## Epic Games Primer (Pt V): Fortnite & How It Built the Epic Flywheel — MatthewBall.vc

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This essay contains the fifth portion of the six-part 'Epic Games Primer' with Jacob Navok, which covers every element of the Epic Games Flywheel, as well as the company's aspirations. Specifically, this entry walks through Fortnite and Epic's overall approach to first party games and experiences.

## The 'Epic Games Primer', Part V: Fortnite (2017-)

What is Fortnite and What Does It Want to Be?

Fortnite is one of the most popular video games outside China (where it is not available), was made by Epic Games, and runs on the Unreal Engine.

By most estimates, *Fortnite* ranks third among non-mobile only titles (e.g. *Candy Crush*) in terms of monthly active players, with roughly 60–80MM compared to 110–130MM for *Roblox* and *Minecraft*. However, *Fortnite*'s total playtime is by far the largest. In April, it amassed more than 3.2B hours of direct playtime (plus a few hundred million more hours watched via Twitch and YouTube), compared to ~2B each for *Roblox* and *Minecraft*. Call of Duty, which has spent more than a decade as one of the world's biggest game franchises, delivered 2.4B hours of playtime across *Call of Duty: Modern Warfare* and *Call of Duty: Warzone* from October through April combined.

Fortnite's per user playtime is so great that it's probably the most played game of any kind outside China, even though Candy Crush has some 250MM monthly players. Similarly, Fortnite likely has the record for peak concurrent users, with some 12MM+ participating in its live concerts compared to 4MM for Roblox's major events.

Much of this has to do with *Fortnite*'s much-talked-about role as a social network or hangout rather than a game. Teenagers in the 1970s to 2010s would come home and spend three hours talking on the phone. Now they talk to their friends on *Fortnite* but not about *Fortnite*. Instead, they talk about school, movies, sports, news, boys, girls, and more. After all, *Fortnite* doesn't have a story or IP — the plot is what happens on it and who is there. Another way to think about the "game" is the virtual/new version of loitering at a shopping centre. What's more, *Fortnite* even offers players an opportunity to digitally loiter ("just hanging") by tuning into their friends' matches. This allows them the ability to join the conversation

without actually joining (or even watching) the game — perfect for the bus home from school or while doing homework.

This is one of the reasons a sense of individuality and agency is key to *Fortnite*'s creative ethos. Although players can dress in various outfits, including those of characters like Deadpool, they never take on that character's unique attributes, skills, or powers. Because the player is not actually *becoming* that character. That doesn't mean we want to remain an exact replica of our "IRL" selves — we might want to be taller, or blue, or metal, and so on. But when you're specifically Iron Man, there are limits to what you can look like, how you can behave, what you can do or be, where you can go, and how much time you'll spend there. And certainly, it doesn't make sense if all of your friends are all Iron Man, too.

## Fortnite Game Modes

There are three core areas of Fortnite today:

- 1. Fortnite: Battle Royale: This is a "Player vs Player" game in which up to 100 players land on an island either solo or in teams of two or four and then fight other players until no opponents remain. Success/survival requires more than just shooting; players must scavenge for resources and weapons, build defensive structures, outrun storms, and so forth. Fortnite often has "Limited Time Modes" that tweak gameplay, too. This can be Capture the Flag—like games, versions of the main Battle Royale with half the gravity, or IP-related tie-ins where select players can wield the superpowers of Marvel's Avengers. One of these game modes is actually the original version of Fortnite, Save the World, which is described later.
- 2. Party Island: The newest part of Fortnite is a bespoke, always-on island designed purely for social play. Historically, socializing in Fortnite required players to enter Creative Mode, a training simulation, or the Battle Royale itself. Party island offers an opportunity for more free-form, relaxing social play. What's more, guns aren't even available. Instead, players can simply hang out in a virtual world (think of a virtual version of hanging poolside), dance, fish, race, and more. In addition, Party Island launched with a dedicated club where famous, real-world DJs such as Deadmau5 and Steve Aoki perform live.

Press attention typically focuses on *Fortnite*'s use of marquee events such as the Marshmello and Travis Scott concerts, a live event with *Star Wars* director JJ Abrams, or a major movie integration such as *Avengers Endgame*. These play an important part in Epic's R&D process (below). But more important is the role of such events in attracting a broader set of "player" to the world of *Fortnite*.

Fortnite may be one of most popular games in the world, but it's far from being one of the most popular digital services/experiences in the world. And unless it can broaden its content, its appeal will remain capped. There is an inevitable and low ceiling to how many people will participate in high skill games, especially adversarial ones about competition and death.

More broadly, the Battle Royale game design inherently limits the ability of the Epic/Fortnite ID to be a virtual representation of a player's real world identity. Most of us, after all, aren't murderers. In addition, games aren't the only way we socialize. If that's all *Fortnite* is, it can only express a small part of you.

To scale in "playtime" per player and the total numbers of players, a virtual world needs to offer many levels of immersion, work for various levels of skill, and fulfill many emotional needs and use cases. Consider, for example, the differences between *Fortnite* and *Animal Crossing*. The former is fast-twitch, winner-takes-all, and gun-based, while the latter is therapeutic, never zero sum, never right or wrong, and entirely non-violent. Some players will enjoy both, but many are either/or. And the addressable market in the latter is likely to be much larger.

Party Island is a concerted effort to start diversifying *Fortnite* away from guns and competitive play and into a place you want to be, you want to relax, and where you can express yourself without limitation.

3. **Creative Mode:** This allows players to easily create their own *Fortnite*-like digital worlds, games, and stories, similar to how *Minecraft* and *Roblox* operate. Another way to think about Creative Mode is like a simplified bundle of the entire Epic offering. The experience itself, for example, is built and powered by Unreal. All games are accessed by a virtual, lobby-like island based in *Fortnite*, which basically serves as a visual Epic Games Store. In addition, these games are operated at no cost by Epic, using the Epic Online Services backend and Epic ID system. And as

the platform that powers and distributes these games, Epic serves as the publisher, too (as per Epic Games Publishing).

The games made in Fortnite Creative are mostly limited by the items, functionality, and aesthetics currently available in Fortnite. However, Creative Mode thrives despite (or perhaps because of) these limitations. Players can enjoy everything from simple treasure hunts, to immersive mashups of the Brothers Grimm with parkour culture, to a 10-hour sci-fi story that spans multiple dimensions and timelines.

In addition, Creative Mode continues to become more flexible and powerful. Today, there is a greater range of possible creations available to *Minecraft* or *Roblox* creators, but Fortnite Creative Mode's basis in Unreal should allow for greater complexity over time. In addition Sweeney has said Epic's long-term goal is to allow Creative Mode to accomplish not just anything that Unreal can, but anything that Epic themselves can produce using Unreal.

Everything in Fortnite Creative Mode is free to both creators and players (though tipping is available). Competing game creation platforms, such as *Roblox*, allow creators to charge players to access their games, as well as sell items they create (e.g. individual trees) to other developers. In this case, the developer receives less than 30% of the proceeds. Notably, this is substantially less than the 70% netted by a developer who sells their games through Steam or Apple's App Store and the 88% when selling through Epic Games Store.



## Fortnite Misunderstandings

There are five things commonly misunderstood about *Fortnite*:

- 1. **Its Business Model Is Not Unique:** Although it's one of the most profitable games in history, *Fortnite* is entirely free to play. Players do not need to pay to play the game, keep playing the game, or access paywalled levels or exclusive content. Furthermore, nothing that the player can buy such as a digital outfit or a "season pass" provides any competitive benefits. There are no "better guns" or "extra lives" that a player can purchase, only cosmetics and other related perks. While the success of this model surprises many non-gamers, it's increasingly common. Indeed, most of the most revenue-generative games are free to play (though most of these do sell extra lives). Furthermore, most of these games are far simpler to design and much cheaper to operate. The *Disney Tsum Tsum* mobile puzzle game, for example, has grossed over \$2B since 2014.
- 2. Fortnite Is Not the First Mainstream Cross-Play Game: Historically, major games would only support a few devices (e.g. PlayStation 4 and PC) and would not allow players to compete against those using a competitor's hardware (e.g. PlayStation 4 Call of Duty players couldn't play Xbox One Call of Duty players). Fortnite has none of these limitations. It is available across all devices in its fully featured form (though the quality of the graphics/visuals varies), and a player on any device can play another using any other. Fortnite is not the first game to support many devices and cross-play. Final Fantasy XI, for example, launched in 2002 and supported PC, Xbox, and Playstation cross-play. However, Fortnite is unprecedented in the scope of its cross-play and for forcing those that had long resisted such functionality, such as Sony PlayStation, to embrace the model. As a result of its success breaking down cross-play barriers, the major hardware platforms now allow cross-play for most major titles, including Call of Duty: Warzone and Minecraft.

- 3. Fortnite Does Not Have (and Has Never Had) More Players Than All Other Games in the West: Because of its dominance in the press, Fortnite is often considered to be the most popular game in the West (or at least the biggest game). It is certainly enormous, with an estimated 60–80MM monthly active users. However, Minecraft and Roblox are considerably larger, with 110–130MM monthly players. In addition, they are typically more balanced in gender splits, too. However, Fortnite's total playtime far exceeds that of any other game in the West. Roblox, for example, peaked in April 2020 with roughly 2.1B hours. Fortnite, however, achieved 3.2B hours despite having 30MM+ fewer users.
- 4. Fortnite Didn't Really Pivot from a "Failed Game": The original version of Fortnite was a "Player v. Environment"—style game where players teamed up to survive and fend off zombie-like enemies. This title, which has since been renamed Fortnite: Save the World and reclassified as a "mode" of Fortnite, released in July 2017 to little fanfare. It wasn't until a Battle Royale mode was released in September which was clearly inspired by the Unreal-based PlayerUnknown's Battlegrounds, the first mainstream battle royale game that Fortnite picked up mainstream popularity. And as the original Save the World mode spent seven years in development only to sputter on release, Fortnite: Battle Royale is often characterized as an accidental success.

But as an engine provider, Epic's job is to understand and optimize for emerging genres and game dynamics. Furthermore, *Fortnite* was always designed for flexibility. While Epic wanted to preserve the live-or-die urgency of shooters such as *Counter-Strike* or *Call of Duty*, it also wanted to unite and underpin this sensibility with the sandbox nature of *Minecraft*. Accordingly, a pivot was natural to the game (indeed, the speed with which Battle Royale launched suggests the mode was in development well before Save the World had even launched).

- 5. Fortnite's Live Events and Concerts Don't Exactly Have 10MM+ Attendees: One of the most interesting and innovative parts of Fortnite is its live events, such as its Marshmello and Travis Scott concerts. And they are quite popular, too. The first Marshmello concert counted 11MM attendees, while the first Travis Scott airing had 13MM. However, the technology simply does not yet exist for there to be thousands, let alone millions of people participating in a shared, synchronous experience with their own individual characters. While 11MM attended Marshmello's performance at the same time, they did so via over 120,000 separate instances, each of which were slightly out of sync and capped at 100 players per instance. Scott's event, which was far more technically sophisticated, was capped at 50 players per instance and thus had more than 250,000 concurrent "versions" in operation. Epic can probably host more than 100 concurrent players per instance today, but not several thousands, let alone millions.
- 6. Fortnite Is Not the First Game to Draw in and Intermingle Third-Party IP: Fortnite's enormous popularity has made it an increasingly necessary part of consumer marketing, brand building, and multi-media franchise experiences. In 2019 alone, Fortnite produced experiences with the NFL, Nike and Air Jordan, Marvel Comics, DC Comics, John Wick, and Star Wars. Some of these events occurred only days apart, but most important is the fact that parts of them persist. Specifically, a player who buys a Disney/Star Wars' Storm Trooper outfit can continue to wear it after a Star Wars event exists. In fact, they can continue to wear it as part of a team that includes Lionsgate's John Wick... and then go inside a limited time event set in Warner Bros./DC Comics' Gotham. This sort of cross-over permission is generally unusual. It's particularly rare when the IP owners don't control the editorial experience.

This is a real and significant achievement, but it's not unique to *Fortnite. Minecraft* and *Roblox*, for example, have had such crossovers and outfits for years. This is, in part, a reflection of the fact that Hollywood still lacks a clear gaming strategy and capabilities. As a result, they've little choice but to embrace the opportunities available to them. Accordingly, such multi-IP experiences are likely to become more common in the years to come.



The Value of Fortnite to Epic Games

Since 2017, Fortnite has generated close to \$2B per year in revenues and hundreds of millions (if not \$1B+) annually in profit. This success helps finance Unreal and all of Epic's new initiatives, such as EGS, EOS and EGP.

It is also an overarching customer acquisition "cannon" through which Epic can shoot large numbers of users across different devices to new experiences. As discussed above, the Epic Games Store was launched onto tens of millions of day-one devices through an update to the PC/Mac *Fortnite* app. In addition, it's much easier to launch a games store when you have one of the world's most popular and frequently used games on an exclusive basis.

Fortnite also established Epic's 350MM+ users and 2.3B connection social network/player graph and created the suite of cross-platform online services that now make up Epic Online Services. Fortnite's ongoing success, meanwhile, both funds Epic's decision to give EOS away for free and means that EOS operates at an efficient level of scale.

Fortnite also serves as a large research and development platform for Unreal. Fortnite's marquee events obviously help drive players to the game and sustain the interest of those already playing it. However, they're also a critical (and profitable) opportunity for Epic to create new technologies and develop the expertise required to execute them. Marshmello, for example, tested Fortnite's ability to deliver relatively synchronous experiences at an enormous scale (i.e. 120,000 concurrent instances playing the same content). Fortnite's Star Wars: The Rise of Skywalker event represented the world's largest-ever live-motion capture-to-digital avatar event. The Travis Scott concert involved the live loading of several new "game" worlds that allowed players to be transported across multiple different stages and aesthetics throughout the show.

This concert also serves to promote Unreal to third parties. Not long after the Travis Scott concert, Sony Music, for example, announced it would be building a technology team for Unreal-based concerts. This initiative is important for a few reasons. Most obvious is the way it affirms the unmatched strength of Unreal. Sony Music's sister company Sony Interactive Entertainment has its own gaming platform (PlayStation) and numerous proprietary engines. Second, Fortnite/Epic Games doesn't want to be in the content-making business and especially not the concert-producing business. The company is definitely asked to do both, but instead, they want to make it easier and cheaper for third parties to do so themselves. And the Travis Scott concert showed not just how to creatively execute these events, but the upside potential from doing so. An artist simply can't "buy" millions of people spending 10 minutes fully immersed in your music.



Similarly important is how Fortnite Creative Mode provides Epic with insight into emerging gameplay formats, genres, and wants. If insight gleaned from Epic's Unreal division is partly responsible for *Fortnite*'s rapid pivot from a PvE game to a PvP Battle Royale, imagine the benefit of accessing hundreds of millions of hours of playtime spread across thousands of constantly changing experiences.

In this regard, it's important to contrast *Fortnite* with other Epic titles. Epic Games began as a game maker and created engines to support its own titles rather than help others do so. Unreal, for example, is named after Epic's 1998 game, *Unreal*. But over the past twenty years, the company progressively reduced the number of games it produces. Today, these efforts are almost exclusively focused on helping the company "dogfood" its engine (notably, Unity does not make its own games), fueling R&D, or driving other strategic objectives. They're not about revenue, per se.

Last year, for example, Epic acquired Psyonix, owner of the hugely popular Unreal-based game *Rocket League*. Shortly thereafter, Epic announced the game would soon be sold through the Epic Games Stores and would no longer be sold on Steam (customers who previously bought the title there would still be able to access it). In the years to come, it's likely we'll see unprecedented integration between the title and *Fortnite*, neither of which were, of course, designed with the other in mind.

In 2019, Epic also purchased the social video hangout service Houseparty. And under COVID, it has become one of the 10 most popular apps in the world and serves as a non-Fortnite sort of digital "third place" for millions. From May 15–17, the app hosted a scheduled event featuring 40+ artists including Katy Perry, Snoop Dog, and Terry Crews — all of whom you could watch alongside your friends.

However, the best case study of Epic's approach to first-party titles is *Gears of War*. For all the success of *Fortnite*, the title is far from being Epic's first billion-dollar hit game. In 2006, the company produced an Xbox exclusive, *Gears of War*, which won dozens of "Game of the Year" awards, became one of the bestselling games of the seventh generation of consoles, and spawned one of the highest-grossing franchises of the decade. But in 2014, Epic Games sold the hit franchise to Microsoft. The costs of production had become too great, and its strategic value to Unreal wasn't clear.

It is difficult to see Epic taking a similar approach to *Fortnite*. The game is distinct, and this gets to the last and perhaps most important thing to understand about Epic: the prospect of the Metaverse.

This essay is the fifth 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, and Epic Online Services, as well as Founder/CEO Tim Sweeney's vision for the future and unprecedented aspirations.

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