Game on: The rise of online video gaming and the intersection of paying and playing
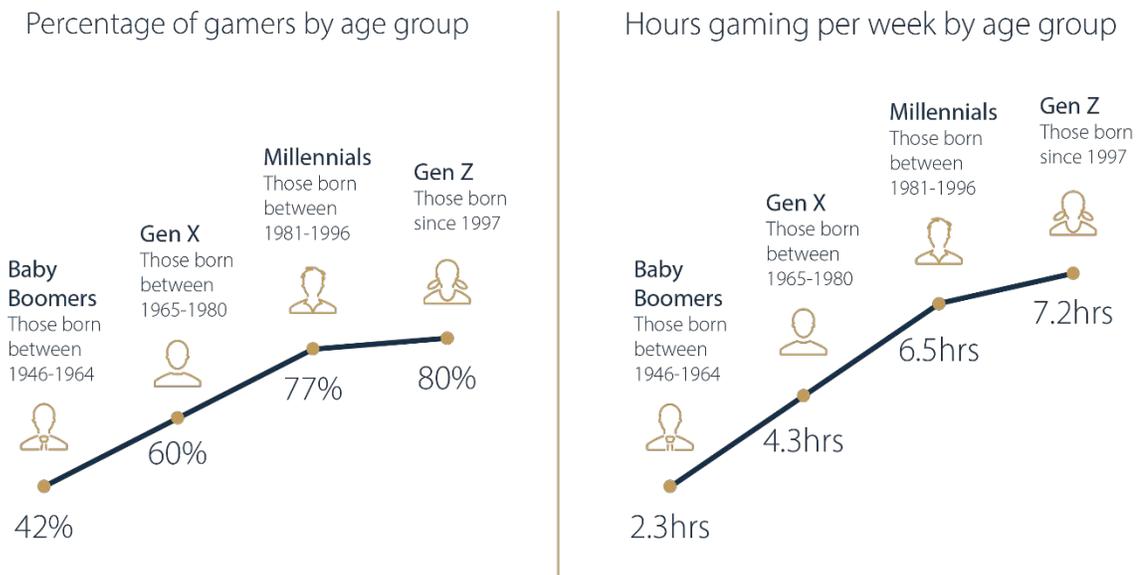
Visa Consulting & Analytics

Video gaming is a vast, fast-growing global industry touching various sectors, including payments. For 2021, the global revenue was estimated at U.S.$175.8 billion, which, between 2020 and 2024, is expected to deliver a compound annual growth rate (CAGR) of 8.7 percent.[1] This presents a clear opportunity for financial institutions to take advantage to growing card usage and enhance consumer engagement.

The global community of online gamers is set to exceed three billion people in 2022, nearly a third of the world's population.[2] That's a lot of goals scored, hazards avoided, and quests completed. The community now includes consumers from nearly all demographic segments, and with that comes a closer correlation between paying and playing in the online universe.

In this paper, Visa Consulting & Analytics (VCA) outlines the key characteristics of the online video gaming market, including its customer base, revenue models, integration of payments, pain points, and opportunities for today's payments businesses.
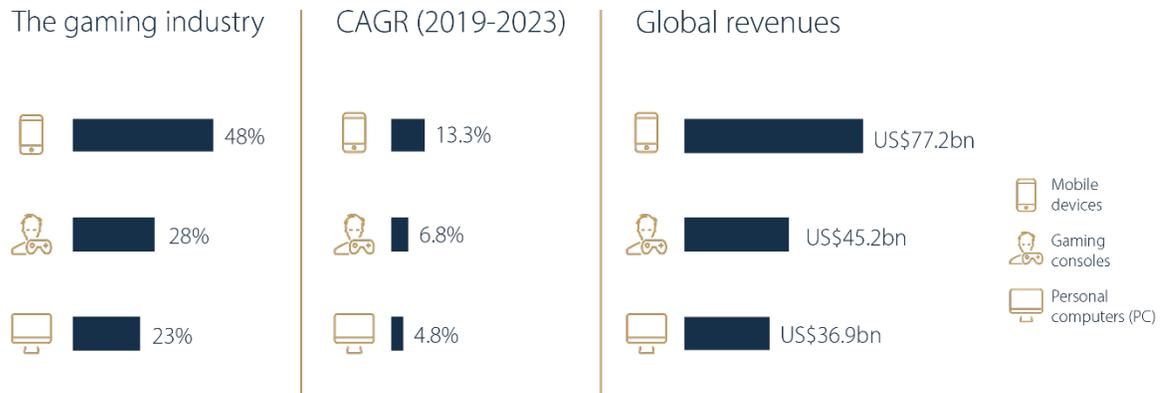
A new operating model

In this report, we refer to "online video gaming" as the act of playing any type of video game over a wirelessly connected network. The appeal of gaming is both deep and wide:

Percentage of gamers by age group

Baby Boomers
Those born between 1946-1964
42%

Gen X
Those born between 1965-1980
60%

Millennials
Those born between 1981-1996
77%

Gen Z
Those born since 1997
80%

Hours gaming per week by age group

Baby Boomers
Those born between 1946-1964
2.3hrs

Gen X
Those born between 1965-1980
4.3hrs

Millennials
Those born between 1981-1996
6.5hrs

Gen Z
Those born since 1997
7.2hrs

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[1] BCG market analysis, compiled on behalf of Visa
[2] Newzoo, Global Games Market Report 2021: https://newzoo.com/insights/trend-reports/newzoo-global-games-market-report-2021-free-version/

The online gaming industry is united in supporting three primary operating platforms: mobile devices, video game consoles and personal computers (PCs).

The gaming industry	CAGR (2019-2023)	Global revenues
48%	13.3%	US$77.2bn
28%	6.8%	US$45.2bn
23%	4.8%	US$36.9bn

Mobile devices
Gaming consoles
Personal computers (PC)

Sources: Newzoo - The World's 2.7 Billion Gamers Will Spend $159.3 Billion on Games in 2020; The Market Will Surpass $200 Billion by 2023:
https://newzoo.com/insights/articles/newzoo-games-market-numbers-revenues-and-audience-2020-2023

Understanding the value chain and revenue models

In online, gaming, there are generally four primary stakeholders and four broad gamer segments:

Primary stakeholders

1. Gamers

A person who plays video games or participates in role-playing video games.

2. Developers (studios)

They create the games and are often integrated into or acquired by publishers.

3. Publishers

They fund the development of multiple games and work to ensure financial returns.

4. Distributors

They own the marketplace between developers and consumers and have led the shift to digital and cloud distribution.

Gamer segments

1. Hyper-casual

These gamers play short, stackable and instantly playable games (like Candy Crush), usually in very brief sessions of play.

2. Casual

They play games designed for mass audience (like Solitaire) with short, frequent sessions of play.

3. Midcore

They play more accessible games (like Call of Duty) that are easier to learn but difficult to master.

4. Hardcore

These gamers play immersive, detailed games (like World of Warcraft) usually over long play sessions.

There are multiple revenue models in online gaming, all of which can be lucrative for stakeholders. One such revenue model is in-game micro-transactions, which has become a core driver of transaction volume across platforms. Although there is overlap among them, gaming revenue models can generally be codified as follows:

1. **Buy-to-play** The gamer buys the game and can play indefinitely. However, the game continues to be supported by the developer or publisher (e.g., providing downloadable content), which the gamer may need to pay to access.
2. **Free-to-play** The gamer does not need to purchase the title to play, though access to some features and content may require a subscription or micro-transactions.
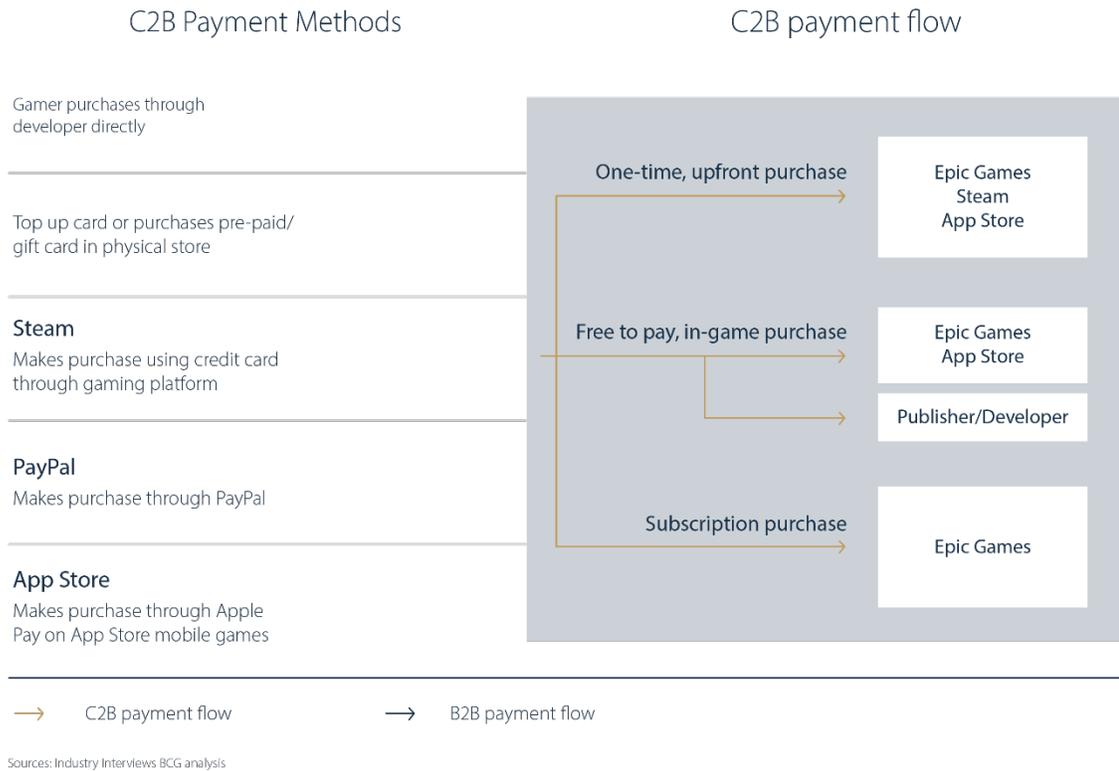
3. **Freemium games** that are free to start but are limited in terms of how far the gamer can progress before they must purchase the game.
4. **Subscription** The game is typically free-to play to entice new gamers – but they must pay a regular subscription to maintain access to all parts of a game.
5. **Ad-supported games** are typically free-to-play, but the developer or publisher earns revenue from advertisements that the gamer needs to watch periodically to continue playing.
6. **Play-to-earn games** that typically incorporate blockchain elements such as NFTs. Gamers are incentivized to use NFTs to improve their value or to create new NFTs. Gamers may need to pay an up-front fee to participate but are paid for their contribution to new and/or upgraded NFTs. If it sounds too good to be true, it's not. But it does take work.

How payments fit into gaming

With the appearance of new revenue models, the gaming ecosystem has become increasingly more complex, with many parties and a myriad of payment flows: business-to-business (B2B), consumer-to-business (C2B) and, with the emergence of play-to-earn gaming, the potential for business-to-consumer (B2C) and consumer-to-consumer (C2C).
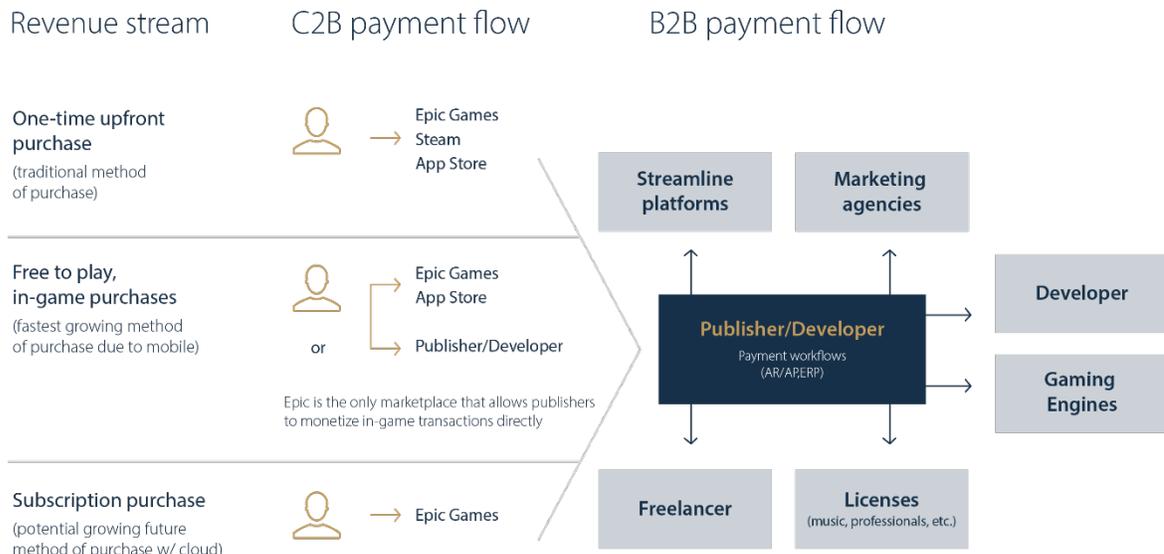
Meanwhile, given the predominance of digital delivery and the rapid growth of freemium models and in-game purchases, there is considerable potential for publishers and marketplaces to influence "top-of-wallet" payment behaviors. This is due to the closed-loop nature of the marketing channels on the platforms, which limits a financial institution's ability to influence payment behaviors.

C2B Payment Methods

Gamer purchases through
developer directly

Top up card or purchases pre-paid/
gift card in physical store

Steam
Makes purchase using credit card
through gaming platform

PayPal
Makes purchase through PayPal

App Store
Makes purchase through Apple
Pay on App Store mobile games

→ C2B payment flow   → B2B payment flow

Sources: Industry Interviews BCG analysis

C2B payment flow

One-time, upfront purchase → Epic Games Steam App Store

Free to pay, in-game purchase → Epic Games App Store

Publisher/Developer

Subscription purchase → Epic Games

Key payments-related pain points for the gaming industry

With the gaming industry's offers and diverse revenue streams, a simple, seamless, and integrated digital transaction experience is imperative for the user.

Gamer loyalty management: With more gaming options available, loyalty programs are becoming increasingly relevant. Distributors want to increase loyalty but also prefer to stay clear of pure "cash out" programs. For example, publishers like Ubisoft offer benefits and unlocks for playing multiple games in their portfolios to reward its loyal user base.[3]

Subscription management: The growth in cloud distribution may lead to more subscription-based models, which could make it easier to maintain loyalty and allow gamers to try new games. However, distributors are still researching to determine adequate pricing and content strategies, whereas publishers are faced with deciding how to split revenues with partners.

Margin compression: Distributors earn up to 30 percent commission for each gamer transaction,[4] which means publishers and developers are always looking for alternative ways to monetize their games. As gaming grows, companies seek to counter app-store fees and taxes by diversifying revenues through purchases made directly on their page. This gives gamers more for their money, while also increasing

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[3] Ubisoft, https://www.ubisoft.com/en-ca/help/connectivity-and-performance/article/unlocking-ubisoft-connect-rewards-for-legacy-games/000080266
[4] Theverge.com, A guide to platform fees, August 24, 2021, https://www.theverge.com/21445923/platform-fees-apps-games-business-marketplace-apple-google
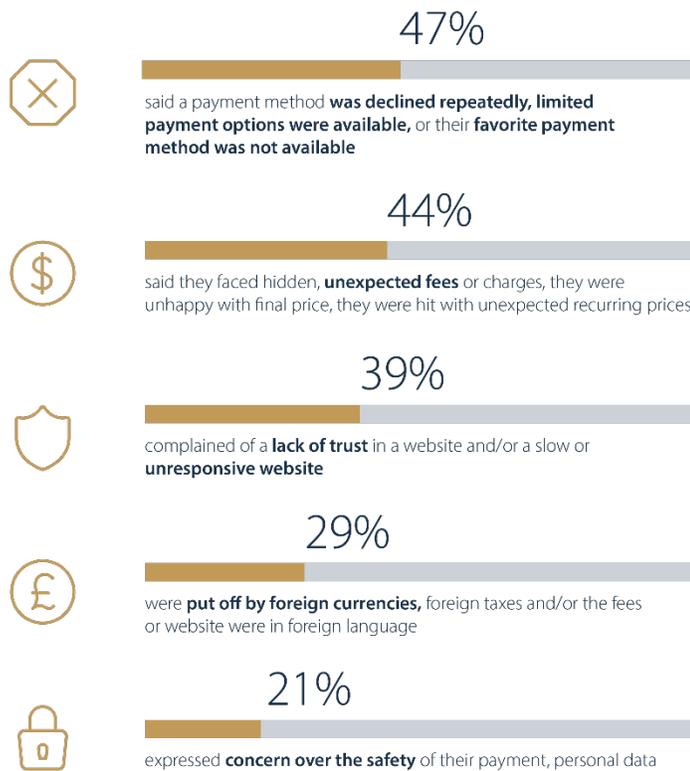
budget for R&D, updates, and additional content. However, with these new purchase options, stakeholders need to manage how they explain fees and avoid cart abandonment by providing pricing transparency.

Acceptance cost and complexity: Large distributors will typically work with multiple gateways and may accept many payment methods, each with unique fee structures.

In-game content trading: As trends such as in-game buying, selling, and trading items rise, distributors need to facilitate transactions in the marketplace to enable buyers to pay with real money or to convert to virtual currency.

Checkout UX: As distributors offer flexibility in payment options, ensuring a seamless checkout experience is key. Balancing a good user experience (UX)/user interface (UI) with a secure checkout must be prioritized to promote repeat purchasing and to increase conversions.

The pain points don't just have an impact on the developers, publishers, and distributors. They can often be a source of friction for the gamers themselves. For example, a recent Visa survey[5] in markets revealed that half of all gamers had previously abandoned the checkout of game-related purchases – and quantified the type of issues they had faced:

47%
said a payment method **was declined repeatedly, limited payment options were available,** or their **favorite payment method was not available**

44%
said they faced hidden, **unexpected fees** or charges, they were unhappy with final price, they were hit with unexpected recurring prices

39%
complained of a **lack of trust** in a website and/or a slow or **unresponsive website**

29%
were **put off by foreign currencies,** foreign taxes and/or the fees or website were in foreign language

21%
expressed **concern over the safety** of their payment, personal data

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[5] From a Visa-commissioned survey

Four areas of opportunity for payment businesses

Given the intersection between paying and playing, there are opportunities for payment businesses to explore. These can be broken down into four main areas:

Loyalty management: Engage with, expand, and bring new value to the online gaming community by incorporating offers or rewards that incentivize specific behaviors. This can be done with all gaming stakeholders and success can be measured by the number of new gamers, incremental transactions per gamer and the value of transactions

Authorization & fraud management: Improve user experience and revenues by revising existing authorization policies and incorporating monitoring tools to increase authorization rates and reduce fraud. Distributors can measure the success of this through the volume of false positives, the volume of legitimate transactions, the volume of compromised transactions, and the average transaction values.

Streamlining B2B payments: Remove complexity and reduce friction from myriad B2B payment flows by streamlining B2B payments with seamless payment processing. Publishers and developers can measure the success of this through the cost of setting up payment infrastructure, the cost of processing payments, and the upstream B2B transactions and revenues.

Crypto in e-gaming: Enable more seamless ways to transact using crypto on all gaming channels and platforms. Developers, acquirers, and payment networks can measure success through the cost of processing payments, engagement, and activation of e-wallets, and near instant transactions.

Examples from leading financial institutions from around the world

Across the world, Visa has worked with a wide range of clients, helping them to understand the opportunity, develop the strategy, and support its implementation. Here are a few examples and the key takeaways:

Partnering with a leading retail bank with a gaming developer to deliver value and new experiences to gamers

A leading retail bank and a large video game developer and publisher devised and implemented a successful co-marketing campaign revolving around exclusive offers and media investments. Campaign components included bonus top-up offers, brand experiences, exclusive rewards, and collaborations with key influencers and opinion leaders. Results included double digit growth by the bank's customers on the publisher's platform.

Key takeaways: Co-marketing partnerships can deliver value by creating fan focused experiences and driving on- and off-platform promotions and engagement.

Issuing exclusive banking IP assets through anime gaming platform to enhance consumer engagement, build brand preference and increase card usage

A leading retail bank, a well-known anime publishing company and a large video game publisher devised a promotion targeting younger customers. The bank issued limited edition game-themed card designs, offered exclusive rewards, and raised awareness through engaging promotional campaigns. Results included above target increases in cards issued and payment volumes. The bank also built brand awareness, especially among hard-to-reach markets, like teens.

Key takeaways: Exclusive gaming IP assets can be used to enhance consumer engagement, build brand preference, and increase card usage.

Launching a co-branded marketing campaign with a commercial/ retail bank and gaming company to drive in-game transactions and increase gamer engagement

A large commercial and retail bank extended its partnership with a large video game developer and publisher. The bank launched a co-brand program featuring one of the publisher's popular game franchises and introduced an attention-grabbing promotion including using game heroes and new digital skins in its campaigns to support customer acquisition and drive usage. Results included above target increases in new customers, transactions-per-card, and values for in-game purchases.

Key takeaways: Co-brand programs can be used to create value-added exclusive benefits that drive in-game transactions and increase gamer engagement.

With payments becoming more important to the player experience, getting this element right is crucial. Delivering the kind of experience that meets players expectations and needs is key for financial institutions to take advantage of this fast-growing opportunity.