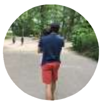
Breaking-the-wheel: Netflix's social resurrection and its virtuous cycle

Breakeven costs of production, synchronicity, and vertical social networks



Anthony Bardaro
Mar 30 · 20 min read ★

"I'm not going to stop the wheel, I'm going to break it." — Dany

Simply put, Netflix needs a social network and *we* need it now! Here's why…

. . .

#leaveyourmark #getstraighttothepoint

choose GREEN to annotate this rest of this article or PINK to get a summary

. . .

The half-life of Netflix content

In a recent interview with Stratechery, Eugene Wei discussed the "half-life of Netflix's content assets":

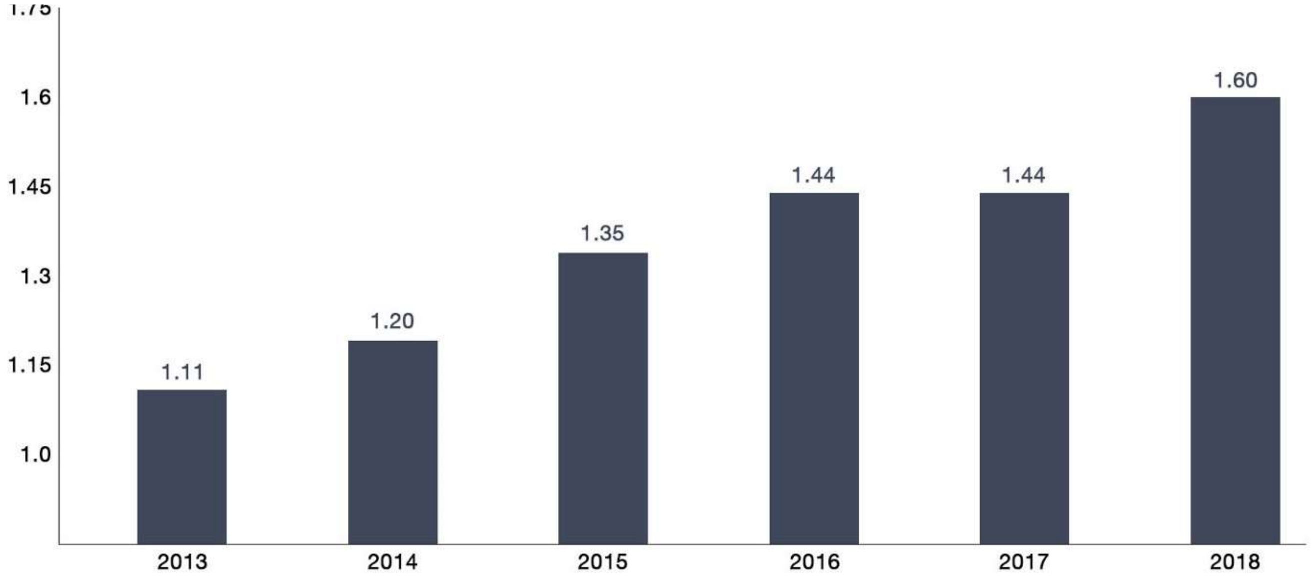
> *Netflix's terminal value as a company is what is the half-life of their content library… [Netflix] is going for the economies of scale advantage over its competitors. But the unit economics are determined a lot by what period they can amortize that content spend over… if Netflix has to spend \$20 billion a year to generate new content, but the amortization period is like a year, that's much different than if they're able to spread that over five years or ten years.*

There's a lot to unpack there, but let's start with the known-knowns. First, Netflix actually has disclosed the useful life of its content assets. From a 2019 presentation about its accounting methods:

> *[C]ontent assets are amortized over the shorter of the title's window of availability or estimated period of use or 10 years. On average, over 90% of a licensed or produced streaming content asset is expected to be amortized within four years after its month of first availability.*

…so if you're an investor, one of the bets you're implicitly making is an over/under on that 4-year useful life. Similarly, that's a pretty objective baseline from which Eugene can start his analysis! (Were he given that known 4-year quantity, Eugene sounds like he would take the "over".)

Since 2013, Netflix's ratio of content spend to amortization[1] has increased as follows:



…from which you can not gain much insight about how over/undervalued its Intellectual Property (IP) may be, since Netflix has been ramping-up its original productions; but you can infer that this spend is clearly customer acquisition cost (CAC) — and yet another indication that Netflix's CAC is rising materially. ("Materially" meaning that its acceleration and velocity are not only underwhelming relative to user growth, but also defying the edict of Ben Thompson's Aggregation Theory.)

This all establishes a few fundamental truths. Were "*Netflix's terminal value [equal to] the half-life of their content library*", per Eugene's formula, then Netflix would be worth a fraction of its current $155B market cap and $170B enterprise value.[2]

As important as these factors are, there are obviously other dynamics in-the-mix…

. . .

Exploration and production breakevens

We can discuss whether Netflix's spending on original programming should be treated as a capitalized expense, cost of goods sold (COGS), or pure CAC, but the important factors for consideration here include:

1. What will be the actual useful life for Netflix's IP?
2. What is Netflix's actual CAC?
3. What is Netflix's actual cLTV?

4. How strong are Netflix's economies of scale?

5. How much operating leverage does Netflix have?

I'll address those questions in a moment, but, in that vein, the following plea from "The Netflix Foil" is particularly apt:

> *Returning to the original thesis at the top, this serves more as an important revelation about the mis-diagnosis that undergirds Aggregation Theory and its resonance downstream. One such example is the lack of both operating leverage and economies of scale embedded in a lot of VC-funded business models, as discussed in "The New News Bundle": There's a widely-held belief that our marginal costs will go away and we'll be left to simply amortize fixed costs 'once we win this market' or 'once we grow big enough' or 'once we raise enough capital' or 'once we accumulate enough loss leaders'. Such misplaced faith leads to terminally wrongheaded projections for future capital-intensity and discounted cash flow…*
>
> *Whether Netflix acquires preexisting IP or produces its own in-house content (i.e. Netflix Originals), it's clear that incremental video hours are required to not only acquire marginal subscribers, but also retain preexisting ones. For this reason, I really do think subscription technology businesses, like Netflix, whose narratives — and therefore valuations — explicitly cite anything akin to 'effectively zero marginal cost leverage' should start disclosing marginal cost items, customer acquisition costs (CACs), and customer lifetime values (cLTVs or CLVs) in investor filings.*

Eugene Wei himself kind of alludes to the same plea in his aforementioned interview:

> *[Q:] This raises the question, is Netflix stuck in the middle? They're not getting the franchise type value that Disney is, they're spending a ton of money up front in a way that a YouTube is not. So is that going to be a fundamental problem in the long run?*
>
> *[Eugene:] That ultimately will be a question and we'll have to see how it evolves. What is the terminal subscriber base of a Netflix, and how much does it cost them to sustain that base across the entire globe over time?*

The "plea" that I excerpted above — and Eugene himself contemplates herein — is that Netflix's management team uses an internal estimate for cLTV (question #3 above), but that estimate is not disclosed to investors — despite the fact that Netflix's strategic planning, value proposition, and valuation are all predicated on it. If their theoretical estimates prove to be empirically accurate or conservative, then all is well; but if they prove inaccurate or aggressive, then management has a problem on its hands. It's advisable for Netflix (and its peers) to just disclose it, preemptively, before the SEC gets involved.[3]

Regardless, the point is that a lot of these data already exist in Netflix's filings. Again, it's debatable[4] whether or not the useful life of its content assets (question #1 above) will prove to last longer or shorter than Netflix's estimated four years — just like any other forward-looking financial statement — but at least it's disclosed on a best-efforts, bona-fide, generally-accepted, and standardized basis.

Netflix's CAC ramp (question #2 above) has manifest the increasing competition for new content and new users. That's known. Adding unto that the context of 4-year content amortization — or anything thereabouts — means that economies of scale (question #4 above) and operating leverage (#5) can also be derived from Netflix's financial filings. As such, while the former seems to be increasingly subsumed by production cost "reflexivity", the latter seems to have a much lower ceiling than Netflix's SaaS-like valuation might infer — all of which I'll discuss more below.

Second screen syndrome: "In Digital Era, What Does 'Watching TV' Even Mean?" — WSJ

If CAC continues accelerating and Netflix keeps spending, we can *hope* that management’s capital allocation decisions imply that LTV still exceeds CAC — so as to justify the continued outlays. But, then again, how would we ever know if Netflix were to become an uneconomical producer with its costs having grown to exceed future cash flows? In such a way, LTV and CAC are the revenue and COGS of the digital economy — like breakevens for an energy producer or unit economics for, well, everyone. These are standard fundamentals that should be disclosed in order to establish a baseline for whether or not a company is facing “*a fundamental problem in the long run*”.

Given the length of its production cycles, the magnitude of its machine, and the latency of its feedback mechanism (e.g. low friction for users cancelling/pausing subscriptions) — Netflix could operate below its breakeven cost of production for a pretty long time before even realizing that average customer lifetime is covertly creeping inward and irrevocably ruining its economics. It’s almost like a duration mismatch, which isn’t inherently problematic; but when it unwinds, it unwinds quickly.

Again, I digress. Considering all of these known-knowns and the known-unknowns, the grand unifying theory I’m going to discuss below is that Netflix needs a social network, but you cannot understand why until you understand the competitive context of these accelerating costs and rising breakevens…

. . .

The vicious cycle

Later in his interview, Eugene Wei started discussing production economics:

> *One of the interesting things about streaming media in general is that with the Internet and software, most of the disruption of the entire industry has been in remapping the topology of distribution. And yes, software is used in production of TV and film to do visual effects in different ways, but we haven’t actually seen software really alter the economics of making that content. So whether you’re Netflix, or Disney+, or HBO and Warner, Amazon Prime, Apple TV, it costs about the same dollars per minute to make a premium TV show or movie as your competitor, so no one necessarily has an advantage on that front. What becomes interesting is on the other side of it: how do you monetize what essentially is a whole bunch of assets that cost about the same?*

Despite industry-wide technological innovation and a positive supply shock, the cost of producing this content has, in fact, *increased* due to the aforementioned concept of "reflexivity", as discussed later in "The Netflix Foil":

> *In such a way, Netflix's real influence on the entertainment industry has been to actually* increase *the cost of all content — from rights to production to talent — rather than reduce it. As a consequence, not only has the marginal cost of content acquisition increased Netflix's cost of licensing 3rd party rights, but it's also increased its own cost of producing proprietary Originals. An exercise in reflexivity!*

In its mounting competition for new content and new subscribers, Netflix's continued pursuit of its own shock-and-awe strategy would likely hurt itself more than it would hurt its rivals, since even the smallest diseconomies of scale wrought from this reflexivity would get magnified when multiplied across Netflix's massive cost base. (Here's that "duration mismatch" concept again.)

As mentioned above, I'm less concerned with the near-term headroom for Netflix's operating leverage than I am with its long-term ceiling. Again, that should not be a very controversial point-of-view, given both the low-base of its current operating income (providing the headroom) and the habitual tick-tock of its marginal cost ratchet (lowering the ceiling):

> *These [content production] costs outrun subscriber revenues for a period; then the subscriber base rallies from behind to catch-up to the content library at equilibrium; then subs exceed content for a period; then new and increasing content costs jump ahead of subs again; lather, rinse, repeat.*

While effects of competition-cum-reflexivity-cum-ratchet should already weigh on the terminal value of Netflix's operating leverage, they certainly impact marginal utility in a way that's all reminiscent of the vicious cycle discussed in "The New News Bundle":

> *[Now that Netflix may be turning-the-corner toward diseconomies of scale,] the bundle falls apart from the top (due to a lack of operating leverage) and bottom (due to a lack of marginal utility). [So Netflix needs] to achieve operating leverage and/or economies of scale that are sorely lacking in its preexisting business.*

In other words, each incremental piece of Netflix content provides less and less of a benefit to subscribers.

NFLX net sub growth rate (%yoy, 2019Q2)

Remember, all of this spending is CAC and/or capex, so if Netflix doesn't deploy this capital, then revenue and/or asset values take a hit, by definition. (Acknowledging that not all liabilities are created equal — and some obligations are more flexible than others — this ROI factor is another reason why capital-intensive, uneconomical producers keep pumping below their breakevens.)

At the same time, these potentially negative unit economics can leave a big hole-to-fill at Netflix's scale — as exacerbated by its decelerating global subscriber growth, despite accelerating costs.

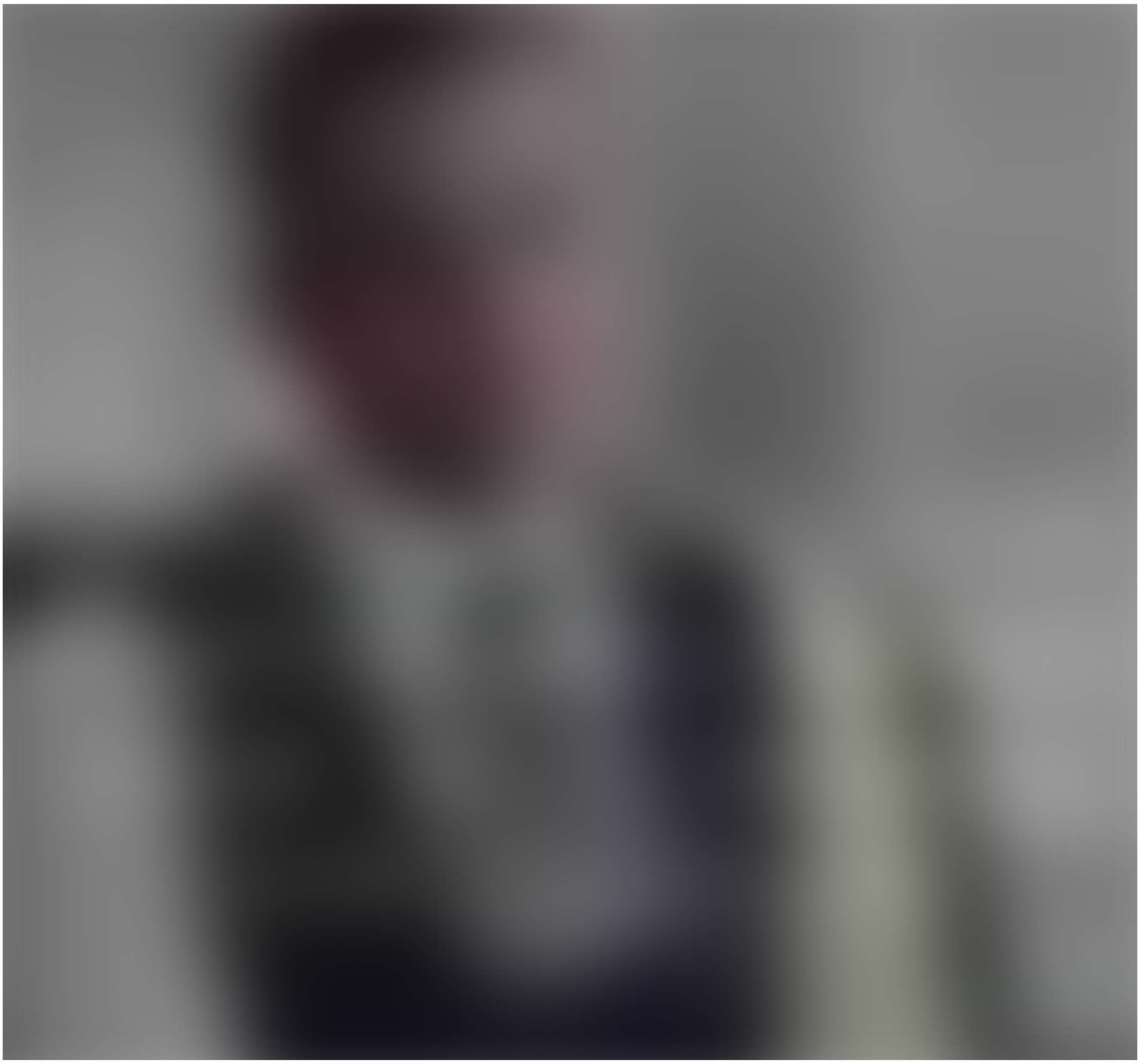
(Netflix's global net subscriber growth rate was +5.5% qoq in 2019q4, and the company guided toward +4.2% for 2020q1, which it should easily exceed given the streaming-boom stoked by coronavirus, making this admittedly the worst possible time to pen an analysis about Netflix's call-to-arms 😆, even though it appears to be underperforming its peers quarantine-to-date. The COVID-19 related bumper-crop is exactly why now is the time for Netflix to act — holding dear the first principle that you'd rather control your destiny than have your destiny control you.)

This all makes Netflix sound less like a tech business and more like a traditional company. Tech business models are usually characterized by low marginal costs to scale (higher fixed costs) and, thus, exponential unit economics. In contrast, traditional business models have relatively higher marginal costs to scale (lower fixed costs), and, thus, more linear unit economics. Netflix is certainly the latter, with its aforementioned marginal cost ratchet instilling linear economics.

That's not a problem, as long as Netflix acknowledges and addresses it…

. . .

The antidote



An MBA from the Pearson Specter Litt School of Business 🙄

None of this should be the end-of-the-world for Netflix — or make its business uninvestable. Already of a magnitude unlike anything in traditional business, Netflix's scale can still be re-deployed as a tailwind, instead of a headwind. It just needs an antidote to counteract its rapidly devolving unit economics. That antidote can repair the inverted LTV/CAC breakeven by either increasing LTV or reducing CAC.

One obvious lever is increased subscription pricing. Netflix certainly has pricing-power and isn't afraid to use it, although the crowded competitive landscape has recently introduced a bit of a price anchor — notwithstanding preexisting subscribers' inertia. Plus, even another 25% increase in its subscription prices atop low single-digit sub growth are not enough to outrun its 25% CAGR in content costs. (In 2019, Netflix's actual content costs grew 22% yoy, including 63% increase in original productions and 4% for licensed content.[1])

Netflix needs to break-the-wheel. It needs a revolution in its cost structure. To wit, "Stuck in the Middle" observed:

> *[There's a] ubiquitous nature of digital content: Abundance, rather than scarcity, that's unhindered by physical infrastructure, by effectively zero barriers-to-entry, and effectively zero marginal costs to scale… Given those conditions, that competition is won by Aggregators… [for whom scale] begets a moat in the virtuous cycle that spirals up toward a superior user experience… network liquidity is the basis of competition for many of them: Who has the most buyers and sellers; the most producers and consumers; the most supply and demand; etc.*

There isn't a more pure form of aggregation than social media. It's the Aggregator's odds-on archetype. And again, for better or worse, one thing Netflix has is preeminent scale — the kind that can seed aggregation's virtuous cycle.

Netflix needs to reinstate its dearly-departed economies of scale and operating leverage. It needs to break-the-wheel of that vicious cycle and reenter the slipstream of a virtuous one, for which social media's network effects are the perfect catalyst…

· · ·

The "Netflix Social Platform"

As this embedded Tweetstorm goes on to discuss, "*a Twitch-like social network for both subscribers and non-subscribers [including] watch parties; live-blogging; hottakes; recaps; etc*" is a strategically sound initiative considering Netflix's lot:

1. Netflix can populate its social network at low or no CAC, due to its large preexisting userbase (167M global subscribers);
2. Netflix should leave that social network open to non-subscribers, allowing network effects to reach new users at zero CAC — a portion of which consumers will eventually subscribe to Netflix in order to participate in group events like simulcast watch parties;
3. An open source "Netflix Social Platform" should then provide this proprietary social network to 3rd party streaming apps as-a-service, for free or at cost, allowing partners to integrate these next-level engagement features into their apps with a simple API — bootstrapping a social graph at the flick-of-a-switch;
4. Netflix is currently the most one-dimensional big tech component we've ever seen (e.g. Amazon had already diversified its revenue streams with FBA and AWS at this point in its life, and Netflix certainly appears closer to exhausting its TAM than Amazon ever was!);
5. If Netflix doesn't seize this opportunity, someone else will (many are already trying!)

Streaming is somewhat less rivalrous than other consumer tech, due to multihoming. Despite all of the competition entering the market, the Streaming Wars’ battle-lines are still being drawn along distinct jobs-to-be-done. While “*these newfangled competitors are not perfect substitutes for Netflix’s service, they are both complementary unto Netflix’s core userbase and rivalrous unto its marginal customers*”, per Tech’s False Idol.

In the competition for finite consumer demand, most streaming rivals will want to hedge their monolithic dependence on their traditional marketing (ye olde “content-is-king”) with something more native. Plus, as our golden age of content abundance creates both a discovery problem and a tyranny-of-choice, many streaming providers might not have another option but to join this hypothetical Netflix Social Platform. Call it a “Prisoner’s Dilemma Wedge”, if you will! 😉

There is no more “native” form of engagement than Netflix infused with social media and there is no better network to seed it than Netflix’s preexisting userbase — thereby sidestepping the whole chicken-or-the-egg conundrum that serves as a barrier-to-entry for most two-sided marketplaces. That combination of broad scale and narrow product-market-fit is powerful enough for Netflix to produce an insurmountable headstart in this new social networking vertical, as recently discussed within context of Amazon’s habitual go-to-market strategy:

> *Amazon loves building scale… as barriers-to-entry; then leasing its scale-as-a-service for 3rd parties. Time after time, Amazon’s endgame has been to provide B2B customers with outsourced economies of scale and operating leverage, which reflexively increases Amazon’s own scale.*

Here, again, we see the concept of leasing scale as-a-service to 3rd parties. To date, Netflix has largely leveraged its scale toward linear gains much like a traditional business, per “Three’s Company”:

> *That scale is… the gateway to entering the slipstream of what I've called the* "virtuous cycle" *— scaling with the tailwind of both network effects and virality — albeit rare in its purest form (e.g. Facebook not Netflix).*

…but a native social network would arm Netflix with more exponential economics thanks to greater network effects and virality.

Finally, Netflix would welcome anything that gives subscribers a reason to reduce monthly churn.

. . .

Coronavirus and synchronicity

I've been agitating for a Netflix social network for over a year, but others have started to arrive at the same conclusion due to the current coronavirus pandemic.

From Eugene's interview again (emphasis mine):

> *[Eugene Wei:] One of the things I've often thought about shows, movies, and all these cultural properties in general is that they are sort of like mini social networks in a way, because they are the basis for cultural conversation, and there are what I call narrative network effects to these things…*

Then from Eugene himself a few days later:

Users are begging for this:

Frankly, one of the things Eugene pointed-out that I hadn't even thought of was "synchronicity":

> *[Q:] There's a question as to whether Netflix is hurt by the release-all-at-once strategy, because they don't get an opportunity to participate in that sort of social validation and the network effects that accrue to a show. You saw in the case of The Mandalorian, which despite being a streaming show, was able to get that cultural valiance that no Netflix show has, even something like Stranger Things. That's always been a question — is that a good or a bad thing for Netflix? […]*
>
> *[Eugene:] I'm starting to sense that there was something lost in everything going asynchronous, and that we'll start to see media companies experiment a little bit with trying to force some level of synchronicity again, just to help us regain that feeling of community. Sometimes when you're on Twitter when something crazy is happening, or there's a sporting event and everybody's watching it live, you do have that feeling that I used to have when I was a kid, when… it was different watching it at that moment because I knew like 30 million Americans were also at home watching that exact moment with me. And in a period where media companies, especially if you think about sports and everything, which is all at a standstill right now, are looking at, okay, what do we do with*

> *this old content? I think some of it will be creative experimentation with generating this synchronous sense of community again…*
>
> *[Q:] Obviously the advertising plays into it in a part, you have to watch [sports] live, but it's so socially meaningful to have something that everyone bands around on and talks about that it's the most obvious vehicle for that.*

Entertainment culture is piling-on the asynchronous trend that Netflix first catalyzed. Most content is now consumed on-demand—watch what you want, when you want—so the shared-experience that was once central to the community-building and culture-defining properties of entertainment has been whittled-down to a nub. You can recommend a show or movie to anyone, but the opportunities to talk about that content around the watercooler, dinner table, or even social media are getting fewer and further in between.

But, hey, I'm not complaining. Abundance means there's something-for-everyone, and we still have live sports as one of the last bastions of synchronous, linear programming. Others have (in)gloriously filled-the-void too: HBO's *Game of Thrones*; Disney's *The Mandalorian*; ABC's *The Bachelor*. Netflix itself just doesn't have a foothold in this job-to-be-done (JTBD), which, for now, is more of an opportunity than a problem.

That all said, right now, coronavirus has shut everything down. Such a cliff-event warps the mechanics of everything from production to consumption. Longing for some sports action, I myself binge-watched Netflix's *Drive to Survive* reality-style documentary series about Formula 1 racing. A few days later, most of the professional drivers I had first encountered in the Netflix series — all of whom are now isolated due to COVID-19 — got their competitive fix by racing one-another remotely via an F1 video game, which was broadcast to the world via Twitch. (Must watch TV!)

Suffice to say, the synchronous void is bigger than it's ever been. We need it filled now more than ever. What better conditions for Netflix to launch its born-again social network!?

. . .

Highly-evolved vertical social?

The question now is whether or not vertical social networks can succeed where vertical search engines failed?

A generation ago, vertical search engines across categories like food (Yelp), travel (TripAdvisor/Expedia), and real estate (Zillow/Trulia) were expected to unbundle the monolith that Google had aggregated in its flagship search engine. While a few survived and far fewer thrived, most failed — and almost everyone is still actively pursuing Google for horizontal foreclosure (though most of their cases are tenuous).

In contrast, however, today's potential vertical social networks already have critical mass. Spotify and Peloton are both experimenting with their own social integrations, and they're two companies who are already operating at scale with evangelist userbases — much like Netflix. Peloton's CEO, John Foley, discussed his strategy on the company's 2020q1 earnings call:

> *[Social features] are going to help protect our moat from a network effect perspective.*

Even if you do not believe in the silent killer that is Netflix's vicious cycle, its CEO Reed Hastings himself will tell you what he thinks is Netflix's most clear-and-present danger:

> *"Our focus is not on Disney+, Amazon or others… We compete with (and lose to) Fortnite more than HBO. When YouTube went down globally for a few minutes in October, our viewing and signups spiked for that time… We compete so broadly with all of these providers, that any one provider entering only makes a difference on the margin… I think about it really is as winning time away, entertainment time from other activities[.]"*

Hastings has repeatedly cited complementary and substitutable goods — like gaming and social networking — as competitive threats to Netflix. He has also specifically summoned the massive, multiplayer, online, battle-royale metaverse that is Fortnite. These are the functionally fungible horsemen of the new media apocalypse, who come bearing nueva synchronicity and social experiences. Many have already laid-claim to their slice of consumers' entertainment pie, and it's high-time that Netflix stake its own claim on what crumbs remain today — rather than wage war on multiple fronts tomorrow.

This isn't exactly a standing-start for Netflix either. In 2004, they already launched a social network, known as "Netflix Friends", which they shuttered in 2010, then promptly shifted resources toward Facebook API integrations, which itself collapsed in a quasi-scandal (or political crossfire, depending on your persuasion) during the techlash of 2018. In the middle there, between 2009 and 2011, they had also managed to release the very popular "Netflix Party Mode" on Microsoft's Xbox 360, replete with features to synchronize group watch parties and chat by voice in real time, all of which ultimately got de facto shut-down by one of the game console's version updates.

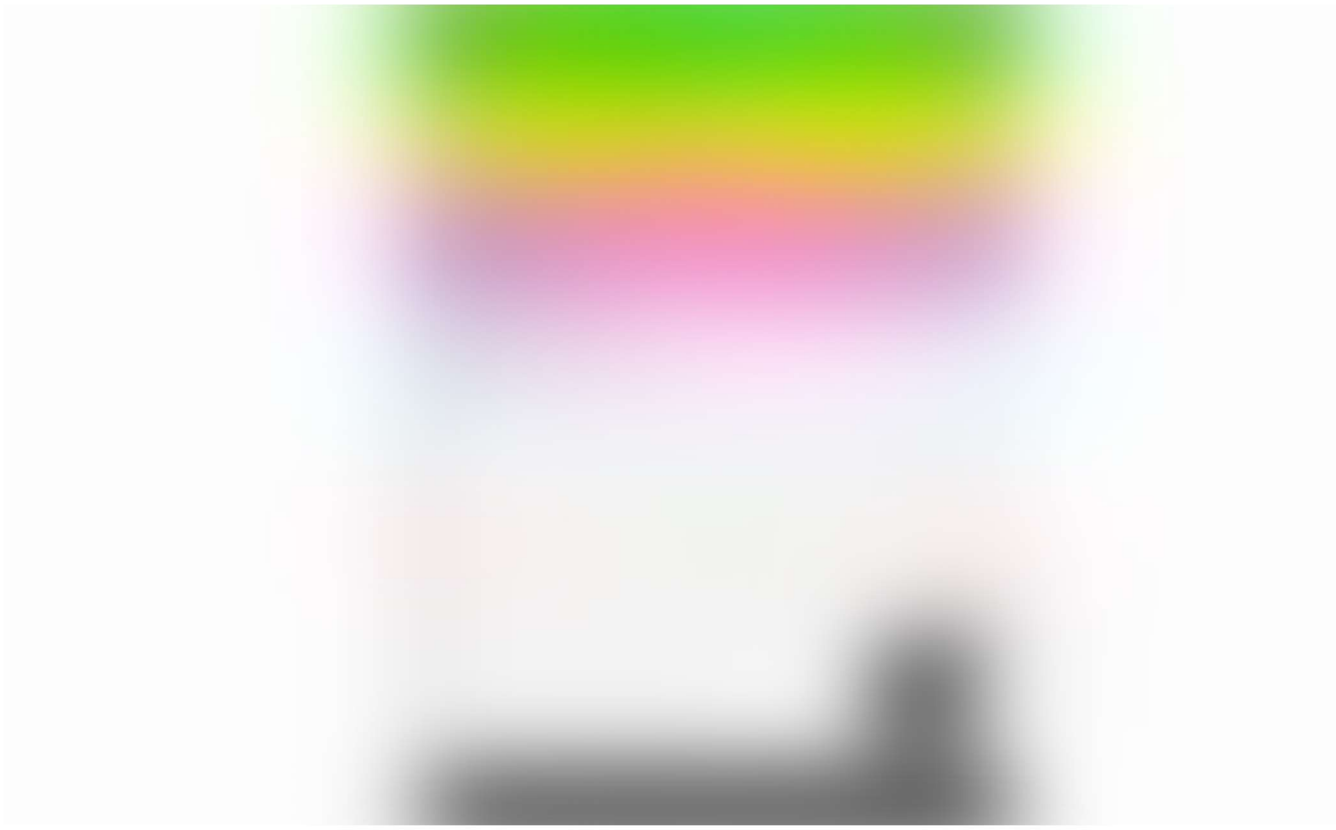
Regardless, the elephant-in-the-room, Facebook, is locked-out of the platform business, which gives Netflix's franchise — and others like it — a good chance of evading horizontal foreclosure at the hands of social media's incumbents.

The stars have aligned and the time is now! 🏁

. . .

A non-zero-sum network

John Naisbitt once said, "*We are drowning in information but starved for knowledge.*" That's never been more true than today, when 58% of us suffer from information overload, which is part of why Annotote's knowledge network gives you highlights of everything you need to read and lets you annotate anything you want to save or share. One person's annotation is another person's summarization, so everyone can get straight to the point. All signal. No noise. Annotote. Sign up now!



> "Perfection is achieved not when there is nothing more to add, but when there is nothing left to take away." –Antoine de Saint-Exupery

. . .

[1] *Netflix reports total amortization expense in its income statement under cost of revenue; both amortization of streaming content assets and cash spent on content can be found in its cash flow statement. However, to show just how much Netflix has started to ramp-up spending on new proprietary content, its amortization of streaming content assets is currently 79% licensed (21% produced) content as of 2019, compared to 86% in 2018 and 92% in 2017:*

Furthermore, its $19.1B in on-the-run content assets (i.e. those in the catalog and available to subscribers) are 77% licensed and only 23% original productions:

[2] *The half-life of $19.1B in available content assets at a 4-year useful life (~$9.2B in annual amortization of streaming content assets, as reported) discounted by an 11.93% WACC = 😬 compared to a $155B market cap*

[3] *Recently, Google made a similar such decision with regard to its YouTube segment's financial disclosures. Google likely evaded regulatory disclosure heretofore because the Larry Page, former CEO of Google's holding company Alphabet, never received or reviewed YouTube's financials himself, but with new CEO Sundar Pichai recently receiving both Alphabet's reigns and YouTube's full financials, the company would likely not have been able to convince regulators that these data were unimportant investor disclosures. By acting upon its own behest, ahead of formal SEC intervention, Google has thus far skated-by with minimal YouTube disclosure — only top-line revenue — which is a favorable precedent for Netflix, et al, who would probably prefer to keep these metrics secret for competitive reasons, but need to disclose something for liability and compliance purposes. However, in contrast to YouTube's revenue disclosure, which is one-piece-of-the-puzzle within context of the broader Alphabet holding company's convoluted corporate performance, Netflix's estimated LTV is the entire, straightforward shebang! I personally don't fault Netflix (or its management team) at all for not disclosing data like CAC or LTV. These data are the new financial language of the internet, and, as the plea excerpted above asserts: "[all] subscription technology businesses, like Netflix, whose narratives — and therefore valuations — explicitly cite anything akin to 'effectively zero marginal cost leverage' should start disclosing [these data] in investor filings." I generally think it's the provenance of FASB and/or the SEC to adapt new standards for such disclosure.*

[4] I'd add the counterfactual that these assets do have long-tail optionality that could beef-up that average shelf-life — think merchandising; licensing IP for video game productions; and producing sequels/spinoffs for tentpole franchises. Albeit not Disney-scale opportunities, these would supplement the carrying-value of Netflix's IP.

Netflix Social Media Business Business Strategy Finance