





CLOUD GAMING

The Beginning of the New Gaming Era







Introduction

With an initial motive to connect people and data around the world, cloud computing was invented back in the 1960s by Joseph Carl Robnett Licklider (American Psychologist and Computer Scientist). Since then it has proven its worth. If we take into account the current scenario, cloud computing has now become an ideal way to deliver solutions and enterprise apps for various businesses worldwide.

No matter which sector we consider, cloud computing has become a necessity. But one sector that can reap the enormous benefits of cloud computing is the gaming sector. Cloud gaming is revolutionizing the gaming experience. It has presented users with a seamless experience that has never happened before.

But what is cloud gaming, how it can be a new era of the gaming world, and how it can prove to be a win-win strategy for investors, entrepreneurs, gaming businesses, and so on?

Your mind might be currently flooded with all these questions. Isn't it?

Well, this guide will provide you with all the answers you are looking for. It will make it clear why investing in cloud gaming apps can prove to be beneficial.

So let's dive deep into the topic.

What is Cloud Gaming and How It is Different From Traditional Gaming?

Cloud gaming or gaming-as-a-service or gaming on demand is a technique of playing online video games on remote servers in data centers. It means the users need not download or install games on their smartphones, PC, or console, unlike traditional gaming. All they need is a stable high-speed internet connection for sending gaming information to a browser and an app to play a game.

The good thing about cloud gaming is, as the game is being played and rendered on the remote server, a rich gaming experience can be enjoyed on the user's device. All a user needs to do is subscribe to a monthly or a yearly plan to access the services. Apart from this, there are paid games at less price.







How Cloud Gaming Works?

The working principle of cloud gaming is similar to that of video streaming. There was a time when we were required to have blu-ray discs or DVDs for watching movies but now we don't need them anymore as we can stream movies anytime and anywhere we want from multiple devices.

Similarly, cloud gaming doesn't demand any high-end hardware. Users can play games on the cloud without any manual insertion of the disc or booting of an existing app, as the server does it all by itself. This is the reason why these days users can stream a feed of multiple games at a single place regardless of their current location.

In other words, the processing power for running the games is handled by the virtual server. All a user needs to have is a compatible device that can handle the required internet bandwidth.



Cloud Gaming - Key Market Insights

If we go with the latest report from <u>Fortune Business Insights</u>, the global cloud gaming market size is expected to reach 40.81 Billion USD in 2029, at a CAGR of 43.6% (2022-2029). This is comparatively high if we compare it with 3.24 billion USD in 2022.

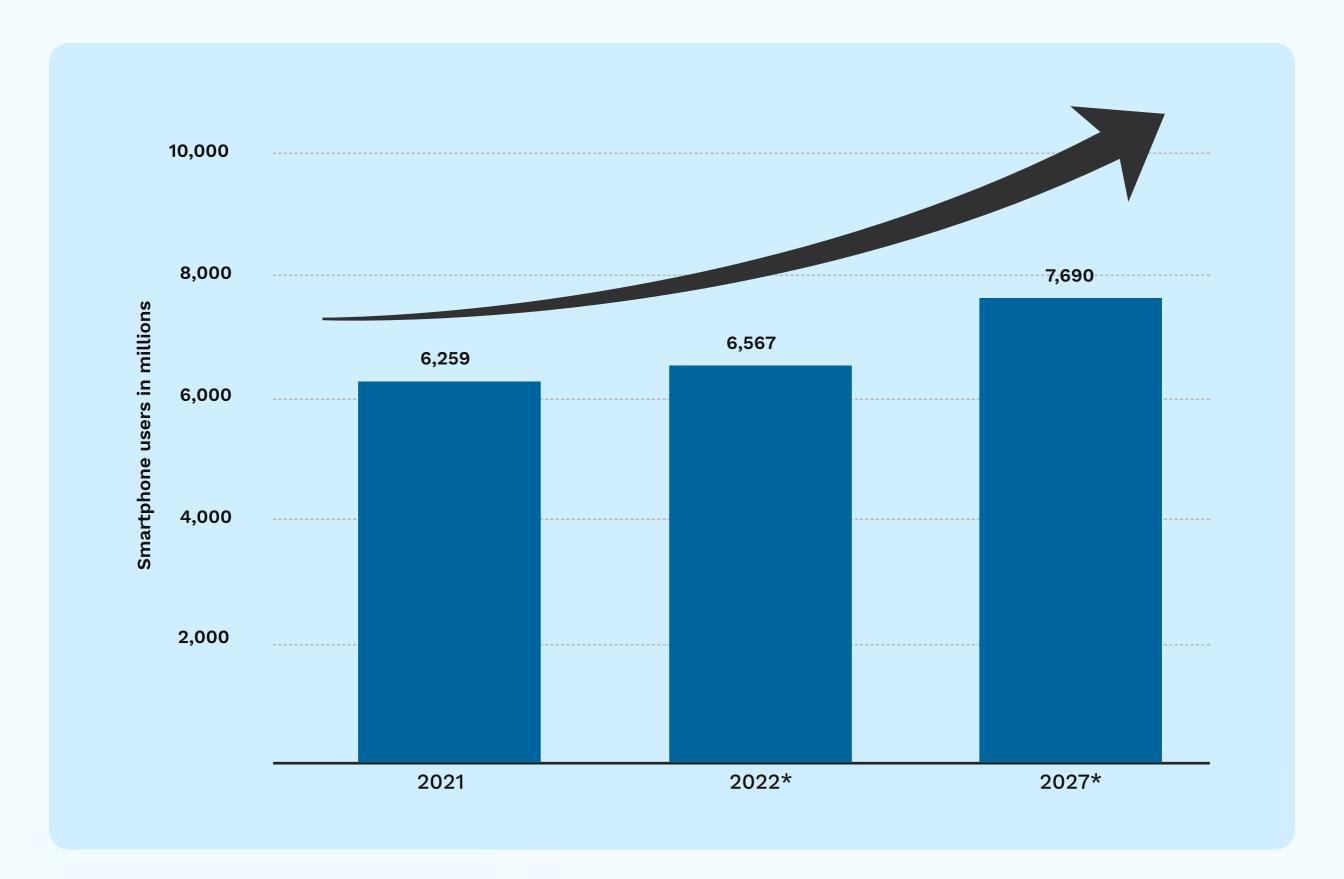
Well, when it comes to the factors responsible for this huge growth, smartphone adoption on a mass level comes on top. If we consider a report from <u>Statista</u> there were only 6,259 million smartphone users in the world in the year 2021. This number has reached 6,567 million in 2022 and is further expected to reach 7,690 by 2027. This massive increase in the number of users is giving new hope to game developers to create immersive mobile gaming environments for gamers.











Even network providers are investing a lot in mobile gaming for offering better user experience through high-performance connectivity. And why not so when there are about 2.4 billion mobile gamers globally?

Well, efforts are being made to reduce technological barriers and related high costs to attract gamer types from around the globe. If we talk about latency, it has always remained an issue but work is in progress to achieve minimum to no latency in gaming services.

The introduction of 5G technology has shown a silver lining to offering an immersive and unique gaming experience. A reason why key market players and telecom providers are forming alliances and collaborations to offer gamers a true 5G gaming experience.

If we take the example of S K Telecom and SingTel, both have worked together in the year 2021 to entice gamers with the help of technology like 5G and multi-access edge computing. Even POST Luxembourg and EU mobile operators have partnered with Blacknut to offer its users a unique 5G gaming experience. These examples point to the market growth of cloud gaming in the near future.



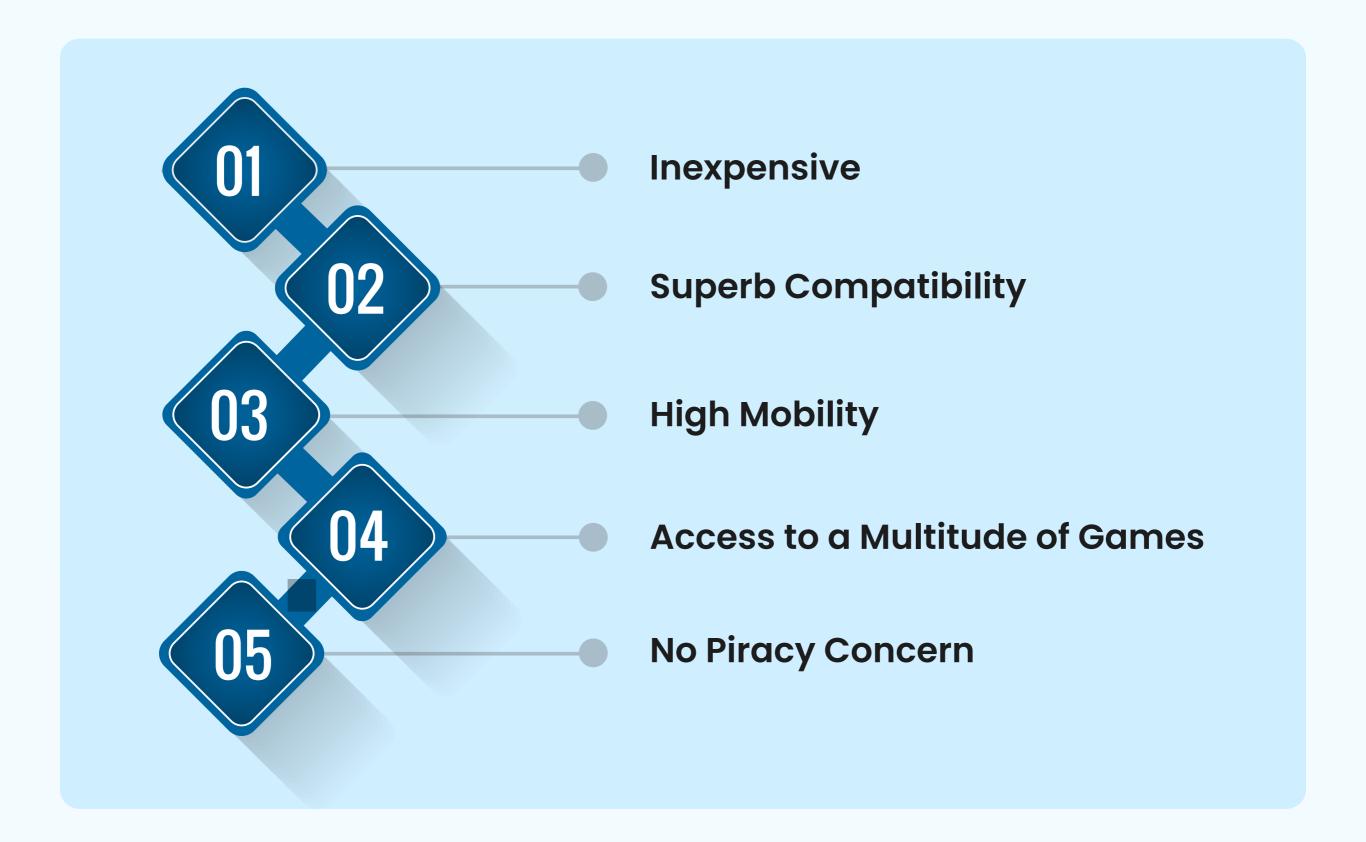




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Top 5 Benefits of Cloud-Gaming Over Traditional Gaming

Well, when it comes to advantages, versatility, instant access, no hardware requirement, easy and remote access on various supportable devices, etc stand on top. To get a better understanding let's go into detail.



Inexpensive

Needless to say, gaming using personal computers and gaming consoles cost a lot. Even if we consider a mid-range PC, it costs around 1000 USD while a high-end gaming PC will cost anywhere around 2000 USD or even more. On the other hand game consoles like Xbox Series X and PlayStation 5 cost around 500 USD.

This is not the end, users are required to purchase game titles too. If we go with games for Xbox and PlayStation, it costs anywhere between 49.00 - 69.00 USD. This is huge when compared with cloud gaming which is only limited to the subscription fee whether monthly or annually.





Google Stadia has only a monthly fee of 9.99 USD with access to over 200 game titles in its library. Moreover, users need not purchase any specific hardware for the same as cloud gaming support smartphones, tablets, and other such devices.

Superb Compatibility

Users can play high-end video games even on low-end devices. Cloud gaming services are platform-independent which means users can reap the benefits of both iOS and Android cloud gaming on their smartphones or tablets. Thanks to the highly scalable platform that has made this possible.

This is one of the major advantages over traditional gaming where memory storage, graphics, capacity, and processing power remains major issue.

High Mobility

The good thing about cloud gaming is, players can play them from anywhere and at any time. All a player needs is a compatible tablet, smartphone, or other devices along with a subscription and a stable internet connection.

On the other hand, when it comes to traditional gaming this is not the case. A user requires to have a personal computer, laptop, TV, or gaming console apart from the gaming box that can't be carried at all places, and all the time.

Access to a Multitude of Games

The issue with traditional gaming is, users can only play available games. This limits their gaming experience unless they purchase more game titles. On the other hand, cloud gaming offers gaming enthusiasts, easy access to a plethora of video games. Companies are investing a lot to offer immersive gaming experiences by offering a multitude of games in subscriptions.

No Piracy Concern

Cloud gaming service providers are legally authorized to stream games on their platforms. This means they have legal rights to ensure that the games are free of any manipulations. This eliminates the possibility of any piracy as compared to traditional games where the chances of piracy in game titles are more.







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Top 5 Cloud Gaming Companies



1. Microsoft Corporation

Established in 1975, with its headquarters in Washington, United States, Microsoft Corporation is one of the top multinational corporations. Its primary business includes consumer electronics, computer software, personal computers, and other related services apart from cloud-based solutions and support systems.



2. Google Inc.

Established in 1998 with its headquarters in California, United States, Google inc. focuses on internet-related products and services. It deals in cloud computing, online advertising technologies, software, and hardware. It is also one of the top multinational companies in the world.



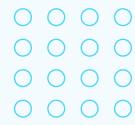
3. Amazon.com Inc.

Established in 1994 with its headquarters in Washington, United States, Amazon.com Inc is one of the leading online retailers that offers its service worldwide. It is also one of the major providers of web services and offers cloud web hosting apart from selling a number of product categories online.



4. IBM Corporation

Established in 1911 with its headquarters in New York, United States, IBM Corporation deals in cloud computing and data analytics. It is well known for creating and marketing high-quality computer products. IBM also has some major inventions in its basket like the hard disk drive, floppy disc, and the UPC barcode.











5. Intel Corporation

Established in 1968 with its headquarters in California, United States, Intel is popular for the development and production of microprocessors. The semiconductor chips developed by Intel are used in major electronic devices worldwide. Intel also deals in Intel Server GPU which offers tailored solutions to the providers of cloud gaming services.

Top 5 Cloud Gaming Startups



1. Shadow

Shadow is a cloud-based game streaming app that allows users to access and play games on iOS, Android, Mac, Linux, Windows, and various other cloud-based devices through monthly or yearly subscription packages.

Year of Foundation	2015
Location	Paris (France)
Funding	105 million USD
Investors	Nick Suppipat, Serena, Charter Communications, and 4 others



2. Parsec

Parsec is a cloud-based gaming and remote working solution provider that allows users to remotely play games and collaborate on work. Parsec app is available on iOS, Android, Mac, Linux, Windows, and various other platforms.







Year of Foundation	2016
Location	Park City (United States)
Funding	33 million USD
Investors	Andreessen Horowitz, Lerer Hippeau, Makers Fund, and 3 others



3. Ubitus

Ubitus provides cloud computing and gaming solutions for multiplayer games. It is known for its white-label solution named "GameCloud" which is an end-to-end cloud gaming system for fixed & wireless network service providers, game developers, and OEMs.

Year of Foundation	2007
Location	Taipei (Taiwan)
Funding	17 million USD
Investors	ACTOZ Soft, SQUARE ENIX, Sony Innovation Fund, and 6 others



4. Blacknut

Blacknut is a subscription-based cloud gaming platform that allows users to play multiple games on-demand without having to buy them separately. Blacknut can be accessed easily from a smartphone, tablet, or TV.

Year of Foundation	2016
Location	Rennes (France)
Funding	3 million USD
Investors	SQUARE ENIX, GO CAPITAL, Nestadio Capital, and 1 other







5.Playgiga

Playgiga provides cloud-gaming technology to gamers, game publishers, and telco companies. It allows users to play AAA-quality games on their PC, laptops, or TVs through monthly subscriptions apart from enabling game publishers to publish their games.

Year of Foundation	2013
Location	Madrid (Spain)
Funding	6 million USD
Investors	Caixa Capital Risc, Inveready, Bankinter, and 1 other

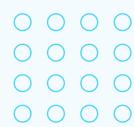
Top 5 Cloud Gaming Trends

Cloud gaming can put an end to console sales and development

According to Yves Guillemot (CEO and co-founder of Ubisoft) gaming consoles may become obsolete in a single generation due to a rise in cloud gaming. He further added that with time streaming can overtake costly hardware.

2. Popularity of online casinos

Cloud-based casinos have to face major challenges in some markets, including the U.S. due to illegality in conducting betting operations online. Cloud-based casino gambling can emerge as a popular cloud gaming trend. This is so because it will be based on chance and not on skills. It is also unique in terms of how social interactions do take place.







3. Rise of subscription-based cloud gaming

According to Zuora (cloud-based subscription management platform provider) subscriptions across all segments have grown five times faster than the retail economy over the past few years. So, there is a huge possibility that gamers will get the advantage of consuming games the same way they are now consuming movies and music.

4. Adaptive AI can be allowed for adaptive cloud gaming

Adaptive AI uses cloud computing for driving advancements in processing power and delivering sophisticated gaming graphics. But it has the capability to change the way games respond to inputs from a player at a fundamental level. The hyperpersonalized gaming experience has the power to allow players of mixed ability levels to play together. It also helps players become skilled by adjusting to evolving skill levels.

5. Cloud gaming can attract more spectators from the Esports world

Many high-profile Esports gamers net millions of dollars in endorsement deals year after year. The popularity of this online twitch platform enables gamers to live stream gameplay. As a result, the market is glooming.

A report from <u>Deloitte</u> states that Esports is blurring the lines between video games and TV. This can spur the game companies to think like broadcasters. So it is expected to see Esports revenue streams that resemble TV revenue in form of both advertising and sponsorship.

Wrapping Up!

Cloud gaming has not only emerged as a relatively cheap form of entertainment for gamers but has also brought immense opportunities for companies, entrepreneurs, and investors. Whether it's telecommunication, hospitality, entertainment, or other industry verticals, all can reap the benefits of cloud gaming.







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Bonus Read: Metaverse – A Game Changer in the Virtual Gaming Industry





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