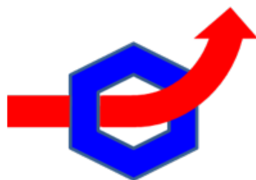

DUNCAN JONES

Coach-Consultant
Hexagon Innovating

Driving growth by optimizing innovation efforts

65 Chudleigh Ave
Toronto, Ontario
M5R 1T4

Text/ Cell: 416 301-6700
duncanjones@hexagon-innovating.com

www.duncanjones.ca
www.hexagon-innovating.com

Three Critical Steps for Early-Stage Opportunities: Establishing Ownership, IP Rights and Governance

(Reading Time: 35 minutes)

As soon as you start thinking about embarking on a entrepreneurial undertaking, it is important that the team:

1a) Establish who the Founders are.
1b) Agree upon each person's ownership share.
1c) Develop mechanisms to manage ownership issues.
2) Secure the rights to the core intellectual property.
3) Decide on how the business will be operated/governed.

The reasons for taking these three, interdependent steps early on include:

- Clarifying the ownership status in order to head off battles among the Founders and presumed Founders.
- Ensuring that the critical intellectual property required to execute on the business plan is available for use without legal ramifications.
- Establishing clear expectations on how the business will be run and governed especially with respect to dispute resolution.
- Ensuring that business is structured and operates in a clean, clear and simple manner so as not to dissuade potential investors with additional risks and uncertainties.

1a & 1b) Ownership Allocation

The majority of entrepreneurial activities start when one or more people discover something, invent something or simply come up with an interesting idea. The next step usually involves exploring the opportunity in more detail to flush out all the possible approaches and avenues, and assess their feasibilities. Additional individuals, with particular sets of skills and expertise, are often recruited to assist at this stage. The result being that very early on, a small group or team of "Founders" has been established.

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Even though the enterprise has not likely been incorporated[1] (and there may be no need to yet), it is critical that the Founders be identified and that they all agree on their percentage ownership in the opportunity. The decision as to who is a Founder is not always straightforward. Most individuals involved in the early opportunity formulation will claim to be Founders, so it is important not to involve too many individuals nor raise the expectations of those individuals to whom you are only seeking information or advice[2]. Of course, the ultimate list of Founders is a result of negotiations among those involved. Those who feel they are being treated unfairly always have the option to quit and in some cases may go off to set up a competing effort[3].

Similarly, the ownership breakdown between Founders is not always straightforward. Most frequently, at an early stage, the ownership is split equally among the small group of Founders. Occasionally, the split favours the initial inventors, individuals who made an exceptionally strong initial contribution, or individuals who bring what are perceived as "more valuable" skills and experience such as senior scientists and seasoned leaders. Of course, the ultimate ownership split is again a result of negotiations among the Founders, with those who feel they are being treated unfairly, again, having the option to leave and potentially compete[4].

In fact, the discussions or negotiations that result in the selection of Founders and the allocation of ownership are interdependent. The sooner that this is resolved the better, as it heads off bitter battles that can arise when the inherent value of the opportunity has grown significantly. This initial establishment of Founders in no way precludes adding additional owners/shareholders to the team later on as required. However, with an initial ownership structure in place, such negotiations are generally simpler involving only two-parties: the established enterprise and the incoming team member. Failure to agree results in a simple parting of ways. In fact, investors become owners (also termed shareholders) in a firm through just such a negotiation. They offer to provide certain funds in return for a desired

[1] Incorporation is the establishment of the business as an independent legal entity. It protects the owners (shareholders) and Directors from any liabilities and obligations including debts. As a result, incorporation should be done prior to a major investment or product launch.

[2] I, like many, have been caught in this trap i.e. thinking that you are working as part of the team of Founders, when in fact you learn that you were just considered an advisor and this was a measure of future employability. You can complain and argue, but it is usually an unwinnable situation. Working for free with no clear, formal and especially written expectations as to compensation (cash or stock) or a future position within the firm is all too common and often ends in disappointment.

[3] I experienced this at a Hackathon, when a programmer was assigned to a team and after a day of working on the project, claimed he was due a 33% ownership stake. This request was refused and he left claiming he would create his own version of the application. Fortunately, he does not have the industry know how nor the professional network that is vital to testing this app so he likely reconsidered.

[4] In many ways, this becomes the first test of whether the group can function as a team. It's surprising how often greed disrupts the enterprise, even before any real value has been created. If co-Founders can't get along initially, they will never survive the stresses of technical setbacks nor the harsh demands and decisions of investors.

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ownership position (as well as a number of other decision-making rights including seats on the Board of Directors[5]). Table 1 outlines the common financial tools used by investors. Table 2 describes the investment parameters used. Table 3 outlines the various roles in a company.

2) Intellectual Property (IP) Rights

Intellectual property rights including patents, copyrights, trademarks, and industrial designs grant a set of legal monopoly rights to the inventors. Trade secrets (like the Coca-Cola formula) and know how (like the individual skills, knowledge and experience of a top notch litigation lawyer or a NASA engineer) are additional forms of intellectual property that carry no legal protection, but may also be leveraged by the inventor/owner to establish a monopoly position (See Table 4). Differentiating your offering from that of the competition, by establishing a monopoly position in as large a market as possible, is what will deliver the above average profits that investors seek (See Table 2).

Again, the majority of entrepreneurial activities effectively start when one or more people invent something or acquire the rights to an inventor's intellectual property. In the biopharma industry, this is almost exclusively associated with a patented drug or biologic, or the discovery of a new use for an existing one. At the other extreme are the software and internet-based, e-commerce (like Amazon, Apple [iTunes], eBay and Uber) and advertising (like Google, Facebook and Twitter) platforms. They rely on trade secrets in the form of customer data, data management tools including search algorithms, as well as the know how and creativity of top programmers. Other industries including manufacturers (like Apple, Samsung and Toyota) and retail service firms (like Home Depot and Walmart) rest in the middle of this intellectual property continuum relying more on a combination of patents, trademarks and know how.

[5] Extraordinary items are additional absolute veto rights that sophisticated investors demand. They include any decisions concerning additional financing of the company, partnership deals, and major spending including employee salaries. They are demanded in order to provide the investors with significant additional control over the business in order to protect their investment.

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Table 1: Definitions of Various Financial Tools

Financial Vehicle	Notes
Ownership Percentage	A simple breakdown of the ownership of a business, that is used early-on before significant investment is secured.
Common Shares/Stock (private)	Shares issued in a private company also termed equity that represent an ownership stake. So called Founders' shares are usually in the form of common stock. Each share represents an equal portion of the company. If the Founders have not converted their ownership percentages into an equivalent proportion of common stock, this is required at the first major round of investment. The number of total shares issued is somewhat arbitrary, but tends to be the equivalent of $1/share based on the first round investor's valuation of the business. Generally, private shares cannot be sold or traded.
Preferred Shares/Stock	This is another form of stock in a private company often demanded by investors. These shares have a "preference" over common shares, in that if the business is ever sold at a value less than the total amount of money invested, they get paid out first. If any funds remain, these are apportioned to the common shareholders. Frequently, a new and higher form of preferred shares is issued at each round of investment. In this way, the last investor is able to get their money out first. Owners/holders of preferred shares frequently have additional rights concerning investment decisions.
Common Shares/Stock (public)	Shares issued in a public company. These can be bought and sold easily, as they are traded on a stock exchange. When a company "goes public" through an Initial Public Offering (IPO), the company issues additional shares and allows anyone to buy them. At this time, the existing private common shares and preferred shares convert to these as well. Public companies must report their activities and finances to the public, at least quarterly.
Debt	Debt is another term for a loan. Loaning money to a company, does not give the debt holders any ownership in the company. The way that they make money is through interest payments on the debt. Usually, early-stage companies do not qualify for loans/debt because of their inability to make interest payments and their high risk of failure/default. If however debt were to be issued, it would be paid off ahead of the preferred shareholders.
Bonds	Large public companies and various levels of government can acquire a loan/debt by issuing bonds. These bonds can be traded between investors.
Convertible Debenture	A convertible debenture is a hybrid of a loan/debt and preferred shares. Initially the investment behaves as a loan and interest is paid. However at the debt holder's option, it can be converted into preferred shares usually at a premium i.e. for more shares than that amount of money would normally buy. Convertible debentures mitigate four difficulties facing early-stage investors: It makes it a slightly less risky investment as interest is paid and the debt holders are first in line for repayment. It avoids or at least delays the requirement to negotiate a valuation of the business which can be very subjective in the early days. If the company is doing well, it allows debt holders to become owners and share in the upside. Finally, if the company is doing poorly and is unlikely to be able to repay its debt, it allows the debt holders to become owners with more influence on how the company proceeds.

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Table 2: The Thinking Behind Venture Capital Investment

Principle	Notes
Investment Focus	Investors, unless they are part of a syndicate or group, tend to focus on a particular type of business or field that they have expertise in. The major areas are software and information technology, biotechnology, medical devices, and energy and cleantech. Their expertise allows them to assess the feasibility of the opportunity as well as provide the companies that they invest in with valuable guidance.
Investment Amounts	Every investor has a so-called sweet spot for the amount of money that they like/want to invest in a given deal. This amount relates to the total amount of money that has been allocated to investing. Sophisticated investors understand the importance of investing in a portfolio of opportunities in order to diversify the overall risk, as a portfolio gives the investor a better chance at having a few winners as well as the inevitable losers. A portfolio usually includes from 5-15 deals. Investing in more deals than this requires more work and time without significantly more risk reduction. In addition, investors need to keep some extra money available as they know that it is often necessary to further invest in struggling companies to get them to the next round of financing. Finally if an opportunity is doing well, they may wish to invest more alongside the next round of investors. For example, an rich individual/angel investor with $250,000 to invest overall would be looking for deals in the $25,000 range to ensure they could make 5-10 deals. The investment ranges of the various types of investors are outlined in Table 6.
Rate of Return	Over the last 20 years, the average annual return on (safe) Canadian government bonds was 4.5% whereas the average annual return on the (more risky) Toronto stock exchange (TSX) for owners of public companies (i.e. equity holders) was 7.6% (Source: http://www.taxtips.ca/stocksandbonds/investmentreturns.htm). Since early-stage companies are far riskier with 50% failing (Source: http://blog.gust.com/the-startup-failure-rate-among-angel-funded-companies/), investors seek opportunities forecasting much higher annual rates of return, closer to 40% and above. Over 7 years, that is equivalent to 10 times their initial investment. The 1 in 5 investments that hopefully achieve these rates help to offset the poor performance of all the others in a portfolio of early-stage investments, resulting in an overall expected average annual rate of return in the 10-15% range (Source: https://blog.wealthfront.com/venture-capital-economics/). As opportunities mature and some of the risk is reduced, the expected rates of return that are sought decrease slightly. Table 7 describes a model set of investments.
Investment Timeframe	Investors in early-stage deals must have longer investment timeframes simply because later-stage investors do not buy-out early-stage investors or founders. Instead they co-invest (with additional special powers and preferences) as they want all of their money to go towards moving the business forward. The investment timeframes of the various types of investors are also outlined in Table 6.
Share of Ownership	At each round of investment, the incoming investors generally seek a 15-60% stake in the enterprise. Too small a position is not worth the upfront effort or the ongoing management to these investors. Too large a position, does not give the Founders enough incentive to continue to work hard for the enterprise. As a result, the size of investment that a given investor likes to make correlates with the stage and value of the company. Therefore when seeking investment, you should look for investors that have a record of investing in enterprises at a similar stage and valuation to yours.

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Table 3: Definitions of Various Company Roles[6]

Company Roles	Notes
Founders	Founders are the individuals who initially started the business. They hold a significant ownership interest in the business, usually with common shares. As the business develops a more formal structure, they become employees. Some may also serve as Officers, Directors and members of the Scientific/Technical Advisory Board.
Employees	Employees work for the business and are generally paid a salary or hourly wage. They may be awarded shares or options in the company through an employee stock ownership plan (ESOP) as a form of additional incentive.
Investors	Investors in a business are also owners, usually through common or preferred shares. The often serve on the Board of Directors as well.
Officers	Officers are the leaders of a business and have responsibility for day-to-day operations. Common titles include Chief Executive Officer (CEO), Chief Financial Officer (CFO) and Chief Operating Officer (COO). The group is collectively called the C-suite. All employees directly or indirectly report to these Officers. The various Officers report to the CEO, who in turn reports to the Board of Directors. Many Officers are also Founders, but professional business managers may also be hired to serve as Officers.
Directors/ Board of Directors	The Board of Directors is responsible for the business and has a responsibility to represent and act in the best interests of all the owners. The Board is usually comprised of an odd number of some Founder-Officers, the CEO and CFO even if they are not Founders, a number of investors, and an independent member (i.e. someone who is not an employee or investor in the firm). Independent Board members are usually compensated with a combination of cash, and shares or options, while the other members are not as they already are compensated or hold an ownership interest in the business.
Scientific/ Technical Advisory Board	The Scientific/Technical Advisory Board is a group of advisors that are assembled to assist with scientific and technical decisions. This group is often led by one of the Officers. These advisors are usually compensated with a combination of cash, and shares or options.
Consultants	Consultants are hired by the Board of Directors or Officers to assist with business analysis, decision-making and process improvement. They are generally compensated with cash, but may negotiate for some additional stock or options.

[6] An Employee Stock Ownership Plan (ESOP) is an allocation of shares or options to acquire shares representing 5-15% of the company. They are issued to employees, at the discretion of the Board of Directors, to reward and motivate good employees by providing them an ownership position and share in the company's upside.

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Table 4: Brief Descriptions of the Major Forms of Intellectual Property

Type of Intellectual Property	Comments	Examples
Patent	A very strong source of legal protection that can be enforced for 20 years when it is obtained. The process, machine, manufacture, or composition of matter, or any improvement must be new, non-obvious and useful. Novelty and obviousness are frequently challenged.	- The electric lamp by Thomas Edison in 1880. - The microwave oven in 1950. - Ibuprofen (Advil, Motrin) in 1961 and in force until 1985.
Copyright	Legally covers literary, musical, dramatic or artistic works. For programmers, it covers the source code and possibly the exact look and feel, but will not protect the core ideas from a work around.	- Mickey Mouse which expires in 2024. - An article like this one, for the life of the author plus 50 years. - Most pictures and drawings on the internet.
Trademark	Legally protects your brand which can be very valuable in the eyes of your customers, but does not prevent competitors from also developing the core ideas. Trademarks are valid for 15 years and renewable in perpetuity.	- Product names and logos like Coca-Cola, iPhone, Lego and Advil.
Industrial Design	Legally protects a decorative or nonfunctional aspect of an item for 10 years.	- The shape of a Coca-Cola bottle, sports car or shoes.
Trade secret/ Know how	These tools do not provide any legal protection, but nevertheless may be difficult to copy. Specific know how, domain knowledge and customer access related directly to the task at hand can provide a significant barrier to all but those with similar capabilities or the resources to obtain them.	- The Coca-Cola formula. (This could have been patented for a fixed period of time, but the company decided to keep it as a secret potentially forever). - Passenger load factors for the various airline routes.

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At start-up, the core intellectual property especially in the case of the legally protected forms is usually owned by the inventor(s), or the company or institution where they work (by way of their Employee Agreement[7]). It is critical that this IP is secured by the enterprise through direct ownership, outright purchase, a license (usually exclusively for a given territory or application), or an option to license or purchase it in the future under certain conditions[8]. Table 5 reviews the various methods that intellectual property is secured.

Brilliant ideas and the plans to carry them out, on the other hand, are often an unprotected and often legally un-protectable secret among the Founders. These ideas are, in effect, acquired in exchange for the share of ownership granted to each Founder. A confidentiality agreement[9] and a non-compete clause[10] between each Founder and the enterprise is always recommended and can assist in securing these IP rights.

Without having secured some form of intellectual property rights, the new enterprise will be unable to make a strong case that they are distinct and have the potential to earn the above average profits sought by investors. It is during negotiations with inventors, institutions and even Founders for particular IP rights, that modifications to the ownership structure are often required. In fact, the negotiations around Founder selection, ownership allocations and IP rights are almost always all interdependent.

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[7] An Employment Agreement is a standard document for new hires in all companies. The agreement covers duties, compensation, vacation, benefits, and termination as well as confidentiality, intellectual property and non-compete obligations.

[8] Frequently, one of the conditions of investment is a thorough review of the license agreement(s) to ensure they are appropriate, the intellectual property to determine its strength/value, as well as a determination of whether anyone else's intellectual property is blocking (termed Freedom to Operate). In one deal, we paid to have all this work done by patent lawyers proactively, which resulted in a very quick, smooth and successful acquisition. As an early-stage venture capitalist, I turned down many opportunities that had not secured the underlying IP and on occasion requested that the Founders renegotiate the license they that had obtained from their University, so as to be more favourable to the long-term goals of the business.

[9] A Confidentiality agreement, confidential disclosure agreement (CDA) or non-disclosure agreement (NDA) is an agreement between two parties, that outlines the information which will be shared for particular purposes, such as investment, partnering or licensing decisions. This information must not be shared with any other parties and each party must make best efforts to keep these trade secrets and know how secret.

[10] A non-compete clause informs employees, investors and advisors that they cannot get involved in a competing business, poach employees, or deal with the current enterprise's suppliers and customers.

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Table 5: Methods of Securing Intellectual Property (IP)[11,12]

Method	Notes
Ownership	Any IP relating to the business and developed by its employees is owned by the company as outline in the Employment Agreement (or common law). The IP is "assigned" to the company.
Purchase/ Acquisition	A business can outright purchase the IP from the owner (another company or the inventors) or in many cases acquire the whole company including its IP. A purchase generally involves a one-time payment.
License	A license is a permit to allow another party to use the IP, subject to certain terms. Ownership is not transferred. In return for the license, negotiated milestone payments and royalties (a percentage of net sales) are paid while the IP remains in force. Diligence clauses ensure that the licensee makes best efforts to commercialize the IP or the license can be terminated.
Exclusive License	An exclusive license is one in which the licensee is the only group that can commercialize the IP. It may however be contractually restricted to a given territory or application/field of use.
Sole License	A so-called sole license is an exclusive license with the additional provision that the owners/inventors are also allowed to commercialize the technology. This provides them an avenue to compete against the enterprise at a later date. As a result, this is not commonly used.
Non-exclusive License	A non-exclusive license permits the licensee to use the IP, however the licensor can also license it to others. This type of license is used when the licensee does not want to be blocked by the IP, but does not depend on this IP to exert a competitive advantage over others or when the IP has too many applications for one licensee to pursue. Many patented materials and methodologies are non-exclusively licensed by the owner, who receives financial compensation from all the licensees. Carbon-fibre developed in 1961 is an example of a material non-exclusively licensed to many. (See http://www.wipo.int/ipadvantage/en/details.jsp?id=2909)
Sale	Assuming the supplier has secured all the necessary IP rights, when a product that incorporates IP is sold as in a normal supplier-buyer relationship, generally the buyer in effect receives a fully paid-up non-exclusive right. The buyer can then incorporate it into their product and commercialize it without making further payments. For example, if you bought a sheet of carbon-fibre and used it to build a bike, you would not need a license.
Option to License/ Purchase	An option involves the right to license or purchase the IP at a later date, usually based on accomplishing a task, such as raising money or receiving some approvals. They are proactive, serving as a conditional license or purchase agreement which are easier to prepare and manage than a license with its reactive diligence clause that can force cancellation of the license, if the terms are violated. A well written option agreement is just as effective as a license agreement in securing IP.

[11] A milestone payment is a pre-arranged payment that coincides with a major event like having a patent grant, obtaining regulatory approval, or product/service launch.

[12] If there are multiple inventors and depending on the jurisdiction (the US but not Canada being a case), each inventor may have the right to non-exclusively out-license the technology without requiring the consent of the others. Written agreements can clarify these situations and mitigate the risks.

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1c) Ongoing Ownership Issues
Clean Founder/ownership allocations and securing IP rights are essential to attracting investment. As part of the negotiations, venture capitalists and more sophisticated angel investors will require the enterprise to incorporate, prepare a formal Shareholders' Agreement[13], and in effect lock-in all the ownership positions. At the same time, funds are usually made available to pay basic salaries, and some form of employee stock ownership plan (ESOP) is frequently put in place to provide further rewards to productive Founders and employees. Table 6 breaks down the various types of investors. Table 7 outlines a multiple round investment scenario.

Nevertheless, prior to such a first round of equity investment, ownership issues may arise that can be anticipated and mitigated. There are three types of external events that arise quite commonly, that affect ownership allocations:

- Top advisors and additional team members may need to be attracted with an ownership stake. This is a fairly simple transaction/negotiation as they just become in effect part of the team, usually with proportional voting privileges.
- Paid advisors and consultants may demand some ownership stake as a bonus/kicker/sweetener. In this case, the amounts are usually small and so their voting influence is minimal, as are issues of fairness when later events such as ownership dilution[14] occurs (as is necessary to attract additional team members or investors[15]).
- Finally, cash-strapped enterprises may prefer or may have little choice but to compensate their advisors, consultants and even employees with an ownership stake in lieu of part or all of their fees. This can be the most challenging as the dollar amounts may be large. It may require efforts be made to assign a fair approximation of the value of the new enterprise and it may have an impact on the voting and hence control of the enterprise. Upfront negotiation is the simple and obvious solution. Issuing convertible debentures, which can be paid back in cash or converted to shares at the time of the first round of investment, based on a third-party/independent valuation of the enterprise, is another option.

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[13] A Shareholders' Agreement outlines many of the governance issues discussed previously including ownership, voting rights, company control, ongoing management, dispute resolution, confidentiality and non-compete.

[14] Dilution is the reduction in your ownership percentage as a result of new investment. If you own 100% at a $1 million pre-money valuation and an investor puts up $1 million, the post-money valuation is $2 million and your ownership position has been diluted to 50%.

[15] In one early-stage investment, a consultant we hired, at less than his normal fee, was responsible for turning a failing product around. Although not part of his contract, I endeavoured to have him compensated with some stock in the company. Unfortunately, this was turned down by the other Directors.

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Table 6: Types of Investors[16]

Investor	Notes
Founders	In addition to their time (often termed sweat equity), Founders often make some initial cash investment in the enterprise to get it started.
Friends and Family (Love Money)	Often the earliest investors are friends and family who are true believers or just nice people trying to help out. As a result, the investment is often loosely structured as debt or common stock.
Angel Investors	Angel investors are wealthy individuals who make investments with their own money in early-stage companies. They invest in opportunities that interest them and often they have a connection to the underlying technology from previous work experience. Angels generally invest $10,000-$100,000 per deal and have a 5-10 year desired investment timeframe, as they anticipate further investment by others.
Angel Groups	Angel groups are syndicates of Angel Investors who together can invest significantly more in a business. Often they hold meetings to review investment opportunities. Collectively they invest $50,000 - $500,000 per deal.
Venture Capitalists	Venture capitalists (VC) are the mainstream investors in entrepreneurial opportunities. VCs raise money from individuals and large financial funds and invest it on their behalf. Generally, they do not invest their own money and hence are fund mangers not owners. There are different classes of VCs that invest different amounts per deal, in different stages of enterprises, and in different industry sectors. Early-stage VCs invest $0.5-1.0 million per deal and have a 4-6 year investment timeframe. Very later-stage VCs can invest in excess of $100 million per deal and have investment timeframes as short as 2-4 years. VCs are seeking follow-on investment in their deals by later-stage VCs or exit/cash-out through an Initial Public Offering (IPO), sale to a larger company (a so-called trade sale to a strategic partner) or possibly a sale to a Private Equity firm.
Private Equity	Private equity (PE) firms invest large amounts of money in low risk, late-stage firms usually buying 100% of the company (unlike VCs). They accomplish this with a combination of equity and debt also termed a leveraged buy-out (LBO). Private Equity investments range from $100 million to over $1 billion with investment timeframes of 3-5 years, generally in preparation for an exit through an Initial Public Offering (IPO).
Public Investors	Public investors can only invest in a company that goes public and is listed on a stock exchange. They can buy any number of shares and as a result mature companies have hundreds of thousands of investors, some with large stakes and others with just a few shares.

[16] A corporate venture capitalist (CVC) is special type of venture capitalist that instead of raising funds from other investors, are allocated a budget from their (large) parent company. Examples include Google Ventures, Intel Capital, Novartis Venture Funds, Samsung Ventures, and SR One (GlaxoSmithKline). These funds have more of a strategic interest in opportunities than a purely financial one asks the case for the usual (private) VCs. As a result, they are very focused and different funds have different or multiple sweet spots (from early through mid to late stage opportunities).

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Table 7: Idealized Three Rounds of Investment and Exit at Year 6 [17,18]

Event	Pre-money	Investment	Post-money
Seed Round (Initial investment)	$1 M of perceived value, not cash investment, held by the Founders	$1 M (50% stake) by an angel syndicate or early-stage VC	$1 M + $1 M = $2 M (Founders own/diluted to 50%)
2 years pass (Product launch)	$2 M * (1+40% return)$^{2 \text{ years}}$ = $4 M		
Series A Investment	$4 M	$4 M (50% stake) by VCs	$4 M + $4 M = $8 M (Founders own 25%)
2 years pass (Significant market uptake and sales revenue)	$8 M * (1+37% return)$^{2 \text{ years}}$ = $15 M		
Series B Investment	$15 M	$15 M (50% stake) by VCs	$15 M + $15 M = $30 M (Founders own 12.5%)
2 years pass (Stable, profitable business)	$30 M * (1+29% return)$^{2 \text{ years}}$ = $50 M		
Exit (IPO or trade sale)	$50 M	Founders owned 12.5% = $6.3 M Seed owned 12.5% = $6.3 M 6.3x return or 36%/year over 6 years Series A owned 25% = $12.5M, 3.1x return/4 years or 33%/year over 4 years Series B owned 50% = $25.0 M 1.7x return/2 years or 29%/year over 2 years	

[17] The pre-money valuation of the firm at each stage is negotiated/determined by the incoming investors and not by some predetermined rate of return. The 40%, 37% and 29% are the effective annual increases in perceived value, if indeed these pre-money valuations were agreed upon.

Scenarios:
1) If the company could only be sold for $36 M not $50 M (with everything else remaining as is), the average annual rates of return for all the investors would be much lower: Seed 28%, Series A 22%, Series B 8%.
2) A more common scenario would be that the Series A investors will only accept a lower pre-money valuation than $4 M. If it was only $3 M and they invested $5 M (to get the post-money back to the original example, with everything else remaining as is) the average annual rate of return for the Seed investors would be down to 29% (or $4.7 M from 36% and $6.3 M), while Series A and B investor returns remained the same (33% & 29% respectively).
3) If the product didn't launch or the sales uptake was slow after 2 years, the original seed investors would have to invest some more money to complete it or try and sell the company (although it could be worth next to nothing if there are no interested buyers given the poor progress/performance).

[18] Average rate of return = 10^(LOG$_{10}$(Sale_Value*Ownership_% /Investment)/Years) - 1
For Series A = 10^(LOG$_{10}$($50 M*25%/$4 M)/4) - 1 = 10^(LOG$_{10}$(3.125)/4) - 1 = 10^0.124 - 1 = 33%

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There are also three types of internal events that can arise that affect ownership allocations. A Founder on the team may no longer be motivated to do their fair share - a so called free-rider. They may even wish to quit the enterprise as a result of personal conflicts or a loss of the shared vision. Thirdly, there may be a desire by the rest of the team to remove/fire a Founder for their poor performance or disruptive behaviour.

A number of procedures can be established, but they must be agreed upon in advance, to address such internal issues if and when they arise. In order of increasing complexity and perhaps fairness, they include:

a) The default position of maintaining the initially established share structure, with the leaving member becoming in effect a silent partner[19,20].
b) Loss of one's ownership stake upon quitting or being dismissed by a majority or supermajority[21] (like 75%) of the team[22].
c) Monthly vesting[23] of each team member's ownership share over the first year or more of operations. An individual's vesting ends when they quit or are dismissed by the majority or a supermajority.
d) Mediation, followed by Binding Arbitration if necessary[24], on the relative ownership stake of the exiting member, after they make a case as to their contribution to the overall efforts to date.
e) Tracking of billable time by each member (perhaps at different hourly or daily rates). The dollar value of which gets converted to share holdings on a proportional basis.
f) Renegotiation by all team members of the distribution of share ownership, perhaps with the assistance of a mediator.

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[19] A silent partner still holds their ownership interest but as a result of the other owners' interests exceeding any supermajority of votes required to make decisions, they are in effect silent and no longer have any influence/impact on the decision-making.

[20] In one firm in which my fund invested in and I served on the Board of Directors, it was decided that a senior manager and Founder had to go. Extensive negotiations took place to try and resolve this amicably, including an offering to carve off part of the business. In the end, a formal vote was necessary requiring a careful review of all the ownership interests that narrowly ended in favour of dismissal.

[21] A majority is 50%+1, whereas unanimous is 100%. Between these two extremes are supermajorities. Usually supermajorities are set at 66.7% or 75%, although 90-95% are sometimes employed.

[22] I started an Angel group with two other Founders, only to realize that, despite being supportive, one of them did not have the time to assist on an ongoing basis. After a number of uncomfortable discussions and threats that we would just shutdown and restart the business elsewhere, the individual conceded and renounced any claims of ownership.

[23] Vesting is the process by which an individual secures (or collects) more and more of some predefined rights as time passes. Four Founders could each be due 24% of the firm, having 2% vest each month they work, over the first year.

[24] When negotiation fails the next step is mediation. A mediator is brought in to help the negotiation by clarifying interests and expectations as well as providing an independent opinion on the strengths and weaknesses of the arguments. Failing mediation, an arbitrator who has decision-making authority, is selected by mutual agreement of all parties. Like a judge but with less formality, the arbitrator hears the case from each party and makes a final binding decision.

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g) Continuous monitoring of each team members' contribution by an independent and external arbitrator, who is given authority to redistribute a portion of the ownership stakes based on contribution, especially when one member wants to, or is forced to leave. (This is, in effect, one of the roles that a formal Board of Directors assume, with an ESOP at its disposal).

The choice of approach is influenced by the team's assessment of the likelihood of any of these internal events transpiring over the estimated time that it will take to secure investment.

A fourth internal event can arise when some investment is required by the Founders and they are not be able contribute equally. As discussed previously, valuation becomes an issue unless the investments are made as convertible debentures. Such unbalanced investment can also affect the voting adversely, unless supermajorities are in place. You don't want to create or force a situation in which one individual is squeezed out unfairly, but greed and power can raise their ugly head. Cap tables are used to display the breakdown of ownership or capital structure before and after an investment[25].

3) Operational/ Governance Issues

The third and final step is to discuss and document how the enterprise will be managed/ governed on a day-to-day basis. This includes assigning roles (and possibly titles) and responsibilities to team members and guidelines as to how decisions will be made. Again, once formal investment is received, these issues are overseen by the Board of Directors.

The vast majority of decisions are made by consensus after discussion, sometimes heated discussion, and compromise among the Founders/owners. At the next level, the default position is voting on the issue with a majority required to carry the day (based on the proportions of enterprise ownership). If, as is recommended, procedures are proactively documented, means to resolve tied votes and the requirement for supermajorities on more important issues can be incorporated, leading to smoother operations.

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[25] The capitalization structure or table, also know as a cap table, is a list of all the shareholders, the amount and type of stock, debt or convertible debentures that they each own and the associated voting rights. At each round of investment, the cap table is update to reflect the new ownership percentages. Prior to any investment, it is important to determine how it might impact supermajority voting, especially in cases where current investors or Founders are making a follow-on investment.

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Some of the more critical decisions that could arise and should be addressed in the documentation (similar to the Extraordinary items demanded by investors) include:

- Alterations to the ownership structure or the voting rules.
- Hiring, firing and the laying off of team members and employees.
- Salaries and non-arms length[26] payments to owners.
- Investment into the enterprise or selling of the business[27].
- Out-licensing technology or entering into partnerships with other businesses.
- Major capital acquisitions or financial commitments.
- Ownership of acquired and created intellectual property and intellectual property rights.

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When embarking on a entrepreneurial undertaking, the assembled team is always full of energy and driven by the opportunity as Steve Jobs said, “to make a dent in the universe” as well as reap the financial rewards for their risks and efforts. It would seem that nothing could go wrong, so why worry or prepare? Unfortunately, it is exactly in this new, complex and highly charged situation that issues and conflict can arise. The clearer the rules are as to how the enterprise will be governed upfront, the less time that will be spent debating and resolving conflicts. This, in turn, will reduce the significant risk of total enterprise implosion.

Take the time to discuss, negotiate, resolve and document ownership, intellectual property rights and ongoing governance at an early stage. They will form the foundation for future modifications and more formal documentation (i.e. a Shareholders’ Agreement prepared by a lawyer), when it is deemed appropriate.

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[26] An arms-length transaction is between two independent parties with no relation or no conflicts of interest. Having Founders decide the pay or bonus of one another would be non-arms length transactions.

[27] I have experienced a rare early offer to buy the firm outright, and more frequently an offer to make such a large investment by an investor that all control by the Founders will be lost. The dilemma, faced by the Founders (and sometimes their early investors), is whether to accept the offer or to refuse it on the basis that more value can eventually be extracted if the opportunity is worked a little longer. Such major decisions often split the team, based on their risk-adversity, personal goals and faith in the technology. Having a requirement for a supermajority, allows for a better hearing of all the concerns and a richer negotiation among the Founders as well as with the acquiring party.

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