



How is your business
powering up for the
next video gaming
challenge?

Media & Entertainment



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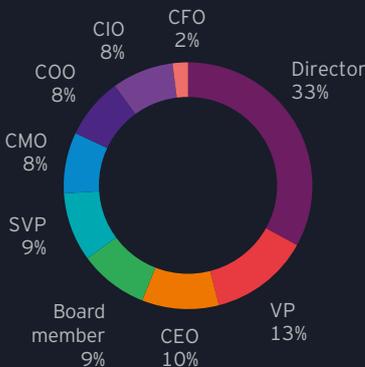


About this report

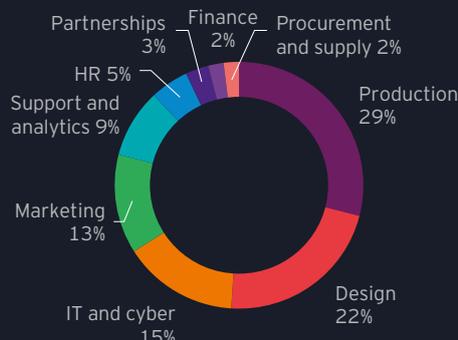
Following an era of unprecedented growth, the video game industry faces a number of challenges. EY conducted proprietary research to better understand the industry's issues and identify solutions. We surveyed nearly 240 global video gaming senior executives, spanning independent developers to the world's largest game publishers, and with revenues ranging from US\$1m to well over US\$1b.

Survey and study overview

Seniority of role



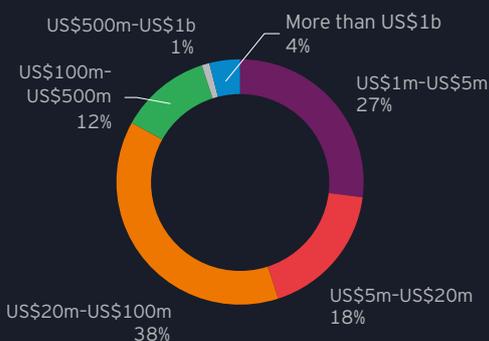
Role function



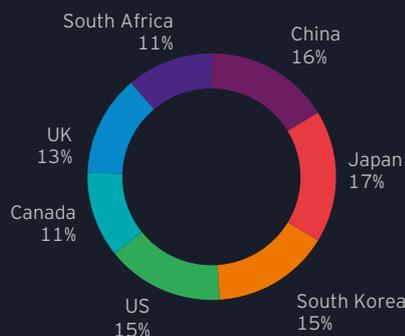
Methodology

- ▶ Survey of 236 gaming executives (C-suite, directors and above)
- ▶ Conducted: March - May 2019
- ▶ Geographies: worldwide (North America, Asia, Europe)
- ▶ Companies: various segments based on revenue size (US\$1m-more than US\$1b)

Company size



Geography



Introduction

It's been a period of jackpot growth and earnings for the video game industry. In the last five years alone, video gaming revenues have almost doubled. And in the next two years, the industry is forecast to be the fastest-growing media and entertainment (M&E) sector after subscription video on demand (SVOD) and online display advertising.^{1,2}

But video game companies are entering a new era – one of increased innovation and broadening popularity, yet one of rising risk; escalating content costs; and new, disruptive business models. Are they prepared to deal with this new future?

EY recently conducted a survey of nearly 240 global video gaming senior executives, spanning independent developers to the world's largest game publishers, and with revenues ranging from US\$1m to well over US\$1b. In this survey, EY sought to gain insight into the opportunities and challenges that video game executives are experiencing and how they can play them to their advantage.



¹ "Newzoo: Games market expected to hit US\$180.1 billion in revenues in 2021," *Venturebeat*, 30 April 2018, via Factiva; "Newzoo: US will overtake China as No. 1 gaming market in 2019," *Venturebeat*, 18 June 2019, via Factiva.

² "Video Games Cloud busting: Content still king in gaming," *Credit Suisse*, 25 September 2019, via ThomsonOne.

Key findings from our research

Video gaming executives are optimistic about the future.

US\$152b

Forecast 2019 revenue for the global games market – a 10% increase from 2018.

US\$9.6b

Total funding in gaming companies over the last 18 months – exceeding the total invested over the previous five years.

Yet in the near term, industry executives anticipate challenges.

67%

say business risk is increasing for the video game business.

77%

say an influx of new games and titles is increasing competitive pressures.

72%

expect overall development costs will grow.

There is a growing urgency to increase average revenue per users (ARPU's).

68%

expect a slower growth of new gamers will cause the industry to seek new ways of earning revenues.

To unlock additional investment capital, improving working capital and shoring up balance sheets are a must.

67%

expect M&A activity to increase with the need for creative and technical talent as the primary deal driver.

Automation is crucial as back-office and infrastructure costs increase.

79%

say the costs of developing a great game experience are growing.

Blockchain is emerging as a leading solution to drive trust throughout the gaming ecosystem.

70%

say that cyber attacks are becoming more serious and 64% say in-game fraud is increasing.

Companies will need to invest in people to offset the rising cost of talent.

52%

agree that the shortage of development and technical talent will get worse over the next five years.

“

The global games market is forecast to surpass US\$150b in revenues in 2019, a 10% increase from 2018.



Video gaming executives are optimistic about the future

Based on the results of our survey, the good news is that executives say they are optimistic about the future. They have confidence that the industry will continue to grow, both in revenues and in audience engagement — the latter potentially at the expense of other M&E sectors.

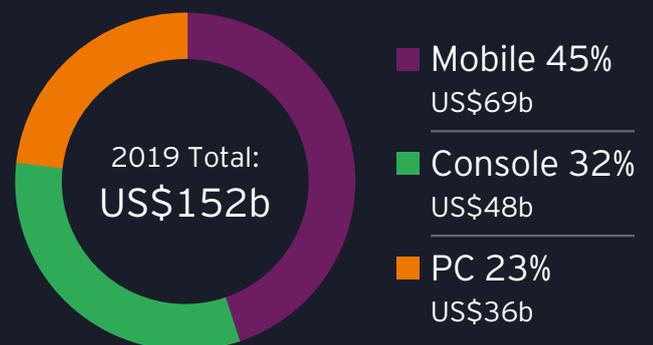
In 2019, the global games market is forecasted to surpass US\$150b in revenues, a 10% increase from 2018. In the longer term, the industry is projected to grow to nearly US\$200b by 2022, representing a compound annual growth rate (CAGR) of approximately 9%.

These revenues are supported by user statistics that suggest gaming has now become a mainstream activity – 86% of internet users say that they have played games on at least one device within the past month. This percentage rises to 92% among 16- to 24-year olds.³

Global games market revenue (in US\$b)⁴



Gaming market by device⁴



³ "Gaming Goes Mainstream, but Play Varies by Gender and Age," *eMarketer*, 14 April 2019.

⁴ "Newzoo: US will overtake China as No. 1 gaming market in 2019," *Venturebeat*, 18 June 2019, via Factiva.

Confidence in growth prospects has investment dollars flowing

Companies from within and outside the video game sector are pouring money into investment, confident in the prospects for accelerating growth.

Major technology companies are among the most significant investors in the video gaming industry. Seeking to leverage powerful franchises and brands, huge customer bases and deep technical know-how, these global players are building out new, potentially highly disruptive gaming platforms. This would include a variety of subscription-based streaming services and, in some cases, talent and studio infrastructure to support the development of proprietary video game content.

Meanwhile, incumbent pure-play gaming companies are investing in the next wave of game franchises, along with a variety of new technologies. Some of these include cloud-based gaming systems, enhanced mobile offerings and robust social media features that serve to strengthen the bonds with and among their player communities. In addition, capital continues to flow into the build-out of ancillary capabilities, such as systems to support the sale of advertising embedded into games and add-on content monetized through in-game microtransactions. These help diversify revenues and lift profit margins.

eSports is an intriguing area for a cross section of strategic and financial investors, including M&E companies aiming to access a younger, rapidly growing audience that is exiting the legacy media ecosystem at an accelerating pace. Companies looking to play in the eSports arena are investing in everything from venues, events and teams, to merchandise, sponsorship and media rights. As we will find out later, the more immediate opportunity in eSports for video game companies may be to market their titles and products to be distinctive in an increasingly crowded market.

The total funding in gaming firms over the last 18 months has exceeded the amount invested over the previous five years. Investment in video game companies was US\$5.8b in 2018 and has already crossed US\$3.8b in the first half of 2019.⁵

⁵ "Game investments continue at record pace in first half of 2019," *Games Industry*, 11 July 2019, via Factiva.



Where content was once king, it is now emperor

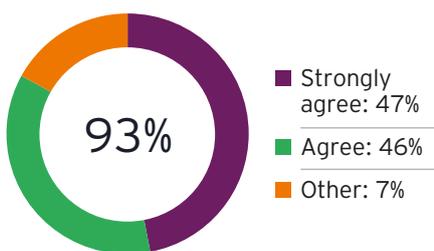
Much like the pivot to big-budget franchises made by the major movie studios more than a decade ago, the scaled gaming publishers are narrowing their focus on developing fewer, high-quality titles as they seek to create differentiated experiences in a crowded market flooded with free options for consumers. As-a-service revenue models are also demanding more expansive worlds and a continuous focus on virtual goods and other add-ons to keep gamers engaged and extend their lifetime value. This is driving an escalation in spending for content production and marketing.

Video gaming companies are also seeking to identify proven intellectual property (IP) from other sources, including licensing well-known content from different mediums or revitalizing their back catalogue and releasing retro games.

The battle for content in an industry flush with cash is rapidly changing game development funding. Developers find themselves in a much stronger position to negotiate financing up front and achieve more favorable revenue sharing at the back end.

While content is now emperor, the need to stand out is more crucial than ever before. Large game publishers are ramping up their investment in marketing to maximize awareness.

How to interpret the pie charts in this report

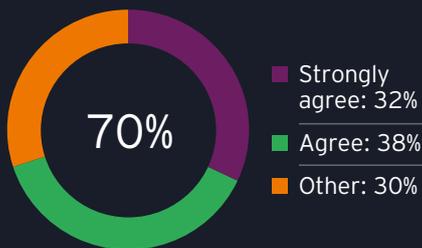


- ▶ The percentage in the middle of the pie chart represents **strongly agree and agree**.
- ▶ Other includes: **Neutral, Disagree, Strongly disagree, and Don't know**

Confident as they are, video gaming companies feel the pressure to evolve

Confident as industry players are in continued growth, video game executives are feeling the pressure to evolve — to find the disruptive advantage that will keep them ahead of their competition.

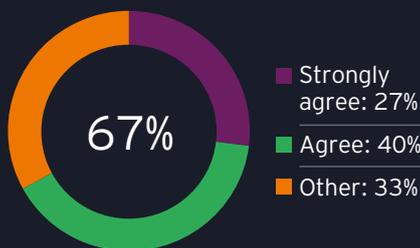
The next five years will be more challenging for video game companies than the last five years.



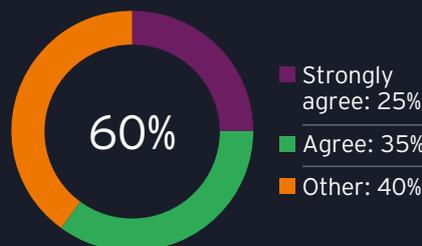
Seventy percent of EY video gaming survey respondents agree that the next five years will be more challenging for video game companies than the last five years. More specifically, 67% expect overall levels of business risk to increase. This percentage rises higher among smaller companies who see risks increasing and for whom managing these risks is relatively more prohibitive.

Among the biggest risks is a slowdown in the growth of gamers in an environment where the number of gaming companies entering the industry is increasing. This is placing pressure on the industry to explore new revenue streams, as well as organic and inorganic opportunities for growth.

In general, business risk is increasing for the video game business.

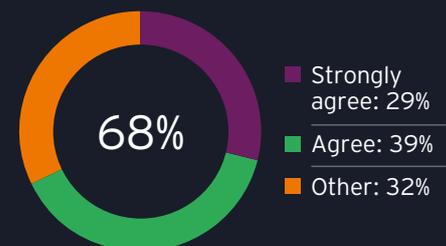


The growth of new customers and players of video games is slowing.



► Of all the markets, Japan is the least concerned about the slowdown in customers and players with only 39% of executives citing it as an issue.

Slower growth of new gamers will cause the industry to seek new ways of earning revenues.



► Across all markets, around two-third of companies see the need to find new revenue streams in the face of slowdown in customer growth.

Video game companies find new revenue streams by adopting monetization strategies from other sectors

The holy grail for video game executives is to end revenue volatility arising from the “hit-driven” nature of industry and smooth out revenue streams. Taking lessons learned from other media sectors, video gaming companies are adopting and adapting successful monetization strategies for their own competitive advantage.

The move from single-player, offline console or PC gaming to single- or multiplayer online and mobile gaming has opened up opportunities for gaming-as-a-service (GaaS). Instead of releasing a version and then waiting years for a new and improved iteration, GaaS allows game developers to create “live,” long-term games. These are updated regularly with new features, which allow them to benefit from recurring revenue, additional engagement from players, and, ideally, a higher lifetime value.

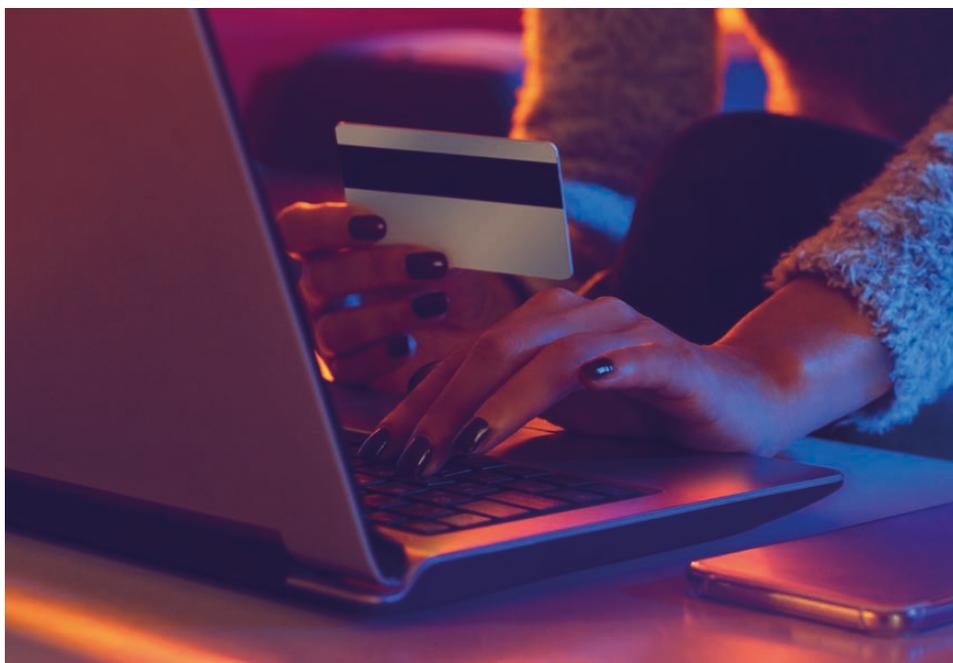
Services, including in-game purchases, downloadable content, season passes and eSports, already comprise more than 40% of total revenues for some gaming companies.⁶

Video game executives are doubling down on in-game advertising, in-game purchases and other new sources of revenue. US advertisers are expected to spend US\$3.25b in 2019 to place ads within video games on mobile, desktop and console platforms – a 16% increase over 2018.⁷

GaaS

40%

of total revenues for some gaming companies come from GaaS.



⁶ “EA and Activision’s US\$79bn games-as-a-service growth,” *Games Industry*, 19 October 2018, via Factiva.

⁷ “Gaming Goes Mainstream, but Play Varies by Gender and Age,” *eMarketer*, 14 April 2019.

Intensifying competition and costs raise the stakes

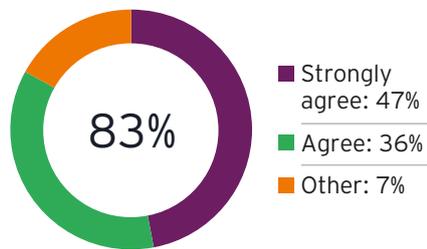
Cost of sales and marketing

45%

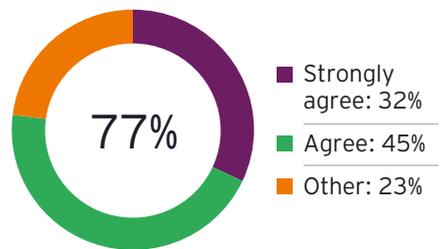
say the costs of sales and marketing will grow 10% or more.

Although video game executives are finding new revenue models, their companies face stiff competition as the number of games and titles proliferates.

The number of new games entering the market is increasing



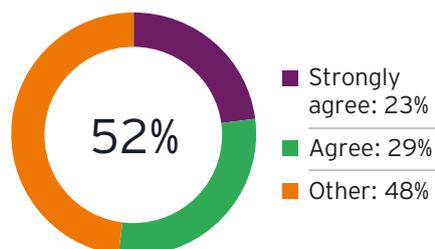
An influx of new games and titles is increasing competitive pressures



To stand out in a noisy, fragmented market, video game executives expect they will have to invest more in marketing. The rapid growth of eSports is one avenue of opportunity where video gaming companies can differentiate themselves.

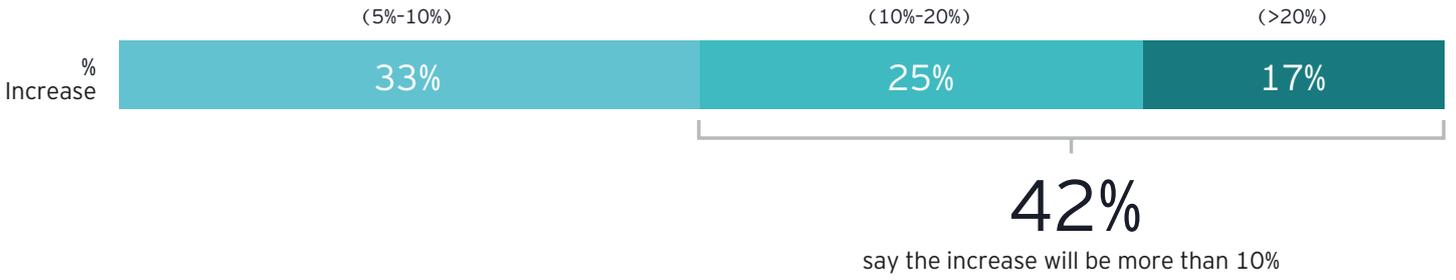
Leadership teams at gaming companies also face escalating talent costs across multiple dimensions, including development, creative, digital and senior management as this competition also extends to the war for talent. To offset these costs, video game companies will have to invest more to train and retain the people they have or possibly pursue mergers and acquisitions (M&A) to rapidly upscale and diversify their talent bases.

The shortage of development and technical talent will grow worse over the next five years

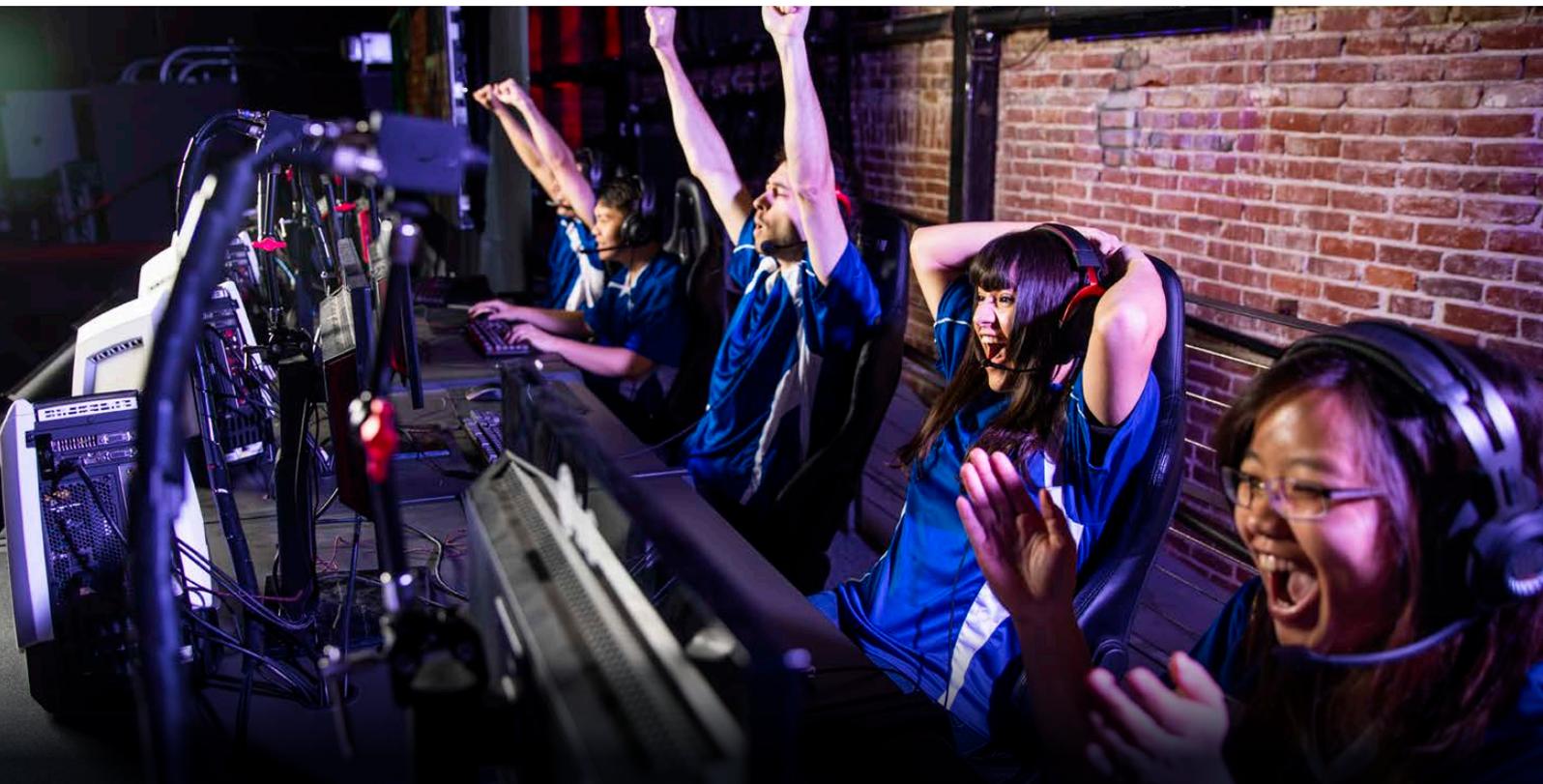
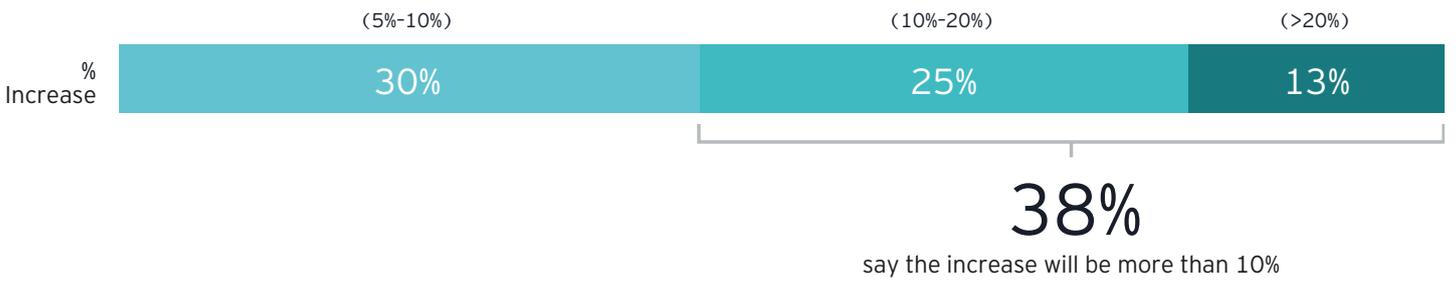


- ▶ China identifies the biggest issue with the shortage of talent (61%).
- ▶ It is seen as a bigger issue for smaller companies generating over US\$100m in revenues (68%).

Cost of technical and creative talent will grow



Cost of senior management talent will grow



As competition increases, and costs escalate, margins are coming under pressure

Overall costs of game development

79%

say the costs of developing a great game experience are growing.

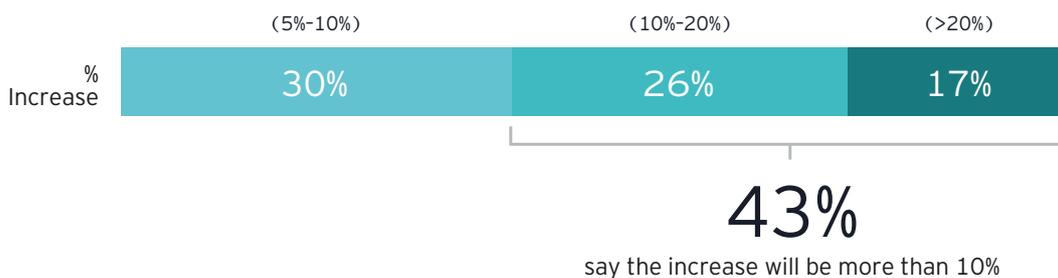
As the costs of developing a great game experience grow, video game companies are challenged to protect their margins.

Over the next five years, 42% of executives surveyed anticipate overall development costs will grow by at least 10%, with 17% expecting costs to increase by more than 20%. At the same time, as the industry matures and business risks increase, back-office and infrastructure costs are expected to rise significantly. The video gaming sector has been hit especially hard with cyber-related issues, from the theft of data and virtual goods to credential stuffing, swatting, distributed denial of service and counterfeit virtual goods.

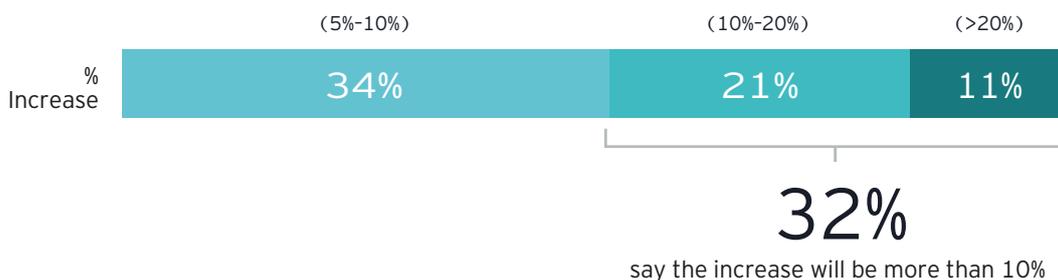
In an environment where maintaining trust is business-critical, video gaming executives expect the costs of enhancing cybersecurity and regulatory compliance to grow. Forty-three percent of executives surveyed expect cybersecurity costs to grow by 10% or more. Sixty-five percent of executives believe that compliance with new privacy laws will be a challenge, with 32% anticipating costs of regulatory compliance to grow by 10% or more.

Executives also believe they will have to substantially invest in technology infrastructure to support these cybersecurity investments, along with funding the move to new cloud-based and streaming platforms. Forty-one percent anticipate a 10% or more increase in the amount they'll have to spend on technology infrastructure.

Cybersecurity costs will grow



Cost of regulatory compliance will grow



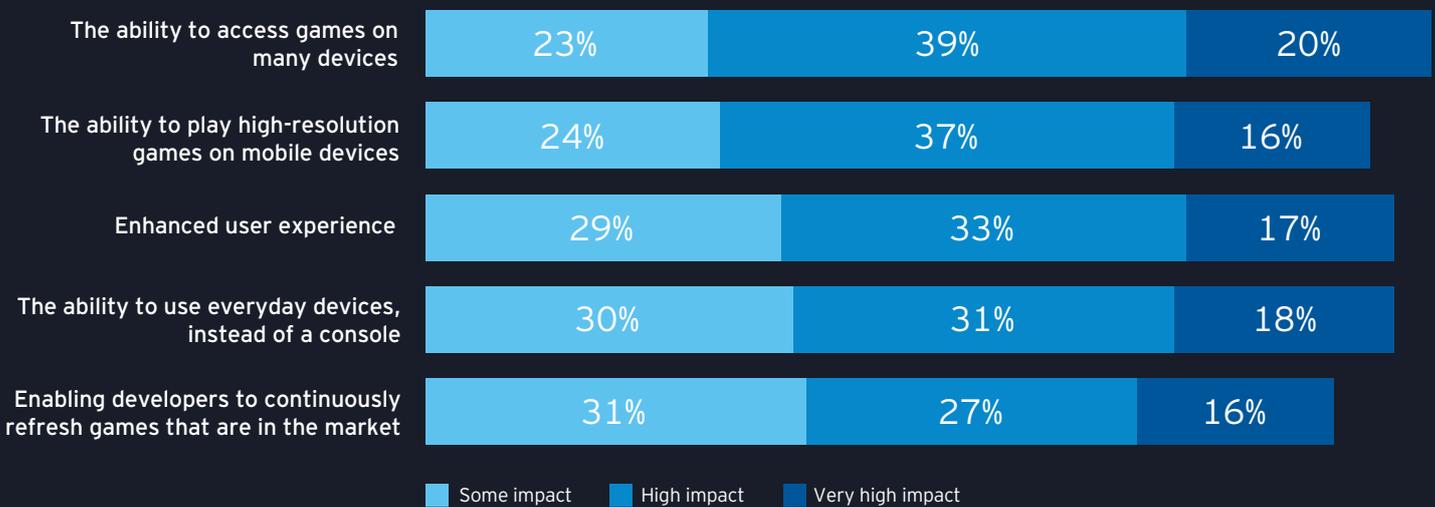
Cloud-based streaming and eSports are the next game-changing challenges that video game executives face

As competition heats up, cloud-based streaming and eSports are positioned to be the next disruptors in the video game industry.

Cloud-based streaming is moving from the fringe to the mainstream

Publishers, console players, technology companies and what seems like every other player vying for space in the video game market are experimenting with cloud-based streaming technologies that will transform how video games are sold, distributed and played.

Cloud-based or streaming games will have an impact on:



The future of Triple-A gaming

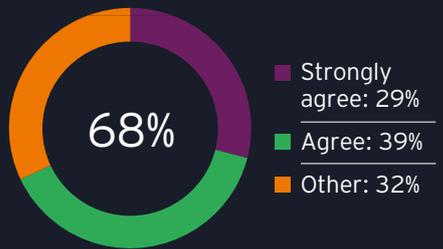
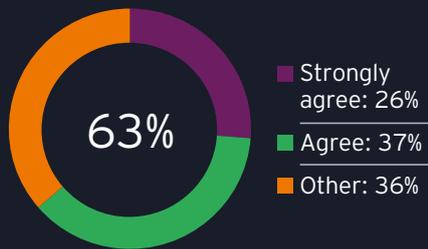
69%

agree that fully functioning Triple-A games will be available on smartphones within a few years.

In our survey, video game executives say that a move to the cloud will profoundly change the gaming experience. The development of cloud gaming, especially when combined with the rollout of technologies, such as 5G, represents more than an opportunity for the industry – it’s a strategic imperative.

If major game companies do not provide cloud-based games, they will be at a competitive disadvantage in five years.

Cloud-based or streaming games will be the dominant form of games in five years.



Triple-A games are no exception. They too will evolve toward a streaming, cloud and mobile future. In fact, 69% of survey respondents agree that video game players will be able to play fully functioning Triple-A games on a smartphone within a few years. More than 70% agree that gaming companies will distribute most Triple-A games wirelessly through the cloud between 5 and 10 years.

As a result, video game executives anticipate that investments in cloud-based or streaming platforms will grow – more than 45% expect such investments to increase by more than 10%.



eSports will play a bigger role in the video game industry

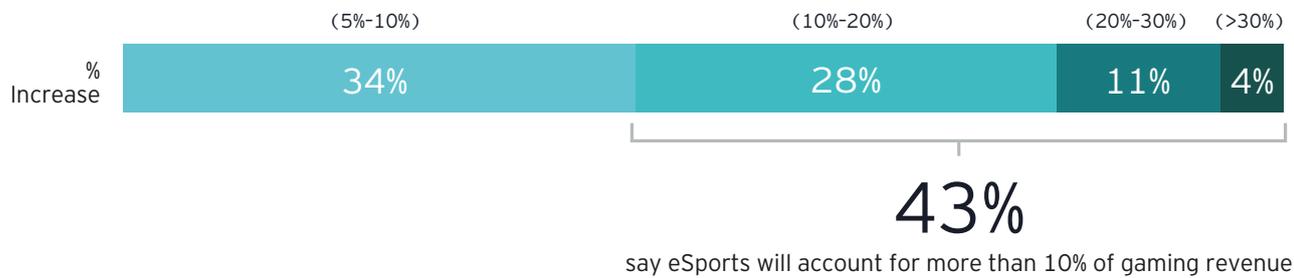
Perhaps, because it is still in its early stage, industry executives are divided over whether eSports will become an important source of new revenue for video game companies. Twenty-three percent anticipate eSports will contribute nothing at all toward industry revenues in the next five years, and 34% anticipate it will contribute up to 10%, while 43% see it adding more than 10% to industry revenues.

However, there is strong agreement on the potential for eSports to improve the brand awareness of gaming companies and attract incremental players to the ecosystem. As new gaming titles and market entrants proliferate, video game companies have an opportunity to use eSports as a platform for their titles to stand out in a competitive market.

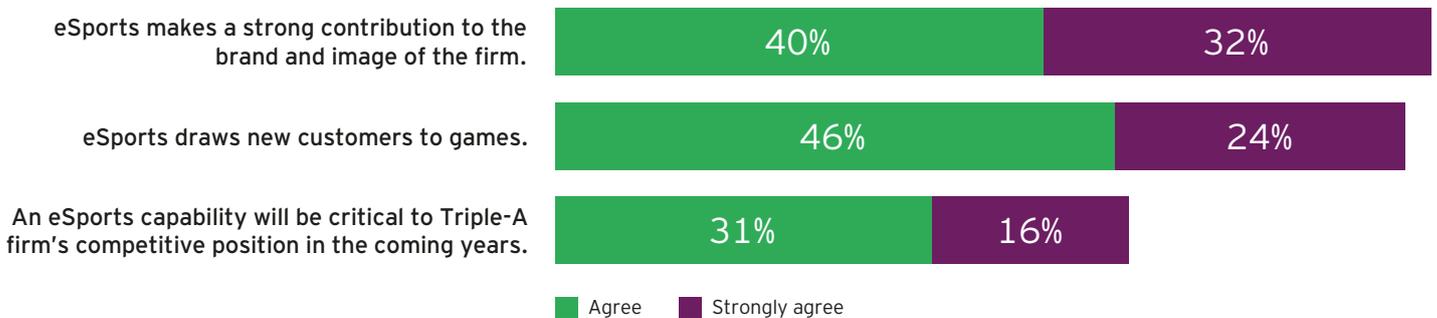


Twenty-three percent anticipate eSports will contribute nothing at all toward industry revenues in the next five years.

eSports currently accounts for less than 1% of video game revenues. What percentage will it account for in about five years?



The roles of eSports in the video game industry



Five ways video game companies can level up for sustained growth

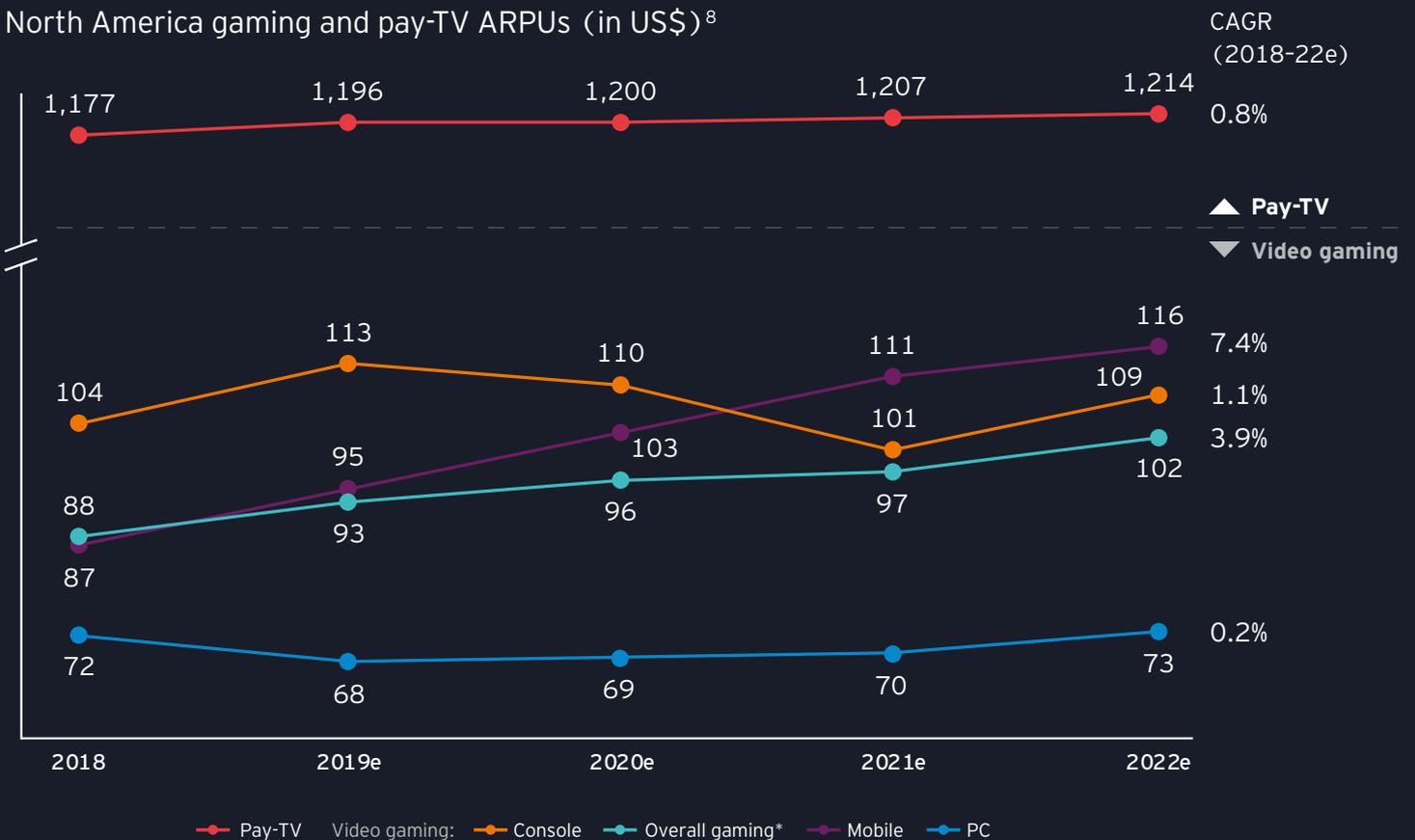
Companies in the video game industry are confident that they can achieve growth in the next five years. However, growth may be slower than over the last 10 years, and will come at a time when companies face rising costs and disruptive challenges from within and outside the industry.

For companies considering their strategic options, here are five ways they can up their game to escalate and sustain future growth:

1. Increase gamer ARPU and share of wallet

There is a growing opportunity for video game companies to increase the spend they receive from gamers. While video game ARPUs are multiples lower than pay-TV, they are growing at a significantly faster rate as gamers spend more time (and money) on their gaming platforms. Although these companies have successfully sold in-game content for years, by more clearly understanding the personas and buying behaviors of their customers, they can seize the potential to tailor goods and value-added services.

North America gaming and pay-TV ARPUs (in US\$)⁸



* Overall gaming ARPU is an aggregate of mobile, console and PC gaming ARPU.

⁸ "Worldwide Mobile and Handheld Gaming Forecast, 2019 - 2023", IDC, Mar 2019; "Worldwide Digital PC and Mac Gaming Forecast, 2019 - 2023", IDC, Sep 2019; "Worldwide Home Video Game Console and Microconsole Forecast, 2018 - 2022", IDC, Dec 2018; "Global Multichannel Data," S&P Global Market Intelligence, accessed Sep 2019, © 2019 Kagan, a division of S&P Global Market Intelligence, estimates.



2. Fund organic and inorganic growth

Video game executives expect deal activity to increase as companies look to M&A to acquire valuable IP, ease their talent shortage, access new capabilities and enter new markets. While the industry has ample financial resources, and sources of external capital are plentiful, it is also critical for gaming companies to improve their working capital and fortify their balance sheets to unlock additional cash for growth investment. From the perspective of funding game development, there is also a need for more analytical rigor across the industry to support capital allocation decisions and evaluate return on investment (ROI).

3. Enhance operational efficiencies

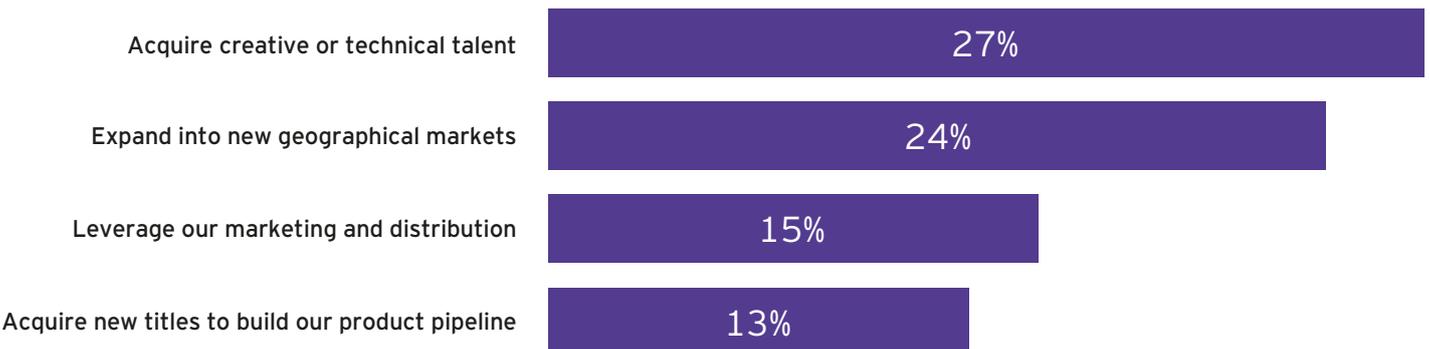
Executives surveyed agree that back-office and infrastructure costs will rise. In response, video game executives should use automation to streamline their operations. Although developers are extensively using robot process automation and artificial intelligence to test games and automate some elements of the development process, video game companies have been slower to adopt these technologies in their back-office and customer-care functions. Now would be the time to ramp up the use of these and other automated technologies.

M&A activity

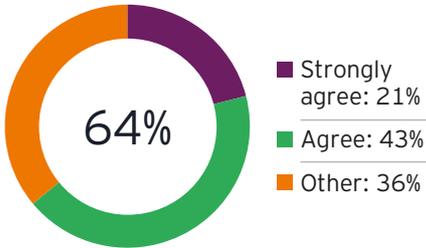
67%

say the number of mergers and acquisitions will increase within the video game industry.

Reasons for a video gaming company to make an acquisition



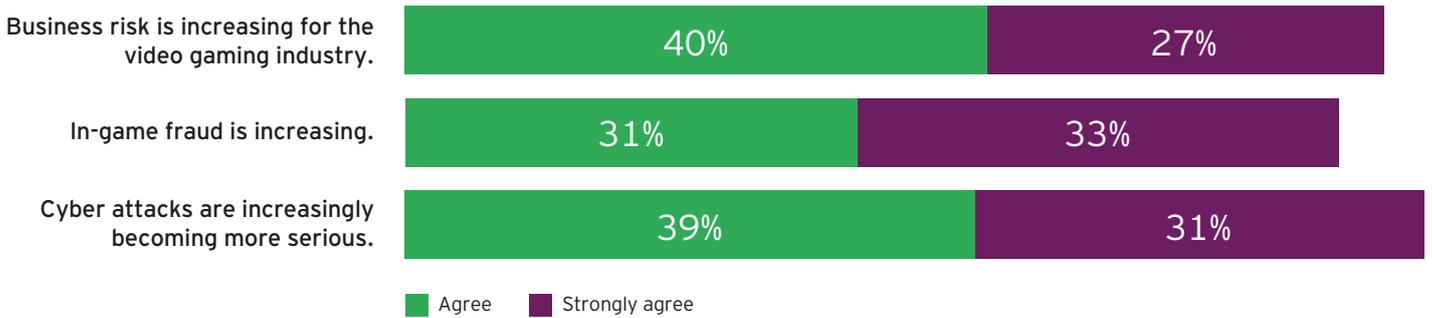
Blockchain will be an important part of the video game industry's future.



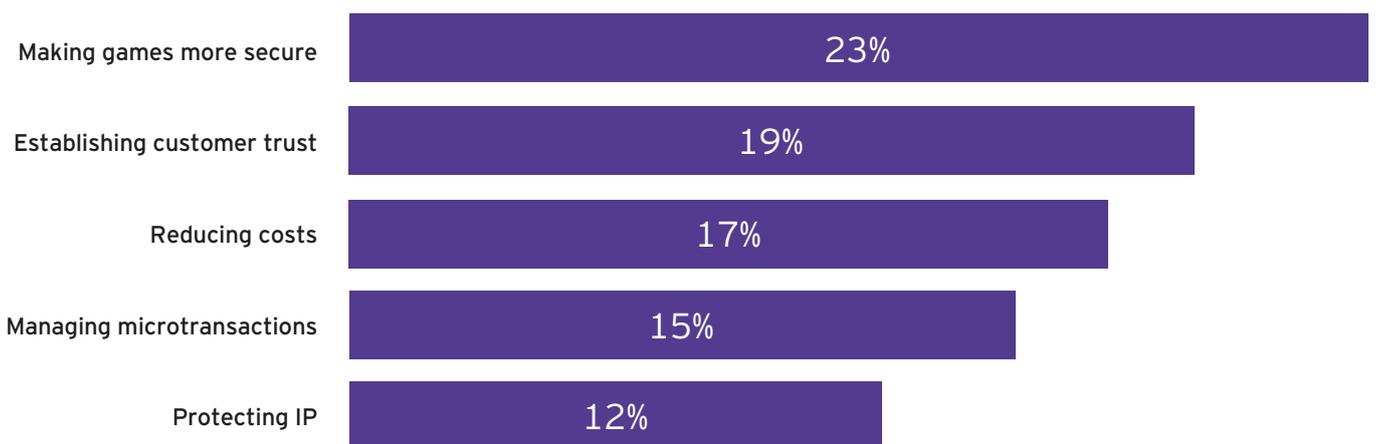
4. Keep the trust in games

Although two-thirds of surveyed executives agree that business risk is increasing across the board in the video game industry, increasing instances of in-game fraud and more serious cyber attacks make cybersecurity among the most pressing priorities. Blockchain is emerging as a leading solution to drive trust throughout the video game ecosystem. Some key opportunities include using blockchain technologies to secure gamers' online digital identity; safeguarding the authenticity, value and ownership of virtual goods; and creating transparency for rights and royalties throughout the video game value chain.

Risk is increasing in the video gaming industry

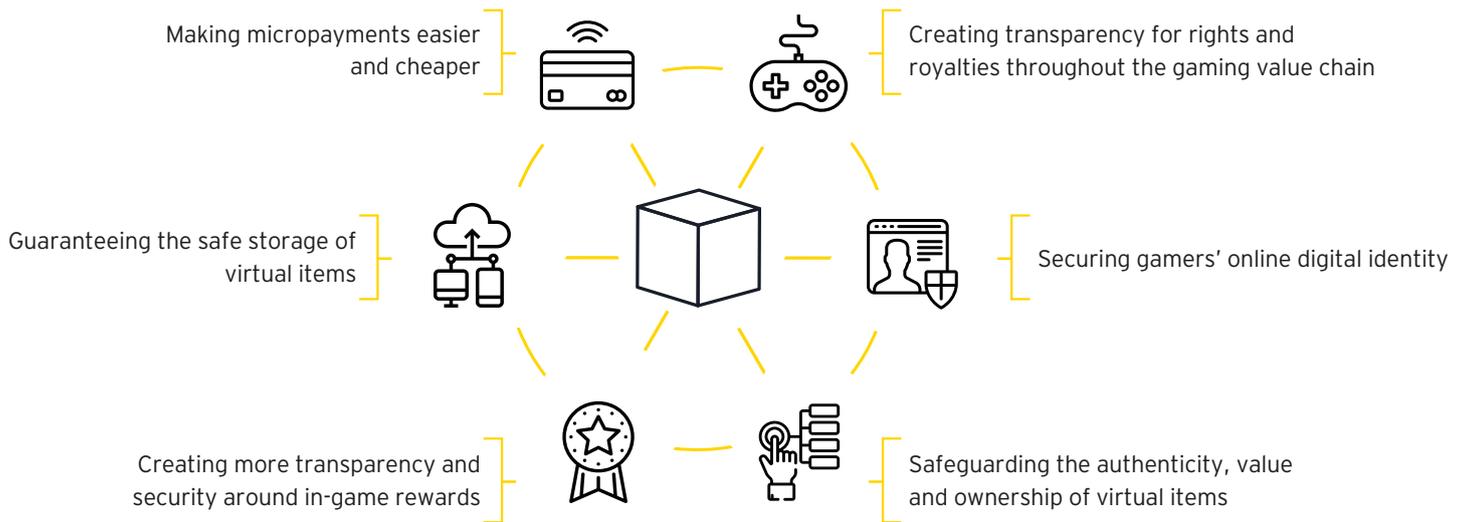


The most important outcome from using blockchain in the video game industry





How blockchain is being used to increase trust in gaming



5. Win the war for talent

Video game companies are constantly seeking creative and technical talent, which remains a scarce resource throughout the industry, so much so that video gaming executives ranked it as the largest driver of M&A activity. In addition to the inorganic route, companies need to understand current employee engagement and what is driving it so that they can implement meaningful strategies to attract and retain the best talent.

Video game companies have game-changing opportunities to fast-track growth, even in a slower growth environment

The video game industry has enjoyed more than a decade of high growth and exceptional margins, but more than two-third of senior industry executives believe that the next five years will be tougher than the previous five years.



Yet, despite facing a number of challenges, from the slowing growth of new players, intensifying competition, escalating costs, and the introduction of new and disruptive business models, video game executives remain confident that they can prevail even in times of slower growth.

By seizing the opportunities ahead (cloud-based streaming, eSports, the introduction of 5G and the use of blockchain to maintain player trust), leading video game companies can take advantage of the disruption to outgame their competition over the next five years.

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