Epic Games Primer (Pt VI): Epic's Philosophy and Unprecedented Aspirations — MatthewBall.vc

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17-21 minutes

Throughout the **'Epic Games Primer series'**, Jacob Navok and I have outlined Epic's ongoing efforts to use the success and scale of Fortnite to launch new services, technologies and experiences that are either zero-revenue or nearly zero-profit.

Obviously, there are some non-financial benefits to this approach. Epic's account system and player network, for example, continues to grow in size, as does the quality, capability and reach of Epic's backend infrastructure services. However, these intangible benefits need financial context. Epic's new businesses could generate billions of dollars in value. After all, they offer compelling, world-class products and are participating in categories that already boast considerable revenues and high margins.

But not only does Epic Games founder, CEO and majority shareholder Tim Sweeney opt against capturing this value, he chooses to shift value out of the category altogether and deliberately eschews bundles designed to lock in customers or players to Epic.

As an example, we can return to part four of the primer, Epic Online Services. Historically, game developers had two choices: (1) free services tied to a platform like Steam or Xbox or (2) paid services without the platform ties. EOS, meanwhile, is available for free and has no platform ties, requirements or restrictions. This means a game that doesn't use Unreal, isn't published by Epic Games Publishing, and isn't even available for sale via Epic Games Store, can replace substantial portions of their online operations and expenses… at the expense of Epic. In fact, developers don't even need to use the Epic ID unless they choose to use elements of EOS that would structurally require it (e.g. player-to-player matchmaking). Collectively, this means myriad multiplayer online services businesses have no reason to exist and the lock-in effects of Steam, PlayStation Network and Microsoft Xbox have been eroded.

Another good example is the Epic Games Store. EGS sells games at 12%, versus the industry standard of 30%. But if a game developer uses both Unreal and EGS, Unreal's 5% licensing fee is waived. Game distribution and game engine licensing are obviously different services, and therefore it's fair for Epic to charge for both. However, Sweeney prefers not to double dip. Accordingly, Epic is not only driving down the share of industry revenues captured by games stores, it's eroding that of the engines, too. Their core business! And such moves go on.

In May 2020, Epic announced it would waive the entire Unreal licensing fee for a game's first $1MM in gross revenue (this policy would be retroactive to January 1st, too). Most games, of course, never gross over $1MM. As a result, they will no longer generate any revenue for Unreal. Small revenue games never generated much value for Unreal anyway, as the company charged developers a 5% royalty. But Unity, the most widely deployed engine for small/mobile games, deploys a flat "per seat" fee for its engine. As a result, for users with a Unity Pro license, even a game with $1,000 in revenue would generate revenue for the company.

Now a small developer with tight budgets faces a unique risk–reward decision when picking an engine: Unity, with an upfront fee, or Unreal, which is free unless they're enormously successful. Unity may choose to match Unreal's waiver, but even if it doesn't, Epic's move will reduce the value of the engine industry overall.

More broadly, we can consider Epic's 2020 unveiling of a new system, "Nanite," which would be part of Unreal Engine 5. For years, companies like Simplygon (now part of Microsoft) offered solutions to help developers with the complex issue of "Levels of Detail." LOD solutions ensure that a game only loads the "right" amount of graphical detail for the player based on their contextual needs. This matters because the more detail a game loads, the harder it is for that game to run reliably, and the more power the processor (e.g. a console or PC) requires. As a result, a tree 100 yards away from a player might not load detailed bark textures until the player gets within 20 yards, and then at 5 yards away, greater detail

still is loaded in. The goal of companies like Simplygon is to ensure this experience is always optimized and without the player ever knowing (e.g. the 20 yard load might have added detail only visible within 10 yards).

But with Nanite, Unreal will now handle LOD scaling automatically and at no cost. All a game developer needs to do is input the highest resolution textures, and Unreal will figure out when and how to use it. This means that for Unreal Engine users, Simplygon has no value. And more and more game developers are using Unreal, meaning the market will support fewer and fewer of these companies — even though the industry itself is growing quickly.

This is a macro-level shift that's not unique to Epic. Ten years ago, the annual Game Developers Conference in San Francisco, the largest industry gathering in the world, was mostly middleware exhibitors offering occlusion software, lighting solutions, physics solutions, audio solutions, and myriad other components of game design. The exhibition hall in 2019 was dominated by Epic, Unity, Amazon, Microsoft, and Google. Much of what was once offered by scores of independent technology providers has been absorbed into the engines or is now tied to infrastructure such as AWS or Azure.

The difference in Epic's case is that these services aren't being offered as paid add-ons to its existing businesses. They are being offered for free. And accordingly, these moves wipe out the value currently captured in the area and shift them to developers. This is the difference between Unreal Engine having a premium tier that includes LOD scaling and offering it for free — the difference between running a game store with 25% fees and 12% ones.

There is a way to be cynical of Epic's strategy. Each new service and fee drop expands Epic's influence over the technical roadmaps of the future and, in part, decides which companies can and cannot exist, which parts of the ecosystem will generate profits, and if they can and by how much.

However, this perspective is difficult to reconcile with the macro context of the gaming industry. Today, the industry generates roughly $120B per year in revenue (excluding hardware sales). Even if every single game used Unreal, from *Flappy Bird* clones on up to every single game from Activision Blizzard through to Nintendo, Epic would generate only $6B in revenue.

And if every single one of these Unreal-based games was *also* sold by Epic Games Store - which would require Apple, Sony and others to shut down their stores - Epic would capture only another $9B in gross revenues (for $15B total, worth 12% of the industry). Remember, Epic doesn't "double dip" on store fees and engine services. What's more, not all of this revenue is incremental; Unreal is already the second most widely deployed engine.

Note, too, that Sweeney has also said that as "founder and controlling shareholder of Epic," he "would never allow" Epic to "share user data…with any other company. We [won't] share it, sell it, or broker access to it for advertising like so many other companies do." So there isn't some secret ex-gaming revenue stream, either.

It could be argued that Epic's plan is more devious. In its famous antitrust case against Microsoft, the Department of Justice found the company had an internal strategy called "Embrace, Extend, and Extinguish." Specifically, this involved Microsoft deploying industry-wide standards that would later prefer Microsoft-related products, and eventually disadvantage competing products. But were this Epic's actual goal, it would make little sense for the company to zero-out pricing in these categories, versus just undercut them through lower prices and better offerings.

So how does one explain Epic's strategy? What is the Epic Games Flywheel looking to achieve? Why is Epic spending billions to launch new businesses that remove or reduce all the value in that category - and without shifting the remainder to Epic's own pockets?

The answer goes back to the gaming TAM ("Total Addressable Market") of $120B. Sweeney believes that the most important segment of the gaming/entertainment ecosystem is the content creator. And, accordingly, the entire ecosystem benefits from making it easier for developers to make both a game and a profit, from driving a greater share of industry profits away from stores and infrastructure providers to these developers, and by breaking down the closed platforms of Microsoft, Sony, Valve, Windows, Steam, etc.

Sweeney's goal, in other words, isn't "Embrace, Extend, and Extinguish", or even to drive Epic's share of gaming profits. Instead, it's to drive the industry topline itself.

> *"Epic's benefit is that we operate games. We have one of the biggest in the world, and we get more* Fortnite *friends as a result of it. We can also really help [lift] up the industry as a group of companies that cooperate together and collaborate together to reach users as*

> *opposed to fighting each other. The worst term that's ever been invented in the history of the internet is 'own the customer.' The customer owns themselves! I'm sorry; read the* Magna Carta*. Our aim is just to help all game developers do that in the way that we've done it with* Fortnite*." - Tim Sweeney*

This approach is essentially unprecedented. Most companies benefit from industry-level growth, but they rarely trade off direct revenues to enable it. Especially when their business can capture, at most, 7-12% of the value.

And this requires us to understand exactly how much the industry TAM stands to grow. Because Sweeney thinks it's in the trillions.

How Epic Is Reshaping the Future

Among Sweeney's strongest convictions is his belief in the Metaverse and how it ought to be operated.

The Metaverse is a complicated idea not well suited to a simple explanation. However, the core ideas are captured in books such as *Ready Player One* or *Snow Crash*. The Metaverse is a quasi-successor Internet where everyone and every company can exist, work, socialize, trade, and create. Critical to this idea is also unprecedented interoperability between experiences. Today, the digital world basically acts as though it were a mall in which every store used its own currency, required proprietary ID cards, had proprietary units of measurement for things like shoes or calories, and different dress codes, etc. Conversely, the Metaverse will involve considerable standardization, interconnection and collaboration between all companies and bodies.

It's also important to emphasize that the Metaverse isn't a "game" (e.g. a bigger, more realistic *Minecraft*), or hardware (VR), or an "expansive virtual world with a digital economy" (e.g. *Second Life*). This would be like saying *World of Warcraft*, Google, or the iPhone, is the Internet. They are digital worlds, services, websites, devices, etc. The Internet, conversely, is a wide set of protocols, technology, tubes and languages, each of which matters because of the devices, content, and communication experiences built atop them. The Metaverse will be, too.

> *Just as every company a few decades ago created a webpage, and then at some point every company created a Facebook page, I think we're approaching the point where every company will have a real-time live 3D presence, through partnerships with game companies or through games like* Fortnite *and* Minecraft *and* Roblox*... That's starting to happen now. It's going to be a much bigger thing than these previous generational shifts. Not only will it be a boon for game developers, but it will be the beginning of tearing down the barriers not just between platforms but between games." - Tim Sweeney*

If Sweeney's right, the Metaverse will produce trillions of dollars in value. We will see our economies and labor markets transform, the "real world" will become fundamentally integrated into the digital one, and countless new digital services and products will be created. This, in turn means, myriad new companies will be created to manage online identities, data, transaction processing, security, and so forth.

Crucially, there will also be no clear point in which the Metaverse is "turned on" or "real"; instead, it will slowly and continuously emerge over the next few decades. To this point, there are many, many enormous technical problems that are still left to solve for the Metaverse. Consider, for example, *Fortnite*'s concerts. Although 12MM players participated in *Fortnite*'s first live Travis Scott concert, they did so in individual groups of no more than 50. This meant that, in truth, there wasn't one concert with 12MM people, but over 250,000 concerts occurring roughly at the same time with up to 50 people. We are far from being able to enable 1,000 people in the same shared, live, and synchronous space, let alone millions.

And beyond purely computational challenges is the difficulty of getting today's mostly closed platforms (e.g. Amazon, Google, Facebook) to embrace interoperability and data sharing. Although such moves would likely benefit consumers and the economy overall, they would severely harm each platform's competitive moats.

> *"… No one company in the whole industry is going to figure all this out on their own. It's going to take everybody working together and building on top of each other's efforts to really get to where we need to be, and I'm super happy to see that. Whatever form this medium ultimately takes, our biggest hope is that we can play a role in it, whether we're the creators of the big thing, or technology supplier to it, or even better, if it's a decentralized distributed system that combines everybody's efforts and connects them in a much more open way." - Tim Sweeney*

For related reasons, no one company will own the Metaverse. Just as no one company "is" the Internet. In fact, the very premise of the Metaverse as an interconnected digital world means that Epic's primary competitor, Unity, will have to play a foundational role too.

At the same time, Epic is uniquely positioned to be a leader in the creation of the Metaverse.

Today, it operates one of the two most widely deployed and technically capable engines behind virtual worlds in gaming, film, and television. In addition, Unreal is rapidly expanding into new virtual use cases, from concerts to theme parks, architecture to design. This not only gives Epic unique influence over the standards and pipelines of the future, but it also makes it much easier for future "worlds" and "experiences" to interconnect.

This will be furthered by Epic Online Services, which will help power the online services for an even greater number of virtual worlds and experiences (i.e. including those not based on Unreal) and offer a shared account system (Epic ID), too.

Epic Games Store, meanwhile, helps distribute virtual experiences and manages access to them. And *Fortnite* makes it not only easier for everyone to be a content creator, but helps to unite previously disconnected platforms and IP and accelerate our shift to online, virtual life. Epic's growing role in game publishing will help forge this interconnection, too.

Understanding the *suite* of services outlined above is critical to differentiating between Epic's Metaverse ambitions from those of *Minecraft* or *Roblox*. *Minecraft* and *Roblox* also offer developers, creators, and talent free online services, a shared account system, large user base, a storefront, and a highly capable engine that can easily integrate various experiences. However, all of these experiences must happen inside *Minecraft* or inside *Roblox*.

Epic, meanwhile, will power or enable a myriad of experiences inside but mostly outside of *Fortnite*. And in these latter cases, partners have the ability to use only the elements of Epic's package they choose to use — or to mix and match them with Epic's competitors. Not all of the world can or will run in Roblox, but most of it can run on or touch some part of Epic.

As excited as Sweeney is by the potential of the Metaverse, he's equally fearful of who might lead it. Per the many sections above, Sweeney is a harsh critic of all closed ecosystems and platforms, from Android ("a fake open system") to Apple ("even worse"). He believes the rates these platforms charge content creators are usurious and anti-competitive and that they stifle innovation. Similarly, he argues that ad-based services such as Facebook exploit consumer data and rights and harm society.

To this end, the Metaverse is as much an opportunity to improve today's Internet as it is to worsen it. Imagine, for example, that instead of being designed by nonprofits and technologists looking to share research files and messages, the Internet had been designed from day one to sell ads or collect user data for profits.

"As we build up these platforms toward the Metaverse, if these platforms are locked down and controlled by these proprietary companies, they are going to have far more power over our lives, our private data, and our private interactions with other people than any platform in previous history," Sweeney said in May 2017. Two months, later he declared, "It's a big and growing problem, the amount of power possessed by Google and Facebook. President Eisenhower said it about the military-industrial complex. They pose a grave threat to our democracy."

Which is to say Sweeney hopes to produce not just a world where developers can make games more easily, or make greater profits from doing so, but one where technology continues to be a force for good.

*This essay is the final portion of the six-part '**Epic Games Primer**', which covered every element of the Epic Games Flywheel, including **Unreal Engine**, **Epic Games Store**, **Epic Game Publishing**, **Epic Online Services**, and **Fortnite**.*

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