functions that are useful in validating the market need, although in many cases some basic prototype is needed to fulfill this paper exercise. The key is to maintain capital efficiency.
- ¤ Validation usually consists in a market maker that validates the market need for the proposed start-up product (i.e., for a new type of chip, a networking vendor like Cisco becomes interested in working with the start-up as no vendors can fulfill its need).

- Series A
  - ¤ The Series A financing usually starts with a disruptive innovation that has been validated with a major market maker as a potential customer or business partner.
  - ¤ The Series A investment usually has the core team in place and a measurable culture as a result. Such a team would typically include the founder (usually the CTO or the CEO), a CTO, a CEO, a product marketing person and a couple engineers that were used to deliver a prototype that secured the early market engagement partner above. A part time VP Finance on contract is sufficient at this stage.
  - ¤ The Series A investment must clearly reflect an opportunity that is VC financeable (TAM, disruptiveness, potential sales growth)
  - ¤ This investment round is lead by one or two venture capital funds

that act as a syndicate and share information and due diligence in a completely transparent fashion.
- ¤ Each new fund will look to deploy approximately 3% of their fund ($3 million for a $100 million fund)
- ¤ Assuming the seed round was done by a venture fund, such a fund will wish to maintain its pro-rata share, usually measured by percentage participation in the last round, of the total investment round not taken by new investors. This pro-rata approach serves to protect this fund's position in terms of company ownership and allows the fund to ultimately deploy its full capital allocation for a company assuming this company becomes a fund maker (a fund maker is defined as a company that generates >10x return on a full fund allocation over the lifetime of this fund's involvement in the company). For example, assuming a $8 million series A financing led by a new investor with $4 million and assuming the fund that initially seeded the company had a 100% participation in the last round of financing, it will look to deploy 100% of the remaining $4 million. Assuming the two Series A funds both need to deploy $3 million each, then the seed investor's pro-rata becomes $2 million.
- ¤ Most of the capital is deployed on initial product development as influenced by the early market adopter and market maker that is either a customer or a partner. Securing an initial target customer is critical in this phase.
- ¤ Validation at the end of this series usually consists in a first product sale to a set of early adopter customers, hence validating the desirability of the innovation (i.e., for the new type of chip example above, a networking vendor like Cisco accepts delivery and starts to sell product based on this chip).

- Series B
  - ¤ The Series B financing usually starts with a disruptive innovation that has been sold to early adopter customers who are deemed to be major market makers for a start-up.
  - ¤ The Series B investment usually has the core management team in place and a measurable (qualitative) culture as a result. The company also has a clear roadmap in terms of key roles to fill as part of expanding its market footprint. Such a team would typically include the founder (usually the CTO or the CEO), a CTO, a CEO, a VP Marketing, a part-time or full-time CFO, and sometimes a VP Business Development to start targeting new verticals that can be addressed by the innovation. The key

roles that will be filled by the end of this round usually include a VP Sales and a full-time CFO.

- ¤ The Series B investment must clearly reflect an opportunity that is VC financeable (TAM, disruptiveness, potential sales growth)
- ¤ This investment round is lead by one or two new venture capital funds that act as a syndicate and share information and due diligence in a completely transparent fashion.
- ¤ Each new fund will look to deploy approximately 4-5% of their fund (i.e. $4-5 million for a $100 million fund)
- ¤ Existing venture funds will wish to maintain their pro-rata share of the total investment round to protect their position and allow them to ultimately deploy their full capital allocation for a company assuming this company becomes a fund maker. Thus assuming a $15 million Series B financing led by a new syndicate with $8 million, the existing investors will look to deploy their respective percentage of participation in the series A financing for the remaining $7 million in the Series B round. For example, a fund that led the Series A round with a 60% participation would look for a $4.2 million position in the Series B. The remaining investors that participate in the Series A would look for a joint investment of $2.8 million (40% of the portion left for previous investors).
- ¤ Most of the capital is deployed on expanding sales beyond the early market adopters and on identifying other interesting growth vectors. The key to this phase is to demonstrate market scalability of the business model and associated with the innovation.
- ¤ Validation usually consists in a clearly expanding sales funnel (i.e., for the new type of chip example above, sales expanding beyond the early adopter networking vendor like Cisco and with potentially new growth vectors in terms of new products that leverage the core innovation).

- Series C
  - ¤ The Series C financing usually starts with a company that has demonstrated sales scalability for their solutions and an ability to continue to grow.
  - ¤ The Series C investment usually has all the management team in place and a measurable culture as a result.
  - ¤ The Series C investment must clearly reflect an opportunity that has the potential to go public (IPO) and is thus a company capitalization exercise.
  - ¤ Existing venture funds will typically wish to deploy at this point

the balance of their full capital allocation for a company assuming this company becomes a fund maker. Thus assuming a $100 million fund has been in since the seed round and has deployed $5 million to date, it will then wish to deploy 3-5% of their fund for total exposure of 8%-10% of their fund in this company which is now deemed a self-sustaining winner and fund maker. While the window for an IPO is impossible to establish at this point as market sentiments tend to vary, this company has all the qualities to self-sustain its growth and become an IPO candidate under the right market conditions.
    - Most of the capital is deployed on making sure the company is properly capitalized for an IPO. The target is to reach critical mass and sales predictability.
    - Validation usually consists in a company that can properly forecast its growth on a quarterly basis and hence manage expectations as a public company.

- IPO
    - A company reaches the IPO phase once it has grown to a critical mass (typically between $50-200 million in sales with significant growth, depending on market conditions).
    - The business model must have demonstrated strong growth potential.
    - The business model must have demonstrated profitability.
    - The growth and business model must have predictability to manage investor expectations.
    - The IPO is led by a syndicate of investment banks who underwrite the IPO (i.e. purchase the stock being offered as part of the IPO) with the full knowledge that there is market appetite for the underwriting on behalf of public equity institutions (banks, insurance companies, mutual fund managers, pension funds, …)

Investment series circle back to the concept already introduced of capital efficiency and risk management in targeting an investment thesis. Sufficient capital must be allotted to address various aspects of risk (which relate to assumptions). Obviously not all companies proceed to the next round or series. There is also always the possibility that someone comes in with a very compelling offer to buy the company (as experienced a few times by this author). The decision to sell or continue financing is always a long, thorough discussion between investors and management intended to uncover how much further value creation is being forfeited vs. how much risk is eliminated.

One crucial point for the start-up's management team to understand is that VCs are interested in opportunities where the market is large enough to warrant the kind of investment position and return they expect from a fund maker. While the reality and vagaries of the market may prove otherwise, any company must look like a fund maker on an *ex-ante* basis.

The Start-up Thesis

Typically a VC is interested in a start-up's thesis that is disruptive.

The start-up company needs to usually address a new market (green-field opportunity) and may later move on to disrupt existing markets.

The drawback of disruptive innovation (technologies and/or business models) is the possibility that the application may not be a certainty and the technology may not work.

Indeed the rationale for early stage funding is to validate the market, the application and ensure customers exist.

The central tool used to manage risk in the commercialisation of a disruptive innovation is a company thesis with a clear, transparent projection of facts, assumptions made and a validation plan for such assumptions.

There are typically two key pieces to a thesis, which are living documents that are used to constantly reflect the status of a company and act as key internal communication tools:

1. A strategic plan which highlights the opportunity uncovered in a given market by a disruptive innovation. Key facts and assumptions need to be clearly highlighted in such a plan.
2. An operating plan that highlights management view of how and when key assumptions will be validated, which are part of key operating milestones that need to be clearly enunciated. Such a plan also details how funds are deployed or held back relative to key operating milestones.

The role of a venture capitalist is then to validate facts and assumptions made. Once a venture capitalist gets comfortable with the thesis, management and the fit of an investment opportunity within the framework of fund management, a term sheet is usually issued to the company.

The Management Team

The management team's culture and attitude to risk are key determining factors to success. Risk is fundamentally a function of assumptions made, or worse, assumptions taken as facts. Assumptions almost always relate to exogenous trends and factors outside of one's control. Risk management should be approached in a manner similar to the way risks are dealt with in projects and is centered on translating assumptions into validated assumptions or facts.

One of the most destructive forms of risk originates from a company's inherent culture:

- Good cultures are transparent and seek to deal with a clear understanding of facts and assumptions; the output of a good culture is sound quality of information.
- Bad cultures deal with spin and bad information, resulting in a poor common understanding of facts and assumptions.

Company risk itself can be divided into two broad categories:

- the risk inherent in the biases and experience of the team.
- the risk outside the control of the team.

A good team "knows what they know"; these are facts that have been validated and are easy for a third party to re-validate. The team also "knows what they don't know"; these are assumptions. The management team needs to have a method to validate these assumptions. This has two implications. The management team needs to be constructed such that the assumptions can be validated by the members of the team. The VC needs to see that the management team has the culture and expertise to seek, analyze, and interpret information about its risks.

Viewed from a venture capitalist's perspective, risk management is addressed via the management team and the investment series as highlighted above. Recall that each investment series relates to certain categories of assumptions that need to be validated. So the team needs an approach to validate assumptions along the lines of a project where the milestones are the series funding rounds.

The management needs to be able to operate largely autonomously. The VC doesn't have the time to run companies but can become an efficient sounding board (as any CEO will tell you, it can sometimes be lonely at the top) and a useful business development agent that makes strategic introductions to various market players. Companies that need lots of hands-on management are poor choices because in the end it is the team that is responsible for making the returns, not the VC; the VC is merely responsible for selecting the right team and opportunity.

Corporate Culture, Risk and the Team

Culture is the single most valuable asset of any start-up. PERIOD.

The attitude towards risk on behalf of the management team is an important part of the VCs evaluation process. A VC wants to see that seeking, identifying, understanding, and addressing risk are part of management's DNA. Open risk identification and management needs to be part of the corporate culture; this entails constantly identifying assumptions and facts, of constantly validating assumptions and doing so as quickly as possible. This is where the expression "*fail early and often*" comes from.

Humans operate in a world of uncertainty based on models of such a world – the models are themselves based on a set of facts and assumptions. Assumptions need validation or invalidation as early as possible – a market feedback cycle is central to this effort.

Redirection of the Thesis

The idea of a business plan being a thesis has another profound implication.

In some cases the thesis is proven wrong and the team needs to head in a new direction, assuming there is such a possibility. Perhaps a new thesis has been shown as likely and the team needs more money to go in that new direction. Here is the kicker; the money invested in the old disproved thesis is now a sunk cost. Any new funding essentially starts over.

This can cause conflict with the original investing group because their investment is now essentially lost.

Admittedly the management team has learned something which has value, but the key point is that a new set of assumptions needs to be proven and the team is therefore at or near the starting point of the goals behind the series funding structure.

A huge problem that a new VC faces when getting involved in a changed thesis funding round relates to the legacy issue caused by previous investments and the sentiments of past investors. Past money was lost chasing after a false thesis which can cause earlier investors to seek to recoup such funds from new investors. New investors are not interested in paying off for failed legacy investments.

What an Entrepreneur Should Seek in a Venture Capitalist

While most of this chapter has been dedicated to what VCs look for in an entrepreneur, it would be grossly incomplete without a teaser regarding what the entrepreneur should look for in a VC.

A VC's value should be a lot more than money; rather a VC should be viewed as leveraged money. Three central functions of a VC are:

1. To act as a sounding board that has a clear grasp of a company's plans.

2. To act as a business development agent that makes critical market introductions for a company, either for new investors in subsequent funding series or to customers and partners that can have a material impact of the company's prospects.
3. To help the entrepreneur in recruiting critical team members that will have a material impact on the outcome of the venture.

VCs should have clarity about their role and not interfere with day-to-day management. Rather, VCs have a role in ensuring that proper management is present. Any VC that attempts to interfere in management is bad news; he/she does not understand that you cannot hold someone accountable for a plan that they did not conceive. Ownership and accountability go hand-in-hand and need to be a central part of a company's culture, starting with investors and board members. Thus, good VCs should hold management accountable for management's plans and the proper communication of the evolution of such plans.

Entrepreneurs should ensure they understand the culture of a VC as it relates to clarity of roles and responsibilities, attitude relative to failure, and accountability. One of the tragic mistakes I have witnessed that entrepreneurs make is the fact that due diligence is a two-way street. An entrepreneur should conduct thorough due diligence on potential investors and their partnership to understand who they are bringing on board. Too often, the focus of entrepreneurs is on getting as much money as possible at the highest valuation possible, often with disastrous consequences.

I have often pointed out that a CEO's single most important deliverable is a company's culture. Cultures are usually set at the top as they are shaped by the people you hire and the people you fire. Remember, while you can hire a VC you can't fire one.

Exit Possibilities and Strategy

Q: How does a VC fund see their return realized?

A: The exact same way as the Entrepreneur; through the "exit strategy". The exit is the final outcome of value having been created. The only form of exit which does not result in value having been created is the form that in hindsight was based on a flawed thesis or which has witnessed execution failure.

Generally, in my experience, a company yielding a 1-5 times return will be the outcome of a merger or acquisition (M&A) transaction, whereas a >10 times yield typically results from an IPO. Also, in the case of an IPO, it is not an "exit" per-se but a very important financing event to continue to sustain further growth for all stakeholders. It is also a very important milestone in the lifetime of a company indicating that it has reached a point of strong, predictable growth where expectations can be properly managed. As you will see, this is part of the reason why VCs rely on preferred share financings: Preferred shares generally become common shares on an IPO, aligning all parties after true venture value creation has been realized.

One last point is that very few top-quartile VCs accept the premise that a company can be funded for an acquisition. Companies should not built to be sold but are highly likely to be approached for an acquisition on their way to an IPO. Building a company from day one with the specific intent of selling it makes a company cut corners and fail to take the necessary steps to build an enduring, growing entity on its own merits.

Classic Mistakes Made by Entrepreneurs

The following is a non-exhaustive list of classic mistakes entrepreneurs make in the venture capital engagement process:

- **Shotgun approach** – Many entrepreneurs think that they will get VC traction by talking to every VC and using fear of loss; the best VCs will only invest in teams that make them comfortable by providing crisp answers to questions and demonstrating the right attitude to addressing risk in a venture. Fear is only a convenient excuse for a VC to spend time elsewhere where comfort can be established. As we say in the industry, "*the story rarely gets better post financing*".
- **Don't burn your angels** – As a past angel myself, I have far too often witnessed (as an angel and as a VC) situations where angels were made to overpay for common shares, only to see the angel investment get severely diluted by venture investors. In such cases, many angels conclude that VCs are evil and to be avoided at all cost. Angels play a critical role in the venture capital eco-system; they typically accept much higher risk and should thus get great pricing on their shares. Unfortunately, as a past angel, I can only blame myself for not understanding the inevitable financing roadmap of companies I invested in. Angels and entrepreneurs need to learn the art of alignment with a very large and logical eco-system by anticipating a company's likely financing roadmap.
- **Offering common shares and/or debt** – The VC asset class depends on preferred shares to attain its objectives. This is based on 40 years of best practice that has resulted in funds being set up by limited partners with the specific expectation that only preferred shares will be used.
- **Lack of clarity in thesis** – the best VCs will only invest in manage-

ment's thesis, never the VC's. While the proper dynamics between a VC and entrepreneur do entail ongoing discussions and challenges to get to the truth, VCs know that they do not run the show; entrepreneurs do. Thus, lack of clarity in a thesis demonstrates that a team is not ready for funding.

- **Lack of thought regarding assumptions made and their validation** – A lack of thoroughness in de-risking the venture only points to future failure.
- **Poor response time in answering back regarding pointed questions relating to a thesis and its validation by a VC** – This usually points to the team not being ready for a financing or using the shotgun approach.
- **Poorly thought out answers** – Even worse than above, this points either to arrogance, immaturity, incompetence, or intellectual dishonesty.
- Not knowing what you know versus what you assume, and not being prepared to answer how facts or assumptions can be validated by a third party writing the cheque.
- **Poor transparency** – The capital sin. The venture process is one of human relationships based on trust.
- **Second to transparency, insisting on an Non Disclosure Agreement ("NDA") being signed (see below)** – This shows a lack of understanding of the VC industry and process as well as potential difficulties in getting a transparent, trust based discussion, notwithstanding the outcome (financing or not). The VC engagement process should result in a crisper understanding of the thesis.
- **Not understanding the nature of venture capital and making comforting assumptions regarding venture capital** – Many entrepreneurs (this author, in his past, included) make the mistake of believing that they understand venture capital. They merely understand what they choose to, based on the few individuals they have interacted with
- **Overvaluing their company at a given round, resulting in a down round in the future** – It is very important to understand the market rules of thumb for future financings in order to avoid the undesirable consequences of angry investors in the future and the morale impact on the company of a down round. This mistake usually is borne primarily by angel investors.
- **Treating VC process with a transactional mindset** – The VC process is the beginning of a long and hopefully constructive relationship. Choosing the wrong VC can make life seem very long and painful. You are choosing a business partner in your venture and making the

wrong decision *will* be arduous. Too many entrepreneurs make the mistake of using valuation as a criterion, forgetting that there are many funding rounds left to the pursuit of their thesis.

Key take-aways and Rules of Thumb in VC Interactions

The venture industry reflects the evolution and understanding of over 40 years of best practices in creating superior returns via emerging or disruptive business opportunities. VCs will typically not deviate from this model as they understand that not conforming to it creates severe difficulties for future fundraising by a company. VCs need to have a strong understanding of a company's likely financing roadmap as a preamble to making an investment.

These practices are fundamentally objective and non-arbitrary. In the end, only measurable results count. The primary factors that yield results however are a function of a very volatile yet central component; humans and the culture they generate.

Raising money is not easy nor has it ever been nor should it ever be; the process of raising money should be used by entrepreneurs as an opportunity to clarify and validate their own investment thesis. The process by which an entrepreneur undertakes the process of fundraising reveals a tremendous amount about the culture of a start-up. Part of a VC's due diligence is specifically based on the way in which a team goes about fundraising.

Be prepared regarding your thesis. Once you engage and get interest, it is yours to lose. Venture deals close because they are clearly in play as a result of the entrepreneur being ready for a financing in terms of thesis maturity and/or crispness. Once you engage, response quality and timing are critical measures of a management team's quality and ability.

Why VCs will not sign NDAs: notwithstanding the transparency discussion previously outlined, VCs simply cannot reasonably manage an NDA process. The typical VC simply talks to far too many players in the industry and will ultimately invest in the best team and best technology. An NDA process both restricts the VC's ability to run his business and creates a management nightmare. The industry has solved in part the confidentiality issue by realizing that professional integrity is key to its success and by simply not distributing materials without the prior approval by an entrepreneur as a necessary step in conducting due diligence.

Term sheet before or post due diligence: this one is almost a religious issue for me. The best VCs almost never issue a term sheet until they are materially done their due diligence. A financing is an act of free choice based on one having done his or her homework. It is not responsible, in my opinion, to restrict an entrepreneur until you are 100% sure you wish to go ahead with a financing based on having done your homework. Some VCs lock up deals with a term sheet, restrict the company's options relative to financing as a result, and very often either renegotiate a deal or simply walk away after doing their homework. This creates many side issues, including the fact that a syndicate is hard to create as some investors may simply not choose to follow a path they deem irresponsible.

Make sure you understand the vintage of a fund making an investment as most funds have a 10 year life. An older fund investing in a very early stage start-up can spell bad news in terms of artificial pressure to exit an investment by the time the fund (and not necessarily the company itself) matures.

Valuation: valuation is pretty much recipe-based. A start-up's capital needs and exit potential either fits a fund's thesis or does not. If it does, the valuation usually fits within a narrow range that gives sufficient comfort to an investor that his return potential is in line with his fund's objectives. Valuation and ownership are directly correlated to how much capital needs to be deployed (fund capital limitations and return models), coupled with ownership objectives (time limitation). As such, capital deployed and valuation are directly tied to the stage of a round (how much is it de-risked). Typically, a fund tries to get close to 30% ownership at seed, 25% at series A and 20% at series B. Ownership at series C can be as low as 10%, with much capital deployed.

Engagement: make sure to ask investors about their investment model/ criteria and investment decision process / timelines.

VCs who do their homework thoroughly are usually lower maintenance and focus on value creation as opposed to wasting management's time.

Not everything is what it appears to be. Many investors will ascribe to the best practices outlined in this chapter. Yet very few do... it is thus incumbent upon the entrepreneur to do in-depth due diligence on an investor, especially with references that are not provided. The challenge of reference checks is usually that most people recognize the world is small and are thus hesitant to provide a real opinion. Most people will revert to the safe practice of stating facts as opposed to opinions. As I mentioned earlier in this chapter; your single most important asset is your company culture. Such a culture is set by the individuals you hire or fire. You can hire a VC but cannot fire him.

Antoine Paquin

Antoine is a general partner at Rho Canada Ventures (www.rho.com), a new fund that is part of Rho Capital Partners, a diversified private equity firm based in New York. For nearly 10 years, he defined and shaped the direction of several notable and groundbreaking technology firms, including Axiom Microdevices Inc., (part of Skyworks Solutions), Bitflash Inc. (part of Open Text Corporation), Philsar Semiconductor Inc. (part of Skyworks Solutions) and Skytone Systems Inc. (part of Cisco Systems).

Mr. Paquin continues to be an active global angel investor in many technology start-ups. Mr. Paquin serves as a director on the boards of Accedian Networks, Pyrophotonics Lasers, Public Mobile and Javaground USA, a California company that he seed-funded.

Antoine holds a few awards from his entrepreneurial career, including Entrepreneur of the Year (1997) for the Nation's Capital, recipient of the National Research Council's Innovator of the Year Award, and recipient of the IWAY awards for exceptional entrepreneurial achievements (Canada's Information Highway Initiative).

Antoine was born in Montréal, Canada and raised in Canada, France and Africa.