

Analyzing Digital Game Distribution in Gaming Industry: A Case Study

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Abstract

The current situation of the gaming industry, as well as the effects of e-commerce on traditional gaming products commerce, will be discussed in this paper. Its goal is to see if e-commerce will someday supplant the traditional method of purchasing games. Previously, gamers had to go to a gaming store to buy a physical copy of the game. With the advent of e-commerce, game companies are promoting the use of a digital copy. We'll look at the economic tradeoffs between the two methods of acquiring computer-based games, as well as the impact they have on the people who buy them and their preferences. We would have figured out how the gaming industry has changed at the end of this study. How it got there and how it affects gaming industry stakeholders.

Keywords

e-commerce, traditional commerce, physical copy, digital copy, computer-based games

1. Introduction

1.1 Gaming Commerce

Digital game distribution allows the delivery of video games without the need for the physical copy such as optical disc, ROM cartridges and memory cards. The distribution of games is all done over the internet and provided by online distributors. Online distributors can deliver these services by creating their digital distribution platform where game publishers can put their product for sale. In return digital distributors gain a percentage for every game sold on their platform. The share of gaming sales from digital compared to physical has grown by 63% in the last 9 years (Clement 2009). Over the previous two decades, both the gaming and e-commerce industries have experienced consistent expansion. Both businesses are expanding, and the epidemic has contributed to this growth. For e-commerce and gaming, social distance and lockdowns have been an opportunity, resulting in a 30 percent boost in value for both industries. Mobile gaming is now the largest segment of the gaming business, accounting for over half of total revenue. A similar shift toward mobile experiences has been seen in e-commerce, although conversion has been tough. Mobile devices account for over 80% of all product discoveries, but just 30% of conversions. This is because the checkout processes are difficult to use. This is beginning to change, thanks to mobile wallets, mobile banking, and user-friendly web design (Friberg, J. 2021)

This study aims to identify two main objectives:

- The economic impact of digital distribution in the industry
- The preferences and tradeoffs that consumers are willing to accept

1.2 Rise of e-commerce in gaming

The distribution of games over the internet has grown increasingly prevalent in recent years. The overall market is currently dominated by brick-and-mortar retailers and physical copies, but the online market — which includes online distribution of full game titles, subscription-based models, downloadable content, virtual commodities, and related value-added services — is rapidly developing. We still know very little about how players feel about digital game delivery (Toivonen, S. and Sotamaa, O. 2010).

The rise in popularity of digital game distribution and the need for delivering games digitally gave the opportunity for a new market. Digital game delivery platforms, the leading platforms such are Steam, Epic Games and

Microsoft. They can provide thousands of games available for purchase any time of the day. Comparing that to the number of titles that can be at a physical store at any given time gives the digital platform a lot of advantages. Not needing a person to manually transact the sale. Without the need to limit daily business hours to close shops and the convenience it provides customers to be able to access their products at any given time. This, however, contradicts some of the industries consumer needs to collect physical copies as part of their collection.

Now that there are several avenues for game publishers to market their goods, we are going to look if this will present a better value for their customers. In terms of pricing, quality as well as the effect it had on game publishers' revenue. The trends in the industry and what the future of gaming commerce will become.

1.3 Current State of Gaming Commerce

To accomplish the goals of the study we have employed the research method Secondary Data Analysis. We are going to cite the leading digital distribution companies and the different ways the gaming industry has evolved. Warman (2020) identified the year 2020 as the first time in gaming industry history where digital sales exceeded those of traditional physical sales. It has been carefully monitored by game developers, publishers and console manufacturers and has resulted in their strategy aiming to maximize the trend.

As shown in Figure 1, one leading factor in this is the rise of digital delivery platforms. One such platform was developed by Valve Corporations in 2003 (Clement 2021). Steam is the leading digital game distribution platform that has progressively risen in popularity since its inception. From a meager 7 games released on Steam in 2004, the platform has experienced a huge surge to 10,263 titles released in 2020.

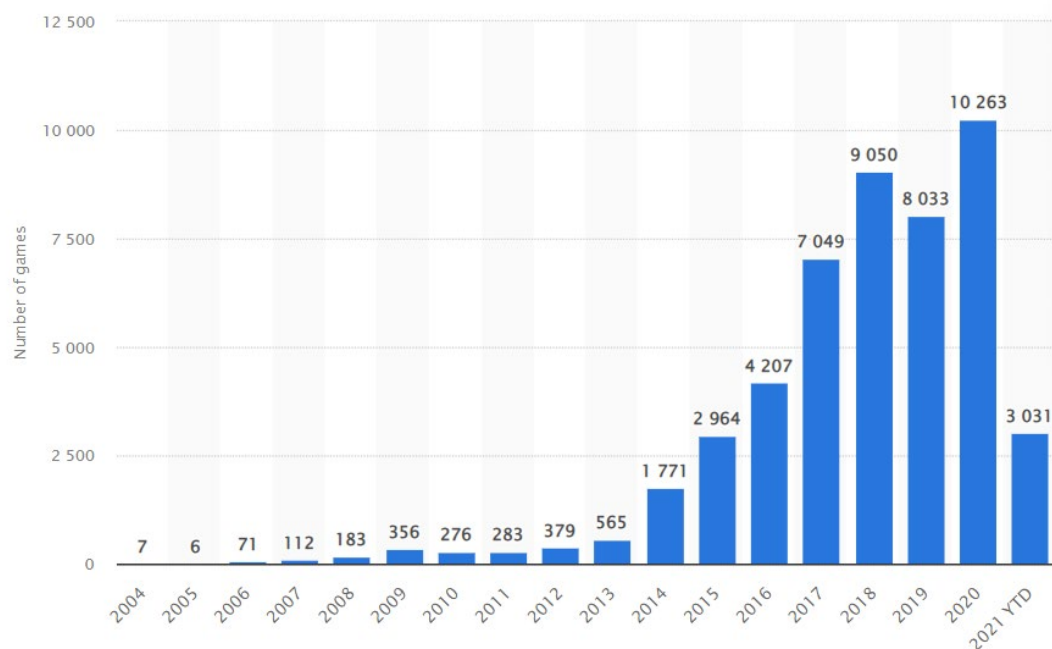


Figure 1. Number of games release on Steam worldwide from 2004 to 2021 (Clement 2021)

We might assume that having various routes to market their games is beneficial to developers. While having numerous ways to sell your work is beneficial, large corporations such as Google and Microsoft are proposing strategies that could harm smaller game producers (Kim 2019). “Spotify-model.” A model that has been heavily criticized in the past. Not only is there a competitor for physical disc in digital game distribution, but companies now are also looking to implement different ways to sell gaming products. Google has recently released Stadia; Stadia is a gaming service developed by Google in a subscription-based model. Gamers would have to pay a monthly fee to gain access to different games available on their platform.

Evolution of gaming commerce is now being greatly felt by traditional gamers. In the previous few years, I've personally felt it. Going to the shop and purchasing a physical copy used to be the only option. These games can

now be purchased in a variety of ways. The simplicity of not having to leave your house to place an order, as well as the speed with which it can be delivered with same-day delivery, provides a great deal of convenience. COVID-19 was hailed by the industry as a catalyst for the shift from traditional to digital transactions (Warman 2020). Even traditionalists were forced at the very least to investigate digital commerce. With the biggest gaming outlets out of service due to COVID and people were generally not comfortable to go outside. Buying games online was the only option.

2 Systematic Literature Review

2.1 Digital Game Distribution

Research of the cut every major retailer takes from the sale shows that there is current standard in the industry including the traditional commerce from physical stores, see Table 1 (Marks 2020).

Table 1: A breakdown of how much every major retailer takes from the sale of a game (Marks 2020).

PC	Steam	30%
	Epic Games Store	12%
	Humble Store	25%
	GOG	30%
	Microsoft Store	30%
Console Stores	Playstation Store	30%
	XBOX Games Store	30%
	Nintendo eShop	30%
Mobile Stores	Apple App Store	30%
	Google Play Store	30%
Physical Stores	Gamestop	30%
	Amazon	30%
	Best Buy	30%
	Walmart	30%

There is no evident advantage for game creators and publishers to make physical goods. Digital goods are now extensively advertised through a variety of tactics (Zentler 2020). One such tactic is discounts. Every major electronic shop periodically offers discounts ranging from 50%-90%. Offering discounts on a digital storefront is simple – meanwhile, a physical retailer like GameStop must rent a space, handle shipping costs and pay its employees. It can't afford to compete with those prices. Even gamers who prefer physical versions will be enticed to test digital downloads at those prices.

For the first time in the gaming industry, Sony, and Microsoft, the two major console manufacturers, released a console that only accepts digital content (Logan Plant 2021). A cheaper version of the Playstation 5 and Xbox Series X is available that does not support physical discs. Gamers in previous generations had the option of choosing between physical and digital copies. This is partly because, with these two key consoles, gamers are increasingly preferring digital over physical media. In 2013, previous generation Playstation and Xbox consoles only accounted for 5% to 10% of overall sales of digital copies. Now the latest generation digital copies account for 50% of the total sales (Logan Plant 2021).

Unlike consoles, PC gaming has been more open to digital copies for some time now, with major digital game distribution platforms like Steam and Epic Games Store offering thousands of games ranging from small indie game developers to the industry's top publishers. Steam alone now offers over 30,000 games on its platform (Zuckerman 2020). Because there are so many game selections, steam attracts millions of players. In April 2020, steam had the largest number of concurrent users ever, with 24,535,923 people logging on to their platform at the same time.

2.2 Subscription and Streaming Based Model

Digital game distribution platforms to buy a specific game is just one way to sell gaming goods. Big corporations are implementing subscription and streaming based models. Sony has PlayStation Plus it is a subscription-based service where players get monthly free games, discounts, and other premium services in exchange for a subscription fee. For a fee that varies depending on length of membership in the US a 1-month subscription will cost you \$9.99 and for a 12-month membership it would be \$59.99 [9]. Other benefits of this were also enhanced with the release of the new generation of console PS5. PS Plus Collection grants PS5 console owners' access to 20 extra PS4 games at no extra cost, including God of War, Resident Evil 7: Biohazard, and Persona 5. These games do not rotate in and out monthly; they're always available and yours to keep with an active PS Plus membership. You'll also get online multiplayer for games that allow it, as well as extra storage to back up your games. During your subscription, you'll have access to all of these premium services. All free games, online multiplayer access, and even backed up saved games will be unavailable once it expires. The only option to get it back is to re-subscribe to the program.

Google has Google Stadia where players would pay a monthly fee and would stream games straight from their platform (Imel 2022). Stadia as a platform is free to use, but you need to buy each game individually, unless it's free-to-play. The Stadia Pro version costs \$9.99 per month and provides you with access to gaming titles on their platform. A key advantage of stadia is that you don't need a powerful system to play demanding games. Gaming PC's would cost you thousands of dollars just to equip yourself with the latest hardware needed to play the latest games. With Stadia's streaming strategy, the necessity for gaming PCs is no longer an issue; you can play demanding games on older computers with just Google Chrome. Problems with streaming service is also an issue with stadia, especially for games. Games require you to issue commands and it needs to reach stadia servers at a reasonable amount of time for the gaming experience to mimic local gaming. Not like other streaming services like Netflix where latency is not much of an issue, just the bandwidth that the consumer has. This means that consumers would need to have fast internet connection and your location to be supported by Google Stadia. I personally got a free voucher to use Google Stadia Pro but soon found out that Philippines is not yet supported by Stadia due to latency issues that would occur.

With all the benefits of going digital, some corporations are pushing the boundaries of what gamers are willing to tolerate (Zentler 2020). Back in 2013 Microsoft tried a game licensing scheme. All games, including physical purchases, would be bound to the user's Xbox Live account. The user would only be able to share games with up to 10 "designated family members," and whether a given title could be traded or resold would be left up to the game's publisher. Finally, the Xbox One would require an internet connection at least once every 24 hours or else all games would be locked until it was reconnected to the internet. This added too much complexity on owning the game and a lot of ownership is still held by game publishers not the buyer of the game. Fortunately, Microsoft did not proceed with the plan, but their reputation took a hit as shown by total sales Xbox One sold just four months later (Zentler 2020). To date, the Xbox One has sold 46.9 million units globally, compared to 106 million for the PlayStation 4. The Xbox sales might not look bad until you realize that the Xbox 360 sold 84 million copies in the previous generation of consoles, while the PlayStation 3 sold 87.4 million.

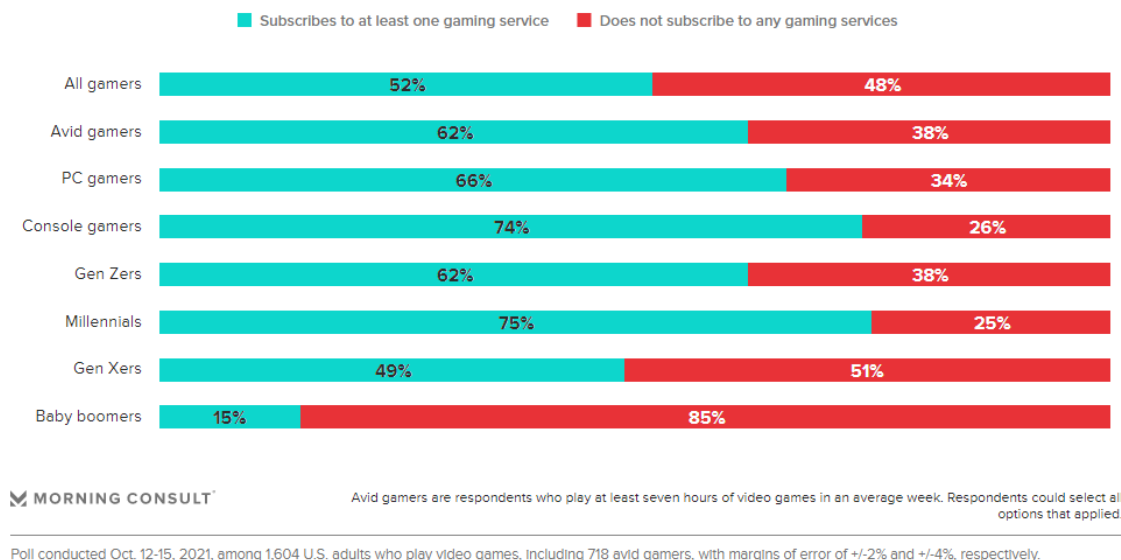


Figure 2: Poll result by Morning Consult, USA (Case & Epstein 2021).

In a poll result presented in Figure 2, around half of all gamers (52 percent) stated they use at least one subscription gaming service, such as Xbox Game Pass, PlayStation Now, or Apple Arcade. Gaming has progressively evolved into a subscription-based economy, allowing gamers to download and play a range of games for a set monthly charge, mirroring shifts in news, entertainment, and other sectors. According to Juniper Research, revenue from gaming subscription platforms is predicted to reach \$11 billion in 2025, up from \$6.6 billion in 2020. Console players (74 percent) were slightly more likely than PC gamers to use at least one subscription service. To play multiplayer games online on some platforms, gamers must join up for related subscription services. Microsoft Corp. said last year that 70 percent of its Xbox Series X and S consoles are connected to an Xbox Game Pass account and that those subscribers spend 20 percent more time playing games than nonsubscribers do. Furthermore, about half of gamers (48 percent) do not have a subscription service membership, indicating that subscription services still have space to grow – especially among older gamers. While 75% of millennial gamers and 62% of Gen Z players subscribe to at least one service, hardly half of Gen Xers (49%) and 15% of baby boomer gamers pay for one (Case & Epstein 2021).

2.3 Physical Game Copies

Physical copies were the only means to get copies of the game before fast internet connections became available. Imagine trying to download a 50GB game file over a dial-up connection; it would take 4142 hours to complete. Now with a 35 Mbps connection it would only take around 3hours to download the same file. The increased use of digital games has been attributed to online distribution of games via services such as Steam, GOG, PlayStation Store, Xbox Games Store, and Nintendo eShop. In September 2015, digital game sales totaled \$5.4 billion, with digital console games seeing a 29 percent increase over the same month last year (DiChristopher, 2015).

Some strategies that gaming companies have implemented to utilize physical game revenues are releasing multiple versions of the same game that comes with added items. Take for example the game released by Sony The Last of Us Part II it came with 5 different versions. Standard Edition 59.99\$, Special Edition \$79.99, Digital Deluxe Edition \$69.99, Collector's Edition \$169.99, and an Ellie Edition \$229.99. The price difference between the cheapest Standard Edition and the most expensive Ellie Edition is \$170. It's still the same game, but with extra material to persuade gamers to pay more for the same game. In the Standard edition gamers would get the bare minimum a copy of the game, which before was only thing gamers needed. Now with the Ellie Edition on top of the copy of the game for a higher price they would also get pre-order bonuses, digital soundtrack, digital mini art book from Dark Horse, a dynamic theme for your PS4 6 PSN avatars, a full-sized functional recreation of Ellie's backpack, embroidered patch, a 7" vinyl record featuring music from the original soundtrack and more. This edition is targeted for the most hardcore supporter of the last of us series (Mills 2020).

Even with the price point set very high for the Ellie Edition it still quickly sold out to many retailers. This was unsurprising given the success of the first game, *The Last of Us*, see figure 3. The many versions spoke to a wide range of supporters of the game, from casual gamers to their biggest fans, and offered varying pricing points to fit their budgets. I was a great fan of the game, and even though I desired the most expensive choice, it was out of my price range. Still, I wanted something more than the usual option and settled on the Special Edition, which costs roughly 4,000 Pesos.



Figure 3. Last of us collectors edition via Gadget Pilipinas (Garcia 2019)

An advantage that gamers who prefer physical copies relate to is the sense of ownership that they have. Digital copies suffer some disadvantages when it comes to ownership. When you download a game, you've only purchased a license to play it. Casual phone game "Flappy Bird" was taken off the iOS App Store at the peak of its fame in 2014 due to legal troubles, and if you were unfortunate enough to own it but not have the game downloaded to a device, it was gone forever. Other notable examples include "Scott Pilgrim vs. The World: The Game" and "OutRun Online Arcade." (Zentler 2020)

In a study by Lee et al. (2016), most of the respondents who prefer physical games cherish the sensation of ownership, being able to select and showcase their own collection in a way that makes sense to them, and being able to share, resell, and trade-in games. The challenge for game content providers will be to provide these needs in a new distribution strategy with digital games. This is crucial because an increasing number of content providers argue for distribution strategies that provide "access" to content rather than the media objects themselves (through subscription-based or streaming models). While digital games provide many advantages, many respondents believed that they did not provide the same experience as physical games. Examining how digital games and digital game platforms might encapsulate the beneficial qualities of the physical gaming experience would be a valuable subject of future research. Stronger social features may help, and several attempts have been made to implement these for several consoles (such as Steam's Friends feature or Xbox One's Dashboard, which allow users to browse other people's collections or gameplay history) (Lee et al. 2016).

Some gamers also want to sell their physical game copy after they've completed it, which they can't do with a digital copy. Borrowing games from friends is likewise not possible with a digital copy. When compared to clicking a link to download a game, giving a tangible copy to someone feels more authentic when you hand them a gift-wrapped game.

3. Conclusions

The case study looked at the current state of the gaming business and how it has evolved. The number of digital game copies sold in comparison to physical versions has been increasing in recent years, and COVID-19 has

amplified this trend. Gamers are unable to leave their house and are keener now to make their purchase at the safety of their own homes. Sony reported an increase of seventy percent from digital sales last year (Harrison 2020)

In 2020, combining physical and digital sales resulted in a 34% rise in sales over 2019 (Dring 2021). Though digital sales have surpassed physical copies, the market for physical games is still lucrative and grew from last year. 18.2 million games were sold in 2020 which was an increase of 2% over 2019.

Gamers' preferences vary; some favor the convenience of buying digital versions, while others enjoy the sense of ownership that comes with purchasing physical copies. Gamers who purchase physical copies desire the option of having the game in their hands and being able to decide what to do with it. When compared to digital, there is the possibility that a publisher will remove a copy of the game, and gamers who paid will lose access to it. Physical sales are even more pronounced when it comes to AAA games, games that are released by big gaming studios. It is estimated that 75% of games sold via Amazon, GAME, GameStop are physical copies (Dring 2021).

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Biography

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