

GA-COURTENAY SPECIAL SITUATIONS FUND

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A VENTURE FRAMEWORK FOR THE INTELLIGENT INVESTOR

March 29th, 2024

“You have to keep learning if you want to become a great investor.

When the world changes, *you* must change.”

Warren Buffett, Berkshire Hathaway letter to shareholders, 2022¹

“The scientist can displace the economist – understand the future, and work for it!”

Georges Doriot, Manufacturing Class Notes, Harvard Business School 1937-1966²

“I have never helped to do anything at Berkshire that was as good as BYD – our \$232m investment in 2008 has soared in value by more than 30 times within 15 years.”

Charlie Munger, interview with CNBC, 2023³

“Over the years, Kleiner Perkins has been the most successful financial institution in the history of the world. There is a big difference between a good idea and a good idea that will make you a huge amount of money.. we’ve had returns of about 40% per year, compounded, for coming up on thirty years.”

Tom Perkins, co-founder Kleiner Perkins, interviewed in 2001⁴

“Being first mover doesn’t do you any good if someone else comes along and unseats you.

It’s much better to be the last mover – that is, to make the last great development in a specific market and enjoy decades of monopoly profits.”

Peter Thiel, Zero to One, Notes on Start Ups, 2015⁵

Introduction

We sit at a time of technological acceleration, at its fulcrum, the advent of the artificial intelligence “AI” era represents a universal technological shift, comparable in its breadth of impact to the spread of colour television and the rise of the internet. In each case, the emergence of the new paradigm influences the primary forces driving business growth and therein redefines selected of the *operating principles* for advantaged capital allocation.

In this white paper, we review the same adaptation that has proved optimal in prior technological shifts: integrating the selected and thoughtful use of a *Venture framework* while maintaining loyalty to the *first principles* that underpin the *Buffettian approach*⁶. It is by this route that this white paper provides a comprehensive methodology for identifying the “Googles” and “Amazons” of the AI era, and beyond.

The case of the internet is contended as a valuable guide, illustrating the challenges and opportunities faced by investors during a period of universal change. The emergence of businesses exhibiting unprecedented growth trajectories, a trend to monopoly, and a reliance on network effects challenged traditional capital allocation rule sets. Achieving the flexibility to adapt to this historic shift prioritised a *first principles*-based approach and thoughtful forward reasoning, at the same time as not abandoning the use of conservative principles.

To identify the investment allocations poised to capture each new technological era, investors must prioritise both *accurate information* and *accurate forecasts*. The Buffettian *first principle* of removing bias from information gathering and focusing on *simple and understandable businesses* remains crucial for obtaining accurate information. However, when it comes to making accurate forecasts in the context emerging technologies, the Lanchester Square Law and Metcalfe's Law emerge as additional guideposts.

The Lanchester Square Law, adapted from military theory to corporate strategy, provides a mathematical foundation for understanding and predicting outcomes in the market share battles that will define each era. It highlights the significance of numerical superiority and its translation into market dominance. Metcalfe's Law, on the other hand, dictates the exponential value growth of software networks as their user base expands, creating a positive feedback loop that compounds the effects of the Lanchester Square Law.

The white paper also contends the necessity for investment allocations as we enter each new era to possess “last mover advantage”, contextually a form of innovation-defence. In a rapidly evolving market it is the last mover, being the company which introduces the final significant innovation, which stands to reap long-term monopoly profits. The combination of the Lanchester Square Law, Metcalfe's Law, and last mover advantage has the potential to create unassailable business positions and generate decades of monopoly profits.

Finally, the white paper examines the importance of scalability and exceptional management within the *Venture framework*. By providing a comprehensive analysis, the white paper aims to equip the intelligent investor with the enduring insights and tools necessary to thrive as every new technological paradigm approaches.

1. At the commencement of a universal technological shift, the intelligent investor adjusts by incorporating a Venture framework into the Buffettian approach

1.1. The periodic focus on the investment implications of a universal technological shift is not a deviation from the Buffettian approach, it is instead embedded within its origin

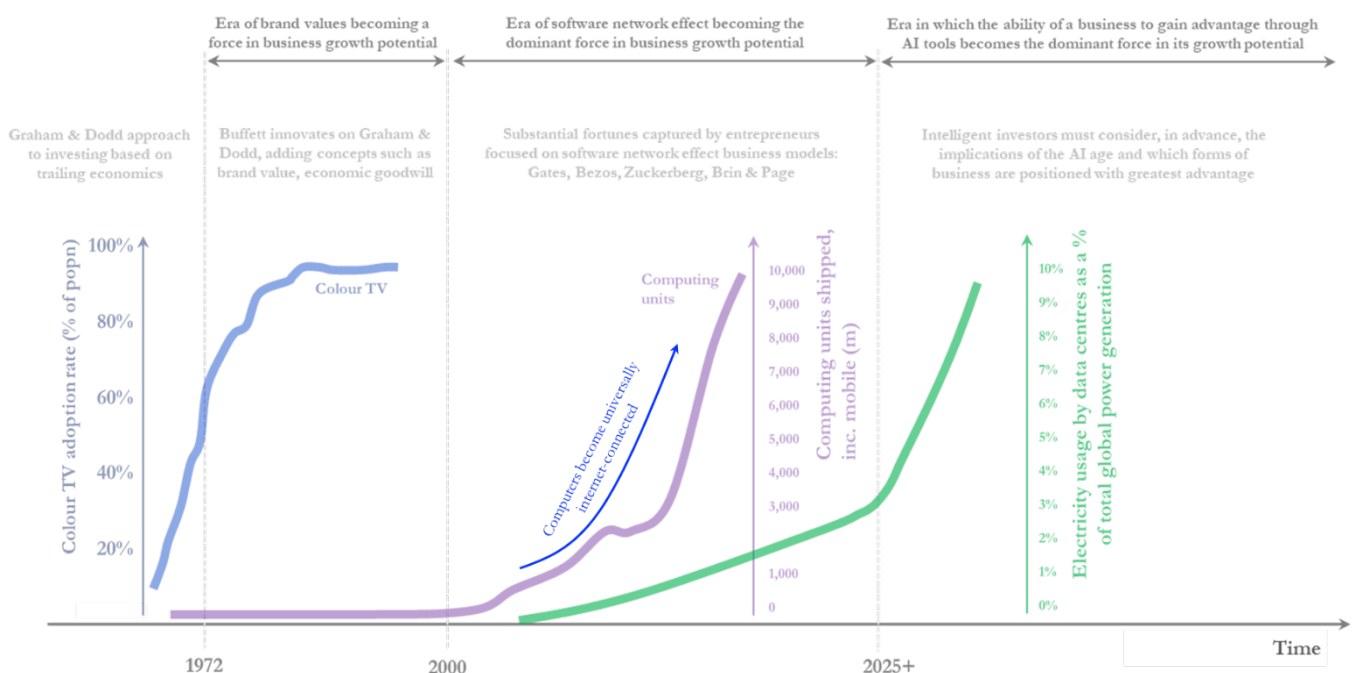
As detailed in Figure 1 below, there have been three main technological shifts over the last half-century. And in each case, the emergence of each new paradigm influenced the primary forces driving business growth.

Warren Buffett originated the approach we today refer to as *Buffettian*⁷ in the 1970s when he broke away intellectually from Ben Graham⁷. Recognising the transformative impact from the penetration by colour television of most households, Buffett adapted his capital allocation strategies. He placed a capitalised value on brands that could leverage television to expand from regional to national dominance, capturing value beyond Graham's focus on net assets. Buffett's distinction between "economic goodwill" and accounting goodwill was a key aspect of this new approach⁸.

However, the breakaway can also be contextualised in the context of Buffett recognising the properties of an emerging paradigm, which in the 1970s was the installation of colour television in homes nationwide, and adjusting his investment methodology by incorporating what this white paper refers to as the *Venture framework*. In this context our contention is that the periodic recognition of a universal technological shift leading to a change in investment rule sets is not a deviation from the Buffettian approach, it is instead embedded within its origin.

A second, and two-pronged, universal technological shift occurred in the 2000s. The colour television in every home shifted to first a desktop computer and then smartphones in every home, and this was co-incident with computing devices becoming universally internet connected.

Figure 1: Universal technological shifts influence the primary forces driving business growth⁹



Whilst Buffett avoided internet stocks, it is important to note that his disclosures revealed that this was based on his own self-awareness as to *his relative advantage*, and not because he rejected the requirement for intelligent investors to focus on the implications arising from universal technological shifts. Buffett stated in the Berkshire Hathaway shareholder meeting in 2017, “*we avoided the tech stocks, because we felt we had no advantage there and other people did, and I think that’s a good idea not to play where the other people are better.*”¹⁰ In other words, Buffett’s broad avoidance of internet stocks was led by the Buffettian principle to remain within one’s own circle of competence, and not to operate in areas which require the trust of outside experts.

1.2. Buffettian investors should seek to identify the “Googles”, “Amazons” of an emerging technological shift: the monopolistic gatekeepers with understandable, inside circle of competence, business models

However, Buffett’s public statements also reveal his acknowledgment that, had he identified areas within the technological shift where he could gain a deep understanding of emerging business models *close up*, or within his circle of competence, he should have incorporated a Venture framework during this period in the selected instances where the other aspects of the Buffettian approach still applied.

“What was our worst mistake in the tech field? I think we were smart enough to figure out Google.

Those ads worked so much better in the early days than anything else. We were their customer very early on with GEICO, for example. And so we were close up, seeing the impact of that.”

Warren Buffett, Berkshire Hathaway annual meeting, 2017¹¹

The observation that during times of widespread technological change, there is an intersection between the Buffettian approach and the Venture framework is further supported by studying those individuals who accumulated the largest fortunes during the internet era. In Google’s IPO prospectus, founders Larry Page and Sergey Brin, who followed a Venture framework, also incorporated elements of the Buffettian approach. This included creating a Google version of Berkshire Hathaway’s “Owner’s Manual” and quoting Buffett’s advice that management should not aim to “*smooth*” quarterly results¹². Likewise, the shareholder letters of Jeff Bezos, who led Amazon using a Venture framework, also reference other aspects of the Buffettian approach. Bezos even remarked about Buffett, “*he’s a hero to me, I read all his books.*”¹³

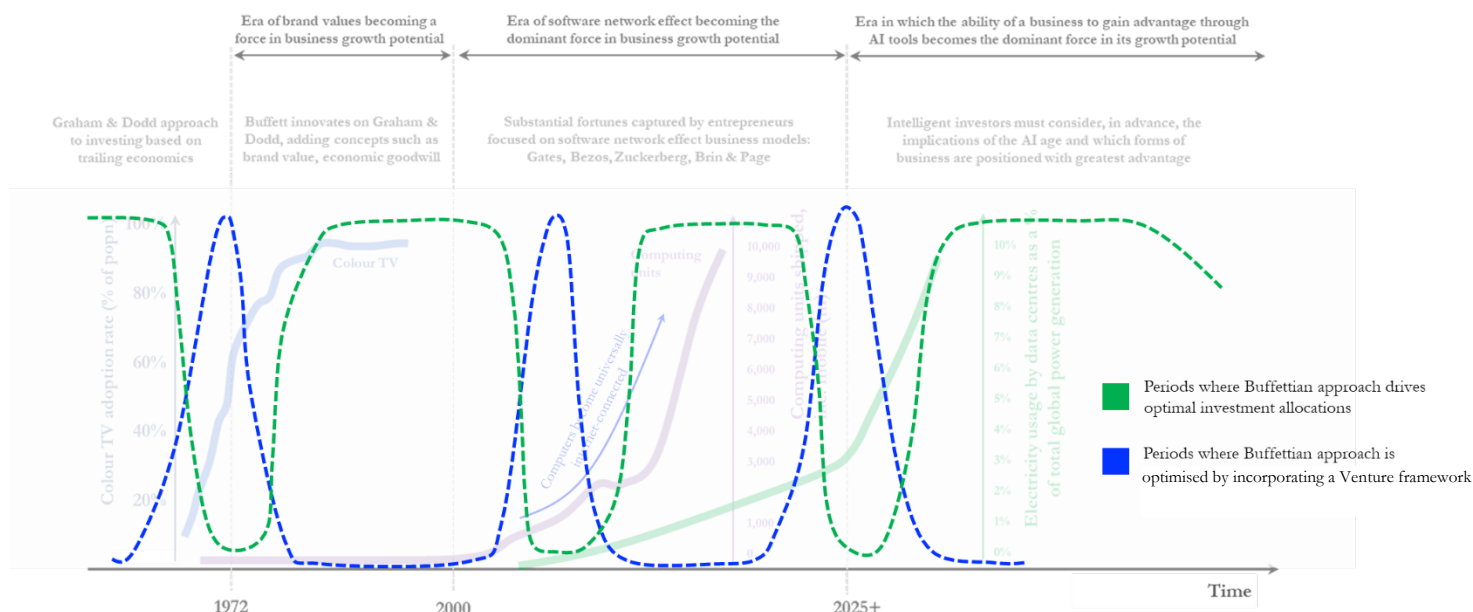
Buffett and Munger themselves can also be observed to be deploying a Venture framework in selected instances where they had achieved *an advantaged understanding of the business in question*. Examples include the Berkshire Hathaway investment in the convertible bonds of Amazon in 2002¹⁴, and in electric carmaker BYD in 2008¹⁵.

“I have never helped to do anything at Berkshire that was as good as BYD – our \$232 million investment in 2008 has soared in value by more than 30 times within 15 years. That’s a pretty good rate of return.”

Charlie Munger, interview with CNBC, 2023¹⁶

Today, our contention is that investors seeking to optimise the Buffettian approach must target similar adaptability by recognising that we are entering a new universal technological shift, the AI era. During this period, investors will gain advantage by incorporating a Venture framework into appraising opportunities where the *first principles* of the Buffettian approach, described in the next section of this white paper, are also met.

Figure 2: At the beginning of a universal technological shift, an intelligent investor recognises the paradigm that is coming, and adapts their approach by deploying a Venture framework¹⁷



1.3. The first principles that are the fundamental underpinnings of the Buffettian approach

The Buffettian approach is perhaps most commonly recognised in terms of its operating principles. These can be summarised as 1) the business must be simple and understandable without reliance on trusting outside experts, 2) the business must be valued in terms of the present value of cash return relative to cash outlay, with low conditionality to macro variables, 3) a dominant company with high returns on equity, with good governance and 4) a conservative financial position, the low risk of the business must correspond to low risk for its equity¹⁸.

However, in our appraisal the Buffettian operating principles are not reconcilable with investment advantage unless one understands their underlying drivers – the more elusive *first principles* that underpin them. Tellingly, even Buffett himself admits to broadly avoiding public discussion of these first principles, focusing his discourse on the more straightforward "*what*" in investing and rarely delving into the more elusive "*why*."

"Let your approach be misunderstood by outsiders. They can't compete with what they don't understand."

Warren Buffett, comments to Roger Lowenstein, *The Making of an American Capitalist*, 2008¹⁹

Nevertheless, it is the *why*, relating to the more elusive *first principles* of the Buffettian approach, that is the same set of first principles that must remain upheld when the Buffettian practitioner deploys the Venture framework.

"First principles – what that really means is you boil things down to the most fundamental truths. And it takes a lot more mental energy."

Elon Musk, Tesla and SpaceX CEO, comments on first principles, speaking in 2014²⁰

1.3. i) *First principle one: The investor's critical competitive advantage lies in access to accurate information. However, humans also pass on information with bias, and therefore investors must prioritise opportunities where information can be gathered independently of outside 'experts'*

"A lack of information can be dangerous. Competitively it can be disastrous.

*Proper information at the right time – at proper cost – accurately evaluated and used correctly..
is a tremendous competitive asset."*

Georges Doriot, Manufacturing Class Notes, Harvard Business School 1937-1966²¹

The core of the *first principles* underpinning the Buffettian approach is the recognition that humans often introduce bias into their communications, aligning with their incentives. As a result, much of the enthusiastic guidance provided by corporate management has limited value. For listed companies, which frequently generate more cash flow from issuing new equity securities than from core business operations, the incentive for biased communication is particularly high.

"I do not understand why any buyer of a business looks at a bunch of projections put together by a seller or his agent – it is naïve to think that that has any utility whatsoever. We are just not interested.

If we don't have any idea ourselves of what we think the future is, to listen to someone who is trying to sell us the business or get a commission on it and tell us what the future is going to be – it is very naïve."

Warren Buffett, Berkshire Hathaway shareholder meeting, 1994²²

"Many people think that if they just hire someone with the appropriate labels they can do something very difficult.

That is one of the most dangerous ideas a human being can have."

Charlie Munger, Berkshire Hathaway shareholder meeting, 1994²³

That the possession of accurate information is an essential component to competitive advantage also dictates the 'circle of competence' operating principle of the Buffettian approach, specifically that the investor should independently understand the facts and reasoning that relate to a *simple and understandable* business without reliance on outside experts.

The Buffettian approach consequently rejects the Venture framework *during most periods*. The rationale for this rejection is that *the majority of Venture framework situations, in most periods, do not occur within universal technological shifts* but rather in niche sectors. These niches often require investors to undergo a steep learning curve and rely on others for information, which is problematic in a market where information is inherently biased.

1.3. ii) *First principle two: Humans act with a gambling mentality. First principle three: Humans act with a herd mentality. These principles lead to recurring opportunities stemming from unintelligent security pricing.*

Two additional first principles that form the foundation of the Buffettian approach are that humans exhibit both gambling mentality and herd mentality. Gambling mentality refers to the willingness to wager on outcomes in situations with low predictive accuracy, and appears to be amplified when the possibility, irrespective of probability, of large payouts is suggested. By contrast, herd mentality, which is a decision-making process heavily influenced by the choices made by others, significantly increases under stressful conditions²⁴. This effect is further amplified when the group of humans being followed is also guided by an authority figure or concept.

“Investors behave in very human ways, which is that they get very excited during bull markets, and during bear markets, they just say this is a lousy place to be so they don’t care what is going on in the underlying business. It is astounding, but that makes for huge opportunity, just huge opportunity.”

Warren Buffett, lecture at University of Georgia, 2001²⁵

Both of these principles, when activated, appear to override the normal judgment of most humans in decision-making. In other words, under conditions that stimulate either or both of gambling or herd mentality, humans can become *unintelligent*. It is in these circumstances that the Buffettian investor takes action.

“The secret of life is weak competition.. in securities markets, if you have an IQ of 100 and everybody else has an IQ of 80, you are way better off than if you have a 140 IQ and all the rest of them also have 140”

Warren Buffett, Berkshire Hathaway annual meeting, 1998²⁶

The drawbacks that would otherwise arise in investment from the existence of these biases can be mitigated, in a reductive sense, by focusing on simple and understandable businesses (to overcome information bias) that have been unintelligently priced (due to a combination of gambling and herd behaviour). Additionally, employing a working method that broadly isolates the investor from the inputs of other humans (such as a provincial location, removal of stockbroker input, and emphasis on high-aptitude independent thought) are further Buffettian steps taken to address these issues.

As illustrated in Figure 3, the Buffettian approach argues that when its methodology is perfected, the resulting financial performance can be significantly enhanced to the point where it surpasses what might traditionally be described as Venture or growth-type investment. This is often exacerbated because most Venture investments will have already been priced at high valuations due to their capital requirements incentivising promoter activity.

Figure 3: Formulaic contention of the Buffettian approach²⁷

The growth of simple and understandable, yet advantaged, businesses,

plus **the additional shareholder return from instances of their undervaluation**

is, on average, greater than

The growth of promoted businesses

less: **the extent to which their promoted share price already discounts their growth**

less: **the failure of their growth to match the bias within its original guidance**

1.4. Buffettian first principles also result in the intermittent recognition of the Venture framework

The *first principles* of the Buffettian approach position Buffett as much as a social scientist as he is an investor.

However, the Buffettian approach also implicitly acknowledges an additional feature of the social sciences – the existence of the disruptive protagonist in new business emergence. By demanding a dominant company with high returns on equity, the Buffettian approach also accepts that weak businesses will be displaced by these disruptors. The Buffettian as such contends the Venture framework. As Bill Ackman puts it, “it happens”.

“Buffett talks about a great business like a castle surrounded by this wide moat. But you also have barbarians trying to cross the moat and steal the treasure. And it happens, Kodak for example.”

Bill Ackman, Pershing Square Capital Management, interview with Lex Fridman, February 2024²⁸

That the Buffettian approach implicitly contends the Venture framework also implies, as this white paper argues, that the *operating principles* of the Buffettian approach *during intermittent periods* may be subject to further optimisation by incorporating Venture framework principles.

These periods include those market circumstances where:

1. The breadth of the universal technological shift offers new avenues to address the Buffettian first principles.
2. The magnitude of impact of the universal technological shift also presents unusually high return scenarios.

In such circumstances, incorporating a Venture framework can further optimise the Buffettian operating principles.

1.4. a) The means by which a universal technological shift opens new routes for the Venture framework to address the Buffettian first principles

The Buffettian first principle of information bias dictates that investors should understand a business model's facts and reasoning independently, without relying on outside experts. This typically excludes niche technological cases where dependence on external experts is necessary.

However, when a technological shift is universal rather than niche, a number of businesses that benefit from the shift will still meet the Buffettian criteria of being simple and understandable. For example, Buffett's consumer-facing investment in Amazon illustrates that a business in a fast-growing internet sector with a tech focus can still be understood without reliance on outside 'experts' or potentially biased company guidance.

The second, albeit duo, of *first principles* of the Buffettian approach are that humans exhibit gambling mentality and herd mentality. Again, this normally rules out the narrow niche of technological cases which are typically coincident with promoter advocacy to take advantage of the gambling and herd mentality of market participants. However, when a technological shift is universal, the abundance of, or amplitude of impact of, information can overwhelm the volume which can be subjected to promotion. And this results in a sufficient frequency of investment opportunities where the Venture framework practitioner can also benefit from the market's gambling and herd behaviours.

Buffett likes to remind Berkshire Hathaway investors that his approach takes advantage of *unintelligent* market participant behaviour. However, unintelligence can also be defined by the market's failure to thoughtfully recognise and analyse emerging paradigms and their associated impact on the changes to operating principles that may be required. As such, the Venture framework also allows the thoughtful investor in these instances to follow Buffett's principle of acting only when they possess an intelligence advantage.

1.5. The Venture framework: a summary

Before delving deeper into the analysis provided by this white paper, it is instructive to review the Venture framework's fundamentals. The framework targets the capture of a leadership position in an emerging industry, and uses that position as a base to displace the economics from a large, incumbent player within the market.

The intermittent relevance of the Venture framework demands a study path dedicated to the selected pool of elite investors who have more consistently specialised in this area of investment outside of universal technology shifts. Our study of these investors concentrates on those who have extensively shared their decision-making processes publicly. These investors include:

- Tom Perkins, the founder of the venture capital firm Kleiner Perkins and arguably also the founder of the modern approach to venture investing.
- Masayoshi Son, the founder of SoftBank and who has achieved extraordinary success in selected venture investments, yet in others, also recorded a higher loss rate than other venture practitioners. As such, with Masa, there is a broader path of learning possible – not only from his successes, but also from his mistakes.
- Benchmark Partners, a Silicon Valley venture firm that remains active today and in many ways sets the most recent standard for venture investment, as alluded to in its company name.

The white paper will also review why the leadership attributes of the founder or CEO of the business matters more in circumstances where the Venture framework is applied than for situations suited to the Buffettian approach. The venture analysis focuses on judging both a business leader and the business, and emphasises "entrepreneur-picking" to almost the same degree as it does "stock-picking". This is unlike the Buffettian approach, which weights to a far greater degree the determination that the robustness of a business is within reason independent of its management team, and that has been priced unintelligently.

The Venture framework looks for the unique and highly skilled business leader who will oversee what will be a multi-decade campaign in displacing an incumbent. This leader needs to possess deep motivation, extraordinary self-belief, science/technical competency, excellent communication and marketing skills, combined with business mindedness in the pursuit of profit²⁹.

The divergence in the criteria which define the Venture framework relative to the Buffettian approach may explain why so few investors master both approaches in a co-incident manner. However, our contention is that not only are the *first principles* that underpin each approach consistent, but the rareness of the practitioner being able to master both approaches in a co-incident manner also results in a meaningful competitive advantage when achieved.

Figure 4: In instances of universal technological shift, the Buffettian approach and a Venture framework can become unified as adhering to the same set of *first principles* ³⁰



Figure 5: A study of the selected, elite investors (Tom Perkins, Masayoshi Son, Benchmark Partners) who have specialised in the Venture framework results in a productive set of learnings applicable during the current era of universal technological shift

“Over the years, Kleiner Perkins has been the most successful venture capital partnership. Well, I can go beyond that. It’s been the most successful financial institution in the history of the world.

We might have to modify that statements if the Medicis and the Rothschilds make their data available. But until they do, I’ll stand on that statement.

We’ve had returns of about 40% per year, compounded, for coming up on thirty years next year. Nobody else has done that well.”


Tom Perkins, co-founder Kleiner Perkins, interviewed in 2001³¹

“For the investment business we have an IRR of 44%.

I think in this scale of investment, compared with any private equity company or any venture capitalist, over the last 18 years, I have not known any other companies which beat this 44% compounded return on investment.”

Masayoshi Son, SoftBank, 2016³²

For Uber, a Quiet Investor Becomes a Sudden Thorn



Bill Gurley, Mitch Lasky, Eric Vohria, Matt Cohler and Peter Fenton outside of Benchmark's office in San Francisco.

The New York Times
article date: August 2017

Benchmark invested in Uber in 2011, putting in an initial \$12 million at a valuation of around \$60 million. (That stake is now worth more than \$8 billion.) Mr. Gurley, Benchmark’s most prominent partner, also took a board seat at the company. He has since promoted Uber on his blog, [Above the Crowd](#), and on social media.

“Over the years, Benchmark’s eight funds have paid out \$22.6 billion to investors. Its backers received a 1,000% gain – net of fees – over the past decade.”

Forbes article on Benchmark Partners, 2015³³

2. The counter-intuitive mathematical law underpinning the Venture framework


2.1. The properties of corporate battles for market share, and the Lanchester Square Law

Warren Buffett states, as per section 1.3, “let your approach be misunderstood by outsiders, they can’t compete with something they don’t understand.” His intention appears to be that whilst his public statements may reveal the *what* of the Buffettian approach, he does not make these statements in a way sufficient for most investors to derive the *why*, or the *first principles* underpinning his approach.

The Buffettian *first principles* – information bias, gambling, and herd mentality – may also remain elusive to most investors due to inherent human evolutionary programming³⁴, which limits our awareness of self.

However, at least one practitioner of the Venture framework, Masayoshi Son, has recognised an additional rigidity in human programming, and one that leads to a miscalculation by humans of the outcomes of modern corporate battles for market share. Unlike the Buffettian *first principles*, which are derived from social science, Masa’s recognition is derived from mathematics.

Figure 6: Masayoshi Son adapted the Lanchester Square Law to evaluate modern corporate battles for market share³⁵

 <p>Aiming High A Biography of Masayoshi Son ATSUO INOUE</p>	<p>According to Frederick W. <u>Lanchester</u>, the British engineer, a fleet with a strong force and a weak force must take different strategies. In this case, Son belonged to the latter. Breaking through from a single point of focus—it was a bold, yet meticulously thought out strategy.</p> <p>Generally speaking, if one aims to establish oneself as a major IT infrastructure provider, one should maintain neutrality. One should not patronize a certain brand or manufacturer. However, <u>Son adopted the ‘Lanchester strategy’</u> in which one concentrated one’s resources in a specific area within the shared battlefield.</p>	<p>“One of the persons I respect the most is Mr Lanchester, in mathematics.”</p> <p>Masayoshi Son, SoftBank CEO, Softbank annual meeting of shareholders, June 2018³⁶</p>
		<p>Lanchester’s Square Law³⁷:</p> $\text{Combat Strength} = [\text{Army Size}]^2 \times \text{Weapon Effectiveness}$

British engineer Frederick W. Lanchester, working in the early 20th century, developed a ground-breaking set of mathematical formulas to model and calculate the outcomes of military conflicts³⁸. The success of his formulas in battle commensurately revealed the intuitive error humans were previously making in battle outcome assessment. Conditioned by the vast majority of human evolution occurring over periods where hand-to-hand combat predominated, innate human programming judges battle outcomes as linearly proportional to army size. However, Lanchester’s insight was that since the development of projectile weapons, war fighting ability has become proportional to the square of the size of the army.

Masa’s perceptiveness was not only that the Lanchester Square Law also applied to corporate battles for market share, but additionally that humans were also innately misjudging these corporate outcomes as a result of our evolutionary programming still directing us to use linear thinking in such battle analysis.

Our comment: The Lanchester Square Law emerges because the ability of one army, in a projectile-based battle, to inflict a percentage rate of change onto the opposing army is not only proportional to its own size but also to the size of the opposing army, because as the opposing army reduces in size the same volume of projectile firepower applied to it has a larger percentage impact. This leads to an exponential increase in the advantage for the larger force.

And as the opposing force gets smaller, it not only loses its own ability to inflict damage but also becomes increasingly vulnerable to the firepower of the protagonist force.

Conclusion: numerical superiority is exponentially advantageous in battle scenarios

2.2. Lanchester Square Law dictates that a new market entrant is likely to succeed only with a completely new invention, not just an improved version of an existing product

The Lanchester Square Law dictates that in a monopoly market where the incumbent holds a 95% market share, a new entrant with a 5% share would need a product 9,000 times (i.e. 95^2 less $5^2 = 9,000x$) superior to the incumbent's to succeed.

Yet we find this is counter-intuitive to the modes of thought of humans: most in our experience would contend that a new entrant that had established a 5% market share and yet possessed a 5x advantage in product superiority would have reasonable odds of further success, even against an otherwise monopolist.

However, a 5x superior product is insufficient; only a ground-breaking innovation offering a customer advantage thousands of times greater than the incumbent's solution succeeds. As such, *a market entrant should not be attempting to grow by possessing a differentiated product within a new technology wave; instead the market entrant must have originated the technological wave as the monopolist.*

"The clearest way is to invent something completely new. If you build something valuable where there was nothing before, the increase in value is theoretically infinite.

A drug to safely eliminate the need for sleep, for example, would certainly support a monopoly business."

Peter Thiel, Zero to One, Notes on Start Ups, 2015³⁹

2.3. Lanchester Square Law also dictates that market entrants should target a small segment of an incumbent's position and grow from there

The Lanchester Square Law also dictates battle strategy. An assault that splits the enemy into smaller units gains a relative advantage at the exponential power of the reduced size of each separated enemy unit relative to the whole.

This strategy is represented by both Nelson's splitting of the Spanish fleet in the Battle of Waterloo as much as it is represented by Amazon's initial splitting of the retail market. Amazon initially focused solely on books, where its online model offered a vast selection in the millions, a ground-breaking innovation with an orders of magnitude advantage over the limited inventory of physical bookstores it competed against.

“Books were great as the first best to sell online because books are incredibly unusual in on respect – and that is that there are more items in the book category than there are items in any other category by far.

In the book space there are over 3 million different books worldwide active in print at any given time across all languages, more than 1.5 million in English alone.

When you have that many items you can build a store online that couldn't exist any other way.”

Jeff Bezos, Amazon founder and CEO, public domain interview, 1997⁴⁰

2.4. Lanchester Square Law dictates that the Venture framework should target businesses with “last mover advantage” products

That the Lanchester Square Law dictates a new market entrant will only succeed if it is able to deliver an entirely new innovation has a corollary implication: *the intelligent application of the Venture framework should also target businesses whose products exhibit “last mover advantage”.*

Last mover advantage exists when no new radical innovation seems possible. For example, one-touch ordering from smartphones or smartwatches, as is offered by Uber or Spotify, leaves little room for significant improvements, especially considering that voice ordering could easily be added by the existing market leaders.

When no further innovation appears feasible, last mover advantage is attained, and the Lanchester Square Law implies that the market leader is now unassailable. In other words, when a product's current form is indistinguishable from all conceivable future forms, the final significant advancement has been made, allowing the market leader to enjoy long-term monopoly profits.

Interestingly, public statements from both venture capitalist Peter Thiel and Warren Buffett both recognise the appeal of market leaders with enduringly homogenous end products, again highlighting a stronger connection between the Venture framework and the Buffettian approach than that which may be commonly recognised.

“A monopoly is only a great business if it can endure in the future.

You’ve probably heard about first mover advantage: if you’re the first entrant into a market, you can capture significant market share while competitors scramble to get started. But moving first is a tactic, not a goal.

[And] being the first mover doesn’t do you any good if someone else comes along and unseats you.

It’s much better to be the last mover – that is, to make the last great development in a specific market and enjoy years or even decades of monopoly profits.”

Peter Thiel, Zero to One, Notes on Start Ups, 2015⁴²

“I have always been attracted to the low cost operator in a business and, when you can find a combination of:

*(i) an extremely large business,
(ii) a more or less homogenous product and
(iii) a very large gap in operating costs between the low cost operator and all of the others in the industry,*

..then you have a really attractive investment situation.”

Warren Buffett, discussing GEICO, 1976⁴¹

3. Properties of the last universal technological shift: computers in every home, and mobile computing, rapidly become connected – the Internet era emerges

3.1. Ongoing price-performance increases, a function of the incentives resulting from modern political design, drive universal technological shifts in computing

Modern political systems incentivise the continuing development of productivity-enhancing technologies by *tying human monetary rewards to human productive output*, while prohibiting more primitive forms of resource gathering such as combat and unrestricted foraging.

The modern incentive for increased productive output thereon drives investments in computer processing, leading to improving computing price-performance.

Popular discussion tends to focus on the so called Moore’s Law – a contention that increasing throughput is driven by the *density* of transistors per microchip⁴⁴ – however, as of the 2010s and into the 2020s, the increases in density of transistors per chip has slowed due to physical limitations at small scales, such as heat dissipation and quantum effects⁴⁵.

However, despite the slowdown in the increases of transistor density per chip, the *incentive* for even higher computations per dollar remains. The result is that price-performance improvements appear to be accelerating⁴⁷, driven by the shift towards data centres that leverage parallel computing and multi-core chipsets unsuitable for desktop or mobile devices⁴⁸.

“Show me the incentive and I will show you the outcome.”

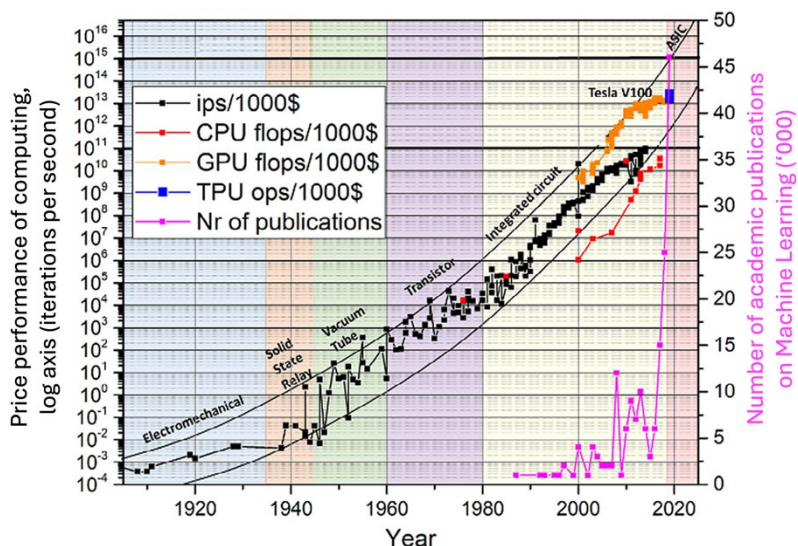
Charlie Munger, *The Psychology of Human Misjudgement*, 1995⁴⁶

3.2. Universal technological shifts occur sporadically, often decades apart, favouring those who understand the historical patterns of these shifts

Although computing price-performance has improved exponentially and consistently, the universal technological shifts themselves have been sporadic, frequently occurring decades apart.

The intermittency of universal technological shifts is likely due to a dependence on “breaking point” developments, where the accumulation of multiple innovations leads to a foundational breakthrough. For instance, recent AI advances result from the combination of increased computational power, improved neural network architectures, big data availability, enhanced algorithms, transfer learning (fine-tuning models trained on one task for another), and open-source software contributions⁴⁹.

Figure 7: An enduring exponential in price-performance of computation over the last 100 years (Y axis is log)⁴³



These cycles also often coincide with market and economic conditions. Innovations require significant investments, and investors' willingness to support new technologies can vary based on the economic environment. Additionally, the time needed for adoption and adaptation of new technologies contributes to the intermittency of these shifts.

However, the intermittency of universal technological shifts is also the cause of the lack of familiarity among most market participants regarding the optimal response, creating opportunities. Our contention is that the sporadic nature of these shifts will persist as a feature of human progress. Therefore, those who study the historical patterns of these shifts and are prepared to wait years, or even decades, for the next opportunity to act will have a lasting advantage.

3.3. Exceptional reasoning should be based on *first principles*, not rules

The internet's emergence exemplifies how thoughtful analysis and reasoning, applied as a new technological shift becomes apparent, can guide investors in adapting the Buffettian approach to the new paradigm.

The lesson is that rigidly adhering to Buffettian *operating principles* can hinder strong investment performance. Instead, investors should remain true to Buffettian *first principles*, which are based on enduring human characteristics. At the same time investors may need to adjust their *operating principles* to accommodate changes in the environment caused by universal technological shifts. In essence, *exceptional reasoning should be guided by first principles rather than rigid rules*, allowing for adaptability in operating principles while remaining grounded in social science, business and market fundamentals.

"When we become rule-driven we stop investing.

Exceptional means the exception to the rule."

Peter Fenton, Benchmark Partners, public comments⁵⁰

3.4. The internet era: rapidity of business growth, market leadership trends to monopoly, a low capex requirement, and a counter-intuitive re-prioritisation of the importance of the human herd

Our assertion is that the underlying dynamics of the internet companies – and their prior unseen rapidity of business growth, businesses which trend to monopoly, a low capex requirement, and a counter-intuitive re-prioritisation of the importance of the human herd – were indeed foreseeable early in the technological shift so long as one conducted thoughtful forward analysis and reasoning.

3.4. a) The internet's software networks reduced software replication costs to zero, replication speed to instantaneous

The transition from physical distribution of software using boxed CD-ROMs to internet-based software downloads or browsing reduced the cost of software replication to zero and made replication instantaneous. Consequently, software networks could achieve massive business values much more rapidly than traditional industries.

Figure 8: The internet era resulted in a change in the cost of software replication to zero⁵¹

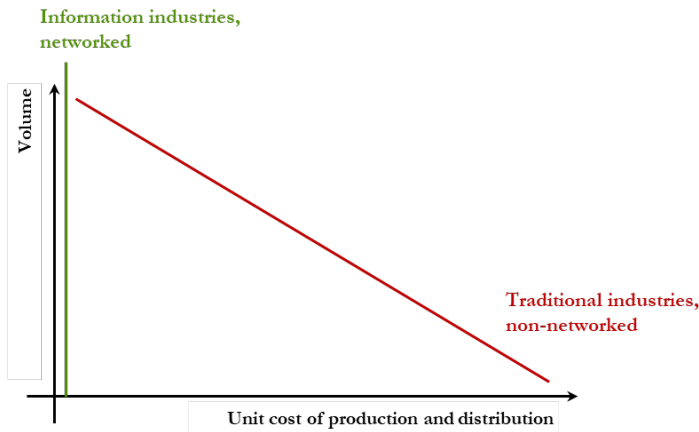
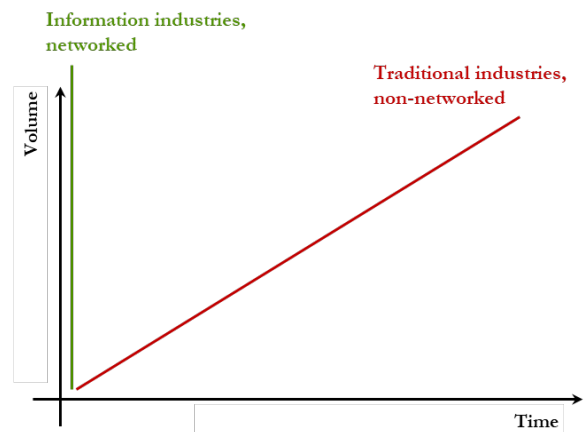


Figure 9: The internet era resulted in a change in the speed of software replication to instantaneous⁵²



3.4. b) The internet significantly expanded the number of businesses exhibiting network effects, where network value grows proportionally to the square of user count, leading to monopolistic outcomes

The internet also greatly increased the number of businesses that exhibited network effects, which occur in software networks and geographic density networks. These networks followed *Metcalf's Law*, stating that the network's value is proportional to the square of the number of its users⁵³.

Figure 10: The demand from customers to become a user of a network is proportional to the square of the number of users of that network⁵⁴

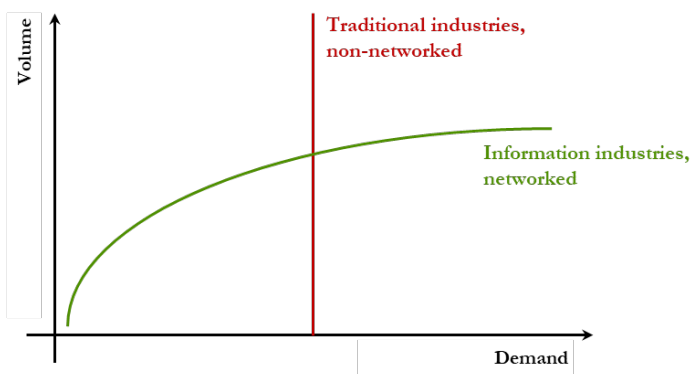
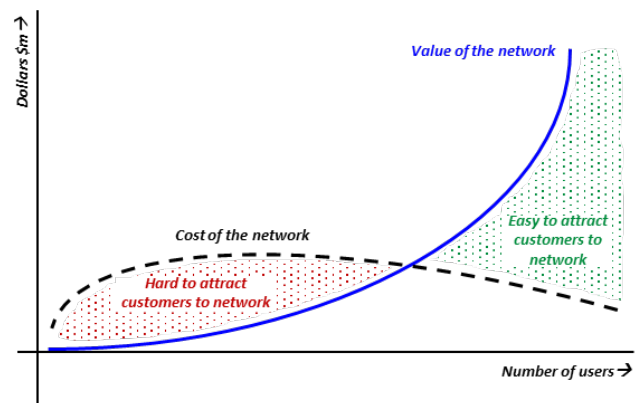


Figure 11: The per user monetisation is proportional to per user demand; as such the value of the network becomes proportional to the square of its no. of users⁵⁵



Our comment: Metcalfe's Law and the Lanchester Square Law act independently yet can also occur at the same time, compounding each other. When both laws apply, they further reinforce the unassailable position that a market leader can attain.

Mathematically, Metcalfe's Law is expressed as: Value of Network \propto (Number of Users)²

As the network grows, the value per user begins to surpass the acquisition cost per user, and the network begins to have a positive value that increases exponentially. This dynamic results in a positive feedback loop. Moreover, Metcalfe’s Law operates independently of, and compounds the effects of, the Lanchester Square Law. When both laws act in tandem, they further strengthen the unassailable position a market leader can achieve, potentially leading to decades of monopoly profits.

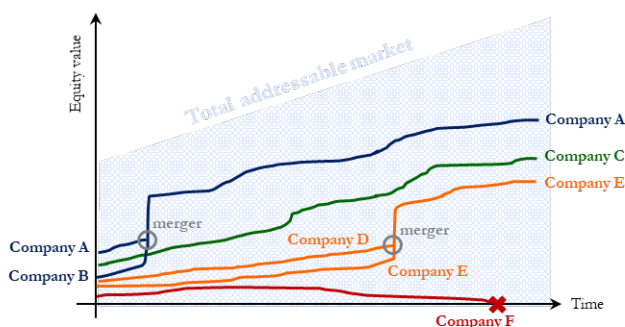
This relationship differed from the relationship between scale and the dominant industrial oligopolies before the internet’s emergence. For these more traditional industry business models, *negative feedback* became the primary force once a certain size was reached. Unlike software networks, traditional industries didn’t experience a change in customer demand proportional to the volume of their customer count. Moreover, without the benefits of zero cost and instantaneous replication found in software networks, these companies faced growth limitations due to the complexity of managing large enterprises.

Many investors likely failed to recognise in advance the different *end games* between internet-era businesses (monopoly) and traditional industries (competitive market) because they lacked a thoughtful, first principles-based analysis rather than relying on established doctrine. Consequently, investors who were able to identify these differentiations early on had access to highly lucrative opportunities.

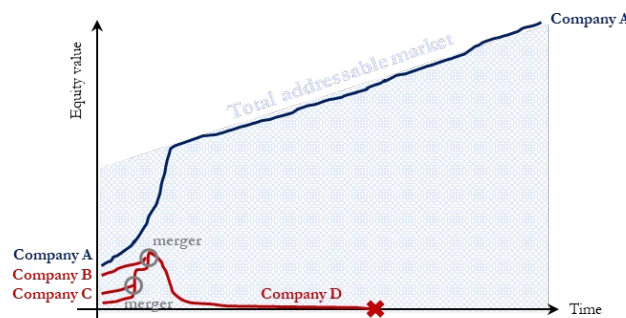
Figure 12: For traditional industries, whose business models exhibit negative feedback as they scale, the outcome is a competitive market⁵⁶

Figure 13: For networked industries, whose business models exhibit positive feedback as they scale, the outcome is a dominant monopolist⁵⁷

Traditional industries, non-networked



Information industries, networked



3.4. c) *The internet’s development provided a ground-breaking innovation yet that leveraged existing infrastructure, and therefore without requiring significant new capital expenditures*

The growth of internet businesses was further accelerated by the fact that customers only needed to connect their computers, which they were already familiar with, to existing telephone lines. This eliminated the need to purchase entirely new devices or learn how to use them. Moreover, since the software networks themselves also leveraged existing telecoms infrastructure, their growth required significantly lower capital expenditures compared to traditional businesses. So called Net Neutrality laws further exacerbated winner-takes-all outcomes.

3.4. d) Lastly, internet business dynamics led to an otherwise false proposition: the human herd's perception of a business became a relevant factor in determining the investor's own stance

The value of a network being proportional to the square of its user count means that achieving early user adoption is exponentially important, even when the network is still in development.

Early user commitment to a network may stem from relatively intangible factors, such as beliefs, expectations, or simply following others. However, if consumers anticipate a network becoming popular, it is in their best interest to become early adopters. The benefits of their early adoption will grow as the user base expands, which in turn funds the cycle of product improvement.

Conversely, if consumers expect the network to flop, regardless as to its actual merits, the network will lack momentum and lack of reinvestment, and the vicious cycle will take over, and expectations will be self-fulfilling.

The implication is that for software networks, success and failure were significantly influenced by the human herd's beliefs and expectations, and not just by the product's initial utility. This contrasts with the Buffettian approach, which emphasised thinking independently of others' beliefs and expectations.

“Any year that passes in which you don't destroy one of your best-loved ideas is a wasted year.”

Charlie Munger, interview with Becky Quick, 2024⁵⁸

Therefore, as the internet era emerged, it was crucial for Buffettian investors to recognise the increased signal value from the herd's early adoption of selected software networks, a significant departure from the traditional Buffettian approach.

The key insight was to identify networks that focused on attracting pioneering and influential users first, using this base to ignite a herd mentality or bandwagon effect driven by self-fulfilling consumer beliefs in the network's inevitable success. Early networks had to convince customers of their future dominance, and previous victories and an iconic brand name were crucial tools in this process.

Naturally, this observation about the herd's utility in networked situations did not invalidate the *general Buffettian first principle* that the herd is often unintelligent. Rather, it specifically recognised the value created by early-stage businesses specialising in software networks that attract the herd.

4. The dominant orientation of the Venture framework is a focus on the business opportunity with the potential to scale

4.1. The exceptional venture investment is that which targets a meaningfully scaled market

The venture business targets a scaled opportunity. As Tom Perkins puts it, “*there is a big difference between just a good idea and a good idea that will make you a huge amount of money.. so.. I’m saying.. opportunity is the thing you look for – scale.*”

“People say, how do you write a business plan?

My answer is, I can’t tell you; I can only tell you how we read one.

We start at the back, and if the numbers are big, we go to the front to see what kind of business it is.

[laughter]

So, I’m answering your question by saying *opportunity is the thing you look for — scale.*

In other words, there is a big difference between a good idea and a good idea that will make you a huge amount of money.”

*Tom Perkins, co-founder of Kleiner Perkins, interview by Sally Smith Hughes, 2009*⁵⁹

In an analogous manner, the venture entrepreneur who achieves extraordinary success will also be the entrepreneur who has obsessed over the opportunity with the *potential to scale*.

The result is another area of commonality between the Venture framework and the Buffettian approach. When assessing the potential to scale, the Venture framework also dismisses the “expert” view, noting that experts tend to be biased towards risk aversion when evaluating previously unrecognised opportunities. Experts are observed as prioritising protecting their reputation over demonstrating *true intellectual insight, temporal recognition, judgment, and experience*.

“Experts – who are they, where and how did they get their experience?

Experts will take no chance on their reputation. What can they really advise about?

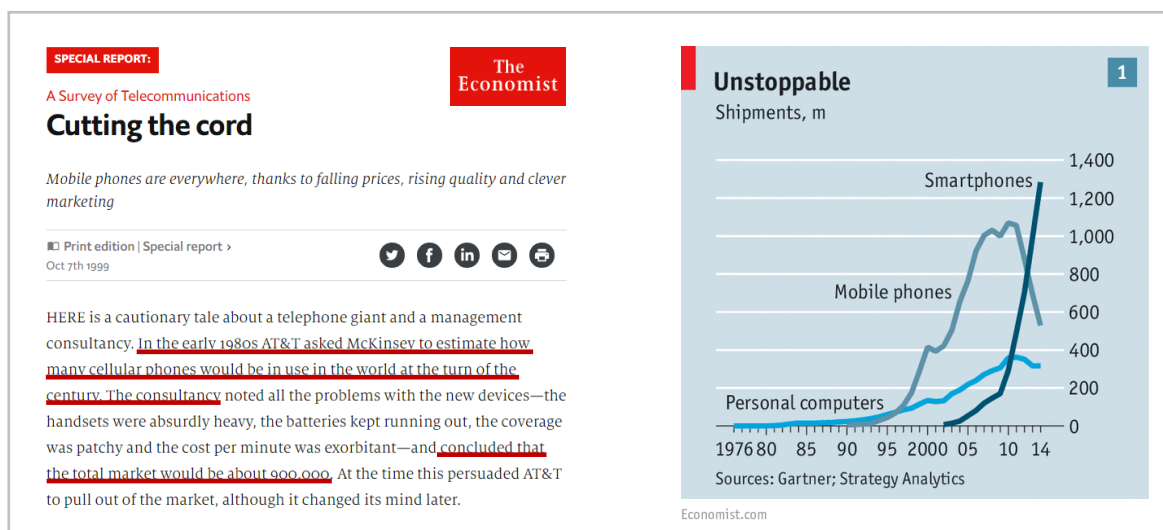
The answer is that experts can only advise about “what it is”. What they cannot offer is true intellectual insight, temporal recognition, judgement, experience, money, time, courage, patience, and faith.”

Georges Doriot, Manufacturing Class Notes, Harvard Business School 1937-1966⁶⁰

Consequently, the venture entrepreneur’s assessment of an opportunity’s scaling potential *will be differentiated*, as they must reject the “expert” view that is already ingrained in the assumptions of established incumbents.

Our contention is that the venture entrepreneur's differentiated perspective relating to scaling potential stems from recognising the presence of a self-reinforcing feedback loop that will both transform and significantly expand the market opportunity. In essence, *the expert's assessment is flawed because it erroneously assumes a static addressable market size instead of a market that evolves and grows throughout the product life cycle.* To put it another way, the expert prioritises data above reasoning.

Figure 14: Venture entrepreneurs differentiate themselves by recognising self-reinforcing feedback loops, leading to a future market outlook that differs from "expert" assessments⁶¹



4.2. For a business opportunity to exceed the growth implied by static conditions, a self-reinforcing feedback loop must exist to transform and expand the market

4.2. a) *The initial venture business design's disruption of an incumbent is just the first part of a positive feedback loop that further propels growth*

The expert's bias towards the assessment of a static addressable market size, rather than a market that evolves throughout the product life cycle, may also stem from an intuitive forecasting error humans make due to the majority of our evolutionary programming having taken place in simpler times. Using a superior weapon David *disrupted* Goliath. It was quick and it was over, and the victory captured a static opportunity: David was king.

However, such rapidity in mission completion is not seen in the growth trajectories of modern companies. Instead of being instantaneous, the process unfolds over decades: the initial venture business design's disruption is merely the first part of a positive feedback loop that continuously reinforces an ongoing and lasting displacement.

“Look for a product or business model which can come into a market and reshape and grow that market in the way that ultimately leaves the company in a position of competitive strength.”

Matt Cohler, Benchmark Partners, Silicon Slopes Tech Summit 2017⁶²

Figure 15: The path to Venture success is achieved when the initial disruption event forms the first part of a positive feedback loop which thereon successively reinforces an enduring and continuing disruption

“What we targeted was a business design that had a feedback loop, where as we change something, changing that thing is actually going to further draw in more customer behaviour toward our business.”

Jeff Bezos, Amazon CEO, public lecture, The Virtuous Cycle of Customer Centricity⁶³

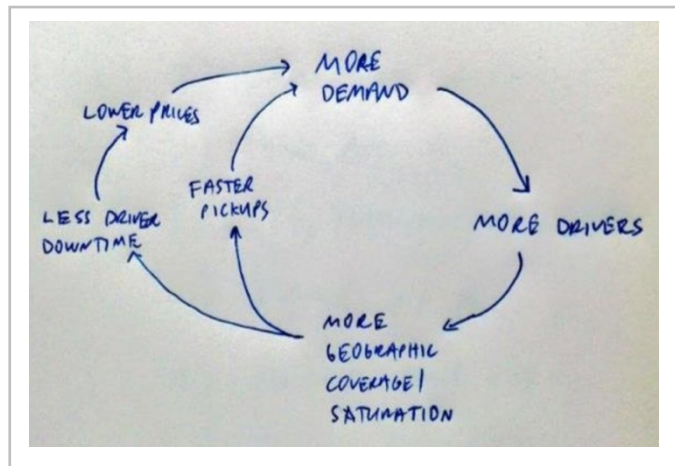
“Uber’s virtuous cycle – geographic density is the new software network effect”

David Sacks, Craft Ventures, on Uber’s virtuous circle, 2014⁶⁴

Figure 16: In 2001, Jeff Bezos scribbled onto the back of a napkin Amazon’s positive feedback loop⁶⁵



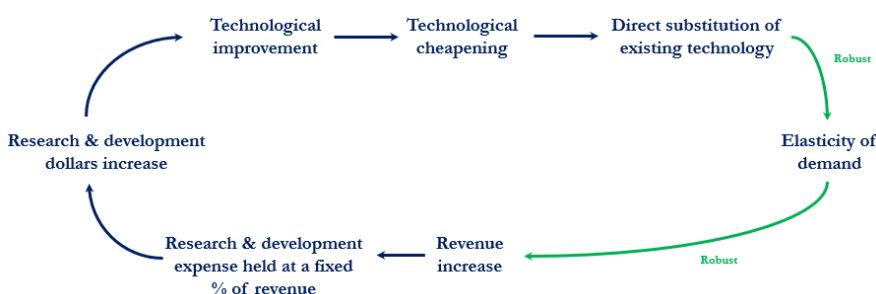
Figure 17: In 2014 venture capitalist David Sacks tweeted the following napkin sketch of Uber’s network model laying out the positive feedback loop of the ride hailing network⁶⁶



4.2. b) A robust growth trajectory for the Venture opportunity requires the displacement, by substitution, of an incumbent

For an innovation to transform and significantly expand the market opportunity consistently, regardless of economic cycles, it must leverage its superior attributes to displace an incumbent product. By reinvesting the revenues generated from this displacement process into continuous product enhancements, the innovation's attributes will consistently improve over time. This improvement cycle enables the product to expand its market opportunity in a robust manner, independent of economic fluctuations.

Figure 18: Venture opportunities achieve independence from economic cycles when their superior products displace incumbent offerings, and the resulting incremental revenue is reinvested in product improvements, further expanding the market opportunity⁶⁷



“The nature of the business we’re in is that we want to destroy the incumbents.. and we’re collectively aligned around being anti-authoritarian to destroy the incumbent.”

Eric Vishria, Benchmark Partners, 2022⁶⁸

4.3. Once a self-reinforcing feedback loop is established, a new law emerges: the probability of venture success is proportional to the scale of the business opportunity

Let's consider the qualities of the business orientation that the Venture framework targets:

1. The venture has brought to the market an entirely new innovation,
2. The venture possesses a monopoly on the innovation,
3. A self-reinforcing feedback loop exists which both changes and meaningfully grows the market opportunity
4. The market opportunity grows because the venture's innovation:
 - a) displaces, by substitution, an incumbent product, and progresses independent of the economic cycle, and
 - b) incremental revenues from displacement are reinvested into product improvement, and this both upgrades the product and grows the market opportunity.

Meeting these conditions implies that since revenues from displacing the incumbent provide the funding for the product's self-improvement cycle, the magnitude of product improvement is proportional to the magnitude of the business opportunity created by displacing the incumbent.

Figure 19: For a feedback loop business model, the duration of product improvement is proportional to the size of the displaceable market⁶⁹

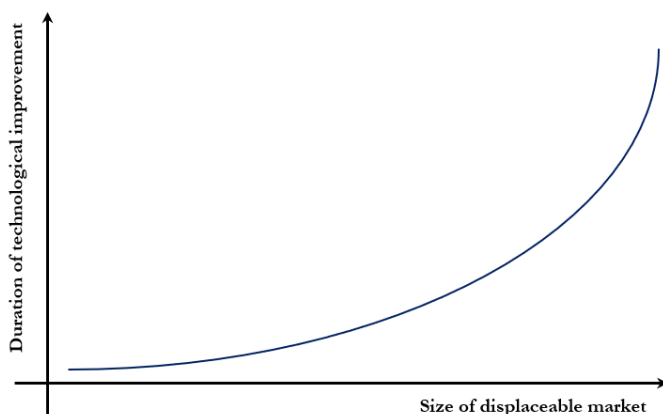


Figure 20: A correlation is observed between successful venture capitalists and their focus on the scale of opportunity

“All the capital in our portfolio is directed to companies with audacious visions seeking enormous markets.

If they succeed, their technology will be extraordinarily valuable.”

Peter Thiel,
Founders Fund, manifesto, 2017⁷⁰

Thereon, logic dictates that the duration of product improvement forecasts the magnitude of product improvement, and therefore, business success. A new law arises for venture opportunities under these conditions:

The probability of venture success is proportional to the scale of the business opportunity⁷¹

The implication for the venture entrepreneur is: pursue a big idea, as its success is as a function of the product improvement that the product will achieve over its lifespan. This also provides an unexpected additional principle relating to capital allocation strategy in the context of the Kelly Criterion, a formula which maximises allocation when both forecast accuracy and asymmetry are high⁷².

In situations where the Venture framework principles are met, forecast accuracy is also *dependent* on asymmetry (asymmetry being greatest for big ideas). Therefore, in Venture scenarios, the Kelly Criterion simplifies to the essence of the section title of this white paper: the primary focus of the Venture framework is on the business opportunity with the potential to scale.

5. The Venture framework demands an exceptional leader for the successful, enduring campaign to supplant established incumbents

5.1. The Venture opportunity requires an exceptional business leader

As introduced in section 1.5, the requirement for *an exceptional business leader* is a differentiation possessed by the Venture framework relative to the Buffettian approach due to the varying types of opportunities each targets.

“There’s some common patterns in breakthrough companies.

First is just an incredible, extraordinary, exceptional entrepreneur.”

Matt Cohler, Benchmark Partners,
Silicon Slopes Tech Summit 2017⁷³

“They say in the stock market, buy into a business that’s doing so well an idiot could run it, because sooner or later, one will.”

Warren Buffett,
interview with the FCIC 2010⁷⁴

The Venture framework focuses on emerging businesses led by individuals who have created and monopolised a new innovation, growing by possessing a positive feedback loop. However, the business leaders must still possess unique qualities to lead a multi-decade effort to displace established competitors. Thus, the Venture framework sets a high standard for exceptional business leadership.

Acknowledging the exceptional leadership and combatant quality required by the Venture framework reflects the understanding that these leaders will be engaged in an enduring campaign for market share, necessitating skills akin to corporate warriorship.

In a 2017 interview, journalist Takashi Sugimoto spoke with Tadashi Sasaki, co-designer of the world’s first microchip, former vice president of Sharp, and mentor to Masayoshi Son. Sasaki also transformed Sharp into a global electronics powerhouse.

Sugimoto: “As I was about to leave, Sasaki took out a magazine. It was an issue of Nikkei Electronics that carried a feature on SoftBank’s acquisition of ARM Holdings, with Masayoshi Son’s photo on the cover.

*Sasaki looked down on it and fell silent for a moment, and said, ‘**Masa will continue his fight, nothing has changed about him from the earliest days.**’*

*There was a glitter of pride in Sasaki’s 101-year-old eyes that he had helped shape what Son is today.”*⁷⁵

By contrast, the Buffettian approach focuses on established businesses with barriers to entry sufficient to defend against the business protagonism from such exceptional leaders, and which are priced unintelligently. *Competent* management is often sufficient, and as such the Buffettian approach does not require the same level of leadership excellence as the Venture framework.

“Poetry, unlike prose, expands our perception of the universe because of its breaking from the norms of discourse.

I love Wallace Stevens poems – and when you read his poems they slow down time. They expand your understanding of the universe in a way that changes it.

Great founders also slow down time. And when a great founder comes in, I felt this about Travis Kalanick, and even in his own way when Mark Zuckerberg presented the Series A when I was at Accel Partners - it has that ‘once you’ve seen it you can’t unsee it’ feeling, and it changes your eyes in a way that it is arresting.

I’ve done this job 25 years and for the founders that have been the manifestation of a great poem, I remember every part of the meeting, I remember even the smell of the coffee.

So why does time slow down? Well time doesn’t actually slow down, but you are recording more information – there’s something about a great entrepreneur for investors, where the slowing down of time, the expansion of awareness, and it’s the density of truth that that you feel in reflection on those moments.

It is rare. And I can spend unfortunately three years to four years and never feel that way. But then I remember meeting Nicolas Julia [founder of Sorare], and it is not only rare but it is weird because you know you are going to invest about three minutes in to the meeting, so it’s this is sort of strange sense of okay we have to do due diligence now and we have to ask good questions, but Nico expresses it in a way that’s so pure you just sit there and think ah okay well that probably won’t happen again for another five years so I should enjoy this moment.”

Peter Fenton, Benchmark Partners, interview by Jeannette zu Fürstenberg, 2022⁷⁶



*Benchmark Partners, 2014, three years after investing in Uber.
Peter Fenton sits on the left.*

5.2. The exceptional business leader is deeply motivated and dedicated to creating a best-in-class product that they believe can significantly improve the world

5.2. a) The exceptional business leader possesses an authentic, profound, and deep motivation, a purpose

Exceptional entrepreneurs possess “*a real sense of purpose and it is authentic, and it is usually not about them,*” as Peter Fenton notes. The entrepreneur leader's belief in their product's potential to better the world not only fuels their own motivation but also inspires the same throughout their company, including employees, customers, and financial partners, creating a shared sense of captivation and commitment “*if you're fascinated, I'm fascinated*”.

“Great entrepreneurs have a motivation that runs so deep that it feels insatiable. There is just a profound deep innate motivation.

That is infectious, it lets other people around them have that motivation, and you know how often I ask the question of a company – “what is the purpose and why are you doing this?”

And you would be amazed at how few entrepreneurs can readily answer that question, but the great ones can. They have a real sense of purpose, and it is authentic, and usually not about them.

Absent an iconic narrative of a different path, people fall back into what they know. It isn't pre-determined, there must be a hero's journey, so to speak.”

Peter Fenton, Benchmark Partners, speaking in 2023⁷⁷

“If there are no new entrants in the space arena with a strong ideological motivation, then we were on a trajectory to never be a space-based civilisation.

We need to inspire humanity, and this is also a way to inspire. The value of building inspiration is very much under-rated, no question. As we show that this is possible, and that this dream is real, it is not just a dream, it is something that can be made real – the support will snowball over time.”

Elon Musk, speaking in 2017⁷⁸

5.2. b) A relentless dedication to creating a best-in-class product aimed at making a positive impact on the world

The exceptional entrepreneur exhibits an obsessive commitment to developing a top-tier product with the potential to significantly improve the world.

“That was the theory that Steve Jobs had, he said the best way to reveal your love for the human species is to put your heart and soul into a product and give it to them.”

Brian Chesky, Airbnb CEO, quoting Steve Jobs, 2023⁷⁹

Realising exceptional product status is of course challenging, involves competition, and as such there will be a history of struggle by the venture leader to attain product superiority, embodying a type of corporate “hero's journey.”

The narrative of struggle preceding success not only validates the achievement of a superior product but also adds a magical, mystical allure, further captivating consumer interest.

Figure 21: Elon Musk’s example of sleeping at Tesla’s production line during critical times illustrates the exceptional entrepreneur’s focus on creating and upholding an iconic best-in-class product, combined with a theme of struggle before success⁸⁰



5.3. The exceptional business leader possesses remarkable self-confidence yet which is also calibrated to reality

5.3. a) The entrepreneur’s self-belief often emerges in tandem with tutelage under an iconic mentor

The exceptional entrepreneur gains wisdom from mentorship, including insights into competitive advantage, principles of social science, and truths derived from focusing on selected principles in mathematics and physics.

As such, when an iconic mentor with advanced knowledge imparts it to a young entrepreneur, it logically boosts the entrepreneur’s self-belief, which may appear as over-confidence but is actually well-calibrated confidence based on the knowledge acquired.

“It wasn’t until I got to Harvard Business School where I met Professor Doriot that I think the light really went on.

Doriot was an extraordinary man and I would visit him when I’d go to Boston. And we’d talk for hours, and so he was a big influence and then, just sticking on this mentor thing, the most important of all was Dave Packard and we can get into that a little later as we talk about Hewlett-Packard but it was the combination of all of that that made me think I really wanted to be an entrepreneur..

A young person needs a mentor, and I think an older man in a way needs a protégé. It’s a mutually beneficial arrangement that has gone on for millennia and I think it will continue.

So you’re lucky to have such older men that are willing to devote a lot of energy and time to bringing along younger people. I’ve tried to do that. Whether I’m as good as the ones I had I have no idea, but I’ve also spent time, doing that..”

Tom Perkins, co-founder of Kleiner Perkins, interviewed by John Hollar, 2011⁸¹

Takashi Sugimoto, regarding Masayoshi Son: "I thought this young man was somehow different from others, and I wanted to help him."

When SoftBank ran into financial difficulties soon after its establishment, Sasaki used his prestige to help Son secure a loan, calling a bank director and personally vouching for his young protege.

"I vouch for this young man called Masayoshi Son. I ask you to grant the loan. I can offer my retirement money and my home as collateral," Sasaki said.

Masayoshi Son: "Sasaki-sensei was my saviour, like my Buddha, because he believed in my future and supported me although I offered nothing in return.

I can say nothing, but lower my head for such pure kindness."

Profile of Takashi Sugimoto's tutelage of Masayoshi Son, Nikkei Asian Review⁸²

"He used to say to me – listen, you have the chance to change your life, your family's life, you could be something very special. Don't you want to be champion? You could be champion of the world.

And I didn't pay attention to it. But he kept on saying – really, you could be champion of the world, you could devastate the world. No man can take what you can take, you've just gotta believe it.

I looked at this guy, and then I started thinking – really, and I said, this guy is really crazy. But he said – he said you do what I tell you to do, and if it doesn't work, then you can leave. So I said ok – bet.

And so I did everything he told me to, and um, I won. I won every um championship, from the amateur championships, I won all the championships.. um, I am going to cry. So um, I won every championship, um [voice breaking up], that he told me, because, he told me what do to."

Mike Tyson on Cus D'Amato, 2008⁸³

From the perspective of the protégé, excellent mentorship can be also contextualised as their achieving of a much higher efficiency in acquiring the necessary information for success than that possible through trial and error.

This path to knowledge acquisition also reduces the need for the social skill handicap that can otherwise result from the protégé's social withdrawal needed to attain a similar level of scientific, technical, or business expertise. And as we shall see, it is in social interactions that exceptional business leaders must also excel, demonstrating outstanding leadership and marketing skills.

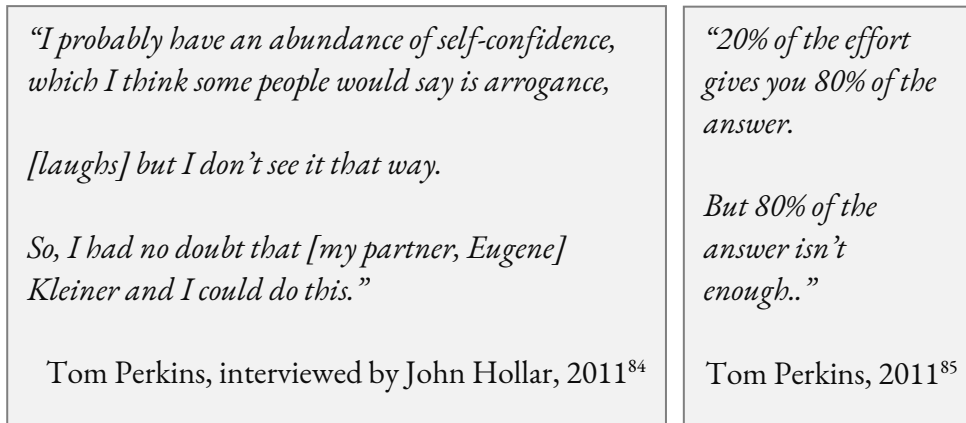
5.3. b) Extraordinary self-confidence, which manifests itself through a workaholic and fearsome personality type

The path of the successful venture entrepreneur, as described in section 4.1, begins with rejecting the "expert" view, which is already embedded in the assumptions of the target industry's incumbents, while seeking opportunities with the potential for unusually large scale.

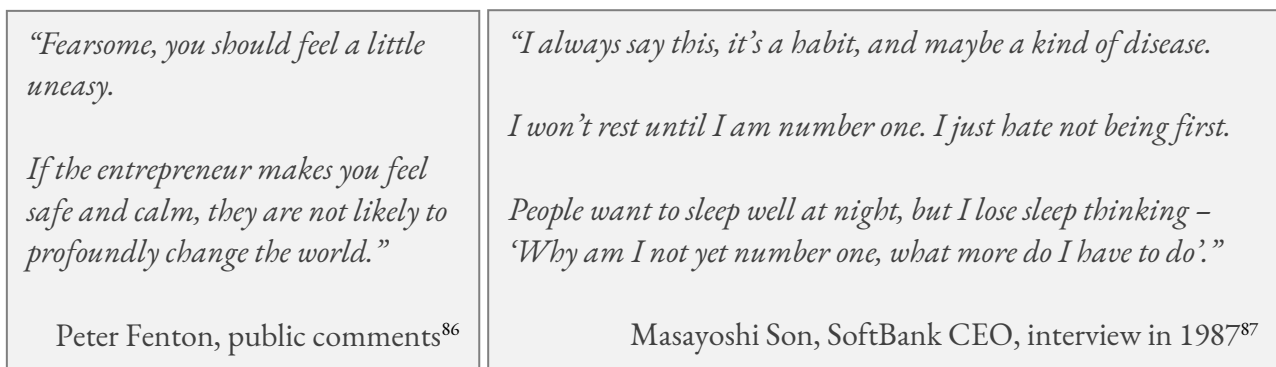
Therefore the venture entrepreneur will – simply by their initial position – be already making a highly confident stance that from a currently small position, vast scale can be achieved. This can seem over-confident to outsiders, however, from the perspective of the successful venture leader, it is a rational and accurate forecast.

To the extent the mentor and mother nature has gifted to the entrepreneur both this self-confidence and science/technical aptitude, these then provide for *rational workaholism*, that is, accepting a perhaps even unreasonable workload yet with the knowledge of a unreasonably impactful outcome.

Figure 22: Reality-grounded yet extraordinary self-confidence rationalises workaholism



Exceptional entrepreneurs also exhibit fearsomeness and indefatigability, attributes which stem from their combination of extraordinary self-confidence and workaholism.



5.3. c) The confidence of the entrepreneur remains reality-calibrated; with learning ability also retained

Exceptional entrepreneurs mitigate the delusional risk associated with high confidence by linking their confidence to first principles, most often related to the science or technical aspects driving their product’s competitive advantage, exemplified in the modern era by Elon Musk.

However the exceptional entrepreneur must not only have confidence that is calibrated to reality but also possess a personality type that enables them to learn dynamically as their venture navigates a potentially multi-decade path of displacing incumbents in an ever-changing world.

Figure 23: Elon Musk historically displayed seemingly excessive confidence, mocking BYD and dismissing SpaceX competition, but the course of time revealed his confidence was calibrated with reality

Betty Lui (Bloomberg news): There's competitors now, BYD, they're ramping a production of their electric vehicles and Warren Buffett owns 10% stake in that..

Elon Musk: Ha ha ha ha.

Lui: BYD is.. trying to compete with you, why do you laugh?

Musk: Have you seen their car? Ha ha ha

Lui: I have seen their car, in fact back at the Berkshire Hathaway meeting I saw their cars, why are you laughing?

Lui: You don't see them at all as a competitor? They offer a lower price point

Musk: I don't, I don't think they have a great product, I don't think it's particularly attractive the technology is not very strong and BYD has pretty severe problems in their home in China so I think they that their focus is and rightly should be on making sure they don't die in China

Elon Musk, interview regarding Tesla, 2011⁸⁸

Interviewer: There's the European Space Agency, Boeing, Lockheed Martin, the Chinese, the Russians

Elon Musk: You've listed a wide range of entities there and I think the differences are really divergent depending upon which one you're referring to

Interviewer: Well let me ask you this question, who is your competition?

Musk: We have no serious competition. And if you mean who is chasing us and who and has a serious chance of catching us, then, none that I am aware of either.

Elon Musk, interview regarding SpaceX 2007⁸⁹

Figure 24: The exceptional entrepreneur must also possess a personality type that enables dynamic learning in a changing world

"The problem with being a founder entrepreneur CEO is that your business is changing on you radically every year. So as you scale from 0-30 it is very different at 30 than it is at zero, and to 300 all over again and then at 3,000 all over again. And if you don't have that curiosity and ability to learn you can get left behind – the company will grow faster than your ability to grow with it.

So there is a common trait that we look for that I would call – ability to learn. And my partner Bob likes to say "be a learn it all, not a know it all". And being a "learn it all" means you have to be very self-effacing around what you do and don't know, apply critical thinking, and don't assume that what you have been told is right.

And that trait I think is a muscle that you need to continually work on and sometimes people lose that as they achieve success. They become know it alls, and they are full of advice, and one of the things we aspire to do in our business is accept humbly that we don't know a whole lot, but we do have the ability to learn quickly."

Peter Fenton, Benchmark Partners, the approach of great entrepreneurs is 'learn-it-all' not 'know-it-all,' 2016⁹⁰

5.4. The educational background of the exceptional business leader is science/technical

“The scientist can displace the economist. It is the man who understands the future that is the man who will move up. I repeat – the man who moves up is the man who sees the future and works for it!”

Georges Doriot, Manufacturing Class Notes, Harvard Business School 1937-1966⁹¹

The exceptional business leader in almost all cases also has a science/technical background while maintaining excellent social interaction skills, which a technically focused early life might typically hinder.

The early life of Tom Perkins provides an instructive case study of the uncommon set of conditions by which a strong technical ability, normally co-incident with social withdrawal, can instead achieve a path of leadership in social situations. In Perkins' case it was his rarely seen combination of technical interest, business instinct, and yet with natural sporting talent.

“I was not in any way athletic in high school, quite the reverse. I was the guy that always knew the answers to the technical stuff but didn't get invited to the parties. But in the early days of television, you could buy a kit and build your own set. I was good at putting those things together and selling them for a profit. So I built kit television sets to sell to neighbours and friends, and I also enjoyed my own little experiments in physics, in my tiny little laboratory in my closet in my bedroom.

And when I arrived at MIT, the first weekend I was there, I tried out for the swimming team, and in the tryout I nearly broke the pool record. So of course the coach insisted I became captain of the team, and I swam for four years at MIT. I went from being a nerd in a school of jocks to a jock in a school of nerds, which was pretty amazing [chuckling]. So it changed my life.”

Tom Perkins, co-founder Kleiner Perkins, interview by Sally Smith Hughes, 2009⁹²



5.5. The exceptional business leader also excels at communication, attracting top talent to their venture

As such the rare mix of skillset observed – deep motivation, self-belief, and a science/technical background, is combined with social expertise. And it is the use of communication, at the outset, that is the critical social tool used to attract highly talented professionals to join the emergent venture.

This requirement is in the context that it will most likely not be clear that a role joining a then small, and normally within a science/technical-based venture, would compete with the social benefits that will also be accessible to highly talented professionals who instead elect to join larger firms. Yet the exceptional business communicator will be able to convincingly convey to counterparties, be it prospective employees, finance partners, or customers, as Huey Lewis sung, *it's hip to be square*.

“Ultimately, people can and will be drawn in by the recognition of technological advantage.”

Georges Doriot, Manufacturing Class Notes, Harvard Business School 1937-1966⁹³

A further attribute is required. For the exceptional entrepreneur to attract an outstanding team that uniquely strengthens their own abilities, the entrepreneur must possess a rare combination of both humility and courage. The humility to acknowledge their weaknesses and the courage to select individuals who complement those weaknesses. Having already taken the high-risk decision to embark on a venture project, bringing in people who may be superior to the entrepreneur in certain areas requires not only great self-awareness but also bravery.

“The word team must have a superior positive meaning.

The weak connotation of levelling down to the lowest common denominator, of hiding deficiencies – must be rejected.”

Georges Doriot,
Manufacturing Class
Notes, Harvard
Business School⁹⁴

“It is not as simple as build a great team, great entrepreneurs need to find complements. So if you look at yourself and you reflect on your skills and your talents and your unique abilities, you will see – everybody has their gaps. I learned this from some great entrepreneurs, who were really very different, but each of them found a complement in other people, that allowed them to be more of who they are.

And so – acute self awareness reveals what you need in your partner, and I think that self awareness is humbling because you have to admit what you are not great at, and you have to play your game.

The great entrepreneurs figure that out, that is what Steve did at Apple, with Tim Cook, a person that really balanced the stuff that he wasn't great at, so he could be obsessive about the stuff that he was.”

Peter Fenton, Benchmark Partners, interview with Semil Shah, 2013⁹⁵

When evaluating the team-building qualities of an exceptional entrepreneur, venture investor Peter Fenton also suggests that the investor should feel such a strong sense of iconic magnetism to the entrepreneur that they could theoretically be persuaded to join the venture themselves. This level of attraction serves as an indicator that the entrepreneur possesses the necessary charisma and leadership skills to attract and retain top talent for their venture.

“I think it's always useful to say – is there some part of me that would quit what I'm doing right now to go work with this person, and if the answer is no, you probably shouldn't invest [in the venture]”

Peter Fenton, Benchmark Partners, interview with Logan Bartlett, 2023⁹⁶

The final necessity to building the outstanding team is *retention*, requiring a recognition by the business leader of the conditions that result in loyalty. As Perkins highlights, world class people in a technical area need to be treated extremely well, and in an atmosphere that is better than any university laboratory.

“There needs to be an understanding that to do world class work you had to have world class people and treat them extremely well, and create an atmosphere that was better than in a university laboratory.”

Tom Perkins, co-founder Kleiner Perkins, interview with Glenn Bugos, 2001⁹⁷

5.6. The exceptional business leader is also a brilliant, high energy, marketeer

In today's increasingly networked economy, achieving early adherence is crucial for entrepreneurs. Having the best product alone is insufficient: entrepreneurs must also excel in marketing, including building the strongest brand. The software network age has significantly amplified the importance of marketing in ensuring a venture's success.

“Dave Packard came back, and he had a fit. He said, ‘Look, the way you get market share is you build the best product you can build, and you’ll get the market share.’

Well, you know, it doesn’t quite work that way, but anyway.

I think I originated the joke at Hewlett Packard that if we were in the sushi business, we would advertise it as ‘cold, dead fish’

[laughs] So I just changed everything. And I got full support from Dave Packard too.”

Tom Perkins, interviewed
by John Hollar, 2011⁹⁸

“This is a very complicated world it's a very noisy world and we're not going to get a chance to get people to remember much about us, so we have to be really clear on what we want them to know.

One of the greatest jobs of marketing that the universe has ever seen is Nike. Remember, Nike sells a commodity – shoes.

Yet when you think of Nike you feel something different than a shoe company as their ads don't ever talk about their products. They don't tell you about their air soles, why they're better than Reeboks air soles.

Where Nike is doing their advertising is they honour great athletes and athletics – and that's who Nike are and that's what they are about.

Apple is about something more than that Apple as well. Our core value is that we believe that people with passion can change the world for the better. And we believe those people that are crazy enough to think they can change the world are the ones that actually do.”

Steve Jobs, Apple's Think Different campaign, September 1997⁹⁹

A strong understanding and implementation of branding is necessary. In previous white papers we have reviewed that the criteria for excellence in branding is achieved by the possession of four 'super brand' attributes: 1) the communication of a compelling message at low cognitive load, 2) an authentic claim of primacy in performance, 3) brand values conveying aspirational beauty through a noble mission, calling, or purpose, and 4) the potential for above average growth by the marketing process itself also embedding a process of positive feedback.

“[The super brand should precipitate amongst its customers] something like an autocatalytic reaction in chemistry, precisely the sort of multi-factor triggered lollapalooza effect we need.”

Charlie Munger, Practical Thought About Practical Thought, 1996¹⁰⁰

Exceptional business leaders thereon employ a high energy marketing strategy that includes public 'stunts', leveraging their energy and media savvy to achieve advantageous economics. This approach, arguably pioneered by Richard Branson, frequently garners front-page news coverage. Not only does this result in highly efficient marketing, but it also leaves a more memorable impression on consumers compared to the more mundane strategies employed by peers.

“I once [1994] drove a tank into Times Square — before 9/11 that is — and we had ‘pyrotechnics up’ the Coca-Cola sign the night before without telling anybody ... the tank sort of went onto the sign ... it looked like the whole thing blew up when we ‘fired’ the tank and the police didn’t look too happy.”

Richard Branson, founder Virgin Group, speaking to CNBC in 2017¹⁰¹

Elon Musk, a modern archetype of an exceptional entrepreneur, has employed similar 'stunt'-based marketing, such as launching a Tesla car into space in 2018 with the words "Don't Panic" from Hitchhiker's Guide to the Galaxy displayed on the dashboard. The entrepreneurs combine humour, shock value, and physical stunts to maximise attention. As per figure 26, Musk has also provocatively chosen the lettering sequence for Tesla's first three cars, comparable to Branson's use of the provocative 'Virgin' brand name.

Figure 25: In 1994 Richard Branson launched Virgin Cola with a stunt driving a tank into Manhattan, and a ‘pyrotechnics up’ of the Coca-Cola sign¹⁰²



Figure 26: Elon Musk targets stunts in marketing: a Tesla car is launched into space; Tesla also letters its cars using a provocative marketing approach¹⁰³



Elon Musk @elonmusk
 Model 3 was going to be called Model E, for obvious dumb humor reasons, but Ford sued to block it, so now it is S3X. Totally different :)
 2:26 PM · Mar 24, 2017

Brian Chesky, the co-founder of Airbnb, exemplifies another modern-day entrepreneur who has employed attention-grabbing stunts, albeit with less bravado than Branson or Musk. One notable example is Chesky's floating of a 70-tonne, two-bedroom house down London's River Thames to promote Airbnb's unique accommodations.

And of course Steve Jobs not only delivered excellence in branding and advertising but also mastered the concept of the stunt publicity event. Jobs' signature approach involved a publicly broadcast presentation showcasing each breathtaking new product, a format that has since been widely mimicked across the technology industry.

Figure 27: Brian Chesky floats a 70-tonne, two bedroom house down the Thames in Airbnb marketing stunt¹⁰⁴

70-tonne, two bedroom house floats down the Thames in Airbnb stunt

Words Rob Alderson
 18 May 2015



Figure 28: For Steve Jobs, the stunt was the product launch show, now mimicked (albeit with some of the magic lost) across the tech industry¹⁰⁵



5.7. Exceptional business leaders prioritise early profitability as business-minded protagonists

Lastly, exceptional entrepreneurs are business-minded, understanding the importance of prioritising early profitability. This recognition can be seen as evidence of their deep motivation: a mission of such vital importance cannot afford to rely on the kindness of strangers within the financing cycle. Therefore, the venture must prioritise becoming self-funding as quickly as possible.

“The only reason to make any investment is to make money, period, full stop. And with a sense of urgency to get on with it, to get it done, do it quickly, do it efficiently, with a full understanding of the importance of the bottom line. All companies should have that, but some are pretty casual about it.

This is where I entered the picture. I never apologised for the urgent need to make a profit, to get on with it, and commercialise these ideas.”

Tom Perkins, co-founder Kleiner Perkins,
interview 2001¹⁰⁶

“Think about the biggest winners in venture: Amazon, Google, Facebook, Apple, go down the list, Uber, Stripe.

Every single one of those companies, before they took branded venture capital, was working.

You know Amazon was doing 20 plus million in revenue, you might say okay it's tiny, but it was working it was up and running.

If you look at the winner's circle the top 10 venture investments ever, they were all up and running and working, not threatened.”

Peter Fenton, Benchmark Partners, interview with
MIT Venture Capital & Private Equity Club, 2021¹⁰⁷

(white paper continues on following page)

Conclusion

History has shown that universal technological shifts – the advent of colour television, the internet, and now AI – redefine selected *operating principles* relating to optimal capital allocation. This white paper has argued that at the onset of these shifts the intelligent investor must consider the merits of a thoughtful forward analysis, the linked recalibration of their approach, and integrate a Venture framework into what will remain the underpinning Buffettian *first principles*, and at an agility sufficient to capitalise on the shift at hand.

The case of the internet provides valuable insights. Here, investors faced a new breed of businesses that exhibited rapid growth trajectories, a trend towards monopolisation, and a business path dictated by network effects, challenging traditional valuation models. Achieving the flexibility to adapt to this historic universal technological shift demonstrated the importance of a *first principles* based, rather than rule-based, approach.

To identify those investment allocations today that stand to capture transformative economics in the AI era, both *accurate information* and *accurate forecasts* are required. For accurate information our advocacy is to prioritise the Buffettian first principle of removing bias from information gathering by focusing on *simple and understandable* businesses. However, for accurate forecasts relating to the AI era our contention is that it is the Lanchester Square Law, and Metcalfe's Law, that become additional and necessary guideposts.

The Lanchester Square Law underpins a successful implementation of the Venture framework. Adapted from military theory to corporate strategy, Lanchester Square Law provides a mathematical foundation for understanding and predicting outcomes in the market share battles that will also define the emerging AI era. In this context, the Lanchester Square Law underscores the importance of numerical superiority, which translates into market share dominance.

By comparison, Metcalfe's Law dictates the value of a software network as proportional to the square of the number of its users, and therefore, as an earlier stage network grows its value per user begins to surpass the acquisition cost per user, and the network begins to have a positive value that increases exponentially. This dynamic creates a positive feedback loop. Moreover, Metcalfe's Law operates independently of and compounds the effects of the Lanchester Square Law.

Another critical insight put forward by this white paper is the concept of *last mover advantage*. In a market shaped by rapid innovation and technological advancement, being the first mover offers no guarantees of sustained success. Instead, it is the last mover – the one who brings about the final significant innovation in a specific market – which reaps long-term monopoly profits. When both the Lanchester Square Law and Metcalfe's Law act in tandem with last mover advantage, a market leader can achieve an unassailable business position, potentially leading to decades of monopoly profits.

An important characteristic of the Venture framework is also the prioritisation of those businesses that have the potential to significantly scale upward. There is a probability of venture success linked to product improvement, which thereon links to the duration of the feedback loop that occurs as the business displaces incumbents. Smaller companies also possess the potential for larger returns, as they grow over time to mega cap status, and this is also why this white paper has focused on companies outside of today's so called "magnificent seven". As Tom Perkins states "*there is a big difference between a good idea and a good idea that will make you a huge amount of money...*".

Additionally, the Venture framework advocated for in this white paper necessitates that each selection should possess an exceptional business leader – one with profound motivation, a deep understanding of technology, and the ability to attract, retain, and lead a top-tier team. These leaders must be not just visionaries but also pragmatists, capable of calibrating confidence to reality and possessing the agility to adapt as their business grows.

The white paper is published at the dawn of a new technological era, AI, an obviously provocative term, yet also one which is also misleading. It signals to a type of competition with the breadth of human intelligence and behaviours yet which is not the destination implied by the current technological path nor that which is, we would contend, incentivised. A clear differentiating factor is that the utility of AI responses are dependent on their training data, whereas humans respond based on a far greater series of inputs and drivers which are not limited to simply training data, nor even to the more uniquely human characteristics of reasoning, intuition and intellectual courage, and also are defined by other concepts such as will to gather resources, and will to power. In essence it is only humans that possess the yearning to explore and make impact *beyond the data*.

“What is mind? No matter. What is matter? Never mind.” Punch magazine, 1855¹⁷¹

Our contention is that so called AI should instead be more clearly named as *a revolution in the throughput volume and analytic sophistication that can be applied to a trailing data series*. Contextualising the technology as such helps forecast its impact – not “AI” but “II” – *information intelligence*. Had such a nomenclature been popularised it may also have directed market participants to greater understand the identifiable and optimal opportunity set arising from this universal technological shift: *it is the data monopolists that are positioned to launch numerous unique AI-powered verticals and become the era's dominant businesses*.

These data monopolies – which we contend as the “Googles” and “Amazons” of the AI era – in many cases will undergo *transformational* economic uplift, and in several stages. Firstly, AI is a universal technological shift which will transform human productivity, yet it is the monopolists where the economic capture from this transformation will be concentrated. However, the transformation in favour of these companies arises not only through their monopolisation, in their domain, of the economic uplift from AI, but also from the advantage that their resulting AI technology then uniquely empowers them with to launch new AI-powered business verticals.

“We are on the edge of the biggest technology revolution that has ever existed.”

Elon Musk, public comments, February 2024¹⁷²

In the AI era, investors themselves must also consider the qualities they will need to prosper in this *revolution in the throughput volume and analytic sophistication that can be applied to a trailing data series*. The first quality that we would contend is time allocation to the development of the investor's own excellence in using AI tools. AI can push human knowledge beyond traditional limits, processing and analysing data at otherwise unattainable scales and speeds, identifying prior imperceptible patterns, and leading us to originate new hypotheses and innovative approaches. However, AI cannot read human minds nor possess true self-orientation, requiring humans, including investors, *themselves* to guide AI tools to achieve extraordinary outcomes *for them*.

“AI, by definition, doesn't have an intrinsic set of goals. Humans must instruct how AI is used.”

Stephen Wolfram, CEO, Wolfram Research, public comments, March 2024¹¹⁰

Secondly, to gain an investing advantage in an AI-driven world, *investors must focus on obtaining exclusive, accurate information, and unique insights, that no AI system possesses.* Whilst not an end point in itself, in our appraisal the start point remains a focus on *simple and understandable businesses.* By directly inspecting these businesses and their products, humans can develop a unique understanding that goes beyond the potentially biased information available in the public domain. This approach also avoids the handicap of relying on information that will often have already been processed by AI systems. Ultimately, the key to successful investing will lay in the investor's ability to accrete their decision-making by *acquiring knowledge and insight that remains inaccessible to AI.*

The key to capturing this accretion requires the investor to reflect on the reasons behind human duality. Humans possess a range of seemingly contradictory traits that appear to test the bounds of reasonableness, from cruelty to kindness, from harsh judgment to our capacity for worship, from cowardice, avarice and bias, to courage, self-sacrifice, and truth-seeking. However, human dualism is not a design flaw but a sophisticated evolutionary safeguard. It protects us against the risks of over-simplification, over-extrapolation and rigidity in conclusion that can arise from perceiving sample data as a complete representation of a world that is not static but ever changing.

Any data series including those used to train AI will be an incomplete sample of the truth, and in the same way that the successful entrepreneur reasons beyond the 'expert' assessment of market opportunity, it is through our human dualism that we continue to "push" and "pull" on the static curtain of data relied upon by AI, and the means by which we effectively break through the limitations imposed by a singular perspective.

This flexible, context-dependent strategy is embedded in the human as a result of our differentiation from AI – our mortal struggle for survival – and is crucial in an ever-changing world where sample data remains incomplete. It is our humanity that attracts us to the path of continuous learning and yet also results in our discomfort with claims of absolute truth, and this sets us apart from AI's monolithic approach to data interpretation. And it is our human approach, driven by our curiosity to break with orthodoxy, which ultimately reveals our unreasonableness as reasonable by underpinning our significant advancements that require foundational breakthroughs.

“AI is outputting a sort of statistical the average of the average. But progress is made by humans when we do things that are not the average of the average.”

Stephen Wolfram, CEO Wolfram Research, public comments, March 2024¹¹¹

As AI has become more prevalent, it is already apparent that its rigidity in drawing conclusions from sample data may amplify several of the Buffettian first principles, including the trust by AI in potentially biased information and its often conformist conclusions also acting as an amplifier of herd behaviour. However, this also prospectively amplifies the unique human advantages of intellectual daring, non-conformity, and courage.

The contrast between AI's efficiency and consistency in processing data based on predefined parameters and models and the human capacity for dualistic, creative, and often paradoxical thinking underscores the unique

strengths of both approaches. It suggests that AI and human cognition work best together in a complementary manner, leveraging the strengths of each approach in the world of investing and beyond.

Figure 56: By harnessing AI's power while maintaining insight, courage, and individualistic reasoning, investors can navigate the AI era and achieve extraordinary outcomes



The result is that success in the AI era will be gifted to those investors who dedicate themselves to learning to master AI tools and combine this successfully with the pursuit of truth through intellectual courage, charting new possibilities of excellence. By harnessing AI's power while maintaining insight, courage, and individualistic reasoning, investors can navigate the new era and achieve extraordinary outcomes.

Footnotes

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2. Georges Doriot, Manufacturing Class Notes, Harvard Business School 1937-1966 [\[link\]](#)
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