

THE GAMING INDUSTRY IS 'at an all-time high'

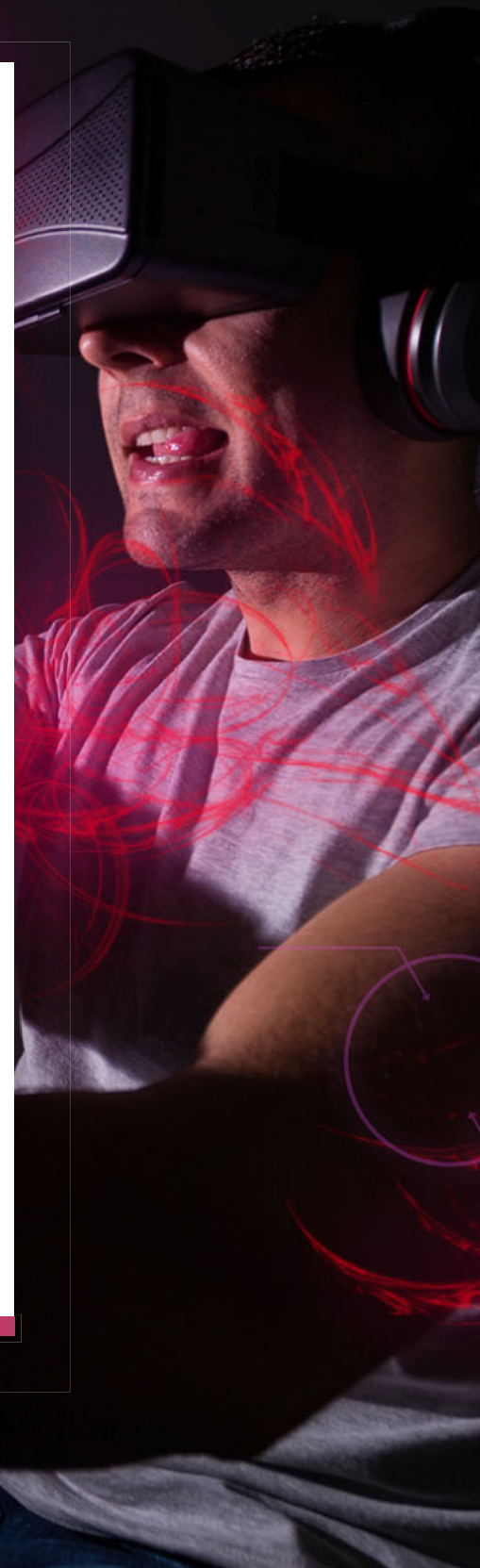


COVID-19 is causing an ongoing ripple effect in the gaming industry.

The video game industry had already been doing very well in the last few years, reflecting an impressive and steady growth. However, the coronavirus pandemic has given the industry an even more significant boost, according to a new report from The NPD Group¹.

The global video game market is anticipated to be worth \$159 billion in 2020², around four times box office revenues (\$43 billion in 2019). Additionally, a recent report by Statista revealed that watching streaming services³ has increased 51% , and regular TV watching is up 45%. Additionally, new game downloads have gone up by 80% and almost 50%⁴ of these are on mobile devices. The pandemic has driven the streets to be empty, but traffic on internet highways is at its peak, and gaming accounts for a majority of it – 70% to be precise⁵.

Gaming as an industry is half a century old, but today it is at its peak, thanks to the next-gen digital technologies that reshaped the experience in the past decade.



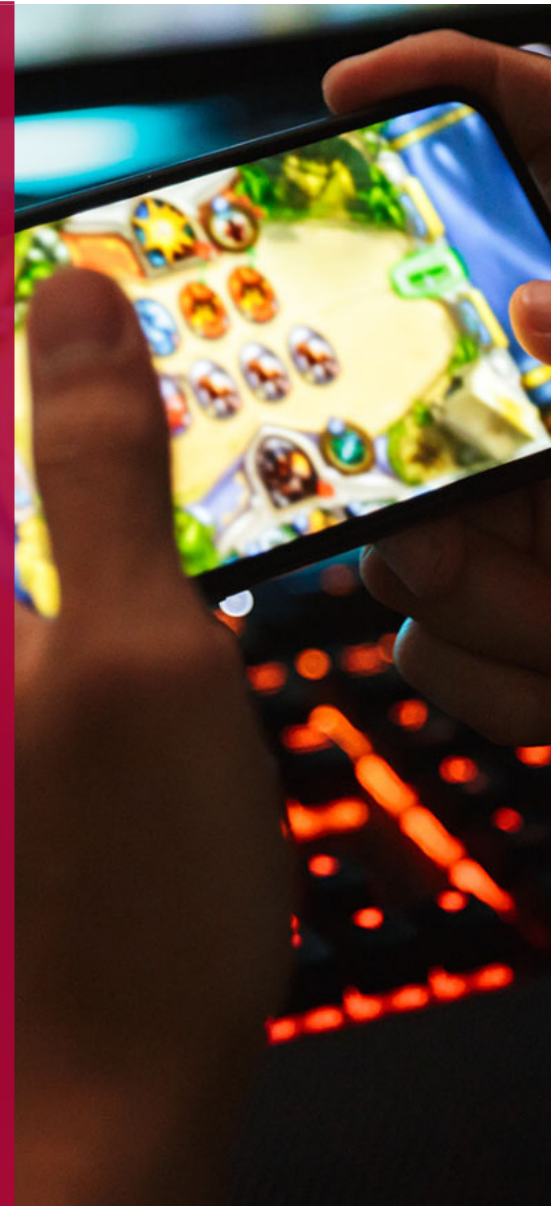
■ The Decade that Changed the Gaming Experience altogether

Back in 2010, could we ever imagine capturing a digital creature in the real world, aided by augmented reality and satellite maps? Pokémon Go took the gaming industry by storm with its real-life features - a far cry from pixelated games of a decade ago, played with cumbersome consoles.

With new technologies and ready software, games have become more sophisticated in design and experience. Gaming subscriptions such as Google Stadia, Apple Arcade, Twitch, and PlayStation Now provided easy access to newer content, while next-gen consoles like Nintendo Switch, Xbox, and PS4 allowed the users to experience kinetic movements with motion sensors, right in their living rooms. The continuous evolution of technology has been synchronous with the advancement in the gaming experience. And, the trends, as they appear, are pointing to a more immersive future.

■ Mobile is the Name of the Game

The gaming industry is poised to be at \$159 billion this year. Almost half of it, \$77.2 billion is attributed to mobile gaming. However, browser-based games have seen a dip of over 13%, with more and more users using their smartphones to play. Creating a more immersive experience on mobile devices would be one of the key focus areas for the gaming industry. The gaming industry is also maturing in revenue generation with more avenues being explored to cash in on the popular sentiment. In-game ads have been a major source of revenue for game developers and they would be increasingly training their focus on mobile ad mediation platforms to maximize their reach. In addition, reward video ads, in-game purchases, and pay per game or paid games will provide steady revenue streams for the gaming industry.



■ Action Shifts to Cloud

The rising interest in gaming may accelerate a transformation towards delivering games via cloud-based platforms and mobile. Even blockbuster titles are readily available on mobile devices. Meanwhile, cloud gaming enables consumers to play streamed games across devices, often without the need for expensive hardware. The nature of games has evolved beyond imagination. People are no longer playing games in isolation. There are real collaborators and opponents. The games thus must be cloud-hosted and available live across devices. With more and more companies building live streaming games on pay-per-use models, the cloud is where the action is shifting.



■ A New Era of Smart Gaming with AI

The alien on our screen ducks as an arrow is aimed at it. The setting changes from busy downtown alley to quaint café as our sleuth avatar chases the villain. These swift changes are powered by intelligent algorithms that provide the characters with decision-making capabilities. The moves are scripted, though. The behavior tree is defined within a trajectory. In the future, smart gaming will not be scripted; it will have a mind of its own. Machine Learning capabilities will help on-screen characters take more accurate and precise decisions. It will be far more difficult for grandmasters to win a chess game against their virtual opponents.

These are still early days for AI in gaming. So far, we have only seen an enhancement of sorts on the preceding video games with a layer of AI. The stage is now set for more advanced intelligence that will automate the process of building complex games that can quickly adapt based on context and change as player feedback. Machine learning will make the in-game characters to be more human-like and behaviourally evolve as the players continue to interact with them.

The current mobile gaming has limitations of bandwidth. The ease and power of a console are missed too. However, with the technology getting smarter and cloud-based games spreading their arms, these challenges are more likely to be surmounted in the near future. We will soon see the smart AI-based player trained in specific styles of real players for an enhanced, more realistic experience. Imagine playing against Ronaldo on your mobile soccer field, this is going to be the future, and AI will drive the game to that level, not too far in the future.

■ Towards Personalized Gaming via Facial recognition

A few years ago, gaming was about getting to the next level by stacking up blocks. Today there are life-like graphics and sleek animation. Advanced software platforms and expert resources have changed the face of gaming. Technologies such as facial recognition are now mainstream, and users have their virtual avatars fighting the intense battles on screen. It is no more a saga about illusive characters, but the experience is getting closer to reality.

■ The Rise and Rise of Augmented Reality in the World of Gaming

Gaming today is all about the experience. Augmented and Virtual reality is making gaming experience life-like. The boundaries between real and virtual are getting blurred, creating a whole new hyper-real world. Augmented reality allows people to bring the gaming experience out of their devices into the real world. It makes gamers form teams and enjoy the game together. VR, on the other hand, is still nascent and only limited to high end prohibitively expensive games and esports. The typical hardware requirements also come in the way of its large-scale adoption. The path ahead is to make VR and AR more accessible and affordable, and many large corporations are already making headway in that direction.

■ The New Opportunities

The gaming industry is at the cusp of new breakthroughs. New technologies, newer innovations and fresh perspectives are adding wings to the imagination of game developers. However, the next wave of growth and enhancement will have to ride through the challenges posed by the present ecosystems. As more people get tuned to online gaming, the security of their personal data is a matter of concern. Similarly, in-game purchases, paid games, and other monetization avenues demand safe transactions. This requires a secure IT infrastructure that is breach-proof and fortified against any malicious intruder in the form of malware, ransomware, or phishing expeditions.

The stream of big data generated by players accessing the game is a treasure trove to unlock new doors and drive personalization. This requires the strength of big data analytics and real-time insights for interventions for better monetization opportunities. The gaming industry would need more investments in modernizing their IT infrastructure to make the most of the opportunities available today.

■ The Future of Gaming

Unlike most industries, gaming has seen tremendous growth and high adoption during the pandemic. Are these spikes short-lived, or is the trend going to sustain long term? The expansion of the gaming industry and surge in esports was predicted far ahead of the pandemic. The technological advancements and increasing penetration of broadband are helping the industry grow exponentially. As the world moves to 5G, the internet's lightning speed will only enhance the gaming experience, and the game will be on forever.

■ About Tavant

Headquartered in Santa Clara, California, Tavant is a digital products and platforms company that provides impactful results to its customers across North America, Europe, and Asia-Pacific. Founded in 2000, the company employs over 2500 people and is a recognized top employer. Tavant is creating an AI-powered intelligent enterprise by reimagining customer experiences, driving operational efficiencies, and improving collaboration.

■ References

¹ <https://www.npd.com/wps/portal/npd/us/news/press-releases/2020/more-people-are-gaming-in-the-us/>

² <https://newzoo.com/products/reports/global-games-market-report/>

³ <https://www.statista.com/study/72150/coronavirus-impact-on-the-video-game-industry-worldwide/>

⁴ <https://www.weforum.org/agenda/2020/05/covid-19-taking-gaming-and-esports-next-level/>

⁵ <https://www.weforum.org/agenda/2020/05/covid-19-taking-gaming-and-esports-next-level/>



Santa Clara | Dallas | New Jersey | London | Bangalore | Hyderabad | Noida | Sydney | Tokyo | Colombia

 866-9-TAVANT  hello@tavant.com