How to Build Your Own Unicorn Stable

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Unicorn (*noun*)
A start-up company valued at more than a billion dollars, typically in the software or technology sector

Unicorn Stable
A successful start-up investment portfolio containing at least one (and preferably *more* than one) unicorn

The below article contains analysis of the key systemic success factors necessary for the start-up investors (angels and VC funds) to maximise their ROI performance and minimise their investment risks; and is intended primarily for the angels and VCs who are looking for a better and more predictable and dependable way of building *their own* Unicorn Stable.

1. What Makes a Successful VC Fund?

According to the billionaire PayPal co-founder Peter Thiel (see his book's "***Zero to One: Notes on Start Ups, or How to Build the Future***" chapter 7 "Follow the Money", where he discusses the success factors as they apply to operating the most successful VC funds), one of the major rules in life is that it is the small minorities that achieve the disproportionate results. The "Pareto principle" (a.k.a. the "*80-20 rule*") is one of the most-widely-known embodiments of this phenomenon, but in the investment world this principle is even more extreme.

In the business world, this is manifested by the monopoly businesses capturing more value than millions of their undifferentiated competitors; and on a closely-related note, the venture capital returns don't follow a "normal distribution curve" either, but instead follow a *power* law: a small handful of companies radically outperform *all others*, and attain exponentially greater value *than the rest put together*:
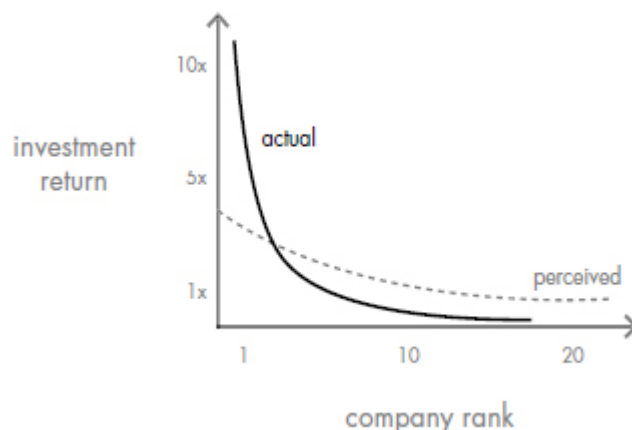
Peter Thiel's own Founders Fund illustrates this skewed pattern: Facebook, the best investment in their 2005 fund, returned more than all the others combined. Palantir, the second-best investment, is set to return more than the sum of every other investment aside from Facebook; and this highly uneven pattern is seen in all of their other funds as well.

"The biggest secret in venture capital is that the best investment in a successful fund equals or outperforms the <u>entire rest</u> of the fund combined"

This highly uneven pattern is mirrored in the rest of the industry: the overall Silicon Valley statistics is that 95% of the venture capital returns come from 5% of the deals (which means that what usually makes or breaks a VC fund, is *being in that 5%* (i.e. a fund containing *at least one* of those "5-percenters"), while the deal terms (e.g. early-stage valuation) matters relatively little because the wins are so disproportionate).

This has given birth to the saying "*You can only lose your money once*", implying that "if you *don't* invest in the *right* (i.e. the winner 5-percenter) start-ups, you lose your potential to make money many times over".

The picture is even more dramatic among the earlier-stage start-ups: as Jason Calacanis writes in his book "***Angel: How to Invest in Technology Startups—Timeless Advice from an Angel Investor Who Turned $100,000 into $100,000,000***": "*one of your two hundred investments will make 99.9-plus percent of your overall returns*" (by returning several thousand times the original investment).

Not surprisingly therefore, even the broadly diversified (with the hope that winners will counterbalance losers – or as Peter Thiel calls it "*the 'spray and pray' approach*") portfolios of investee companies "*usually produce an entire portfolio of flops, with no hits at all*"; and when those fail, most funds fail with them.

According to Peter Thiel:
- "*Even seasoned investors understand this phenomenon only superficially: they know companies are different, but they underestimate the <u>degree</u> of difference; and if they focus on diversification instead of **single-minded pursuit of the very few companies that can become overwhelmingly valuable**, they miss those rare companies in the first place*".
- "*Of course, no one can know with certainty ex ante which companies will succeed, so even the best VC firms have a portfolio. However, **every single company in a good venture portfolio must have the potential to succeed at vast scale**. At Founders Fund, we focus on five to seven companies in a fund, each of which we think could become a multibillion-dollar business **based on its unique fundamentals**".
- "*Whenever you shift from the substance of a business to the financial question of whether or not it fits into a diversified hedging strategy, venture investing starts to look a lot like buying lottery tickets. And once you think that you're playing the lottery, you've already psychologically prepared yourself to lose*".

So the key to running a successful VC fund lies in recognising those "top 5%" of the deals.

But how does one increase the probability of recognising *which ones* of the sometimes seemingly "crazy ideas" at seemingly "crazy prices" by people who seemed "too crazy" belong to that "lucrative 5%" group (so as *not* to miss out on those opportunities, *and* to reduce the amount of money wasted on the projects that have *little chance* of success)?

In other words, what are the signs that indicate a significantly-increased likelihood of a start-up being one of those "**5-percenters**"? What kind of business fundamentals (a.k.a. "success factors") make an industry-outperforming company capable of becoming **the next unicorn**?

2. The Optimal Business Proposition

As Richard Koch and Greg Lockwood have revealed in their recent book "***Simplify: How the Best Businesses in the World Succeed***", all companies that have drastically outperformed their industry peers, were either proposition-simplifiers or price-simplifiers, whereby:
- **Proposition-simplifying** involves creating a product that is significantly more useful, appealing and easier to use than what was available in the market before (e.g. Apple's iPod, iPhone and iPad; Google's search engine, Amazon, Uber, etc.), which then creates a large market that did not previously exist in the same form, or at all; and
- **Price-simplifying** involves cutting the price of a product or service in half or more (which resultantly multiplies the market size exponentially); the most important examples of it being IKEA, budget airlines, McDonald's, Ford, Honda, etc.

Out of the best winners studied in this book, the two *by far* the most successful companies in *the whole of human history* (and both of which now rank among the top 5 most valuable companies in the world), are **Google** and **Amazon** that outperformed their industry peers by a factor of 577,036x (1998-2015) and 16,448x (1995-2015) respectively.

3. The Optimal Business Type

Furthermore, in his recent Stanford University speech titled "**Competition Is For Losers**" (and his book "***Zero to One: Notes on Start Ups, or How to Build the Future***"), Peter Thiel also highlighted the importance of the innovation-based businesses having the right *structure* if they want to succeed, because in most industries the structure of the competition tends to prevent people from making profits due to the fact that most newly-developing industries usually end up with a large number of companies, all fiercely competing against each other, causing them to operate at a loss; and subsequently the vast majority of them eventually going out of business.

Unless the product's core idea is patentable in a way that *cannot* be effectively circumvented, the antidote to the otherwise-inevitable competition is for the companies: (1) to be highly scalable, and (2) to have a *structural* competitive edge over their competitors.

And on that note, according to Peter Thiel, there are only two broad categories of businesses in the entire history of the last 250 years where people have actually made money/fortunes from commercialising technological inventions: (1) software-based (because of the scalability), and (2) vertically-integrated complex monopolies (because that gives a *structural* competitive edge).

3.1. Scalability = Software

As Jason Calacanis wrote in this book **Angel: How to Invest in Technology Startups - Timeless Advice from an Angel Investor Who Turned $100,000 into $100,000,000**: "*there are two types of businesses in my world: insanely scalable ones and everything else*", and "*Scaling in my world means achieving a valuation of billions of dollars, which means making tens to hundreds of millions of dollars, which means my shares become worth a hundred, two hundred, or five hundred times more valuable.*"

Most businesses will not scale no matter how hard the founders work on them; and while a small minority of the brick-and-mortar businesses (e.g. Starbucks and McDonald's) have proven to be scalable, they've had to open tens of thousands of retail outlets over the period of many decades to reach their current size and valuation; and for both Starbucks and McDonald's it took more than 30 years each to reach the $10 billion valuation milestone.

But most of us don't have three or four decades to build our fortunes. We want to do it in five to ten years (which is a reasonable window if you do the right things right).

Software-based businesses, of course, have a major advantage over other types of business, in large part due to software's incredible economies of scale and very low marginal costs, making very high adoption rates possible (which is critical to capturing and taking over markets: if your company has a small market and the adoption rate is too slow, then there'll be enough time for other competitors to enter that market and compete with you, whereas if you have a manageable-size market and have a fast adoption rate, you can take over this market before a meaningful competition gets a chance to enter it).

This is one of the reasons why Silicon Valley has done so well; and why software has been such a phenomenal industry.

Given the above, as well as the fact that the initial upfront costs of software development tend to be relatively low compared to other types of businesses, it's not surprising that software has been so popular among start-ups during the last few decades.

And even though the vast majority of software start-ups eventually fail or don't amount to much, the fact that (1) a not-insignificant minority *do* produce a positive (or even significant) ROI; and there is this ever-present possibility of *some* of them becoming *wildly* successful – including becoming unicorns (albeit only in a very small % of cases), and (2) the amount of "capital at risk" is typically relatively low compared to non-software projects – this makes software start-ups popular among investors and VCs.

3.2. Structural Competitive Edge = Complex Monopoly

Given that there is *already* a huge number of software-based start-ups, it is the second (and much more rare) factor that can dramatically increase *both* (1) the **chances** of company's success, and (2) the **magnitude** to which the company will be able to grow: it is the **vertically-integrated complex monopolies** (*especially* when they create their own extensive ecosystems containing appealing products and services at attractive and/or affordable prices).

This is precisely what Elon Musk did with Tesla and SpaceX; and what highly successful companies like Ford and Standard Oil did well before that.

This is being done surprisingly little nowadays, but the reasons for this rarity are quite understandable:

First, vertically-integrated complex monopolies by their very nature are not as simple to create and manage as simple-vision / single-product start-ups. They also on average tend to be more capital intensive than single-product start-ups (*at least* in the early stages of their development).

Second, according to Peter Thiel, we currently live in a culture where "*it's very hard to get people to buy into anything that's more complicated and takes longer to build.*"

This can mean that investors, looking for companies to invest into, will have a tendency to "shy away" from the start-ups that have a more complex vision; and will opt instead for (what Peter Thiel calls) "*the 'spray and pray' approach*" of diversifying their investments among a large number of smaller simple-vision companies with the hope that profits from the small percentage of winners will more than offset the losses from the vast majority of money-losing investees.

This cognitive bias, however, can become a significant *advantage* for businesses (and their investors) who *intentionally* choose to pursue the "contrarian" complex monopoly route:

If a well-designed simple-vision / single-product company gets itself into direct competition with a well-designed complex monopoly company offering comparable product or service, the single-product company will lose *unless* they manage to out-innovate the complex monopoly company in a majorly meaningful way. One of the main reasons for that is because there can be a huge amount of internal synergy in a complex monopoly ecosystem, esp. in terms of reducing marketing costs and increasing revenue through repeat sales:

- Once a customer has bought one of the products from a company, the marketing cost of making *more* sales (of other products made by the same company) to that same customer diminishes dramatically.
- Furthermore, the bigger the size of the ecosystem, then *not only* the company owning it increasingly benefits from the "network effects", but also the more newsworthy it's likely to become, making it easier to get free publicity in the media. And if that product or service *also* addresses an acute public need, then the free publicity potential *really* skyrockets, all of which can *dramatically* reduce the marketing costs (esp. the costs of paid advertisements).

Given that at some stage in most technology start-ups marketing costs become the dominant cost factor, the above advantages, afforded by the complex monopoly structure, can become *decisive* for the company's long-term survival and the prospects of its future growth.

So, for the above reasons, a simple-vision / single-product company in most cases will be at a major competitive *disadvantage*, hence much less of a threat to a complex monopoly company.

And if the simple-vision / single-product start-up were to decide "to even out the odds" by adopting the complex monopoly route as well, they are likely to have significantly greater difficulty finding financial backers for their business plans (for the same above-detailed prevailing cultural reason of investors preferring "simple" propositions), hence the probability of such entity becoming commercially viable is greatly reduced.

In other words, this prevalent cognitive bias creates a *major* start-up funding market inefficiency that can be a *significant* competition-deterring factor, thus powerfully benefiting the *minority* of players who have managed to "immunise themselves" against this bias.

This "minimalism bias" issue is less prominent among VCs (who are a bit more comfortable and more used to "thinking bigger and more complex" than the typical early-stage investors). However, since the start-ups typically first have to go through the "friends, family & fools" and/or angel investor stage of funding before reaching the VC stage, this "minimalism" cognitive bias can act as a major obstacle standing in the way of those start-ups *ever* getting the necessary early-stage funding.

Consequently, if a good plan for building a complex monopoly business fails to take off simply due to the early-stage investors' discomfort with backing the idea of making something that's not overly simple and "straightforward", then that's the end of the story for them: these businesses will not get a chance to appear on the VCs' radar because they will fail to reach the stage of their development where they would have become big enough to get on the VCs' radar.

All of the above means that companies with good complex monopoly business plans who manage to secure the necessary investments, will have a *huge* competitive advantage (both short- and long-term) over their industry peers from the outset; hence a greatly enhanced probability of long-term survival and the growth magnitude prospects.

Another major reason why start-ups with complex monopoly plans are relatively uncommon, is because it's usually harder to come up with business ideas that could be developed into complex monopolies:

1. Most of the ideas can be developed into a single product but can't really be transformed or expanded into complex monopolies/ecosystems.

2. *Unless* a product has a *truly significant* competitive advantage over the competition, it can be *really difficult* for a single-product company to get to the point of *monopolising* their market (as opposed to "getting lost in the crowd" or getting mired in a costly war of attrition).

   More complex systems, on the other hand, can be made **exceptional** *simply* by assembling *intelligently enough* a number of (each individually) unexceptional components. Companies like Amazon and IKEA are not built on any one singular exceptionally brilliant product or idea, but instead are assembled out of a large number of good but not exceptional ideas that form a system that functions in a superior (compared to the competition) way.

   In other words, competition-crushing business innovation usually can be achieved *much easier* through intelligent assembly of individually-unremarkable components than through the invention of a brand new exceptionally brilliant and unique component, because what the customers *care about the most*, is what the company can *do for them* (which correlates with "how the system operates *as a whole*") rather than whether "there is a singular super-brilliant idea at the core of it".

   To put it another way: the two principal paths to business innovation are: (1) <u>unique ideas</u> and inventions, and (2) <u>intelligent assembly</u> of non-exceptional components; and out of these 2 paths, the latter is much more "replicable" (i.e. can be implemented more or less *at will*), while the former relies to a large degree on "luck" (of getting the "lightbulb moment" of coming up with a bright and unique idea). And of course, whenever these two models can be *combined*, they powerfully *amplify* each other.

3. And last but not least, most people (founders and investors alike) seem to lack the ability to think **comprehensively** and **systemically** *enough* (and also possibly the *courage* to think **big** *enough*?) that's necessary for being able to create the "big and complex" visions.

So all things (pros and cons) considered, **complex monopolies should be the preferred business structure *whenever possible***, because even though it takes more skill and oftentimes more money to get them going *initially* (than it does for a simple-vision / single-product start-up), the later-stage benefits are *so* bountiful (esp. in terms of increasing the long-term viability and the ROI and valuation), that it makes it definitely worth the extra effort. In fact, in most cases it would be a waste of time and resources to be *knowingly* doing *anything but* that!

4. The Optimal Combination

When the above-mentioned success factors of:

1. **Price-simplifying** and/or **proposition-simplifying**,
2. **Software**, and
3. **Complex monopoly**

are combined into the same company that *also:*

4. **Addresses a widely-spread acute public need** (as opposed to being "*a solution looking for a problem to solve*"),
5. **Creates its own extensive ecosystem**, *and*
6. **Has a clear and robust monetisation strategy**,

then the magnitude of such business' potential can be hyper-charged into something truly astronomical!

About the author:

Dr Gintas Vilkelis is a serial entrepreneur and inventor passionate about optimising the systemically-disruptive technologies and business models. He is now in the process of founding a medical technology company that has been designed to fully incorporate all six of the "success factors" discussed in the above article.