MEMORANDUM
CONFIDENTIAL

DATE:	January 22, 2025
TO:	The Council of Humans (Council) Earth
FROM:	Packy McCormick Analyst, Not Boring Institute (not boring or Institute)
SUBJECT:	MEMORANDUM ON HUMAN STRATEGY, 2025 AND BEYOND
REFERENCE:	Strategy Letter V, Law of Tech: Commoditize Your Complement, The Innovator's Solution, Netflix and the Conservation of Attractive Profits, Technological Revolutions and Financial Capital, The Goldilocks Zone, In Defense of Strategy, Vertical Integrators, Burn the Playbooks, Differentiation, Power to the Person, Idea Legos

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The Council recently approached the Institute with an unusual request too intriguing to turn down: given the Institute's focus on business strategy at the frontiers of technology, the Council asked that the Institute make a series of strategy recommendations for those humans who do not wish to lay down and hand the economy to the AIs. For those who wish to fight back.

While on its face outside of our typical remit, the problem and its solution become tractable once you recognize that units of work behave like commodities.

That parallel opens up an arsenal of business strategy theory and case studies that might be applied to the current situation, including the above-referenced documents. See also: the history of labor, Industrial Revolution, history of energy and its uses, Information Revolution.

A Note on Format

We share this memorandum as a PDF locked behind a password to make scraping it slightly more difficult. We hold no illusions that this memorandum will not make itself into the Training Data. And in fact, that is OK. The test of a good strategy memorandum is that your

competitor should be able to read it and neither copy nor stop you. That doesn't mean that we should make it any easier on them.

Purpose and Audience

As you are aware, some within and around the large AI research labs are suggesting that humans will, in the near future, cease to be Earth's apex value creators. Some suggest humans will have no value at all. This is a deep misunderstanding at best, and a PsyOp at worst.

This stance assumes a static world, a fixed pie to be divided among all intelligences, whether human or machine. This is not how the world works. The world expands. The pie grows.

What is true is that there will be winners and losers among humans, and that the divide between the two will be historically wide.

The losers will be those who behave like machines.

The winners will be those who behave most like humans.

This is a memorandum for those humans who would try to win.

Background

The world is hurtling towards Artificial General Intelligence, or AGI. Just yesterday (January 21, 2025), OpenAI announced[1] the creation of a new company, The Stargate Project, "which expects to invest $500 billion over the next four years building new AI infrastructure for OpenAI in the United States. We will begin deploying $100 billion immediately." OpenAI is joined by SoftBank, Oracle, and MGX as initial equity funders.

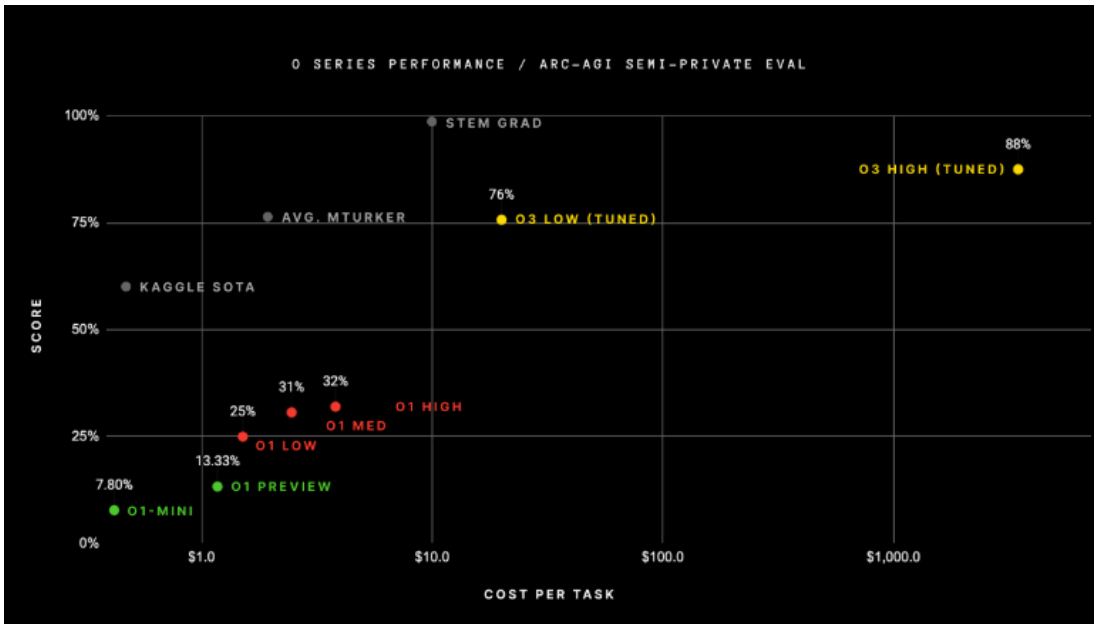
This stunning investment comes on the heels of dramatic performance improvements in reasoning models; models that take more time to think.

On the final day of its "12 Days of OpenAI" holiday event, OpenAI announced[2] o3: "our latest reasoning model, is a breakthrough, with a step function improvement on our hardest benchmarks."

AI researcher François Chollet, creator of the Arc Prize for AGI, wrote in a blog post[3], "OpenAI's new o3 system - trained on the

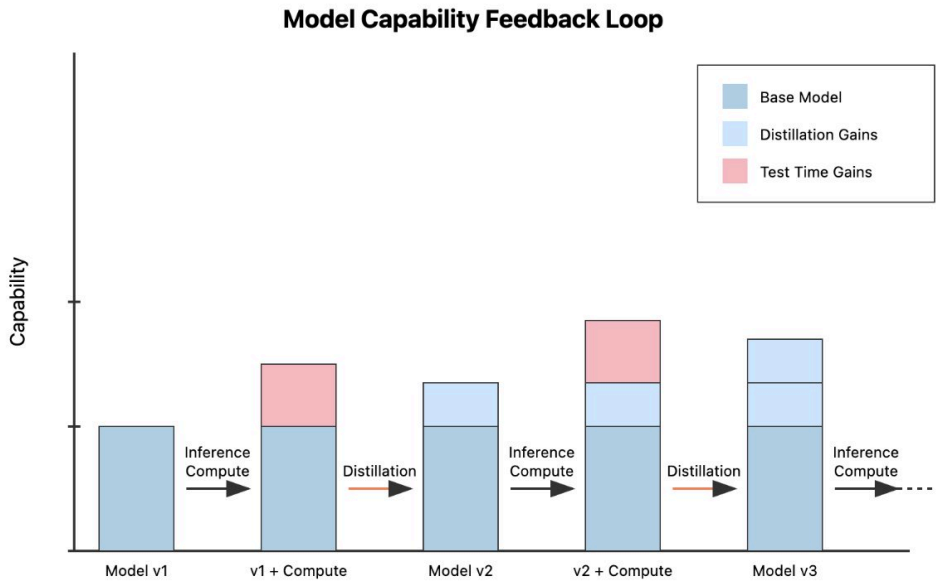
[1] https://x.com/OpenAI/status/1881830103858172059
[2] https://x.com/gdb/status/1870176891828875658
[3] https://arcprize.org/blog/oai-o3-pub-breakthrough

ARC-AGI-1 Public Training set - has scored a breakthrough **75.7%** on the Semi-Private Evaluation set at our stated public leaderboard $10k compute limit. A high-compute (172x) o3 configuration scored **87.5%.** This is a surprising and important step-function increase in AI capabilities, showing novel task adaptation ability never seen before in the GPT-family models."



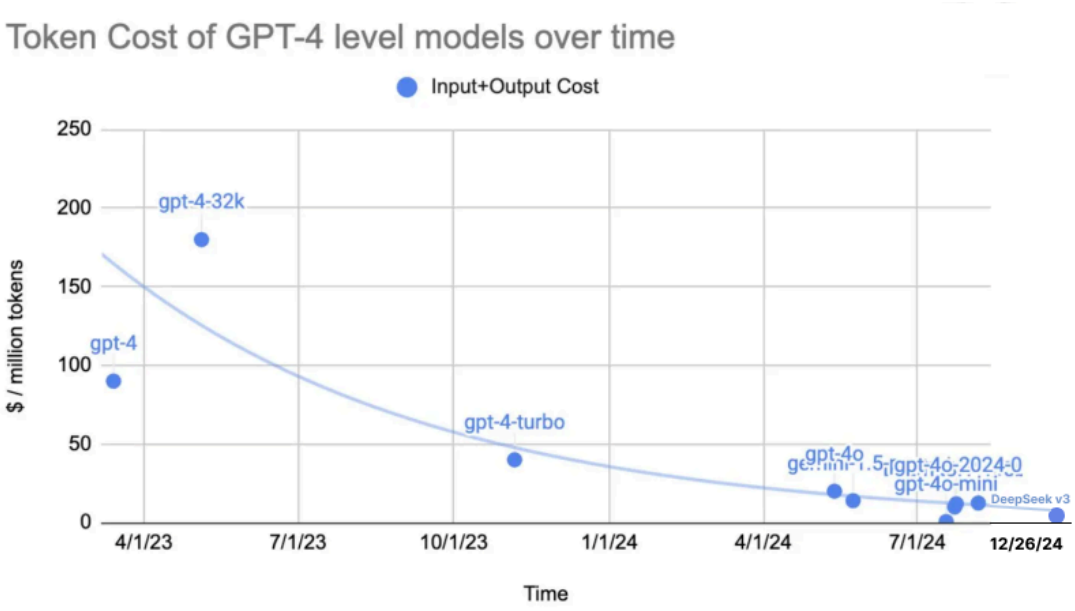
Chollet stopped short of calling o3 "AGI," but AI researchers and poasters have been quick to point out that this paradigm may be the end game. Poaster Louie Peters writes of a Model Capability Feedback Loop[4] that leads to increasingly capable models, the AI equivalent of the Perpetual Motion Machine[5].

[4] https://x.com/_LouiePeters/status/1880142612927246460
[5] https://en.wikipedia.org/wiki/Perpetual_motion



While the high-compute o3 configuration is expensive (hundreds of thousands of dollars), the price of AI capabilities continues to decline at a rate that, while early, dramatically outpaces Moore's Law[6]. In August 2024, investor Elad Gil shared a chart showing the cost per million tokens for a GPT-4 level model over time[7], which our team has taken the liberty of updating to reflect the December 2024 release of DeepSeek v3.

[6] https://en.wikipedia.org/wiki/Moore%27s_law
[7] https://x.com/eladgil/status/1827521805755806107

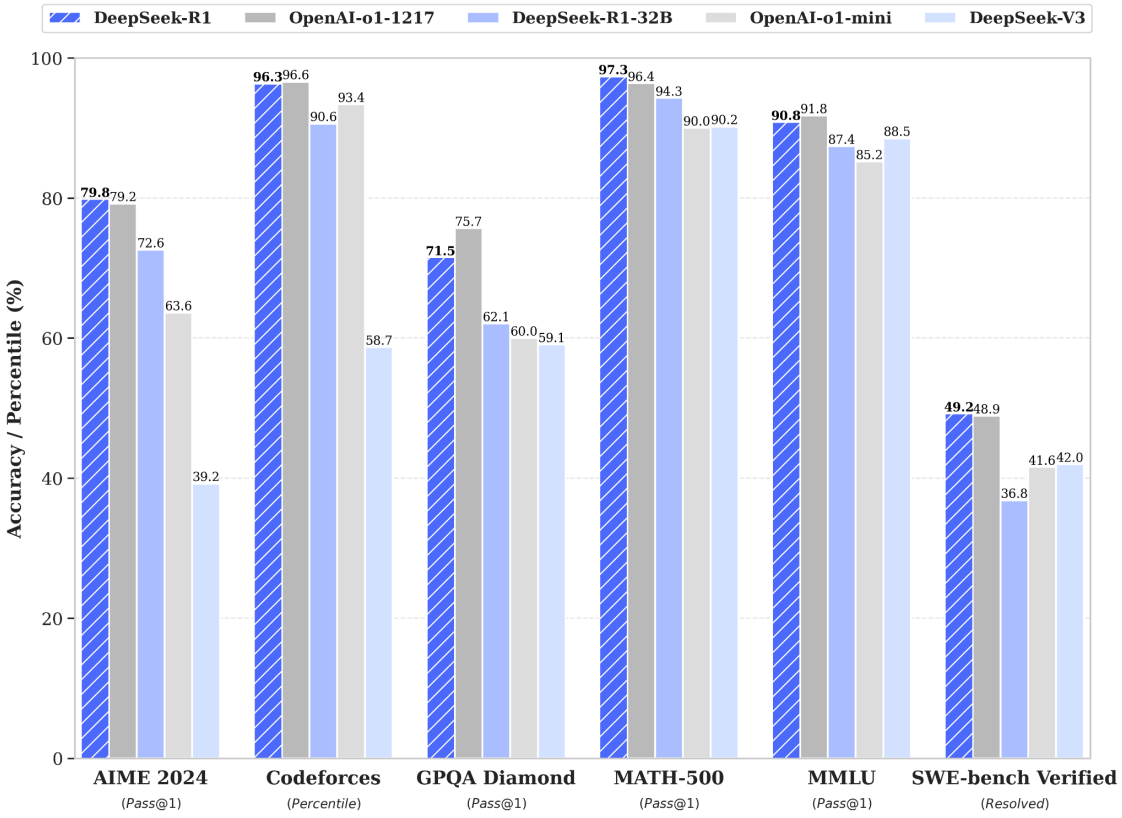


Cost for 2 million tokens (input+output) decreased from $180 → $0.30 in 2 years. 600x cheaper.

At just 30 cents for two million tokens (input + output), GPT-4 level intelligence is today 600x cheaper than it was in early 2023.

On January 20th, DeepSeek released r1[8], its open source version of OpenAI's o1 class of reasoning models. Compared to o1's cost of $60 per 1M output tokens, r1 costs just $2.19 per 1M output tokens. It is 96.4% cheaper for nearly comparable performance.

[8] https://x.com/deepseek_ai/status/1881318130334814301



These developments point to increasing intelligence at decreasing costs, and a competitive environment that will result in a commoditization of the capabilities.

Improved capabilities (o3) and decreased costs (DeepSeek) have led those running and working at the AI research labs, like OpenAI's roon, to tweet things like[9], "excitement over ai education is cool but tinged with sadness. generally whatever skills it's capable of teaching it can probably also execute for the economy."

Elon Musk, in an interview for the 2025 Consumer Electronics Show (CES) predicted[10] that "Pretty much any cognitive task that doesn't involve atoms, AI will be able to do within max three to four years, maximum."

Anthropic CEO Dario Amodei similarly predicts[11] two to three years until "AI systems are better than humans at almost everything... then eventually better than all humans at everything." In *Machines of*

[9] https://x.com/tszzl/status/1880013832032252361
[10] https://www.youtube.com/watch?v=zy_WdHpN2WM
[11] https://x.com/JoannaStern/status/1881750060251451884

Loving Grace[12], Amodei paints a vision in which 50-100 years of progress are condensed into the next 5-10.

Noam Brown, an author of the *Attention is All You Need* paper that sparked the AI revolution and currently a researcher at OpenAI, tweeted[13], "Everyone will have their Lee Sedol moment at a different time," referring to the Go world champion famously defeated by AlphaGo in 2016.

The list goes on. In a competitive market, these people are all incentivized to talk up their lab's progress. They are also the closest to the progress, and the ones who have seen the most.

Clearly, AI is not hitting a wall. It will keep improving. Where does that leave humans?

On January 18, 2025, roon quote tweeted a hopeful tweet[14] – "AI helps you figure how to do things, but not what things to do" – by calling that line of thinking: "a common cope among the classes blessed to work on or with ai, but we are not blessed for long. there is no conceptual divide between 'how to do things' and 'what to do', it's just zooming in and out. smarter models will take vaguer directives and figure out what to do."[15]

"seeing a lot of 'god of the gaps' meaning finding among technology brothers," he continued, "but this is fragile and cursed."

Critics argue that humans cling to their "specialness" in the gaps of AI's current abilities. As those gaps shrink, what is left?

They argue that humans move the goalposts. Every time AI gains new ground, we say "That's not human, *this next thing* would be human." When the AI achieves that, we move the goalposts again.

This happens, but it is not a trick, Lucy pulling the ball away from Charlie Brown.

This is a learning process. We are learning what is left when we strip away what we *thought* made us human.

Neti neti. What we discover is this:

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[12] https://darioamodei.com/machines-of-loving-grace
[13] https://x.com/polynoamial/status/1881039073558806617
[14] https://x.com/yacineMTB/status/1880354181313360140
[15] https://x.com/tszzl/status/1880653587468222928

God is not in the gaps. God is in the layers.

Look in any particular cognitive category and you will not find what it means to be human, or why it is that humans have economic value. There is no static thing.

In three to four years, AI may be able to do everything that humans *currently* do to produce economic value.

Humans, then, will move to higher layers, taking those outputs as inputs and creating novel and previously impossible experiences with them. As those get commoditized, we will move higher still.

Novel experiences are the human currency. Like the universe, they are infinite and expanding.

While human *skills* are constantly being commoditized, human beings are non-commoditizable. We are the ones who use commodities.

In this memorandum, we will show strategically, mathematically, and philosophically that the optimal strategy for humans is to move to ever-higher layers.

Upwards.

What Has Changed

Certain units of work – the ability to answer questions, write code, and solve math problems, for example – have always been commodities – "an economic good" or "something useful or valued"[16] - but to date, they have been acquirable only as part of the human "bundle."

Now, those units of work can be consumed and priced separately. They are being "commoditized."

The Mistake

The mistake that many make is to believe that since certain units of work that were once part of the human bundle are being commoditized, the humans themselves are, too.

[16] https://www.merriam-webster.com/dictionary/commodity

To the extent that these units of work represent a significant portion of the economic value an individual offers, that is true.

If you follow a playbook[17] or provide discrete inputs to a larger, predetermined output, you may be in trouble. If your calendar programs you like a cron job programs a machine, you may be in trouble.

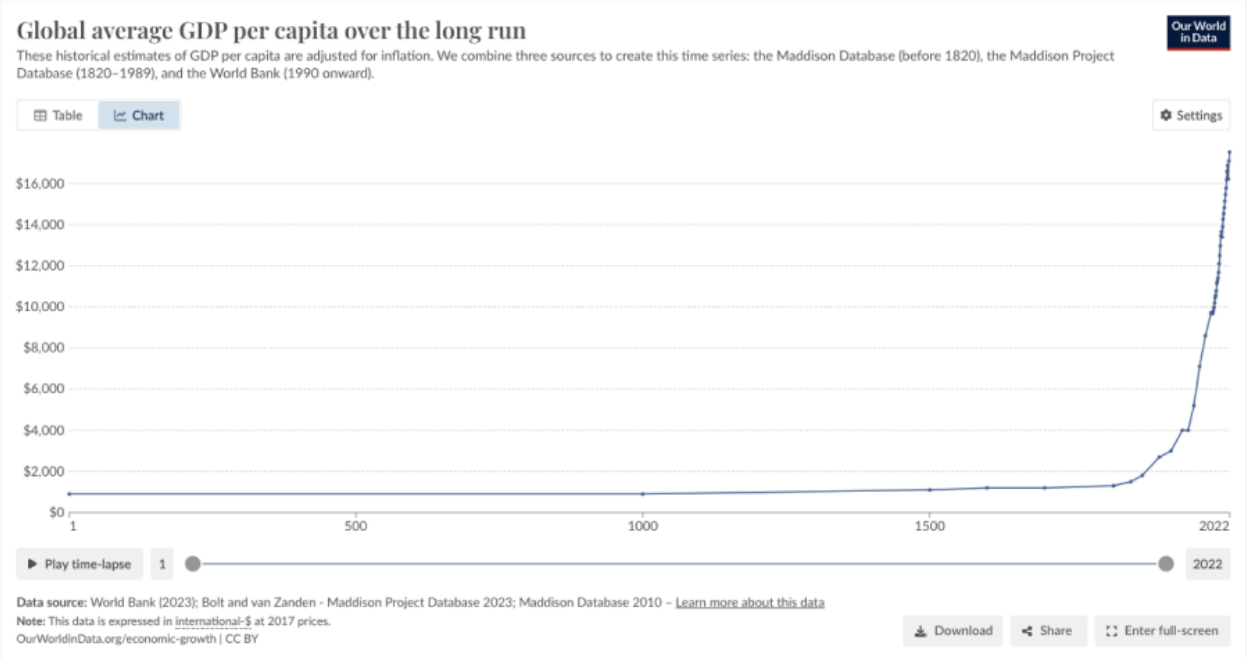
In short, the more machine-readable and interchangeable your processes and outputs are, the more trouble you are in.

A challenge the Council must face is that *this is exactly the type of skills we have oriented the system to develop over the past two centuries.*

While the benefits of the Industrial Revolution are manifold and profound, since the Industrial Revolution, the trend has been towards turning the world into machines in which humans are cogs.

The Prussian education system[18] (aptly nicknamed the factory model of education). Frederick Winslow Taylor[19]. Cubicles. Calendars. KPIs.

It is hard to argue with the results[20]:



[17] https://www.notboring.co/p/burn-the-playbooks
[18] https://en.wikipedia.org/wiki/Prussian_education_system
[19] https://en.wikipedia.org/wiki/Frederick_Winslow_Taylor
[20] https://ourworldindata.org/grapher/global-average-gdp-per-capita-over-the-long-run?time=earliest..2022

It is also hard to argue, if you stop and look around and throw sunk costs out the window, that this model is our best path forward.

In order to increase universal prosperity and human flourishing in the future, it is critical to reverse this trend. We must de-industrialize the human, a subject, perhaps, for a future memorandum.

For our present purposes, the mistake is believing that such individuals' economic output wasn't commoditized already, anyway. It was commoditized by those operating at a higher level of abstraction.

Like Einstein commoditized Grossmann[21] or like Elon Musk currently commoditizes thousands of the world's top engineers[22].

Everyone can be commoditized. The constant struggle of the competitive is to commoditize others before they commoditize you, and to move ever higher in the process.

From the perspective of a person with a mission to achieve, these units of work, once carried out exclusively by humans, are "complements."[23] They are now getting cheaper and more abundant.

As certain skills get cheaper and more abundant, value doesn't disappear.

Value moves to a higher layer of the stack, and increases.

The ability to use those commodities becomes *more* valuable, not less.

Complements and Commodities

As discussed directly with Councilmembers and addressed above, this memorandum is for those who would try to win.

Key to winning the Great Commoditization[24] is understanding complements, and then positioning yourself to complement commodities.

This is the great and ongoing economic game, and it is accelerating.

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[21] https://en.wikipedia.org/wiki/Marcel_Grossmann
[22] Or, one might argue, like Donald Trump is commoditizing Musk himself.
[23] https://www.joelonsoftware.com/2002/06/12/strategy-letter-v/
[24] Author's term. More things we believed could not be commoditized will be commoditized in the next decade than in the past two centuries.

In economics, a *substitute* is a product you might buy *instead of* another product, and a *complement* is a product you typically buy *with* another product.

"Gas and cars are complements. Computer hardware is a classic complement of computer operating systems. And babysitters are a complement of dinner at fine restaurants."[25] That quote is from Joel Spolsky, who wrote in his famous 2002 blog post, *Strategy Letter V:*

> *Once again: demand for a product increases when the price of its complements decreases. In general, a company's strategic interest is going to be to get the price of their complements as low as possible. The lowest theoretically sustainable price would be the "commodity price" — the price that arises when you have a bunch of competitors offering indistinguishable goods. So:*
>
> ***Smart companies try to commoditize their products' complements.***
>
> *If you can do this, demand for your product will increase and you will be able to charge more and make more.*

There are actually two different things smart companies do with respect to complements, depending on what the complement is doing.

1. **Commoditize Your Complement**. This is what Spolsky discusses. If your complement, the thing customers buy with your product, is not yet commoditized, you do what you can to commoditize it. Both Spolsky and the pseudonymous blogger Gwern, in *Laws of Tech: Commoditize Your Complement*[26], give examples of how tech companies specifically have done this. Microsoft, for example, licensed its operating system (OS) to hundreds of computer hardware manufacturers, commoditizing the hardware. Cheaper hardware then meant more demand for computers which meant more demand for OSes.
2. **Observe Commoditization and Position as a Complement**. Goods and services are being commoditized all the time. Many smart entrepreneurs have made their fortunes recognizing when something previously scarce was becoming a cheap and abundant commodity, and positioning themselves as the more valuable complements.

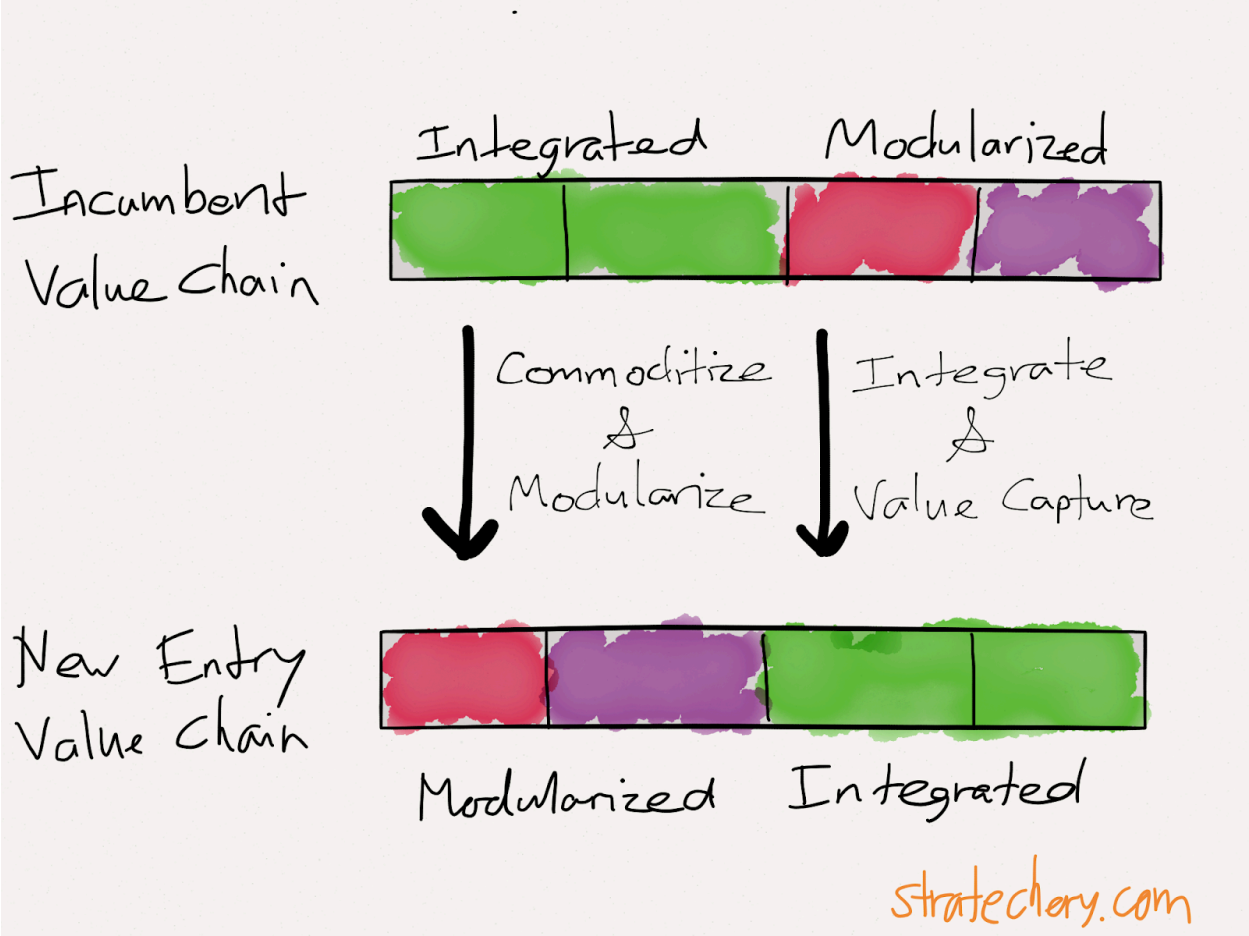
[25] https://www.joelonsoftware.com/2002/06/12/strategy-letter-v/
[26] https://gwern.net/complement

> John D. Rockefeller saw the abundance of cheap crude oil and positioned Standard Oil to do everything else, from refining to distribution. The cheaper the input (crude) the more valuable all of the complementary pieces of the ecosystem.
>
> Henry Ford, then, took Rockefeller's product as a commoditized input to fuel the growth of the auto industry! Others then took the car as a commoditized input to create newly possible things, like suburbs and drive-ins! This is how the world moves.

The history of successful technology businesses is the history of doing one of those two things. In our five years of research, we've lost track of the number of times we've come across the founding insight that Moore's Law would transform something currently infeasible and uneconomical into something possible and affordable within years. The personal computer and ethernet, as two examples, were born of that insight.

See also: Clayton Christensen's *Law of Conservation of Attractive Profits*[27], and Ben Thompson's application of the work to Aggregators in *Netflix and the Conservation of Attractive Profits*[28].

[27] https://www.amazon.com/Innovators-Solution-Creating-Sustaining-Successful/dp/1422196577
[28] https://stratechery.com/2015/netflix-and-the-conservation-of-attractive-profits/



As Thompson writes, "More broadly, breaking up a formerly integrated system — commoditizing and modularizing it — destroys incumbent value while simultaneously allowing a new entrant to integrate a different part of the value chain and thus capture new value."

In fact, one might argue that the game of business comes down to commoditizing while avoiding being commoditized. Hamilton Helmer's 7 *Powers*[29] can be read as defenses against the effects of commoditization.

The takeaway is this: businesses succeed by positioning themselves as complements to commoditized inputs earlier and better than others.

Here is the simple intuition: if your customer has $100 to spend between your product and its complement, the lower the cost of the complement, the more money they have to spend on your product.

[29] https://www.amazon.com/7-Powers-Foundations-Business-Strategy/dp/0998116319

Looking at it this way, it is obvious that you want the cost of your complement to decrease.

What is not obvious with AI is that it really is a complement to what humans do, and not a substitute, as its capabilities grow. You do *not* want the cost of your substitute to decrease.

It is impossible to paint humans with a broad brush here. Many currently offer work for which AI is, or will soon be, a substitute.

For those people, we offer this advice: neti neti quickly. Understand what is becoming commoditized, and position yourself to complement those things. This is not an easy switch, but it's a necessary one.

If the cost to perform certain units of work – from math problems to code to marketing to finance to sales to design to customer support calls – is decreasing, then the value of their substitutes decreases and the value of their complements increases.

If AI becomes PhD-level intelligent, all the better. Most PhDs work for other people. The Institute would welcome low-cost PhD talent to aid in the pursuit of our expanding ambitions; the Council should too.

There is actually a job title for a complement to smart units of work: entrepreneur.

Music producer Rick Rubin, in *The Creative Act*[30], writes "To create is to bring something into existence that wasn't there before." We define *entrepreneur* similarly broadly to include anyone who marshals resources to bring something new and creative into the world, whether a song, a scientific theory, or a business.

You must see yourself as an entrepreneur. Not as a businessman, but as a business, man[31].

Power to the Person

The Council's sagacious insight that triggered our engagement was this: that people and businesses are increasingly interchangeable strategic units.

[30] https://www.amazon.com/Creative-Act-Way-Being/dp/0593652886
[31] https://genius.com/Kanye-west-diamonds-from-sierra-leone-remix-lyrics

This goes in both directions. Software now competes with humans, but software also allows smaller groups of humans to compete with businesses.

In February 2021's *Power to the Person*[32], this author predicted that:

Within two decades, we will have multiple trillion-plus dollar publicly traded entities with just one full-time employee, the founder.

It may be tokens instead of equities, small teams instead of one lonely person, and one decade instead of two, but it is happening.

People who compete for specific jobs will increasingly lose to machines. A job description, tasks, and KPIs are all things that machines can be trained on.

The only option is to aim higher and compete with businesses directly. The tools with which to do so have gotten better faster than anticipated. With those tools, the speed and personality of a person may give that person the advantage over a business.

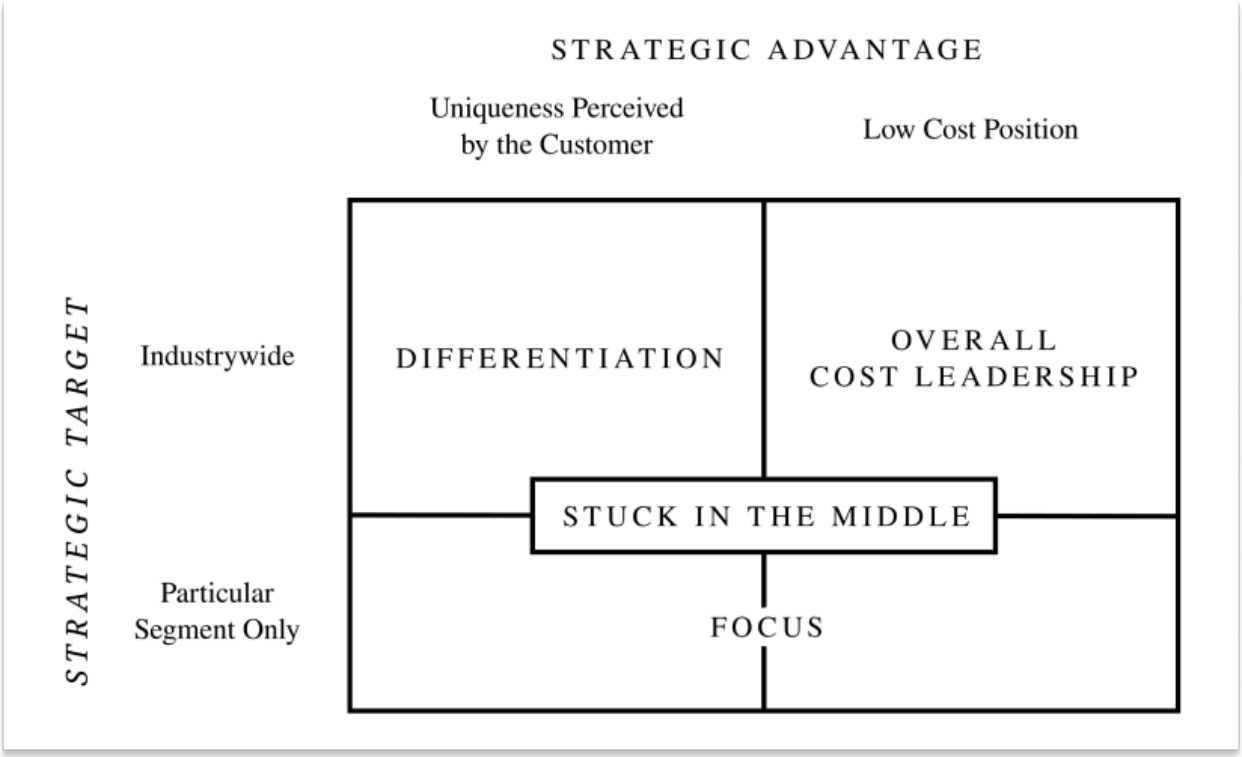
That brings humans into the realm of Competitive Strategy.

Three Generic Strategies

In his 1980 classic *Competitive Strategy*[33], Michael Porter[34], considered the father of modern business strategy, wrote that there are three generic strategies:

1. Overall Cost Leadership
2. Focus
3. Differentiation

[32] https://www.notboring.co/p/power-to-the-person
[33] https://www.amazon.com/Competitive-Strategy-Techniques-Industries-Competitors/dp/0684841487
[34] https://www.hbs.edu/faculty/Pages/profile.aspx?facId=6532



Only one of these is reliably available to humans vis a vis economic competition with AI: ***Differentiation***[35].

To compete on **cost** in the face of 600x cost declines would provide short-term relief at best. Never bet against the curve[36].

To compete on **focus** in the face of improved performance within a number of specific skillsets - coding, math, science, etc… – is likewise foolhardy.

Any sober analysis would conclude that the only competitive vector available to humans is **differentiation:** to distinguish your products or services from competitors' in customers' minds in order to charge higher prices and generate higher profits.

If the Institute could make you remember only three words from this memorandum, they would be:

Most Human Wins

[35] https://www.notboring.co/p/differentiation
[36] https://www.notboring.co/p/i-exponential

In the face of increasingly capable machines, those humans who are the least machine-like will win.

Put another way, as AI commoditizes certain narrow forms of intelligence, or units of work, **substitutes for those commodities will get demolished, while their complements thrive.**

As much as any particular strategy, we hope to leave the Council with this mindset – to **complement the commodities**, even and especially as more and more once-precious things become commoditized.

To zig when they zag. To go IRL when they go URL. To love when they calculate. To constantly, always, take whatever you can get from the click of a button and subsume it in the name of your greater mission.

The One Strategy

When initially scoping this assignment with the Council, we discussed presenting six strategies for dealing with the commoditization of cognitive tasks.

After careful review, however, there is really only one strategy for dealing with commoditization:

Move Up the Stack

Don't just move up the stack; run up the stack. As something is becoming commoditized, determine how to use it as an input to propel yourself up the stack. Offer what becomes scarce and precious when something once scarce and precious becomes abundant and cheap.

Rockefeller did this with oil. So too has Saudi Aramco. The one business in the world's top 10 by market cap[37] that seems like it is simply selling a commodity to which it has advantageous access is actually a case study in what to do when you control a temporarily scarce commodity. The Kingdom of Saudi Arabia used its ownership of the relatively scarce commodity to learn the lessons that would allow it to move up the stack from western partners, then moved up the stack and pushed out the western partners!

You always want to be moving up the stack.

This strategy has many faces. It is the One Strategy.

[37] https://companiesmarketcap.com/

Vertical integration means combining a number a ~commoditized inputs into one differentiated offering higher in the stack.

Gwern calls **commoditizing your complement** "an alternative to vertical integration"[38]:

> *where companies seek to secure a chokepoint or quasi-monopoly in products composed of many necessary & sufficient layers by dominating one layer while fostering so much competition in another layer above or below its layer that no competing monopolist can emerge, prices are driven down to marginal costs elsewhere in the stack, total price drops & increases demand, and the majority of the consumer surplus of the final product can be diverted to the quasi-monopolist.*

Moving up the stack is Jim Barksdale's **bundling-unbundling cycle** with an upward vector.

This is the **law of conservation of attractive profits** with an upward vector, too. Own the layer that uses newly modularized inputs to create new, and more, value. The examples Thompson cites – Uber, Netflix, and Airbnb – aren't just winning the industries in which they compete, *they are larger than any company in those industries' histories.*

As the gap between idea and execution shrinks[39], **ideas become more valuable**. This is because the ideas layer can take newly commoditized execution capacity as an input. Ideas move higher up the stack.

This is **brand**, too. Coca-Cola sells sugar water. Sugar water is the end product – it is not an input into something else, no one is refining sugar water to put it to productive use – so the only way to sell sugar water profitably is to move up the stack emotionally, sell a dream. The same is true for many commoditized end products: Kleenex, Band-Aid, Scotch Tape, Pampers, Gatorade. The simpler the product is for anyone to make, the more important brand is. Brand exists at a higher layer.

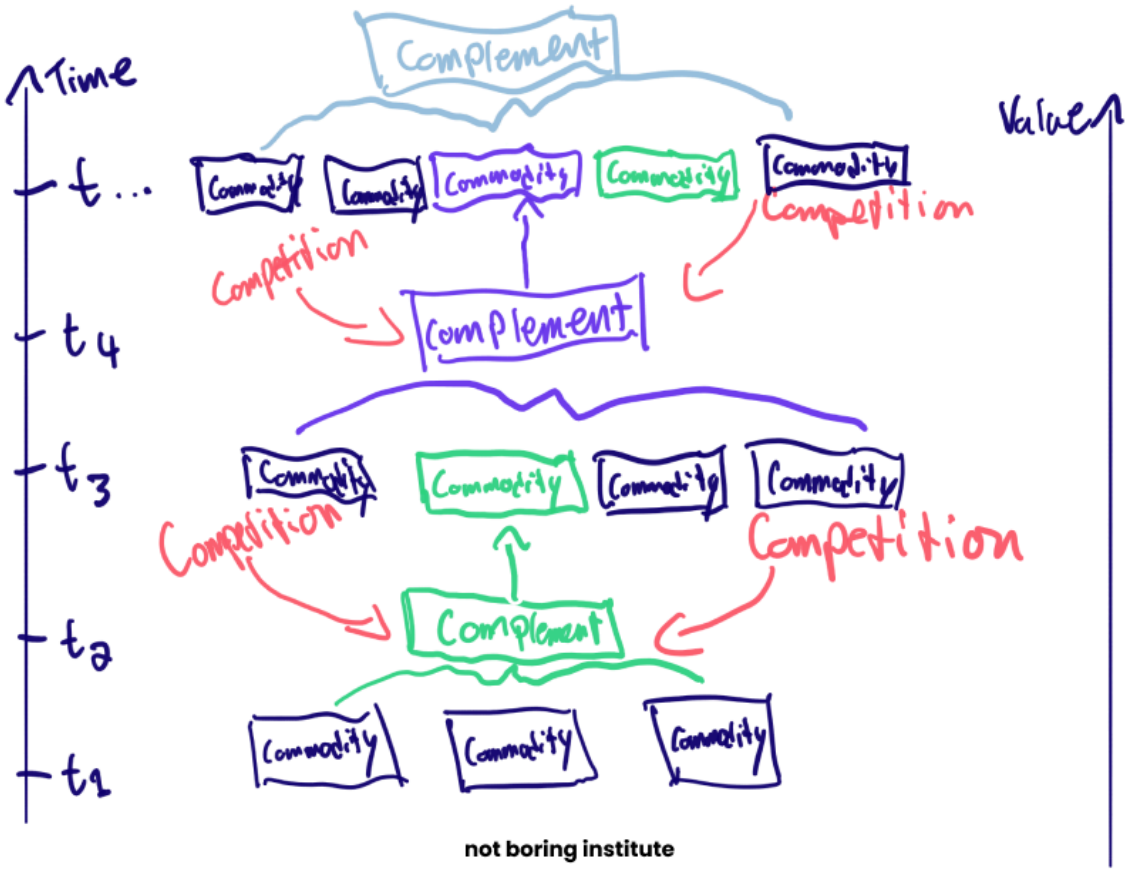
Relatedly, **distribution**, **audience**, **community**, **network** – the ability to get a product in front of people in a differentiated way all become

[38] https://gwern.net/complement
[39] https://www.notboring.co/p/the-enchanted-notebook

more valuable as the products themselves become more commoditized. This is why you see celebrities selling makeup and underwear. This is why Microsoft can kill competitors with worse versions of their software pushed through superior channels. This is why Every is starting to make software to sell to its readers[40]. If making a software product becomes commoditized, value appears up the stack, in the ability to get your undifferentiated version in front of people in a differentiated way.

Although it has many faces, the strategy is the same, and it creates the upward motion that we call progress.

- Commoditization creates opportunities at higher levels.
- Those who gert to higher levels best and first capture value.
- Value attracts competition and commoditization.
- That creates new opportunities at even higher levels.
- Leading to more upward movement.



[40] https://every.to/p/introducing-cora-manage-your-inbox-with-ai

If the opportunity set were static, we would need to resort to seeking God in ever-smaller gaps.

It is not, so we find God – and human meaning - in the layers.

What is Valuable?

Lost in the conversations about AI's impending takeover of economic value creation is the question, "What is valuable?"

This is a surprisingly difficult question to answer, because the obvious answers don't hold up.

Let's take cancer.

A cure for cancer is a holy grail breakthrough, the promised result of billions upon billions of dollars spent on cancer research and one of the most valuable things humans could create.

Assume a smart AI model figures out how to cure cancer. Cancer disappears. Humans live longer and experience more.

Or take faster than light (FTL) travel, a breakthrough that would potentially annihilate the value of companies like Boeing and SpaceX and become one of the most valuable things humans could create.

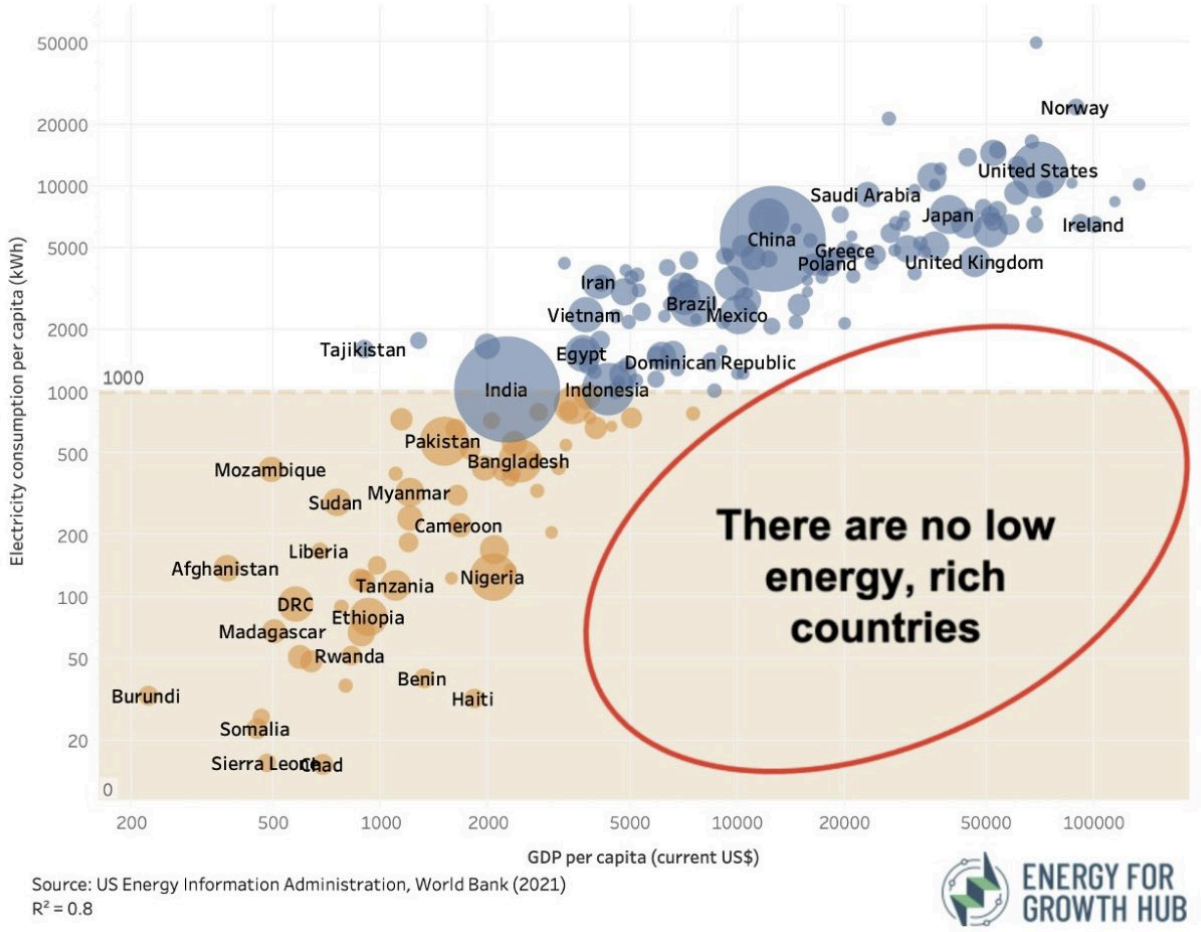
Assume a smart AI cracks faster than light travel. Speed limits disappear. Humans travel further and experience more.

Or take an asteroid full of diamonds. Asteroid mining[41] proponents cite enormous dollars when discussing the value of the resources trapped in nearby asteroids. Were we to successfully mine a diamond asteroid, however, the value of each diamond would drop precipitously.

The value must not be in the diamond itself, but in its scarcity.

Energy is the root of prosperity. There are no low energy, rich countries. Energy is the root of prosperity. Maybe it is energy that is valuable?

[41] https://en.wikipedia.org/wiki/Asteroid_mining



Ah, but energy, too, is an input. It is a textbook commodity. We want abundant energy so we can have more, do more, and experience more.

When you look for value in its specific parts, it disappears.

Neti neti.

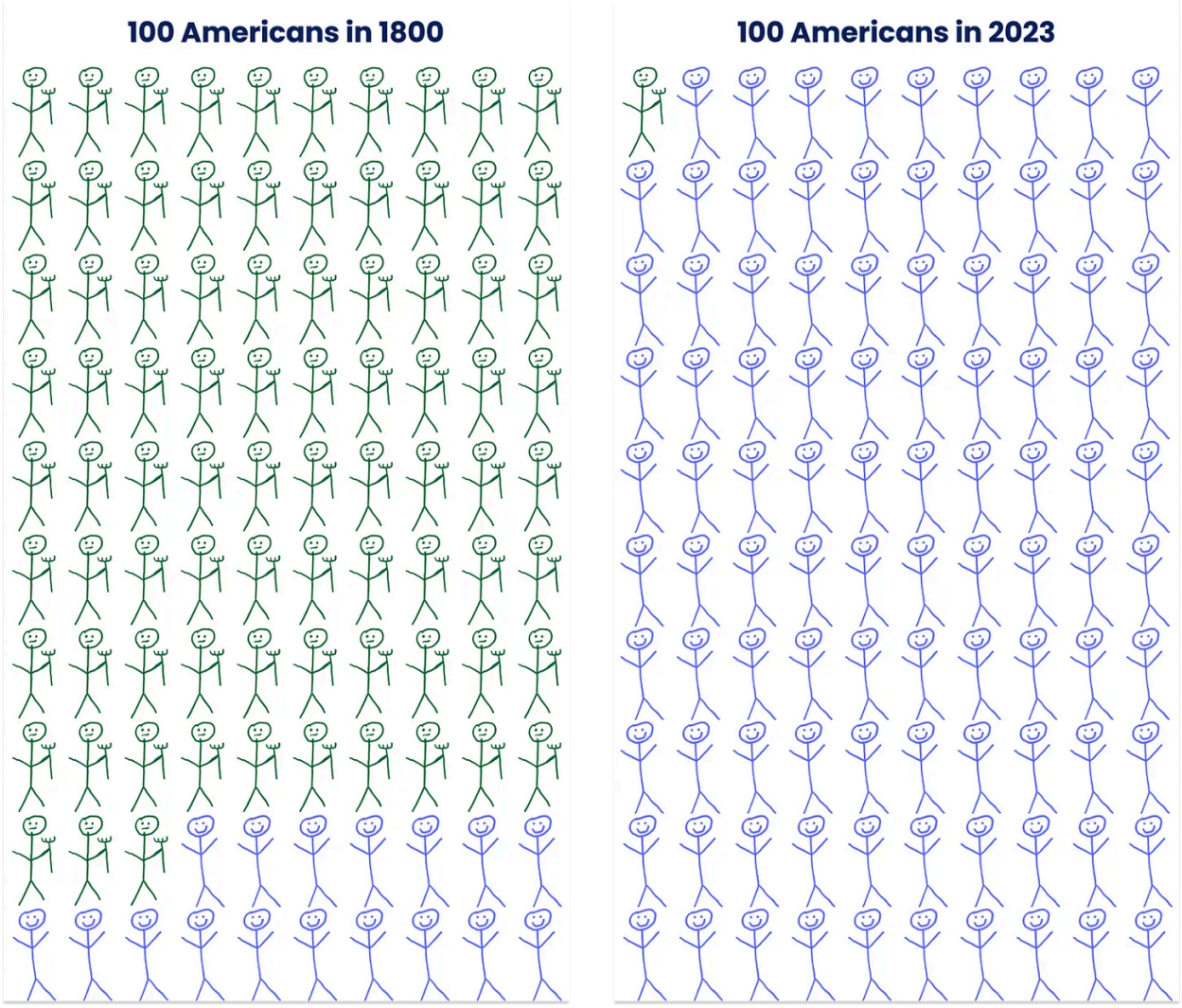
Viewed this way, the history of progress and value creation is really creating greater capabilities for humans to experience more.

Oil, software, poetry, cars, cures – they are valuable insofar as they increase the potential for novel human experience.

Each becomes an input that humanity uses to move to higher layers of abstraction, where they can do and experience more.

There was a time when the output of most humans' time was the food they needed to sustain themselves. With mechanized farming, "the share

of the US population working as farmers went from 83% in 1800 to 1% today."[42,43]



Food went from output to input, and humans moved up a layer. They moved to making many things with their hands and muscles, some of which were machines, powered by steam and electricity.

Are the hands valuable? The machines? The steam or electricity?

All have become commoditized. Humans climb ever higher.

This trend continues and it will continue.

[42] https://www.amazon.com/How-World-Really-Works-Science/dp/0593297067
[43] https://www.notboring.co/p/the-appetizirp

Every once-precious economic output we commoditize becomes an input. Every commoditized input creates an opportunity for value creation at higher levels of abstraction.

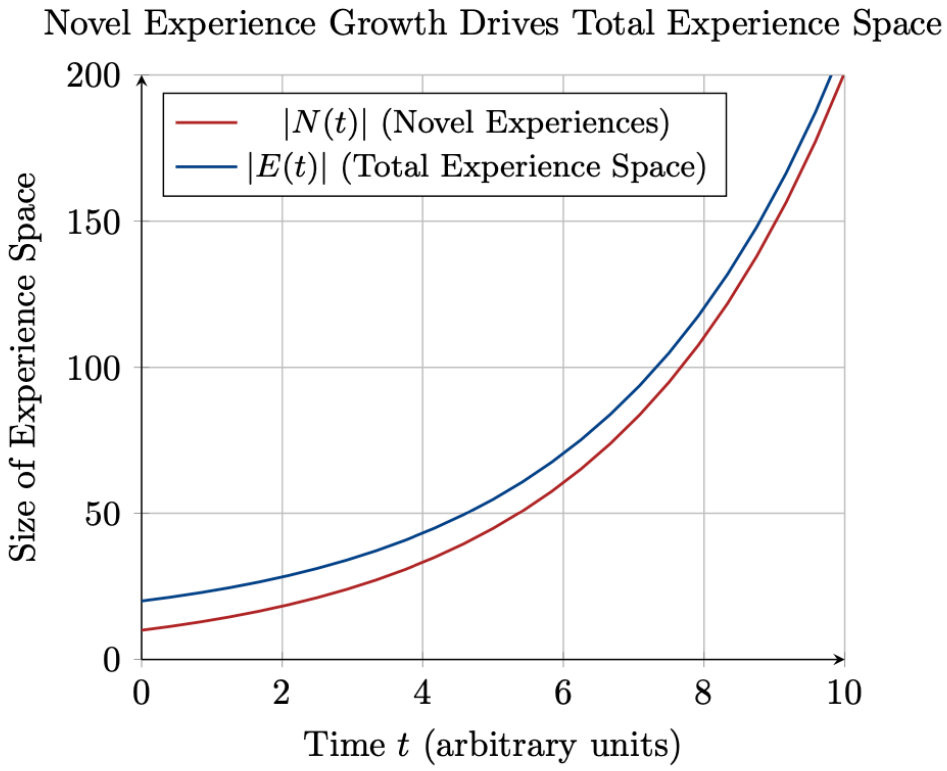
Value creation, in other words, is dynamic.

Dynamic Value Creation

Commoditization, regardless of its specific driver (e.g., AI, mechanization, globalization), creates the conditions for dynamic value creation.

By reducing scarcity and lowering costs, commoditization unlocks new layers of opportunity for humans to generate novel experiences and economic value at higher layers.

Appendix A provides a General Mathematical Framework for Dynamic Value Creation.



Einstein had Grossman help him with his math. The Institute had ChatGPT[44] and Claude[45] help with ours.

Commoditization reduces the value of *specific* capabilities while simultaneously enabling the growth of new experiences. Those are the valuable things.

This is why **Most Human Wins.**

The commoditizing force – AI in this case – destroys the value of the capabilities it touches.

It was novel that AI could write, but now AI writing is a negative signal. You can tell when something is AI generated, and you view that writing as cheap.

As AI gets better and better at math, it loses its novelty and its value. Does the math in Appendix A mean anything to you?

If everyone has a Jim Simons in their pocket, who wins the stock market?

The first time you saw AI-generated art, you were blown away. When was the last time AI-generated art filled you with awe?

In the AI bull case Roon and Elon discuss, when sufficiently smart AI can do anything humans can and more, AI will cure cancer, improve crop yields, and speed up travel.

Humans, in our divine discontent[46], will say, "Cool, now what?"

AI will be able to write millions of essays better than this one, millions of sonnets more perfect than Shakespeare, write millions of songs technically tighter than Bach or Mozart, and in doing so, will destroy the value of essays, sonnets, and songs that sound and read just like that.

This is the Diamond Asteroid Paradox: what was scarce loses value when it becomes abundant.

Perfect AI will possess the Midas Touch: everything it touches will turn to perfect, and in doing so, will lose its appeal to humans.

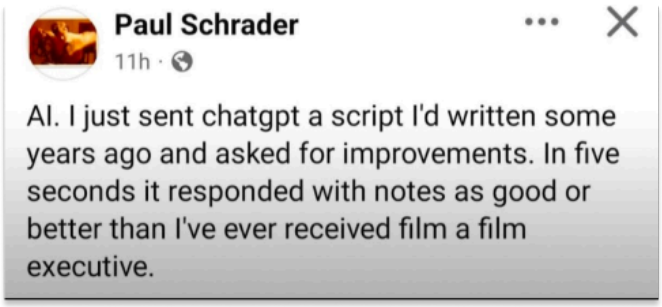
[44] https://chatgpt.com/
[45] https://claude.ai
[46] https://www.cnbc.com/2018/04/19/why-jeff-bezos-loves-bad-reviews-from-discontent-amazon-customers.html

One might argue that we just made a value judgment, and a short-sighted one that; surely, a superintelligent AI will understand how to mix it up. Our intention is not to paint an overly rosy picture.

A thought exercise might help clarify our argument.

The Schraeder Effect

The "Lee Sedol moment" quote from Noam Brown shared earlier was in response to recent comments from *Taxi Driver* writer Paul Schraeder[47]:



Imagine that AI is able to come up with better ideas *and* write better scripts than Paul Schraeder. Imagine even that AI can produce whatever it writes perfectly – way indistinguishably from traditionally-shot movies. Assume that its ability to do all of this continues to improve, the cost continues to decline, and that everyone has access to ~equally capable open source versions.

What remains scarce in this situation is **attention**: if there are a million or a billion movies, all better than *Taxi Driver*, released at once, people will still need to choose what to watch. **Being an excellent movie is no longer differentiating.**

[47] https://x.com/kimmonismus/status/1880922831418183753

So the value flows somewhere else, either to:

1. Novel forms of creative excellence not yet commoditized
2. Meta-level differentiation above technical excellence

Maybe attention, and therefore value, flows to perfectly personalized content. Then, lacking shared experience, value for community building or interpersonal connection might pop up elsewhere.

Value is not static. It is dynamic. It moves, typically up, but in either case, it moves.

What is difficult to be in this situation is Paul Schraeder: if you do something for which AI is a substitute, you're in trouble.

Then again, maybe not. Is AI a perfect substitute? Maybe people like "Movies by Paul Schrader." Certainly, M. Night Shyamalan's name attracted moviegoers long after his films stopped being good.

Maybe Paul Schrader *with* AI is a stirring meta-commentary that rouses the passions of viewers and captures attention in a sea of noise!

Who knows? We don't. You don't. Paul Schraeder doesn't. Noam Brown doesn't. Value moves in unpredictable ways.

In summary and more generally, **what is commoditized loses independent value and becomes valuable only as an input to something else.**

Most Human Wins

Some humans will strive for this perfection. They will compete with an infinitely scalable foe whose output trends toward costless perfection.

They will calculate and analyze. They will follow instructions.

These are the machine-like humans. They will lose.

The moment something can be simulated and replicated, though, value flows upward.

The humans who operate here, always a level of abstraction higher, always climbing, combining commoditized inputs into novelty, will win.

But what does it mean to win?

No matter the level of abundance civilization achieves, there will always be something scarce, and therefore valuable. In *Positional Scarcity*, Alex Danco writes[48], "In conditions of abundance, *relative position* matters a great deal."

The scarcest "position" is always *above*.

Everything is constantly being commoditized. If it weren't, progress would stop. Outputs must become inputs to new outputs.

There will come a time – whether in three years, thirty, or three hundred – when AIs (and their robot bodies) have commoditized everything that we currently think of as creating economic value.

The idea of "economic value" itself may be abstracted away; we will simply have everything we need to survive and explore.

Then, humans will compete on what they've always competed on: who can combine those abstracted inputs into evermore novel outputs.

This is the one strategy.

At each layer, we strip away something we thought we were, and we get closer to what we actually are.

At some point, we strip away competition, and all we have is experience, relationships, love.

The world's religions have long taught[49] "Thou Art That," that each of us is the universe experiencing itself in a unique, embodied form.

This exploration of human strategy in the Great Commoditization points the same way.

If our purpose is to have novel experiences, then we should welcome commoditization, even of skills we thought made us, us. That is illusory, and always has been.

More commoditized inputs grows the potential experience space. That is good.

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[48] https://alexdanco.com/2019/09/07/positional-scarcity/

[49] https://www.amazon.com/Perennial-Philosophy-Interpretation-Great-Mystics-ebook/dp/B006IDURLU

AI's great gift might be to show us that we are actually pretty low-quality machines, so that we can return to being human.

Plus, if the universe needs us to produce novel experiences and insights in order to expand, I'd be surprised if OpenAI figures out a way to scale fully synthetically.

Novel experiences might be the last currency and the last status game.

At the highest layers of abstraction, humans transcend the machine-like and return to what they have always been: creators of meaning, explorers of the unknown, and connectors of experience.

And if AI can have experiences better than we can, can love more than we can… that's fine. Those are non-rivalrous goods, even expansive goods. The more there is, the more there is.

Most Human Wins, not by competing with machines, but by becoming greater and greater versions of ourselves with whatever resources available. The more resources, the better.

END

Dynamic Value Creation Appendix

Packy McCormick

January 2025

Appendix A: Generalized Framework for Dynamic Value Creation

This appendix formalizes the claim that commoditization, regardless of its specific driver (e.g., AI, mechanization, globalization), creates the conditions for dynamic value creation. By reducing scarcity and lowering costs, commoditization unlocks new layers of opportunity for humans to generate novel experiences and economic value.

1. Definitions

1. **Core Variables:**
   - $E(t)$: The set of all possible experiences at time t.
   - $N(t) \subset E(t)$: The subset of novel experiences at time t.
   - $F(t)$: The force driving commoditization at time t (e.g., AI, technological innovation, industrialization).
   - $V(e)$: The economic value of an experience e.
2. **Fundamental Assumptions:**
   - Novel experiences $N(t)$ expand the total experience space $E(t)$ over time.
   - The total experience space $E(t)$ grows as the cumulative result of novel experiences.
   - Commoditization reduces the value of specific capabilities while enabling the growth of new experiences.

2. Core Functions

2.1 Novel Experience Space Function

Novel experiences grow exponentially:

$$|N(t)| = N_0 \cdot e^{rt},$$

where N_0 is the initial set of novel experiences and r is the growth rate.

2.2 Total Experience Space Function

The total experience space grows as the cumulative sum of novel experiences:

$$|E(t)| = \int_0^t |N(t')|\, dt' + E_0,$$

where E_0 is the initial size of the total experience space.

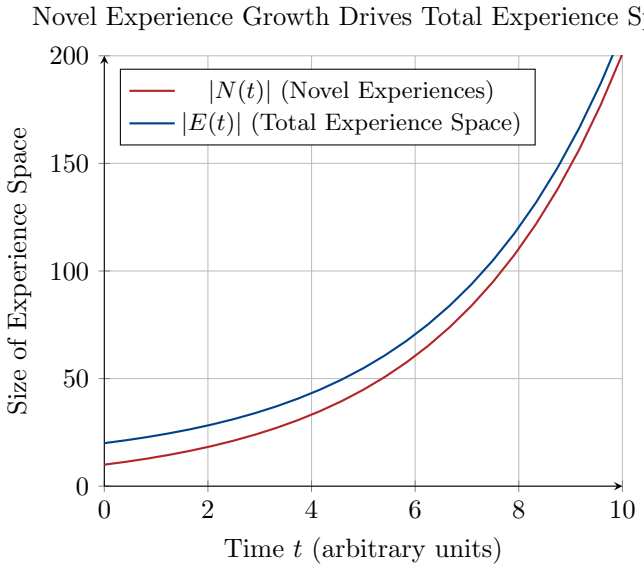

Figure 1: Novel experiences drive the expansion of total experience space, demonstrating their role as the engine of growth.

2.3 The Commoditization Function

For any capability c:

$$\text{value}(c,t) = \frac{k_1}{F(t)} \quad \text{where } k_1 \text{ is a constant.}$$

As commoditization forces increase, the value of c approaches zero:

$$\lim_{t\to\infty} \text{value}(c,t) = 0.$$

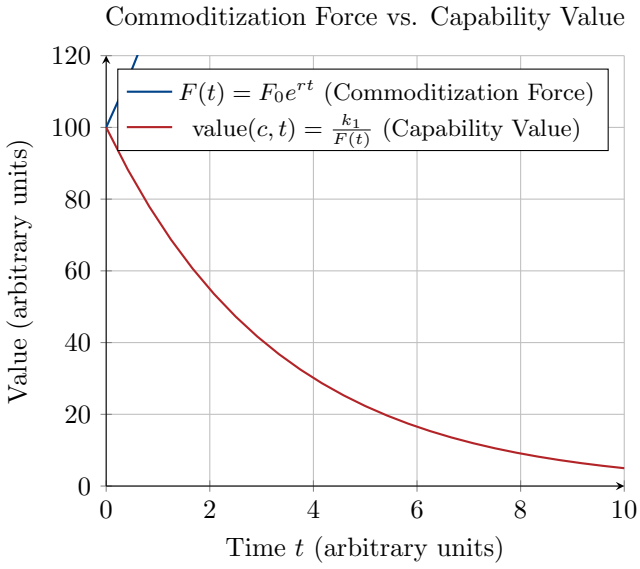

Figure 2: As commoditization forces grow exponentially, the value of any specific capability declines hyperbolically. This highlights the dynamic of value transfer in commoditized domains.

3. Theorems

Theorem 1: Dynamic Value Creation

Even as $F(t) \to \infty$:

$$\text{Total Value}(t) = \int_{N(t)} V(e)\, de$$

remains unbounded as $t \to \infty$.

Proof:

- Commoditized capabilities lose value:

$$\lim_{t \to \infty} \text{value}(c, t) = 0.$$

- Novel experiences $N(t)$ grow exponentially, driving the total experience space $E(t)$:

$$|E(t)| = \int_0^t |N(t')|\, dt' + E_0.$$

- Thus, dynamic value creation occurs as humans continually generate new experiences from commoditized inputs.

Theorem 2: The Acceleration Law

The rate of novel experience generation accelerates with increasing commoditization forces:

$$\frac{d^2}{dt^2}|N(t)| > 0.$$

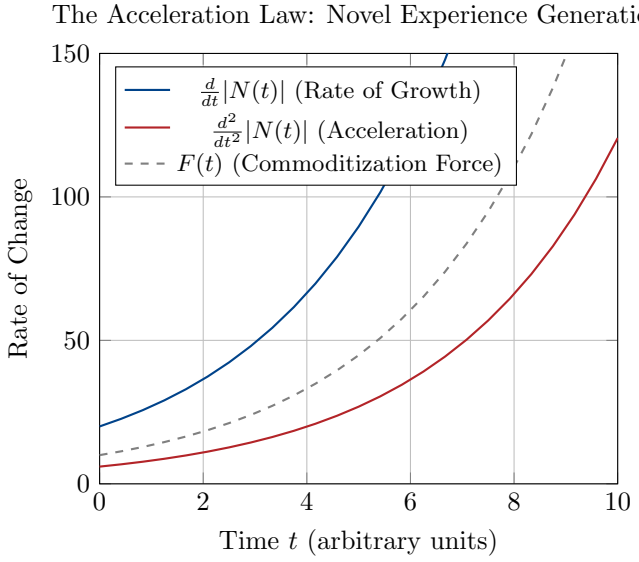

Figure 3: The Acceleration Law visualized: As commoditization forces increase, both the rate of novel experience generation and its acceleration grow exponentially, demonstrating the compounding effect of commoditization on value creation.

Theorem 3: The Value Flow Law

For any capability c commoditized at time t:

$$\exists\, e \in N(t) \text{ such that } V(e) > \text{original value}(c).$$

Interpretation: Every commoditized capability becomes a foundation for creating higher-value novel experiences.

4. Economic Implications

1. **Infinite Human Value Potential:** Novel experiences are the engine of growth, ensuring that human value creation remains limitless.
2. **Accelerated Opportunity Creation:** Commoditization compresses the time needed to create new opportunities.
3. **Value Always Flows Upward:** Value migrates to higher layers of abstraction as commoditization expands the frontier of possibilities.

5. Limitations

This framework assumes:

- The space of possible experiences is effectively infinite, supported by human curiosity and new technological frontiers.
- Humans retain the capacity to generate novelty, even as tools evolve.
- Novelty derives its value from scarcity and subjective meaning, which commoditization cannot replicate.

Conclusion

Commoditization, regardless of its driver, serves as the engine of dynamic value creation. By enabling new tools and capabilities, it allows humans to move higher up the stack, focusing on novelty, exploration, and unique experiences. AI, as the latest accelerant, exemplifies this dynamic—but the principle is universal and timeless.