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GAMING INDUSTRY REPORT



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OVERVIEW

The gaming industry-a world where video games bring stories to life and epic adventures unfold at the mere touch of a controller. It is a dynamic realm where creativity knows no boundaries. Come with us on a journey where every click opens doors to endless entertainment. Welcome to the gaming universe, where your imagination sets the only limits.

The industry is like the heartbeat of today's entertainment. However, the digital sphere is much more than just leisure and amusement. It provides a platform where pixels meet profits and emerges as an economy booster reforming markets and traditional notions.

HISTORY OF GAMING IN INDIA

Previously, video games were only supplied through video parlours, where the games were machine based coin operations. In the 1990s, 8-bit NES clones operating on cartridges entered into India. There were several classic games such as Super Mario bros and Contra in each cartridge. This created interest in video games in India for the first time.

The gaming industry in India was introduced in the early '90s. Hand-held gaming consoles became a vogue. A couple of years later, smartphones were introduced. The number of people accessing smartphones with data gradually was increasing. Online gaming is now available at one easy click. The recent obsession of Facebook games like Candy Crush, Clash of Clans and the most popular one PUBG has caught the attention of the young Indian crowd – spending hours at length on the interface. Games based on well-known events like Kaun Banega Crorepati, IPL, Khel Kabbadi,

Between mid- to late-90's the sales of personal computers started to shoot and take over 8-bit consoles. Play stations are still relevant though not as much as PCs because consoles' games are more expensive. The PC remains one of the

Mobile phones became popular in India towards the end of the 2000s. This led to a rapid increase in gaming as almost every smartphone had access to mobile games. In 2020, there were 696 million smartphone users as against a mere figure of 76 million users in 2013. India expects to reach 970 million users by 2025.

GAMING IN INDIA

India is the largest mobile gaming market in terms of app downloads. There are more than 400 Million gamers, 500 gaming studios, around 600,000 e-sports players and 100,000 e-sports teams in the country. The video gaming industry is a developing market in India and is expected to grow rapidly. By the financial year 2022, India's already rapidly expanding gaming market had grown to 2.6 billion U.S. dollars. It is worth about USD 3.02 billion in 2023, and is expected to grow to USD 6.26 billion by 2028, at a CAGR of 15.68% during the forecast period (2023-2028).

The number speaks about the increasing development and potentiality of the gaming country in India. Our country, due to its significant chunk of youth population, along with its rapidly growing IT infrastructure driven by rising use of smartphones and excellent internet connectivity, is expected to rank among the top market locations for the gaming industry. Following are the key players in the Indian Gaming Market.



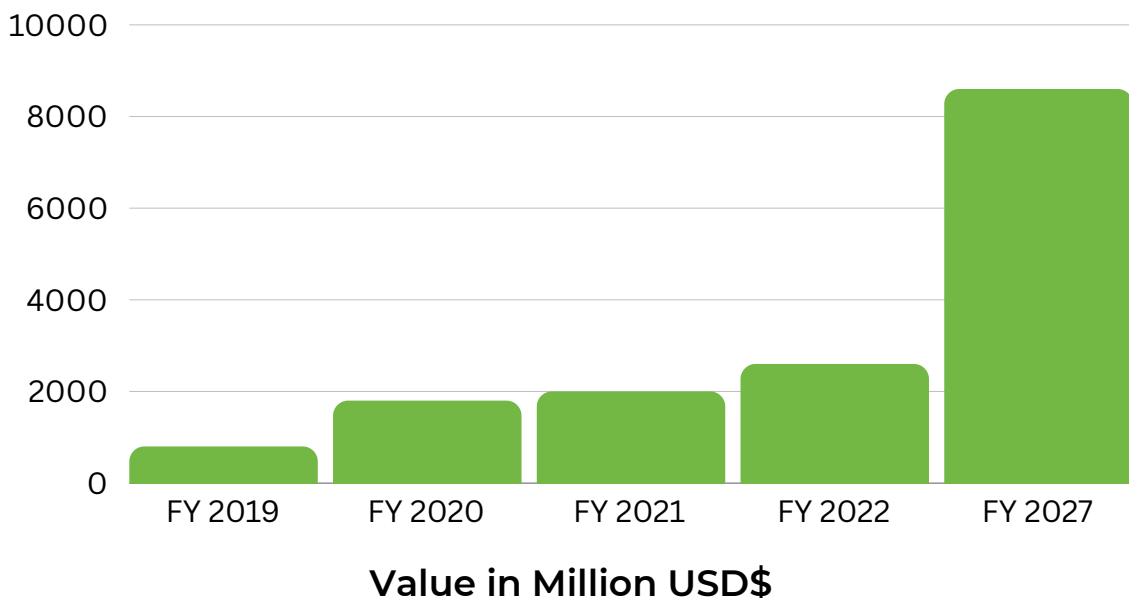
In the previous year, according to CNBC news, Sunil Chemmankotil, CEO of Teamlease Digital, stated that the gaming business is the "next sunrise industry," citing the sector's expanding user base and the potential it will present. It has also led to increase in the number of female audience as well as number of women working in the industry, particularly in leadership roles. Moreover, according to The Economic Times, India has affordable mobile data worldwide. The average cost of a gigabyte (GB) in India is USD 0.26, compared to USD 6.66 in the United Kingdom and USD 12.37 in the United States for the same data. It has led to increased internet usage, as 46% of the nation today regularly uses the internet, owning gaming as the fastest-growing industry in India.

The expansion of India's video game market can also be attributed to cyber cafes, which are cafes offering the public access to the internet. There were more than 100,000 cyber cafes in 2006 with almost 40% used for playing online games. After this, there were 180,000 cyber cafés, but by 2017 First, one of main reasons for drop was the IT Act that led to licensing problems and other restrictions.

The emergence of video game studios in India, particularly in Bangalore, has given the country a nickname, "the Silicon Valley of India." Indeed, in 2009 there were only 15 game development studios in India. At present, colleges have started offering game design and development courses for the students. LPU Jalandhar, Karnavati University Gandhi Nagar, Parul University Vadodara, Vels University, Chennai, UPES Dehradun, RIMT University Gobindgarh, Shoolini University Solan, etc. are some examples.

GOVERNMENT INITIATIVES

Our prime minister has also inspired the developers and innovators by promoting his vision for a "Digital India". There also has been a significant shift in the industry toward game development since then. Furthermore, the Indian government has also shown support for the gaming industry, with initiatives aimed at promoting game development and fostering a supportive ecosystem for developers. This includes the establishment of gaming labs, incubators, and funding programs to encourage innovation and entrepreneurship in the sector. Its initiatives to support the gaming industry have led to the establishment of over 275 gaming companies and the creation of thousands of job opportunities in the sector.



EFFECT OF COVID 19

During the COVID-19 pandemic, there was an increase in the number of Indian mobile gamers because of the stay-at-home orders. From April 2019 and June 2020 when COVID occurred, the Google Play Store saw a 51% increase in mobile game downloads and the iOS App Store saw a 20% increase. Within the first 9 months of lockdown in 2020, India became the largest consumer of online games with 7.3 billion downloads. Indian gaming industry is though at its infancy till now, but leading Indian gaming companies like Red Apple Technologies are taking bold initiatives to maximize jobs in gaming sector while up skilling Indian students with advanced training on game engines.

A senior manager of Client Solutions Group, Dell Technologies, India, states that specific industries and organizations that are more service-oriented and in the public sector are where this movement in adopting desktop computers to notebook PCs is more noticeable.

MARKET SCENARIO

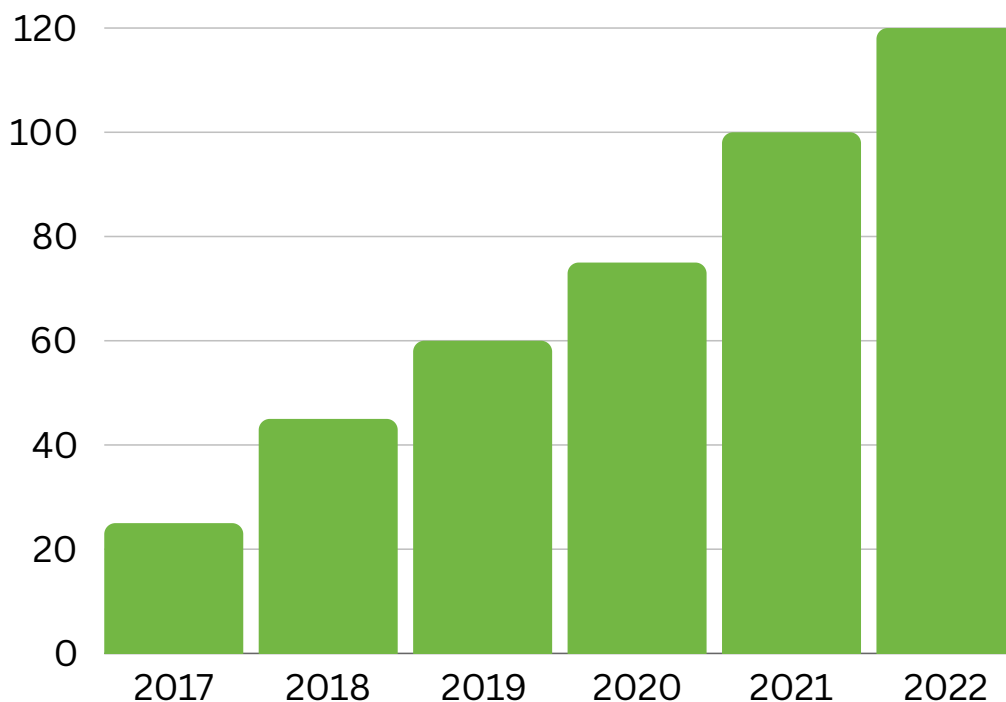
The major players in this industry in India are Sony Corporation, Nintendo, Microsoft, Rolocule Games Private Limited and Electronic Arts Inc. Additionally, there are three unicorns in the gaming space in India at present- MPL (\$2.5 billion), GAMES 24 Seven (\$2.3 billion), and Dream11 (\$8 billion), respectively.

STATS AND PROJECTIONS

As of the year 2019, India is ranked as one of the top five mobile gaming markets in the world in numbers. The Indian online gaming industry is assumed to generate earnings of INR 11,900 crores and the number of users projected to become 628 million by then by the end of 2023. With a business of \$890 million in 2018, the video game sector is still underdeveloped in contrast to other Asian countries, such as China and South Korea.

However, many video game companies are rising to invest, and India could become a prime market for this sector. One of the factors that drove the growth of the video game market was its large number of cybercafés with more than 100,000 in 2006, 40% of which were used to play online.

The industry is also seeing investments from global gaming giants, including Tencent, Alibaba, Nazara, Youzu, and others. Tencent's PUBG, for example, is said to have changed India's mobile gaming environment forever. Media reports state that PUBG is adding Rs 200 crore to Rs 300 crore to Tencent's income from India and is also a part of DE-CIX India's connected peering network.



Revenue Growth in Gaming Startups in India in Billion USD \$

MARKET ANALYSIS

GLOBAL GAMING INDUSTRY

The global gaming industry is currently valued at an estimated USD 330-370 billion. It is expected to grow at a CAGR of 12-14% and is estimated to surpass USD 682 Billion by 2030. With an estimated revenue of 68.27 billion USD, the United States is thought to be the largest gaming market in the world. China's video game market came in second place, with an estimated yearly revenue of 61.44 billion US dollars. The key players in the global gaming market include bigshots such as Microsoft, Sony, Nintendo, Nvidia, Rovio etc.

Regional Analysis

The Asian-Pacific market by far is the most dominant in the gaming industry while there is great growth in the North-American and European Markets.



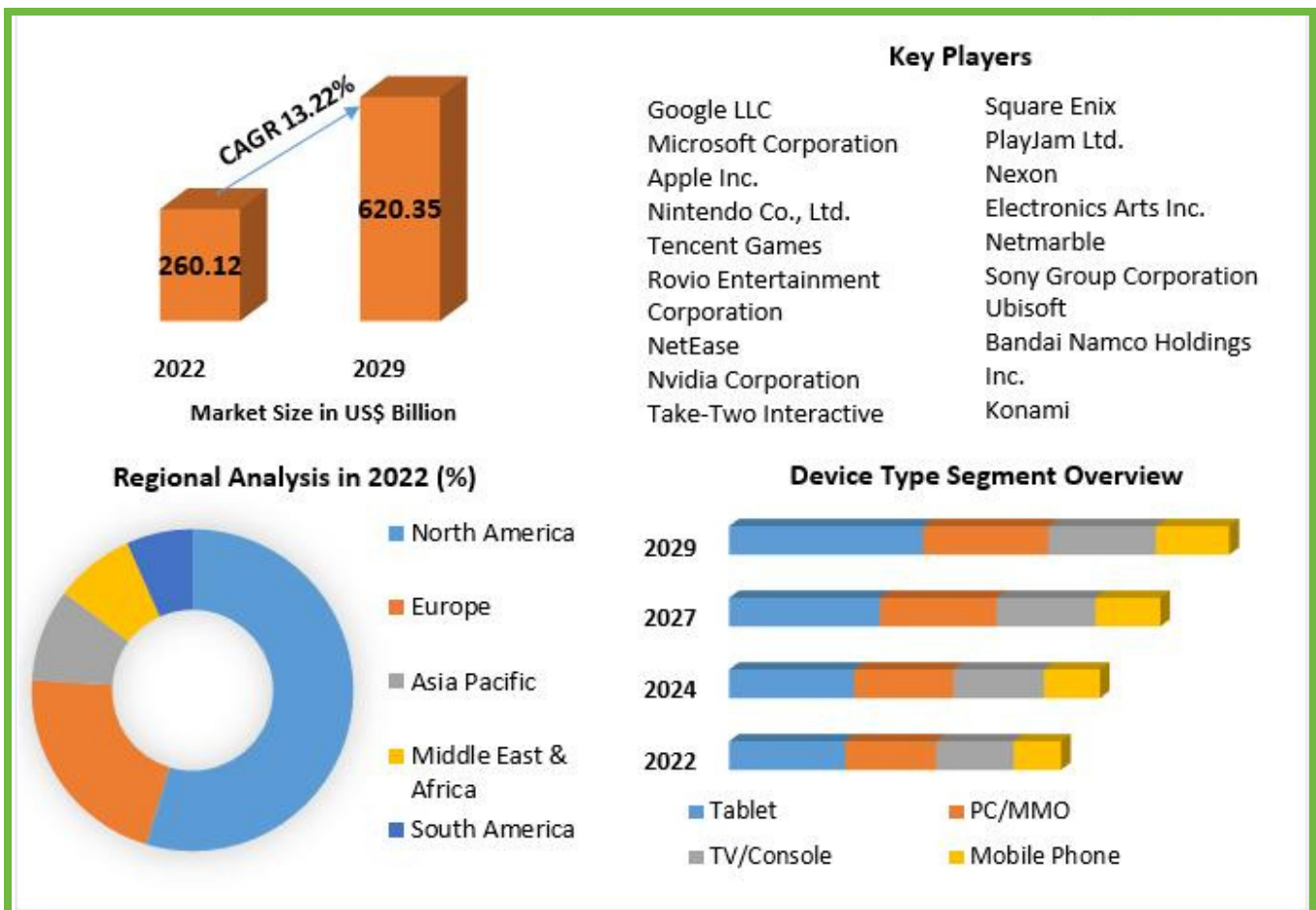
End User Analysis

The male segment in the global Gaming market continues to dominate, with a significant portion of gamers being male.

Device Type Analysis

The TV/Console Gaming category is expected to dominate market growth in the coming years. This is due to the availability of advanced displays and audio systems that enhance users' experience significantly.

GAMING MARKET ANALYSIS



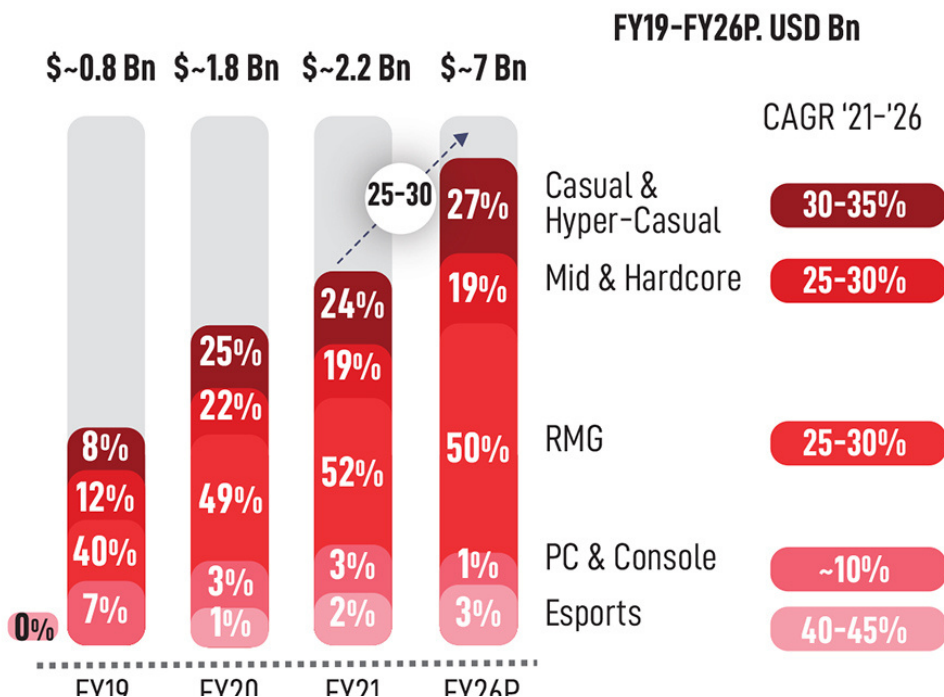
INDIAN GAMING INDUSTRY

The Indian gaming industry is estimated to be valued at USD 3.02 billion. It is the fastest growing gaming market in the world and is expected to grow at a CAGR of 15.68% and reach an estimated USD 6.26 billion by 2028.

The total revenue generated by the gaming industry in 2023 is estimated to be USD 868 million and is expected to reach USD 1.581 Billion growing at a CAGR of 17.2%.

The number of gamers in India across all platforms is 444 million in 2023, up 12.1% YoY. The number of gamers across all platforms in India is forecast to reach 641.2 million in 2027, growing at a 5-year CAGR of 10.1%.

Gaming Market In India Trend by Segment



Based on Game Type

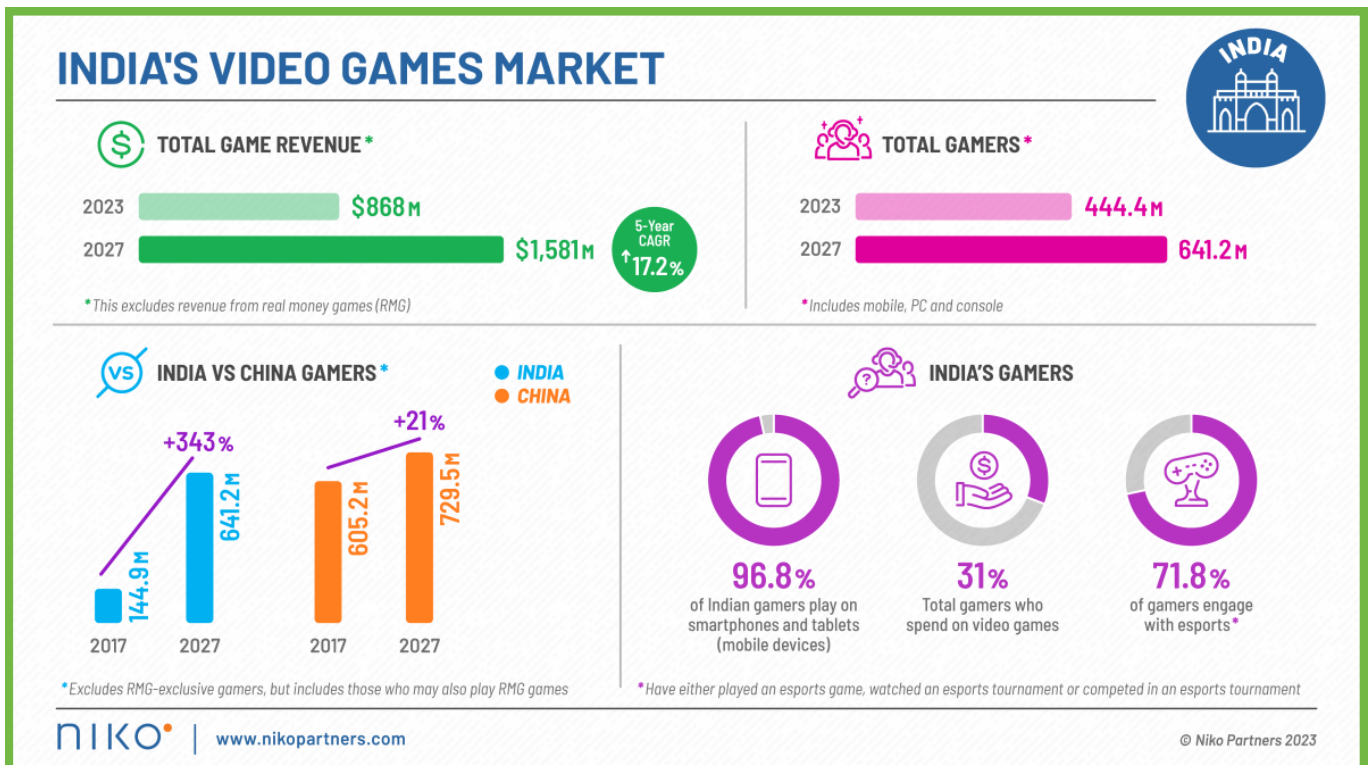
The India Gaming market is segmented into Casual Games, Real Money Games, Online Fantasy Sports, E-Sports, Others. Casual Games dominated the game type segment in 2023 and is estimated to hold the largest revenue share of the market. Real Money Games are expected to grow at a significant CAGR.

Based on End-User

India Gaming market is segmented into Male and Female. Male segment dominated the end-user segment in 2023. However, the female segment is expected to grow at a significant CAGR. The engagement of women is one of the most intriguing aspects of the gaming industry's success story. Although the idea that the business is male-dominated is true to some extent, the growing presence of women in gaming is promising. According to a recent research, women made up more than 43% of the Indian smartphone gaming community.

The Indian gaming industry is dominated by major players such as Sony corporation, Nintendo, Microsoft, electronic arts and Rolocule games Pvt Ltd. Several factors have fueled the growth of the gaming industry in India. The Covid lockdowns encouraged people to seek virtual means of socialization, turning games into a social network.

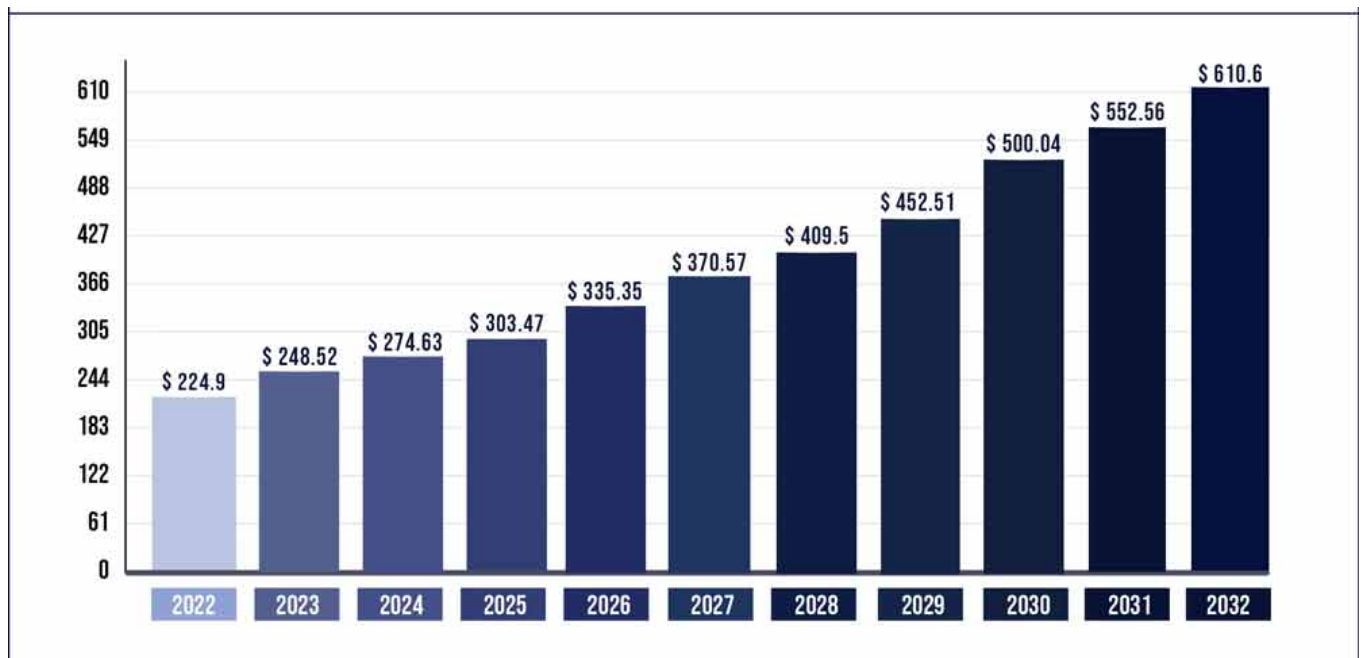
Features like voice chat, proximity chat, and activity feeds enabled players to connect with friends and experience social interaction from home. Affordable data plans also ensured a seamless gaming experience.



MARKET GROWTH POTENTIAL

The number of gamers is expected to grow to 3.6 billion by 2025. It's not just kids either: 38 percent of gamers are between the ages of 18 and 34 years, and 16 percent are older than 55. The number of gamers in the world across all platforms is 3.22 billion in 2023, up 5.6% YoY. One of the top market trends in the Gaming market is the increase in mobile Gaming.

The exponential growth of smartphones and the increasing accessibility of high-speed internet contributed to the popularity of mobile Gaming. The convenience and ease of playing games on mobile devices have made it the largest segment in the Gaming market.



Video Game Market Size in USD \$ Billions

With the advent of new technologies like virtual reality and the rising popularity of mobile gaming, the future of gaming appears bright. The gaming industry could undergo a revolution thanks to virtual reality (VR), which immerses users in an interactive and lifelike digital environment.

The future of gaming could also see the integration of artificial intelligence (AI) and machine learning. This could lead to the creation of more realistic and dynamic game environments, as well as personalized experiences tailored to individual players.

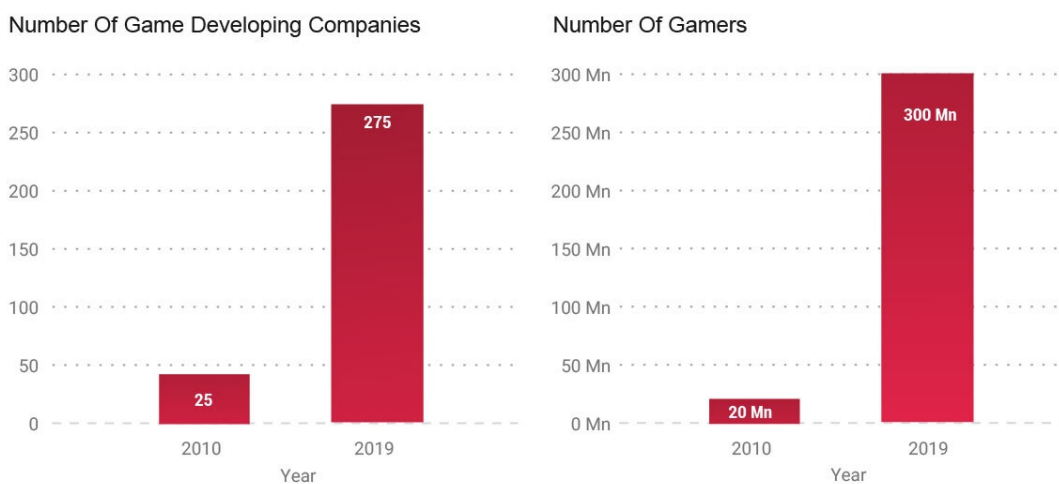
MARKET TRENDS

Rapid Increase in Smartphones is Expected to Drive the Market

Due to the market's expansion and lucrative income potential, two well-known publishers of console and PC games, Activision Blizzard and Electronic Arts, are placing a greater emphasis on mobile gaming. They compete with companies like Tencent, Sea, and Perfect World, which are predominantly involved in mobile gaming. Online advertisers and social media sites like ByteDance and AppLovin are now performing mobile game publishing.

In total downloads this year, India overtook China as the primary consumer of mobile games. India currently has markets that are nearly 2.5 times larger than China and three times larger than the United States. There have been 15 billion (15,000 million) game downloads in the previous year. In terms of global game downloads in the current year, India had the most considerable percentage (17%).

Number of Gamers And Gaming Companies In India Grow Over 10X In Last Decade



In enabling faster game downloads than current 4G networks, 5G networks also supported the growth of such AR games. One million devices may be supported by 5G in a single square kilometer, encouraging more people to play mobile games, especially multiplayer ones.

This year, Samsung planned to move part of its smartphone manufacturing to India from Vietnam and several other countries. They intend to manufacture more than USD 40 billion (40,000 million) of devices in the country.

Android Games to Dominate Market Share

Data costs in the country have recently dropped exponentially, making it one of the most affordable markets for data. It has positively impacted the number of smartphone users in the country. According to a survey by Newzoo in the previous year, the total monthly users for leading games in google play in India was 657 million.

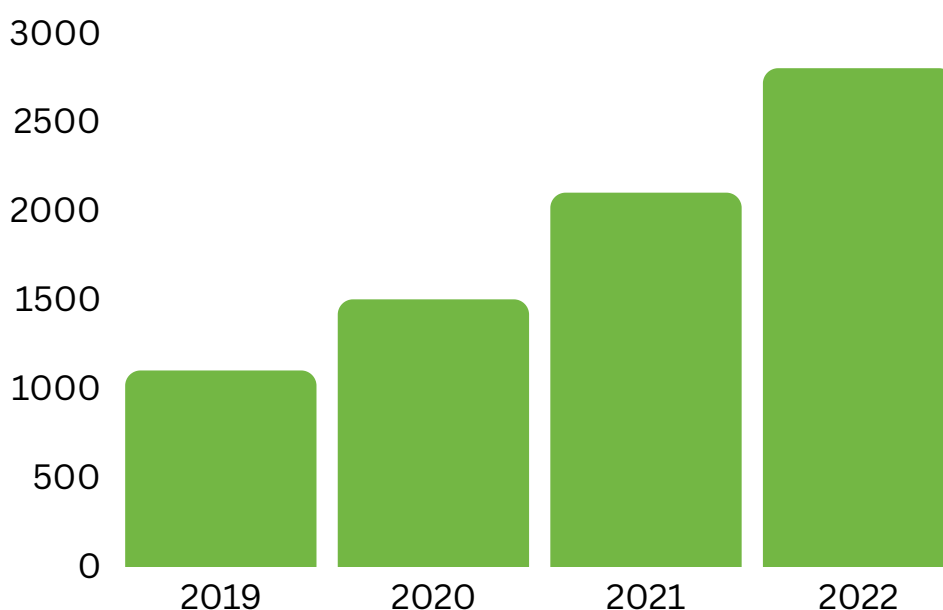
Such favorable conditions have positively impacted the number of mobile gamers in the country. For instance, according to a CMR study that included input from 1,124 mobile gamers aged 16 to 35, the average person has at least seven games on their phone, four of which are regularly played.



According to a report published in the previous year by 42matters.com, more than 5,283 Indian publishers are on Google Play, all 166,039 game publishers. Some of the most prominent Indian publishers are Gammaton Technologies Pvt Ltd., Words Mobile, Moonton, Moonfrog, and Games2win.com. Overall, 3% of all game publishers on Google Play are from India, which suggests the increasing dominance of Indian players in the android gaming industry.

Among the mobile gaming segment, Android commands a significant market share, owing to the dominant share of the user base in the country. According to various studies, the country's smartphone user base is expected to surpass 750 million by the end of last year, growing exponentially with major brands such as Xiaomi and Realme. OnePlus and Samsung dominates the market. Another significant trend is that these vendors offer smartphones with Android OS, contributing to the OS's popularity.

With the recent ban on PUBG, Call of Duty has seen an increase in the number of users. Also, the country has seen a growth in developers offering similar games. For instance, in the previous year, FAU-G, the Indian rival of PUBG Mobile, was up for pre-registration on Play Store.



Indian Gaming Market Growth in Million \$

GAMING AND GAMBLING

GAMING VS GAMBLING

Online gaming can be broadly divided into 'games of chance', where the outcome depends primarily on luck, and 'games of skill', where success depends primarily on the player's knowledge, training, expertise, and experience. Gambling is traditionally understood as risking something valuable and having the chance to win. By placing a bet (usually money) on something with the aim of winning a larger amount of money, you are participating in 'gambling', which may be considered 'gaming'.

Gambling has long been an issue of moral policing and has faced opposition from many states in India. States either ban it completely or regulate it (or are in the process of regulating it. With easy and cheap access to the Internet, 'gaming' has moved from land-based gaming to online gaming, thereby penetrating the masses.



This question returns to the controversial question of what constitutes a "game of chance" and "gambling. There are court precedents that discuss this issue regarding games that are considered to be 'games of skill' such as rummy, poker, fantasy games, and horse racing. However, the principles contained in these court decisions must be evaluated and applied on a case-by-case basis, and applying them as a straitjacket carries inherent risks.

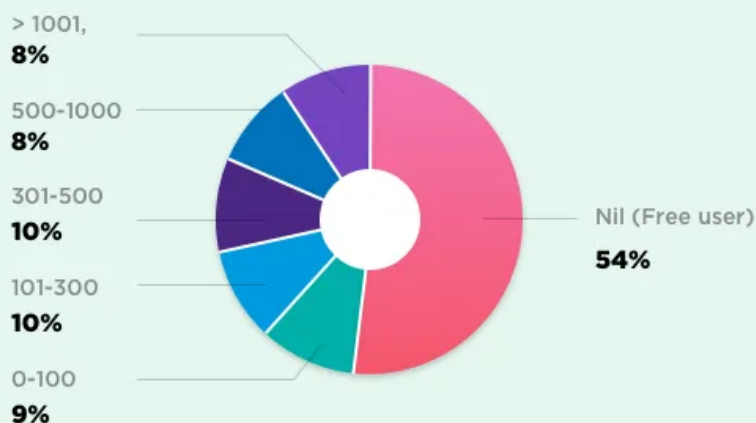


FANTASY SPORTS

Fantasy Sports is an online gaming platform where players manage and create virtual teams of real professional athletes. Players compete against other players' fantasy teams across sports leagues or seasons.

Players who achieve maximum points win prizes based on the performance of real professional athletes. Unlike online games, fantasy sports cannot be played 24/7 as they depend on the amount of time you spend on the app. You can join a sports team before live play begins, making it a non-addictive form of participation.

Money spent on fantasy sports platforms per month (INR)



Market

India has around 300 fantasy sports platforms and 18 million users, making it the world's fastest-growing market with a user base almost three times that of North America.

India's fantasy sports market has grown at a CAGR of 30% since 2019, with an estimated Rs 3,100 crore invested in real-world sports through sponsorships and partnerships with sports leagues. The impact on the overall sports economy is expected to contribute to Rs 29,000 crore.

The Indian fantasy sports market is a dynamic industry that is constantly evolving due to various internal and external factors.

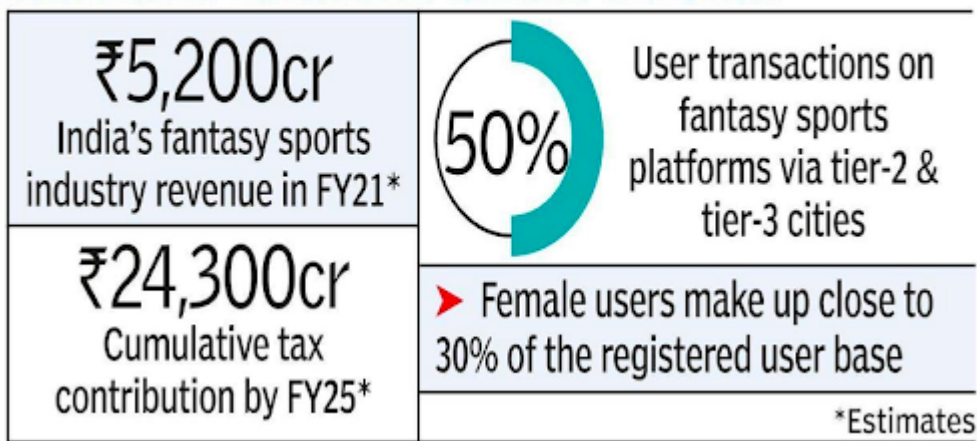
Some of the key drivers driving the growth of the industry are:

- **Increasing Internet Penetration:** Due to increasing internet penetration and the availability of high-speed internet, more and more people in India are accessing online gaming platforms. This increased the demand for online games and tournaments, leading to the growth of the industry.
- **Increasing Usage of Smartphones:** The increasing usage of smartphones, especially among the youth, is contributing to the growth of the online gaming market in India. The easy access and convenience of playing games on smartphones have made them a popular form of entertainment.

- **Expansion of Online Payment Systems:** The expansion of online payment systems in India has made it easier for gamers to deposit and withdraw money from online gaming platforms. This has increased the number of players using these platforms, contributing to the growth of the industry.
- **Increasing Competition:** India's online gaming market is highly competitive with several major players competing for market share. This has led to a surge in innovation as platforms offer new games, features, and promotions to attract and retain players.

Top 3 platforms captured his 96% market share during IPL 2023 and recorded an average revenue per user of Rs 458 during the season. Major players include Dream 11, Mobile Premier League (MPL), My11Circle, and more.

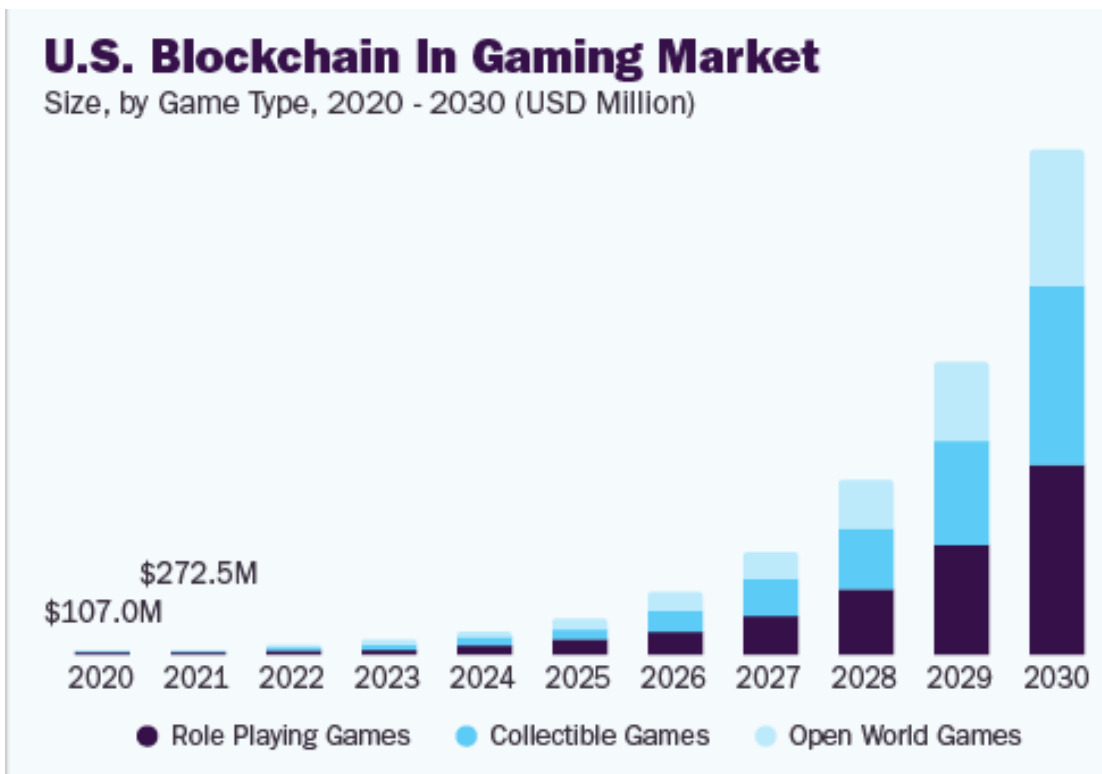
RISING GAMING INDUSTRY



Future

Fantasy sports gaming in India is expected to continue to grow in the coming years due to its young population, large base of smartphone users, and strong fan bases of major sports. Over the past decade, fantasy sports gaming has increased by 700% in India.

In 2019, there were 90 million fantasy gamers in India, and it is estimated that there will be nearly 150 million fantasy gamers in the region by the end of 2022. The fantasy sports market is expected to generate approximately \$3.7 billion by 2024.



Cryptocurrency and Fantasy Gaming

Blockchain technology is a solution to many problems faced by fantasy sports operators. Cryptocurrency will continue to play a big role in the future of fantasy gaming. With new forms of digital currency becoming the next big thing, some fantasy sports are willing to offer cryptocurrency investment payment gateways to play fantasy sports and withdraw funds in the same form of digital currency. Using cryptocurrencies may be the safest way for users to place bets. There is no need to feel the hassle of depositing and withdrawing money.

It's all online and simple.

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Cryptocurrency is based on blockchain technology.

Integrating cryptocurrencies into the fantasy gaming industry offers a variety of benefits. Some of them are:

- **Decentralization:** No single entity controls the system. All members of the blockchain are equally responsible for enforcing and approving all transactions.

- **Trust:** All transactions are transparently recorded on a distributed ledger, so trust among stakeholders is high.
- **Security:** All transactions on the blockchain are verified by all members of the network, limiting operations and increasing security.

How Fantasy Gaming Works:

Imagine being the manager of your own cricket team. Select all your favourite players, assign them to your team, and earn money as they perform.

This is the core of online fantasy games.

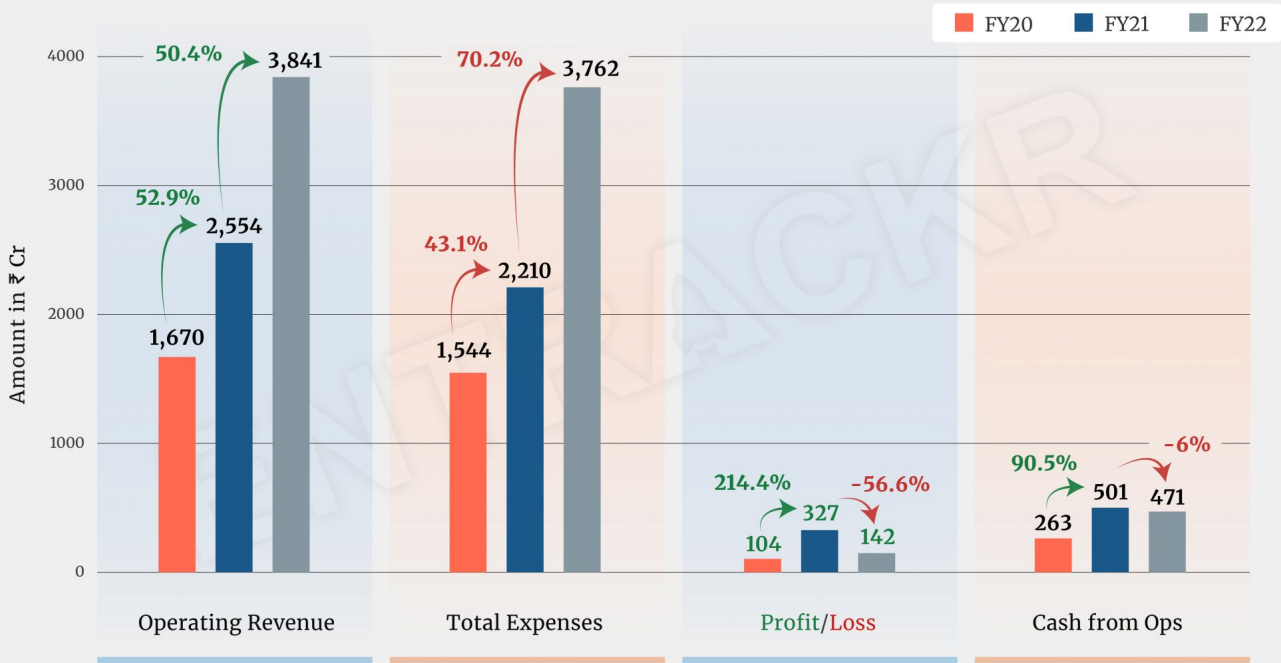
Participants will register on apps such as Dream11 and My11Circle and create their own virtual cricket team for upcoming real-life matches. Suppose in 3 days there is an IPL match between CSK and RCB. The online fantasy player starts curating his team and selecting his 11 most popular cricketers from CSK and RCB. "Purchasing" players requires real money, and participants are often limited by budgets and rules. Of course, acquiring a star cricketer like Dhoni will be the most expensive, which means you will need to strategize and find the perfect balance.

When the real match between CSK and RCB comes, fantasy game players can earn money if their team's cricketers perform well in the real game.

Points are awarded for runs scored, wickets taken, catches and run-outs. The fantasy platform tracks live games and update participants' results in real time. At the end of the game, the participant with the highest number of points in the respective competition will be declared the winner and will receive cash prizes, vouchers and other rewards.

Because 'gaming' is likely to be construed as 'gambling', you can expect to encounter legal hurdles in these states. Additionally, states such as Sikkim, Nagaland, and Meghalaya have laws that permit and/or regulate online gaming, including licensing. As mentioned earlier, while the online gaming industry faces legal and constitutional battles, it is also engaged in a long-running dispute with the GST authorities over GST rates and assessments.

DREAM11 Financials FY22



Poker

In India, online poker refers to poker games played online through various websites and mobile applications.

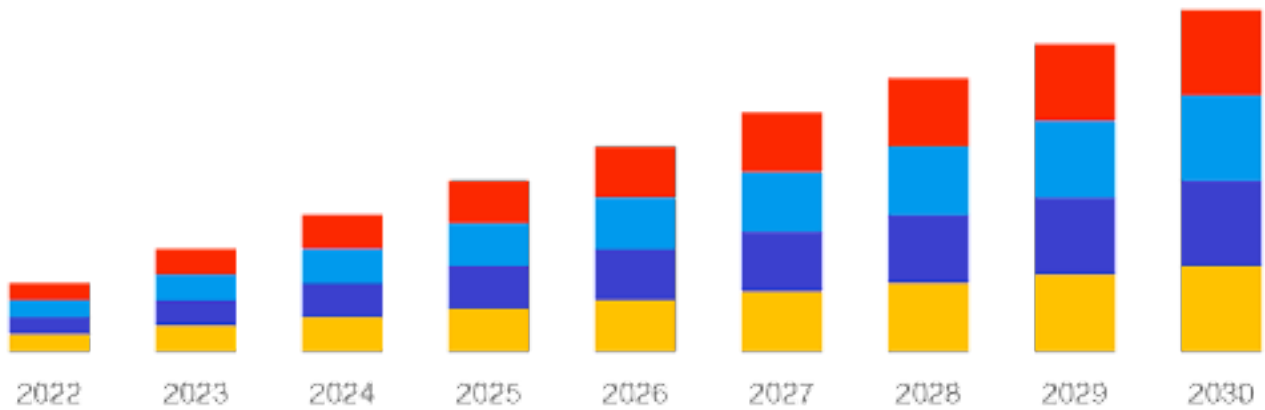
This is a virtual version of the traditional poker game, allowing players to participate in a variety of poker games such as Texas Hold'em, Omaha, and Seven Card Stud from the comfort of their home or anywhere they have an internet connection.

Moreover, the allure of online poker in India extends beyond mere recreation, as it offers the tantalizing prospect of winning real money and competing in high-stakes tournaments. The opportunity to amass wealth through skillful play has captivated countless individuals, spurring them to sharpen their strategic acumen and refine their gameplay techniques.

Additionally, the prospect of rubbing virtual elbows with players from around the globe adds an exhilarating dimension to the experience, fostering a sense of camaraderie and competition that transcends geographical boundaries. Consequently, the online poker landscape in India continues to burgeon, fueled by a potent combination of convenience, excitement, and the tantalizing allure of potential riches, making it a cornerstone of contemporary gaming culture in the nation.

India Online Poker Market 2023–2030 (By Device Type)

■ Mobile
 ■ Desktop
 ■ Gaming Console
 ■ Arcade Games



Key Market Statistics

- The Indian online poker market is expected to register a CAGR of 16.9% from 2023 to 2030.
- The market size in 2023 is expected to reach \$115.1 billion.
- By 2030, its value is expected to reach \$346 billion.
- The major players in the industry are Adda52, PokerBaazi, Spartan Poker, and MPL.



Significant Opportunities

The online poker market offers significant growth and development opportunities in the coming years.

Some of the key opportunities in the online poker market are:

- **Expansion of User Base:** With the increasing availability of smartphones and high-speed internet, the user base of online poker will grow significantly in the coming years. The rise of online gaming platforms and the increasing popularity of poker tournaments are also contributing to the growth of the user base.
- **Technological Advances:** The online poker industry is constantly evolving, and technological advancements such as artificial intelligence, virtual reality, and blockchain improve the gaming experience, making it more immersive and engaging for users.
- **Regulatory Framework:** The legalization of online poker in several countries, including the United States, creates significant opportunities for the industry to expand its reach and enter new markets. Furthermore, the development of a regulatory framework will provide users with a sense of security and trust, contributing to the growth of the industry.
- **Innovative Marketing Strategies:** Innovative marketing strategies such as social media advertising, influencer marketing, and content marketing are expected to play an important role in attracting new users and retaining existing users.
- **Mergers and Acquisitions:** The online poker industry has seen several mergers and acquisitions in recent years, and these strategic moves are expected to continue, providing companies with opportunities to expand their services and market reach.

Overall, the online poker market is expected to grow significantly in the coming years, providing companies with significant opportunities to innovate, expand, and develop new markets.

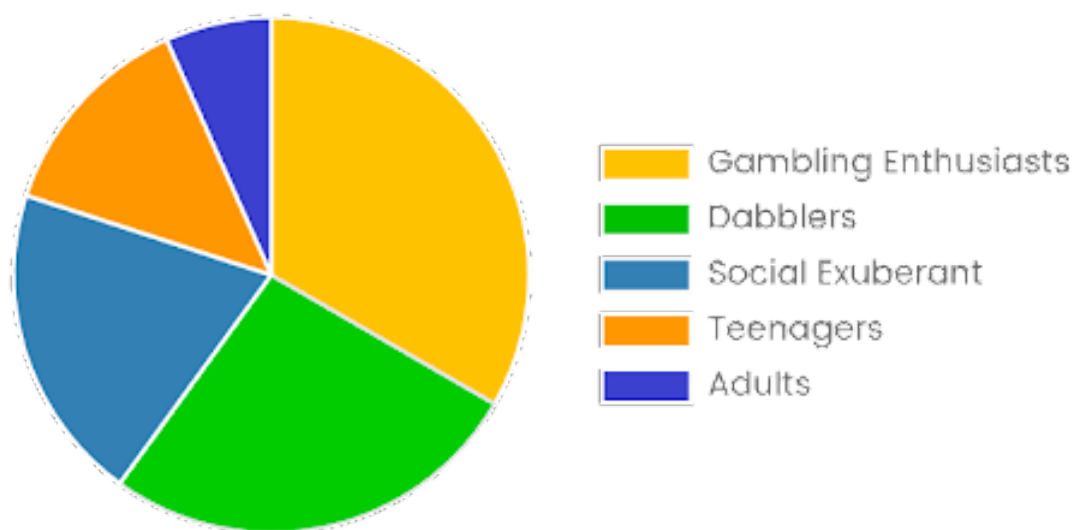
Significant Threats:

The online poker market faces several significant threats that may affect

its growth and development in the coming years.

Some of the biggest threats to the online poker market are listed below:

- **Regulatory Challenges:** The online poker industry is subject to a strict regulatory framework, which limits online poker in certain countries and regions. Regulatory changes such as bans have a significant impact on industry growth.
- **Cybersecurity Risks:** Online Poker Platforms are vulnerable to cybersecurity risks, including hacking, fraud, and identity theft, which may result in significant financial and reputational damage to the Platform.
- **Competition:** The online poker industry is highly competitive, and the emergence of new players and the expansion of existing players can affect the market share of existing players.
- **Payment Processing Issues:** Payment processing is an important part of any online poker platform, and issues related to payment processing, such as fraudulent transactions or delays, can significantly impact the user experience and trust in the platform.
- **Social Stigma:** Despite the growing popularity of online poker, gambling still carries a social stigma in some countries, which can limit the industry's growth.



India Online Poker Market 2023–2030 (By End-User)

GST AND GAMING

India's \$3 billion online gaming industry has captured the world's attention. But that dream came to an abrupt end with his 28% GST on real money gambling. Indian tax law makes a clear distinction between games of chance and games of skill. GST on gambling activities such as betting, lotteries and casino gambling is 28%.

The government imposes high taxes on gambling, tobacco, and alcohol to discourage people from drinking. However, for regular games and for entertainment purposes only, the GST charged may be up to 0%.

Until recently, online fantasy games belonged to the category of regular skill games and had to pay a GST of 18%. And that too was based solely on the commissions earned by online fantasy gaming platforms. This is only a small part of the total sales generated.

The 28% GST on online gaming is a tax rate that applies to the full amount collected from players participating in online gaming activities such as rummy, poker, fantasy sports, and e-sports. This means that whether you win or lose, you have to pay 28% GST on the full amount.

You will also have to pay platform fees and TDS as before. As a result, the cost of online gambling increases significantly and the net profit decreases. The GST Council now recognizes that online fantasy games are not games of skill, but gambling activities where players earn money solely through luck. Let us understand this with the help of an example:

| | |
|------------------------------------|------|
| No. of players (A) | 5 |
| Amount of bet placed (B) | 1000 |
| Prize pool (C=A*B) | 5000 |
| Platform fee @10% (D) | 500 |
| GST @ 18% on gross amount on D (E) | 76 |
| Net amount available (F=C-D-E) | 4424 |
| Net winning for the player(F-B) | 3424 |
| TDS @ 30% | 1027 |
| Net post tax available amount | 3397 |

Millions of people playing online casinos in India are facing difficult situations after the GST Council decision.

This decision has sparked a lot of criticism and controversy in the online gaming industry, with some claiming it will destroy the burgeoning industry and harm end users.

Online gaming platforms will also be affected by higher tax rates, as they will have to shoulder the burden of compliance and pass on the tax burden to their customers.

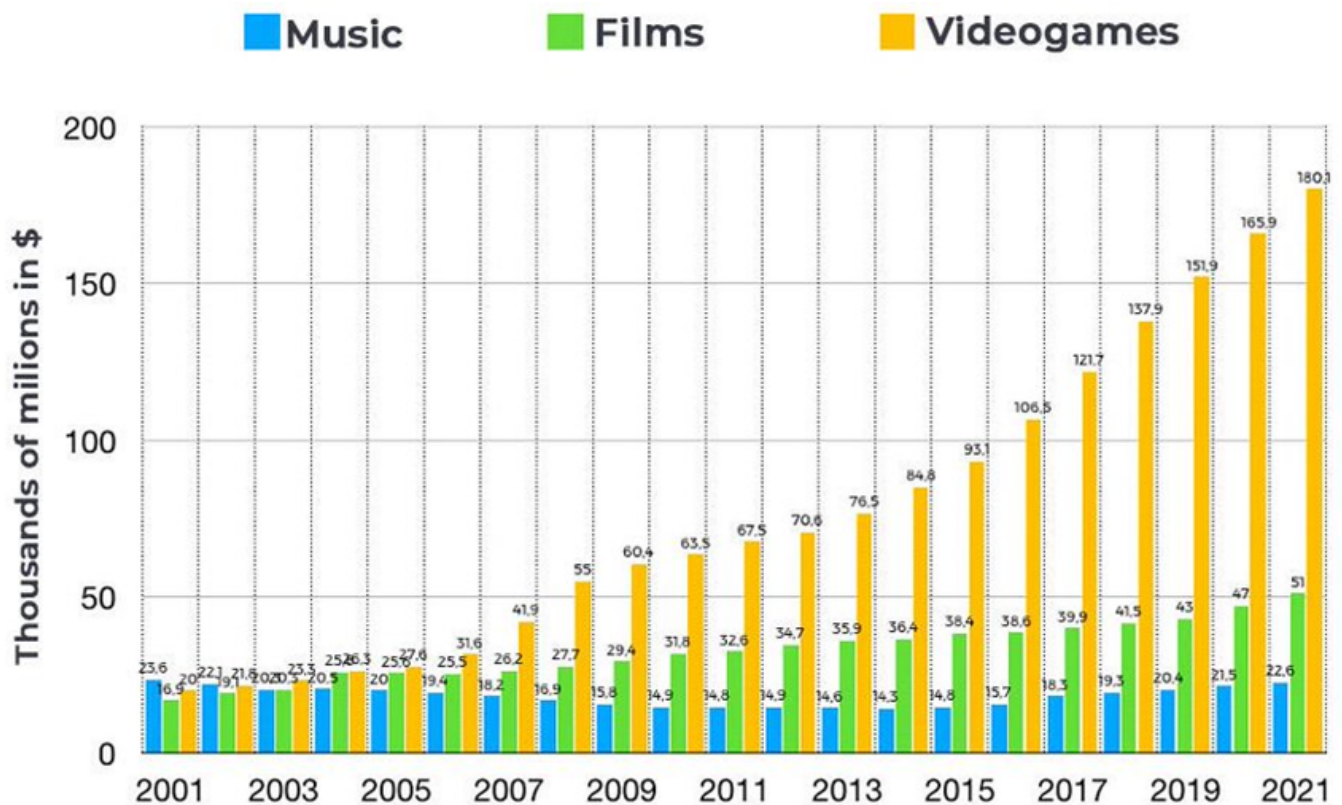
It also reduces the profitability and sustainability of online gaming platforms.

IMPACT OF GST CHANGE ON PRIZE MONEY

| Particular | Earlier Case (18% on GGR) | Present Case (28% on full value) |
|---|------------------------------|--|
| Contest entry amount (inclusive of GST) by participants | 100 | 100 |
| Total entry amount inclusive of GST (assuming 10 players) | 1000 | 1000 |
| Platform fee (10% rate excluding GST) | 85 | 78 |
| GST collected | 15 | 218 |
| Prize money available for winning | 900 | 704 |

MONETIZING GAMING

Over time, the video gaming industry has surpassed films and music in entertainment as a viable career choice. Illustrated in the accompanying figure, the industry experienced a significant revenue surge in 2021, primarily attributed to the impact of the coronavirus pandemic in 2020. With stay-at-home recommendations and lockdown measures implemented in numerous countries, video games and eSports have emerged as a mainstream form of entertainment appealing to individuals of all ages.

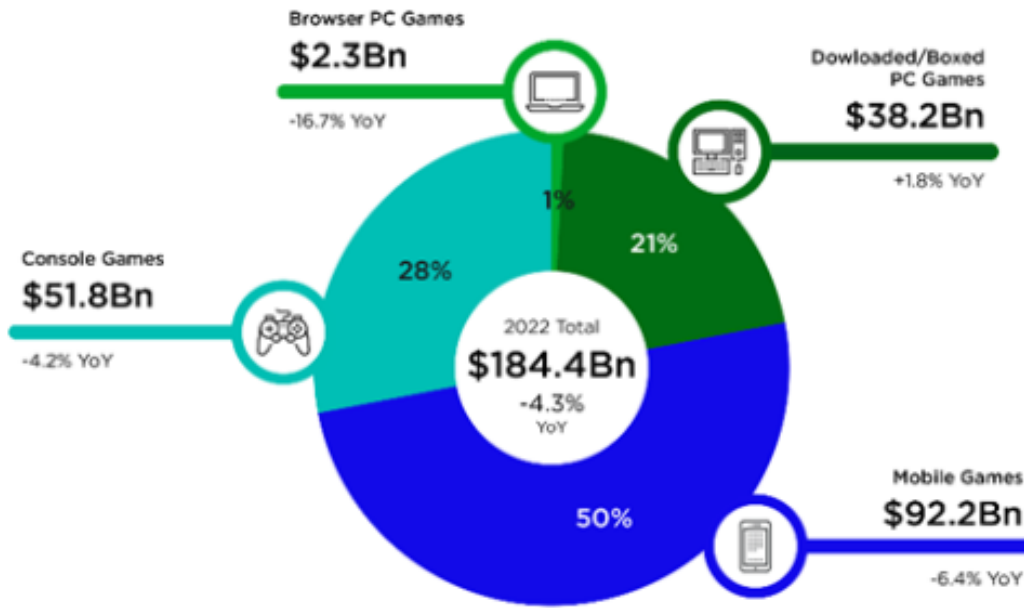


An extensive array of choices, from casual and indie games to AAA blockbusters, contributes to a global market valued at billions of dollars. Enthusiasts can select from various gaming platforms, including popular choices like PCs and consoles like the Sony PlayStation, Nintendo Switch, or Microsoft's Xbox. Despite the prevalence of console gaming, mobile games command the largest share of the gaming market.



2022 Global Games Market

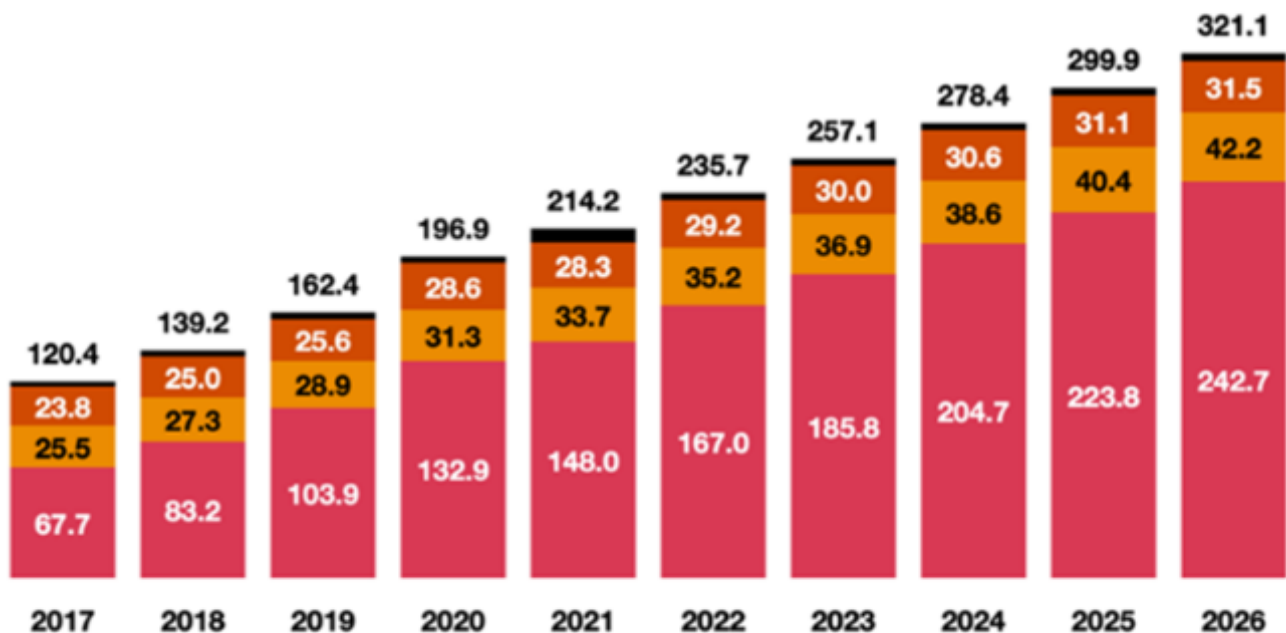
Per Segment With Year-on-Year Growth Rates



In 2023, the video games industry projects to reach a revenue of US\$257 billion. It expects to grow at an annual rate of 10% between 2023 and 2026, resulting in a projected market volume of US\$320bn by 2027. The Games market in India is projected to reach a revenue of US\$7,656.00m in 2023.

Total global video games revenue, by segment (US\$bn)

- Social/casual gaming
- PC games
- Console games
- Integrated video games advertising



The gaming market in India is set for significant growth driven by:

- Young demographic, evolving IT infrastructure
- Increased use of mobile devices and high-speed online connectivity
- Integrating technologies like VR, AR, and the metaverse into console and computer games
- The government's promotion of game creation
- The rise in female leadership, adding a new set of gaming users
- The shift towards mobile and multiplayer gaming also expands the industry.

FREE TO PLAY BUSINESS MODEL

The Free-to-Play (F2P) Business Model is a business strategy adopted mainly in the digital gaming and mobile app industries, where consumers can access and use a product or service without an initial purchase cost.

This model is designed to draw in a broad user base by removing entry barriers and generating revenue from a segment of those users through diverse income channels.

The following attributes characterize the Free-to-Play (F2P) Business Model:

Mass User Acquisition

The primary goal is quickly acquiring a large user base by eliminating initial costs. A substantial user base provides opportunities for monetization through a smaller percentage of users who make purchases or engage with ads.

Monetization Strategies

Multiple monetization strategies, such as in-app purchases, ads, and premium content, are employed simultaneously. Diversifying revenue streams reduces dependency on a single source and enhances financial stability.

Data-Driven Optimization

Data analytics play a crucial role in optimizing F2P models. Businesses continuously analyze user behaviour, spending patterns, and engagement metrics to refine their offerings and pricing strategies.

MONETIZATION STRATEGIES

In the past, video games followed a model similar to high-budget films, undergoing extensive development, rigorous testing, and debugging before reaching the market. . This innovation paved the way for downloadable content (DLC), a significant development that encouraged gamers to make additional purchases after acquiring a game. DLC became a crucial component and served as a precursor to the now prevalent concept known as microtransactions.

Major Sources of Revenue

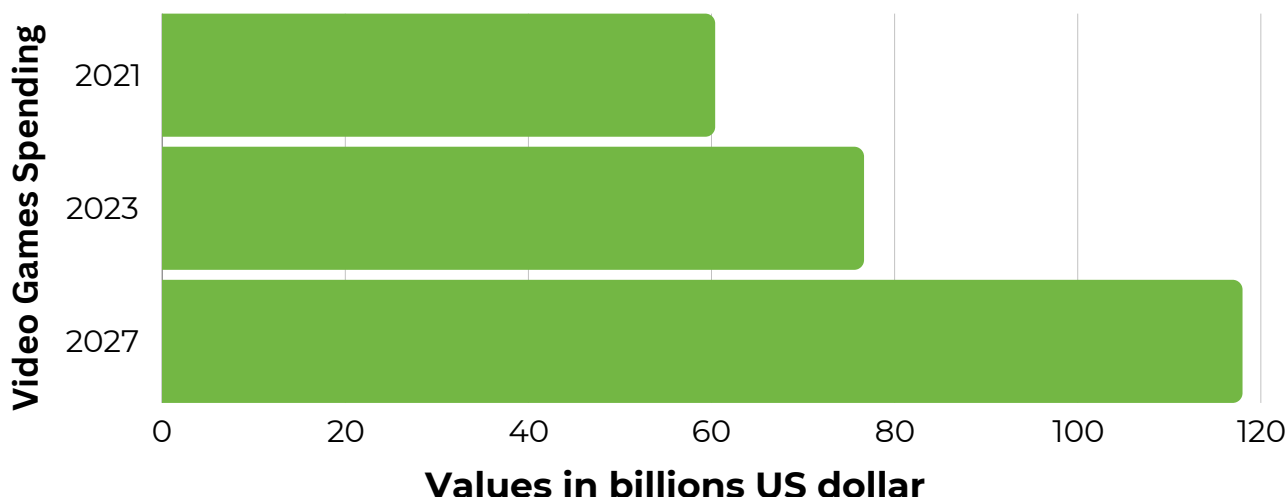
While some games operate on a "freemium" model, which means they allow players to download and play for free while generating revenue through in-game purchases, others employ a "pay-to-win" model, where players can gain a competitive advantage by spending real money, which is called micro-transactions.

- **In-Game Purchases**

What distinguishes in-game purchases from microtransactions is their accessibility. They are often affordable, making them accessible to many players.

- **Micro-Transactions**

Microtransactions have become the financial backbone of the gaming industry, fundamentally changing how games generate revenue. In 2021, total consumer spending on video games was \$60.4 billion, projected to grow to \$76.66 billion in 2023 and \$117.95 billion in 2027, according to the Entertainment Software Association (ESA) and the NPD Group



Executives within these gaming companies are strategically targeting the segment of players who have yet to participate in microtransactions, aiming to boost revenue growth further.

- **In-Game Advertising**

In-game advertising has undergone a remarkable evolution. The era of static billboards in-game environments has faded, giving way to dynamic, context-aware ads seamlessly woven into the gaming experience. These advertisements take diverse forms, including video ads, sponsored content, product placements, and interactive ads that engage players directly.

By incorporating these ads into their games, online gaming companies generate income through in-game purchases or downloads and tap into a rapidly expanding revenue stream. Consequently, the gaming industry has transformed into a multi-billion-dollar business, with projections indicating it could surpass \$100 billion by 2025.

ADVERTISING OPTIONS

Interstitial Ads: Full-screen ads that appear at natural breaks in the game, such as between levels or during loading screens.

Banner Ads: Small ads that appear at the top or bottom of the game screen.

Video Ads: Short video clips that players can watch in exchange for in-game rewards.

Rewarded Ads: Players voluntarily watch ads for in-game rewards, such as virtual currency, power-ups, or extra lives. This form of advertising is popular as it provides value to the player.

Sponsorship and Product Placement: Partnering with game developers to have products or brands featured prominently within the game. This can include branded items, characters, or even entire game modes.

INTERNATIONAL TRANSACTIONS IN GAMING

Amid this interconnected landscape of Online gaming, where players from diverse cultures and regions come together in virtual worlds, international transactions play a crucial role, enabling players, gaming companies, and the gaming ecosystem to operate globally.

Types of International Transactions in Online Gaming

Player-to-Player (P2P) Transactions

- **In-Game Trading:** Players from different countries can exchange virtual items, in-game currency, or assets.
- **Real-Money Transactions:** Some players engage in cross-border sales of in-game items or currencies for real money.

Player-to-Platform Transactions

- **In-game purchases:** Players directly pay the gaming platform for virtual items, currency, or premium content.
- **Subscription Fees:** Gamers subscribe to premium services offered by gaming platforms that may involve recurring cross-border payments.

Platform-to-Player Transactions

- **Prize Money and Rewards:** Gaming platforms or esports tournaments transfer winnings and rewards to players across borders.
- **Refunds and Compensation:** Platforms may issue refunds or compensation for issues related to gameplay or purchases.

Gaming Company-to-Player Transactions

- **Virtual Currency Sales:** Gaming companies sell virtual currency packages to players worldwide.
- **In-Game Marketplaces:** Companies facilitate cross-border transactions within in-game marketplaces.

GROWTH IN SUBSCRIPTION-BASED GAMING

The global subscription-based gaming market was valued at \$17.16 billion in 2021 and is projected to reach \$55.94 billion by 2031. This represents a CAGR of 12.9% from 2022 to 2031.

The growth of the subscription-based gaming market can be attributed to:

- The increasing popularity of online gaming
- The rising penetration of smartphones
- Continuous technological advancements in the gaming industry

Game subscription services like EA Play and Xbox Game Pass grant subscribers complete access to an extensive library of games offered digitally with no limitations. Users must download these games to their local computer or console. India's gaming industry is the second largest in the world, with over 400 million gamers in 2022. The number of gamers in India is expected to reach 444 million by 2023, up 12.1% YoY. The number of gamers across all platforms in India is forecast to reach 641.2 million in 2027, growing at a 5-year CAGR of 10.1%.

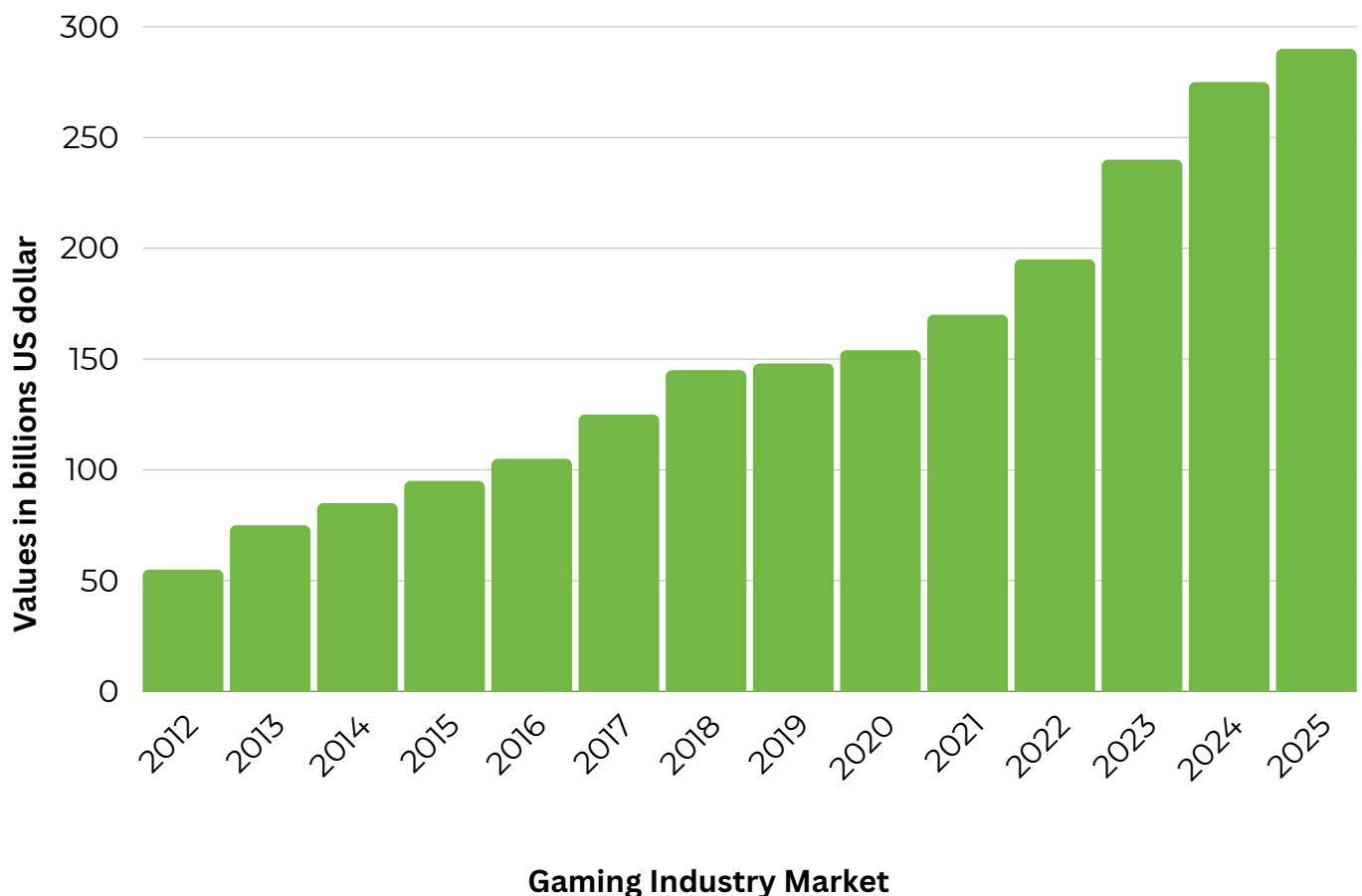
India's proportion of new paying users (NPU) in gaming has been the fastest rising globally for two years, at 40% (2020), and is expected to reach 50% in 2022. The growing monetizable user base boosts revenue for e-sports and video gaming firms.



CAREERS IN THE GAMING INDUSTRY

After reading the above heading the first question that comes to one's mind is that, is there really a career in the gaming industry? The reason that this question pops in the minds of majority of people is because they think that building a career in the gaming industry means becoming a professional gamer or playing games all day.

There are a number of things that a particular organization has to go through before developing a game. We are the ones who are just using the final product but it takes proper programming, designing, testing and various other processes to actually develop the final game. Now, we will be discussing about different career opportunities available in the gaming industry. To simplify, we will be discussing the careers in three different categories i.e. Game development, Esports and Content creation.



GAME DEVELOPMENT

Game Development is the art of creating games and describing the design, development and release of a game. It may involve concept generation, design, build, test and release. A game developer can be a programmer, sound designer, artist, designer, or many other roles available in the industry. Game development can be done by large game development studios or by individuals. It can be as small or as large as you like. As long as players can interact with the content and manipulate game elements, it can be called a "game". The global game development services market size was valued at \$334.63 million in 2021 and is expected to grow at a CAGR of 14.59% during the forecast period and reach \$757.52 million by 2027.

CAREERS IN GAME DEVELOPMENT

Game Designer

- **What Does a Game Designer Do?**

Game designers focus on game functionality, creating systems, rules, and gameplay to help build playable, interesting, and engaging worlds (story and IP). They oversee both the fundamentals and execution of game mechanics and the overall user experience. Game designers must be highly skilled and comfortable solving complex problems on a daily basis. The job duties of a game designer vary somewhat depending on the size and type of project and the studio. As games become more complex and teams grow, some of the traditional roles of a game designer tend to be split into specialized areas.

- **How Much Does a Game Designer Make?**

In India, the average salary for Game Designer is around ₹9,77,966 per year.

Game Programmer (Software Engineer)

- **What Does a Game Programmer Do?**

Game programmer is a general term for computer engineers who work on computer games. Programmers are usually trained in the basic

languages of computer programming and bring games to life. You can specialize in programming areas such as graphics, AI, sound, scripting, UI, networking, tools, porting, etc. To become a programmer, solid knowledge of programming and various platforms is essential.

- **How Much Does a Game Programmer Make?**

In India, salary ranges between ₹ 2.0 Lakhs to ₹ 12.0 Lakhs with an average annual salary of ₹ 4.2 Lakhs.

Animator (Graphic Designer)

- **What Does a Gameplay Animator Do?**

Gameplay animators use keyframes and motion capture to bring digital people, creatures, props, and vehicles to life in game engines, focusing on character performance and gameplay. They are also responsible for implementing the movements, performances, and actions of NPCs (non-player characters) controlled by AI (artificial intelligence).

Gameplay animators must strive to take full advantage of the game engine's technology and maximize opportunities for gameplay and interactivity. They work on all the visual elements needed to put the game together, including characters, objects, textures, assets, environments, props, vehicles, weapons, and more.

- **How Much Does a Game Designer Make?**

In India, the Salary ranges between ₹ 2.0 Lakhs to ₹ 10.0 Lakhs with an average annual salary of ₹ 5.0 Lakhs.

Game Producer

- **What Does a Game Producer Do?**

A video game producer manages the staff that creates a video game, takes a leadership role during each stage of development, and ensures the quality and schedule of the team working on the project. Being a game producer is more about business than creativity.

They manage budgets and ensure production runs on schedule. They may also participate in product marketing and advertising campaigns. As a project manager, video game producers are responsible for coordinating schedules with staff to meet deadlines.

- **How Much Does a Game Producer Make?**

The average salary for Game Producer is ₹14,27,760 per year.

Game Tester

- **How Much Does a Game Tester Make?**

A game tester, also known as a video game tester, is a person who plays video games, tests their functionality, and identifies glitches and bugs before the game is released. Game testers often work for video game companies and work with game developers and programmers to improve games and make sure they are usable for users.

- **How Much Does a Game Tester Make?**

The average salary for a Game Tester is ₹53,971 per month in India.

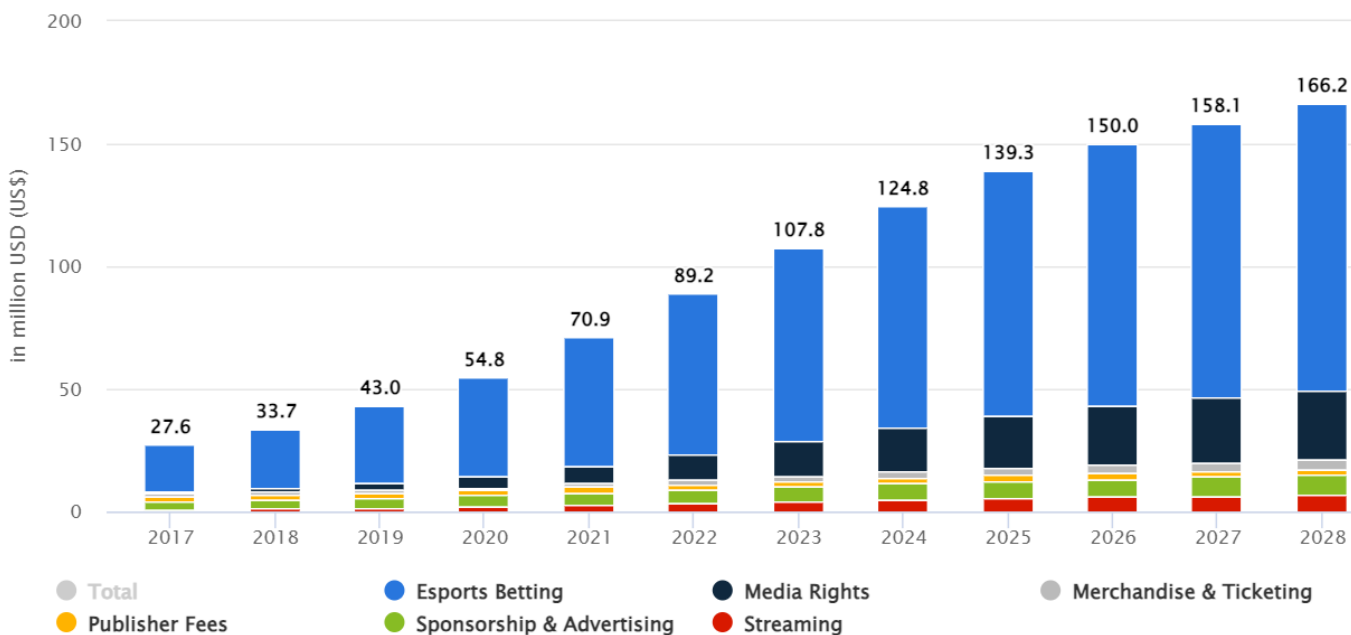
ESPORTS

Esports, also known as eSports, egames, or electronic sports is organized competitive video gaming. Teams primarily compete against each other for prize money in tournaments. Functionally, it is the same as traditional sports. Top athletes are constantly competing for the top spot in their chosen sport or game. Today, professional competitive gaming, also known as esports, is soon to become a billion-dollar industry, with championships being watched live by tens of millions of people and a potential Olympic debut on the horizon.

Rise of Esports in India

The rise of esports in India is nothing short of astonishing. This field is growing by leaps and bounds, and the demand for online games reaches new levels every year. Many factors contributed to the growth of this sector. The most important of these are expanded access to the Internet, an increase in the number of smartphones and the availability of affordable gaming devices in the country. Let's take a look at the numerical growth of esports in India. According to the 2022 State of India Gaming Report, jointly produced by Lumikai and his AWS, the Indian esports industry is poised to reach new heights of success and profitability in the coming years. The sector is valued at \$40 million in 2022, but is estimated to reach a market capitalization of \$140 million by

2027, with a CAGR of 32%. The number of players in the esports category will increase four times between 2021 and 2022 (from 150,000 to 600,000), and in future projections this number will increase to 1,500,000 people by the end of 2027. In fact, Indians download more games than any other country in the world, and along with an influential younger generation, this is contributing to the industry's exponential growth across all gaming sectors.



CAREERS IN ESPORTS

E-Sports Player (Professional Gamer)

An esports athlete is someone who plays games competitively on a professional level. These players are not casual players, but players who have mastered their chosen game. They stand out among millions of players, shine with their high performance, and become professional esports players. Most professional esports athletes compete exclusively in esports and make a living from it.

- **How Much Do Esports Players Earn in India?**

The world's top esports player by total earnings was Johan Sundstein. Sundstein, who hails from Denmark and is also known as N0tail, has earned \$7.18 million so far through esports records in his gaming career. Talking about India, Tanmay "ScoutOP" Singh is one of the highest paid esports players in India with a total income of around \$55,654 (45,92,921).

Needless to say, it's also important to consider the team or eSports organization the player is a part of. For example, a player on a Tier 2 or Tier 3 team will earn significantly less than a player on a Tier 1 team. The ideal monthly salary for a player in a Tier 2 team is around \$700 to \$1000, which roughly equates to between INR 56,000 and INR 80,000. And if we talk about Tier 1 teams, a player can expect to pay around \$2,000 to \$3,000, which equates to around Rs 160,000 to Rs 2,400,000.

Caster/Host

Shoutcasters are commentators who provide live commentary during esports tournaments and also participate before and after matches. Additionally, they also conduct interviews with the best esports companies, professional players, and experts.

Simply put, the host is the public face of the eSports tournament. They introduce players and games to their viewers, and sometimes interview experts to discuss and analyze the games. Just like TV hosts, esports hosts also need to have very good communication skills in order to provide an interesting and entertaining show to their viewers.

- **How Much Does a Caster Make?**

Esports caster make 25,000\$ - 75,000\$ p.a. on an average basis. Their income also fluctuates on an event basis, more events and competitions results in more need of casters and hosts.

Analyst/Coach

Similar to traditional sports, coaches help teams practice against other teams (also known as "scrims") to improve. Coaches work closely with players to motivate them, identify their strengths and weaknesses, and enable them to perform at their best. They develop strategies and analyze their opponents to win as many games and tournaments as possible. Coaches are responsible for all aspects that affect their team's performance. This includes, among other things, the further development of the players' individual skills, team cohesion, game strategy, motivational responsibility and discipline.

- **How Much Does a Coach/Analyst Make?**

Indian coaches make around 50k-100k a month on an average. These

salaries also vary from game to game and organization to organization.

Team Manager

This is a very rewarding position in the esports industry. Team managers are responsible for everything that happens within a team, from recruiting the best players, writing contracts, managing players and staff, arranging team travel and accommodation, dealing with the brand, and developing tournament partnerships and strategies. Additionally, senior team managers in an organization can also look after areas like business development and sales.

- **How Much Does a Team Manager Make?**

Team Manager salary in India ranges between ₹ 3.0 Lakhs to ₹ 32.0 Lakhs with an average annual salary of ₹ 10.6 Lakhs.

CONTENT CREATION

Like we have discussed earlier that esports players can earn additional income through streaming and even content creation (for eg. Tutorials, tips, strategies, gameplay, etc.). But there are certain gamers who have built a career in gaming with content creation and live streaming as their major source of income. Therefore, it is not necessary to be skilled or just aim at becoming the best esports player, one can even build a career in this industry by making games more entertaining for the audience. Like story mode games can be made entertaining through jokes, similarly some streamers take up challenges that their audience suggests and complete these challenges in a fun and entertaining way to engage more viewers. There are many examples in India who have build a very successful career through content creation and streaming on various platforms such as techno gamers, dynamo gaming, beast boy shubh, etc.

TECHNO GAMERZ

Ujjwal "Techno Gamerz" Chaurasia is one of India's leading gaming luminaries. He started his journey into the gaming industry in the mid-2010s and quickly managed to build a large fan base thanks to his engaging content. He was one of the first generation of gamers who started learning about multiple titles instead of mastering just one, and an aspiring amateur in India who dared to create tutorials for gamers.

He was also one of the pioneers of gaming.



“I have loved games since I was a child. I used to play games using other people's phones and spend hours on my family's PC. Those were my early days. Then I realized that people were uploading gaming videos online. At the time, my friends thought I was a great player and asked me for tips. Encouraged by this, I started making tutorial videos to teach my friends” Techno Gamerz says of the birth of his gaming identity. At the time, he didn't know he could turn his love of gaming into a career.

Encouraged by the support of his older brother, who lends him his smartphone to play when he wants and also knows how to make money with a YouTube gaming channel, he started his Techno Gamerz channel in August 2017. In January 2018, he started his second YouTube channel titled Ujjwal.

He has played many game titles and is best known for his game streams such as GTA V, Minecraft, Ranch Simulator, Garena FreeFire, Red Dead Redemption 2, and PUBG. His engaging narration style, family-friendly personality, and mod-based imaginative storytelling have made him stand out in the Indian gaming industry, quickly making him one of India's most popular gamers.

As of November 2023, Techno Gamerz channel has over 37 million subscribers and his Ujjwal channel has over 9.99 million subscribers. He also diversified his interests by branching out into hip-hop and recording the song "Game On" with acclaimed Indian producer Sez on the Beat. The song has been viewed more than 93 million times on the Techno Gamerz YouTube channel. Techno Gamerz reportedly has a net worth of Rs 15 crores.

The above example is of a person who never entered into esports but has built a very successful career in gaming through content creation and live streaming.

MORTAL

Naman Mathur, also known as Soul Mortal, is a famous Indian online streamer, mobile gamer, and esports player. He owns his YouTube channel Mortal. He constantly posts gaming highlight videos and streams PUBG (now known as BGMI) games almost every day. Additionally, he and his team his SOUL have participated in numerous esports competitions both within India and abroad. He won the first official tournament he participated in, PUBG Mobile India Series 2019. Along with his team, he also became the champion of PUBG Mobile Club Open-Spring Split: India, earning him a spot in the prestigious PUBG Mobile. He put on a national show with incredible game sense and perfect aim, inspiring his millions of PUBG Mobile enthusiasts across the country. Soon, Mortal's team, Team SouL, became one of the most popular teams in the entire country.



In 2016, Soul Mortal started his YouTube account. He initially published Mini Militia on his channel. He first posted his PUBG Mobile gameplay on his own YouTube account on June 20, 2018. He also posted a video with tips and tactics for playing PUBG, which helped him gain respectable views and likes. In October 2018, he uploaded a video titled "Every PUBG player will see this ending" The video was a success as it went viral. This video was able to establish itself on YouTube thanks to its 20 million views. Naman Mathur earns quite a living from his YouTube channel. YouTube ads, posts, super chats, sponsored videos and posts are the main sources of income.

CHALLENGES AND OPPORTUNITIES

CHALLENGES

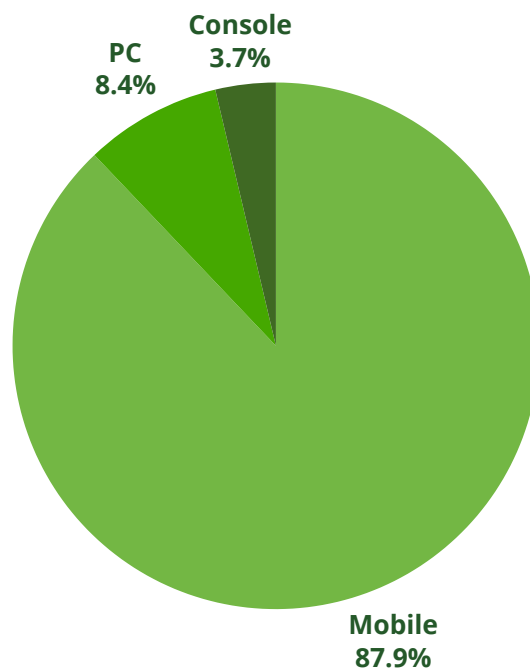
Despite the significant growth in the Indian gaming industry in recent times. It still has a long way to go in order to compete with established conglomerates based in Europe, North America, North East Asia, etc. Most of the gaming products consumed in India are internationally developed which is evident from the overwhelming success of games such as 'BGMI' by Krafton (a Korean brand) and 'Free Fire' by Garena (a Chinese brand). Although these games are marketed as homegrown with their servers operated locally, the fact is that it is ultimately the consumption of a foreign service on a large scale. The revenue generated by these foreign companies is a result of India's enormous youth-centric population and the ease with which a smartphone can be purchased. On the contrary, the Indian gaming industry hasn't been able to capitalise on the advantage of having such a substantial potential customer base.

Wifi Inaccessibility

An essential commodity for a gaming community to exist at a geographic location is the availability of high-speed internet. However, the internet has become a staple commodity in India, with data usage dramatically increasing due to a reduction in prices and COVID impact. These factors pushed the percentage of internet users to be as high as 43%. It still does not compare with the accessibility, speed, and reach that the internet has in developed countries such as the US, Canada, and South Korea. These countries have their percentage of internet users as high as 95%.

Gaming as a Recreational Activity Solely

Gaming in Indian society has the status of a recreational activity. The majority of the potential customer base lies under the middle class category which is traditionally hesitant to spend money on a product solely meant for gaming. This causes the consumers to stick to mobile gaming over console or PC gaming. This is very evident by the fact that consoles and high-spec PC sales are considerably less in India.



Exorbitant Capital Requirement

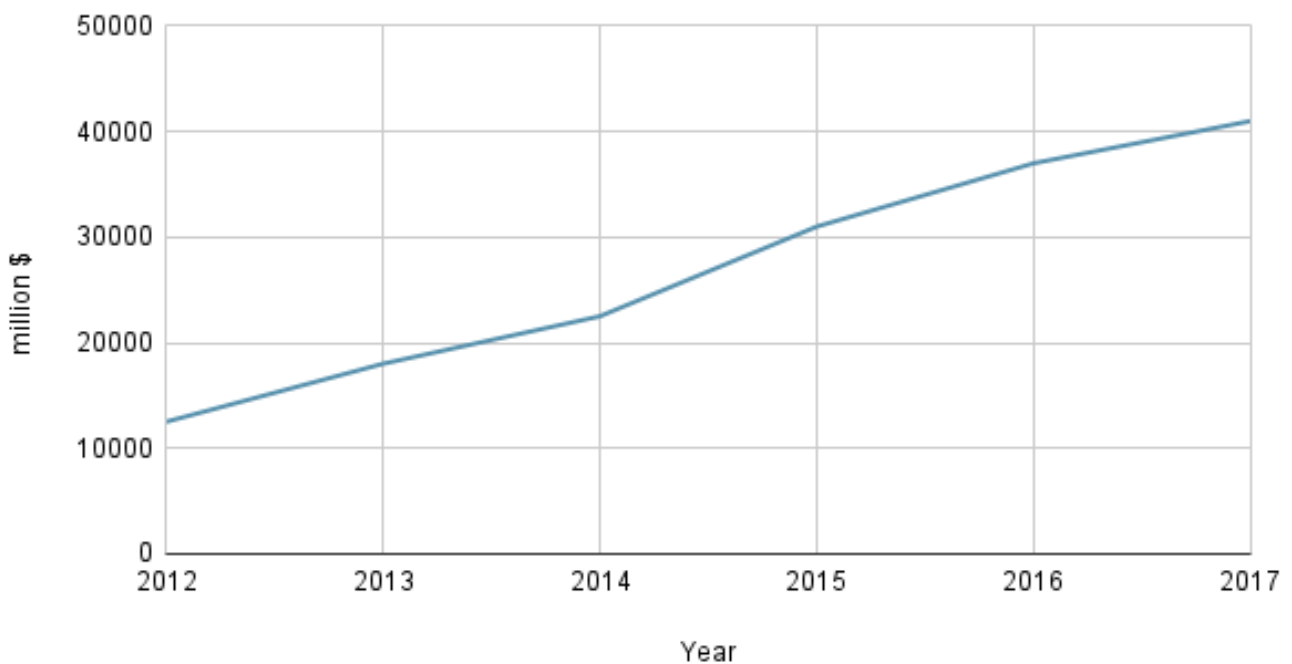
Game Development is a very skill-intensive industry requiring highly trained individuals such as coders, developers, animators, etc. In addition, there are numerous costs involved after the development because such games require constant updates and after-sale services. The developers need to bear the cost of server hosting as well. All of these costs push the game development to be a very capital-intensive business. This creates a barrier to entry for emerging companies into the market, specifically in the Indian market since there's a lack of grassroot level investment in the Indian ecosystem.

Piracy

Over the years, piracy has proven to be a severe threat, not only to the gaming industry but the whole entertainment industry overall. Pirated files are more readily available nowadays on the internet, in the form of downloadables. People resort to piracy due to the higher pricing of legally sold products from licensed websites. These pirated files are offered at a much lower cost or even for free in some cases. The ill effects that piracy incurs on the gaming industry don't solely include financial losses. It discourages investors from pouring in money and game developers to invest their time and skills into creating a product that can easily be stolen, hence restricting the growth of an industry.

There are no stringent laws and regulations to protect the firms against piracy which further negatively affects the business ecosystem. In recent times, there have been various advances towards curbing this problem.

Estimated cost of pirated games in US



Societal Stigmas

Indian society has several stigmas against gaming which restricts the audience that the industry can potentially gain in India. Such stigmas as mentioned above, gaming in India merely holds the status of a recreational activity. It is seen as a distraction from academics by parents and not as a viable career path at all. The Indian millennial population has not realised the potential of the gaming industry as an occupation and has the tendency to stick to traditional service class occupations. This limits the potential growth that gaming can achieve in India because consumers of such gaming products might experience psychological guilt which has been enforced upon them due to such societal stigmas against gaming.

Government Restrictions

Due to the new taxation policies implemented by the Indian Government, a standard 28% GST rate would be levied on all online gaming products. This shook the upcoming industry, since it led most online gambling sites to become unprofitable. The money that was relentlessly being poured into such ventures due to their profitability suddenly stopped. Even prominent businessmen such as Ashneer Grover who were looking forward to releasing their own online gambling platform based on sports, majorly cricket, have halted their venture, due to the new taxation policies. The policies have had their negative impact on the growth of general gaming platforms as well.

OPPORTUNITIES

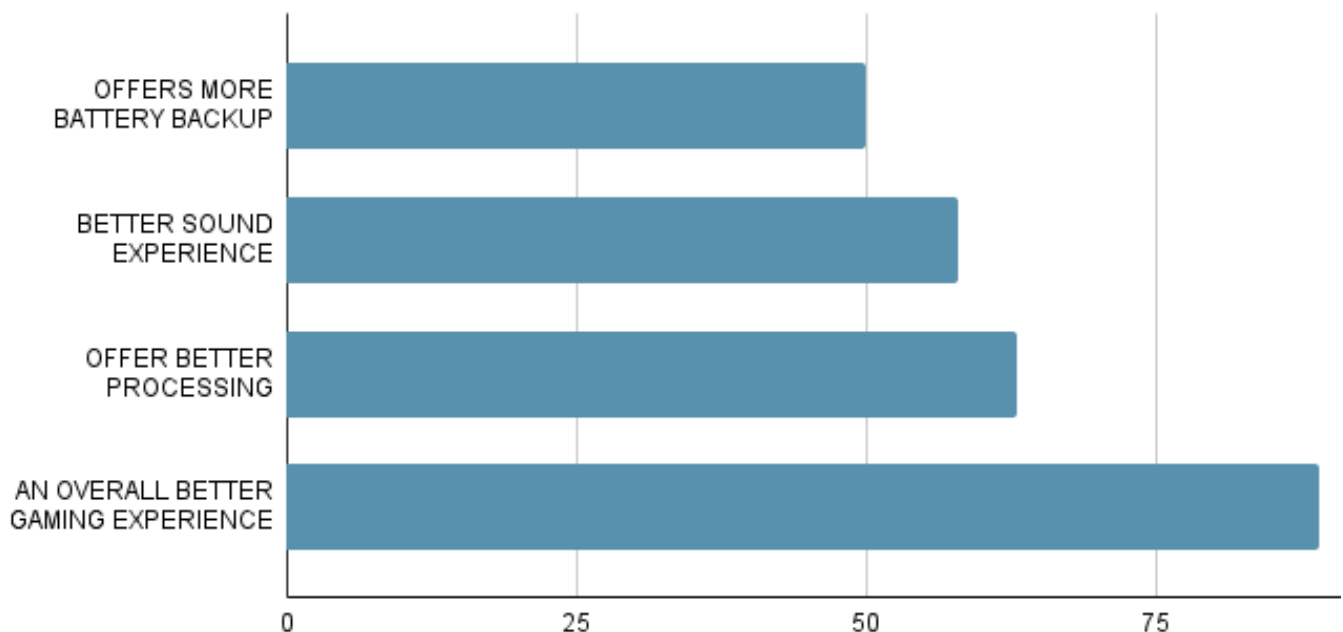
India as a Youth Centric Country

India's population demographic is such that 45% of the population is aged below the age of 25 which accounts for an enormous potential market for the gaming industry to capture. Generally the younger population is more open towards taking up new hobbies and developing new interests. Capitalising on a massively unexplored market such as the Indian gaming industry would prove to be crucial for new and upcoming developers. This also increases the viability for India as the new hub in the Asian market since, it has a massive youth base as compared to the current major Asian players such as Japan and South Korea.

Modern Day Convenience

The portable attribute in modern day gaming devices have increased to an extent that gaming content can be accessed and used, everywhere, in a metro, at the workplace or in a car. These companies can hence focus on making such conveniences a mass commodity and accessible to the general population.

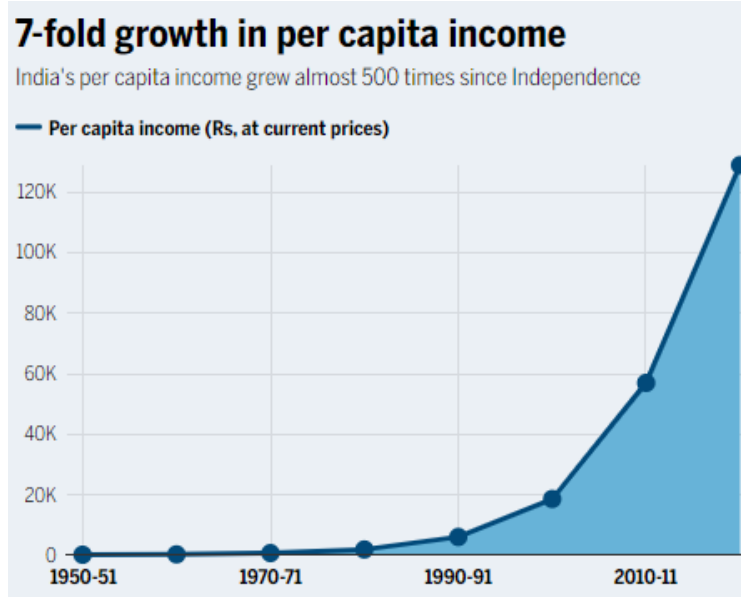
GAMING ORIENTED SURVEY IN INDIA relating to PC/consoles



- Y-AXIS - Question relating to alternate gaming platform as compared to mobile phones
- X-AXIS- Percentage of people who agree with the questions

Increasing Per Capita Income

India's per capita income in recent years has increased considerably. As India is striving towards income equality, it makes such products increasingly affordable. This accounts for an increased market with already existing hardware and thus giving new developers incentive to enter the ecosystem. This would also result in increased foreign investment. This is also boosting the sales of other gaming devices, apart from mobile phones.



Since the platforms such as consoles and pc's have a completely different development process, increase in their sales would result in increased game development, increased sales of complementary commodities such as display screens, controllers and other gaming focused devices and increased employment in the sector as well.

Cheaper Wage Rates

India produces a skilled workforce possessing skills relevant to the gaming industry, such as coding, animation, development, etc., but there isn't much employment in the field itself. There are many premier institutes in India that provide quality education and result in the development of highly skilled personnel, but the students are forced to work abroad due to lack of opportunities in their particular industry.

Moreover, challenges such as access to capital, regulatory complexities, and cultural perceptions surrounding gaming contribute to the constrained growth of the domestic gaming industry. Despite concerted efforts to promote indigenous game development and nurture talent through educational initiatives and incubation programs, systemic barriers persist, hindering the sector's ability to absorb the abundant pool of skilled professionals.

Government Initiatives

The current Indian government is ambitious to create a rapidly growing economy, which has incentivized it to promote a variety of industries and entrepreneurship. It has created a variety of subsidies and funding sources within the country to fund upcoming ventures. Movements like Make In India have boosted entrepreneurship and risk taking ability amongst individuals. Even banks have readily developed enthusiasm towards funding newly emerging startups. Thus incentivizes locally based developers and businessmen to enter the Gaming market. According to the official database of the Indian Government pertaining to investment, these promising statistics have been put forth-

- Transaction-based game revenues increased by 39% in 2022 compared to 2021
- The sector is expected to grow by 20% by FY25 to reach INR 231 Bn
- India has the largest fantasy sports market, with a user base of 180 Mn
- The industry is expected to grow at a CAGR of 33% to reach INR 25,300 Cr in FY27
- Indian gaming raised \$2.8 Bn from domestic/global investors in the last 5 years. Funding increased by 380% from 2019 and 23% from 2020
- India has produced three gaming unicorns: Game 24X7, Dream11 and Mobile Premier League.

China's Diminishing Influence as a Manufacturing Hub

Western companies have tended to reduce their dependency on China in terms of production, and for procurement of raw material. This is a result of constant privacy breaches by chinese government, within the entities of other countries, and also the stigma that was developed against China, post-covid. India, in recent years has made great advances in terms of infrastructural development. The government has taken initiative which has led to establishment of IT parks, Business epicentres and a corporate ecosystem in cities like Gurugram, Bangalore, Hyderabad etc.

MARKET COMPETITION

UNVEILING THE DYNAMICS OF FANTASY GAMING

Regulatory Landscape

The fantasy gaming sector operates within a complex regulatory framework, with varying regional perspectives on its classification. Some regions acknowledge it as a skill-based game, while others grapple with concerns related to gambling, shaping market strategies amid this dynamic regulatory environment.

Global Expansion

While immensely popular in India, leading platforms like Dream11 strategically expand globally to tap into the worldwide interest in fantasy sports. These international forays aim to broaden user bases and diversify revenue streams.

Innovation in User Engagement

Platforms invest significantly in enhancing user engagement beyond traditional gameplay. Winzo's integration of multiple Indian languages caters to diverse user preferences, while Games24's community-building efforts create a vibrant user community through interactive features and forums.

Beyond Fantasy Sports

The evolution of fantasy gaming extends beyond sports, with platforms like Winzo and Games24 diversifying offerings to include a spectrum of games. This strategic shift capitalizes on the growing interest in casual and skill-based gaming, expanding the market to attract users with varied gaming preferences.

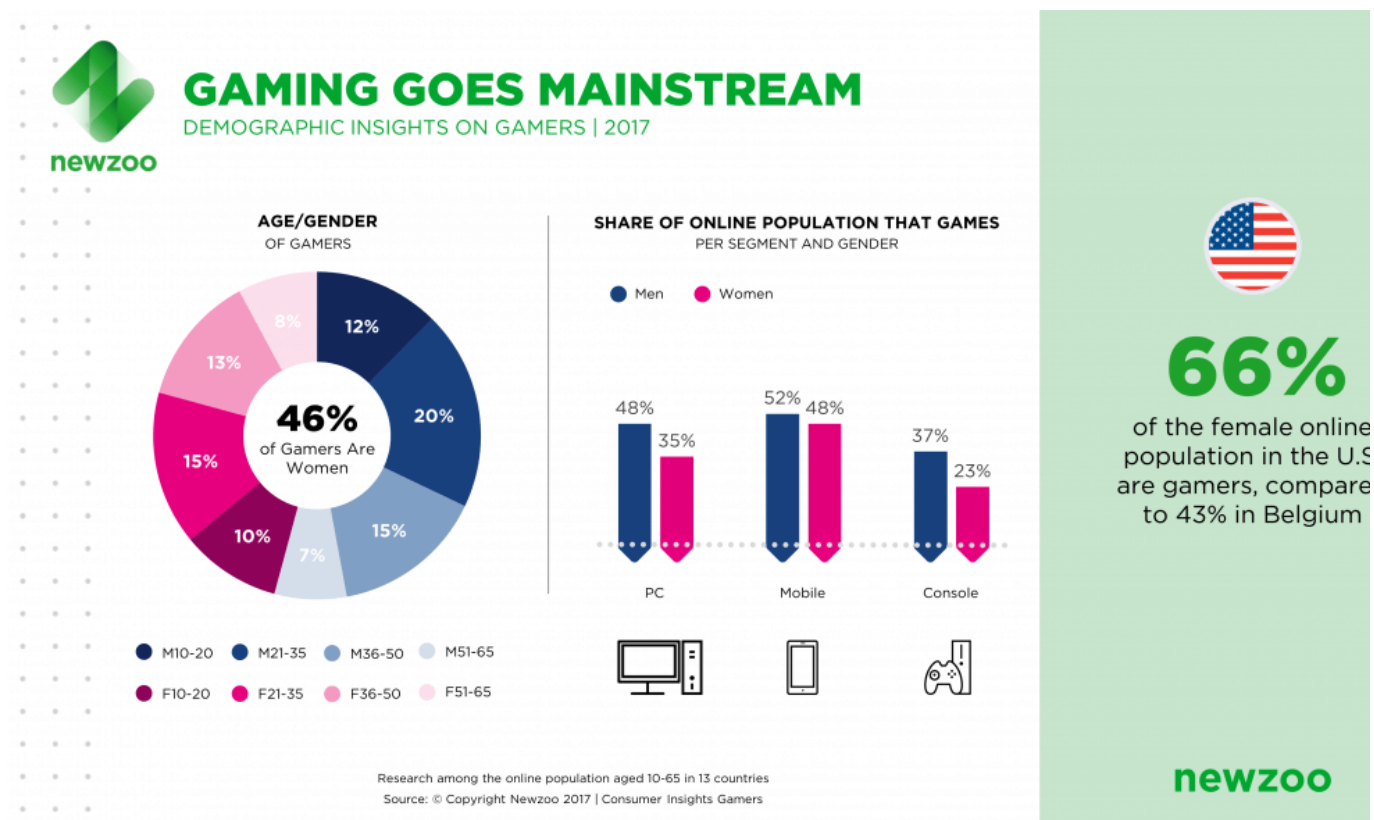
INDIA VS US GAMING INDUSTRY : A COMPARATIVE ANALYSIS

| BASIS | INDIA | USA |
|-----------------------|---|---|
| SIZE OF GAMING MARKET | Over 507 million gamers, making it the world's largest gaming market by number of players. | Over 209 million gamers, the second-largest gaming market in the world. |
| CONSOLE GAMING | Console gaming is less popular than PC and mobile gaming, with an estimated 30 million console gamers. | Console gaming is more popular, with an estimated 75 million console gamers. |
| PC GAMING | PC gaming is growing in popularity, with an estimated 60 million PC gamers. | PC gaming is well-established, with an estimated 90 million PC gamers. |
| MOBILE GAMING | Mobile gaming is the most popular platform, with an estimated 447 million mobile gamers. | Mobile gaming is also popular, with an estimated 154 million mobile gamers. |
| KEY TRENDS | Mobile gaming is expected to continue to grow rapidly, driven by the increasing affordability of smartphones and mobile internet. | Esports is expected to continue to grow in popularity, with the U.S. esports market projected to reach \$2.2 billion by 2023. |

Let's have a look at some other factors:

Gender Ratio: The gaming landscape in India and the United States exhibits intriguing variations in gender participation. In India, a dominant 60% share is held by male gamers, indicating a notable gender imbalance. In contrast, the United States presents a more balanced scenario, with nearly equal participation from both males and females. This divergence in gender ratios highlights cultural and demographic nuances that significantly influence gaming preferences in these two regions.

Age Gap: A deeper analysis of the gaming demographics reveals substantial age differentials between casual gamers in India and the United States. In India, more than 70% of casual gamers fall below the age of 34, with a significant portion, over half, concentrated in the 18 to 24-year-old demographic. This demographic skew towards the younger age bracket aligns with the stereotypical image of gamers as being predominantly youthful. In stark contrast, the majority of American casual gamers defy this stereotype, with over half of them aged above 55 years.



GAMING IN INDIA MARKET LEADERS

Sony Corporation

- **Market Share**

Sony Corporation holds a significant share of the gaming market in India, particularly with its PlayStation consoles and associated gaming ecosystem. While exact market share figures may vary, Sony has established itself as a prominent player in the Indian gaming industry.

- **Unique Selling Proposition (USP)**

Sony's PlayStation consoles are renowned for their high-quality hardware, exclusive game titles, and robust online gaming services. The PlayStation brand has a strong reputation for delivering immersive gaming experiences, backed by cutting-edge technology and a diverse library of games.

- **Valuation**

Sony Corporation's gaming division contributes significantly to its overall valuation. The company's market capitalization reflects the strength and potential of its gaming business, which includes hardware sales, software sales, subscription services, and digital content.

Gaming in India Market Leaders

- 1 Sony Corporation
- 2 Nintendo
- 3 Microsoft
- 4 Rolocule Games Private Limited
- 5 Electronic Arts Inc.

*Disclaimer: Major Players sorted in no particular order



Nintendo

- **Market Share**

While Nintendo has a smaller market share compared to Sony in India, it has a dedicated fan base and a recognizable presence in the country. The Nintendo Switch console, in particular, has gained popularity among Indian gamers for its unique hybrid design and innovative gameplay experiences.

- **Unique Selling Proposition (USP)**

Nintendo's USP lies in its family-friendly gaming content, iconic franchises like Mario and Zelda, and innovative hardware concepts. The Nintendo Switch, with its ability to seamlessly transition between handheld and console modes, which appeals to a wider audience.

- **Valuation**

Nintendo's valuation reflects its global brand strength and the success of its gaming platforms and intellectual properties. While the Indian market contributes to Nintendo's overall revenue, it may not be as significant as its presence in other regions.

Microsoft

- **Market Share**

Microsoft, with its Xbox gaming brand, holds a notable share of the gaming market in India. While facing stiff competition from Sony's PlayStation, Xbox consoles and services have a dedicated user base and continue to be a popular choice among Indian gamers.

- **Unique Selling Proposition (USP)**

Microsoft's Xbox ecosystem offers a range of features and services, including Xbox Game Pass, backward compatibility, and integration with other Microsoft products like Windows PCs. The company's focus on cloud gaming and cross-platform play enhances the value for Indian gamers.

- **Valuation**

Microsoft's gaming division contributes to its overall valuation, although it may not be the primary revenue driver for the company. Nevertheless, the Xbox brand remains a key component of Microsoft's broader entertainment and services portfolio.

Rolocule Games Private Limited

- **Market Share**

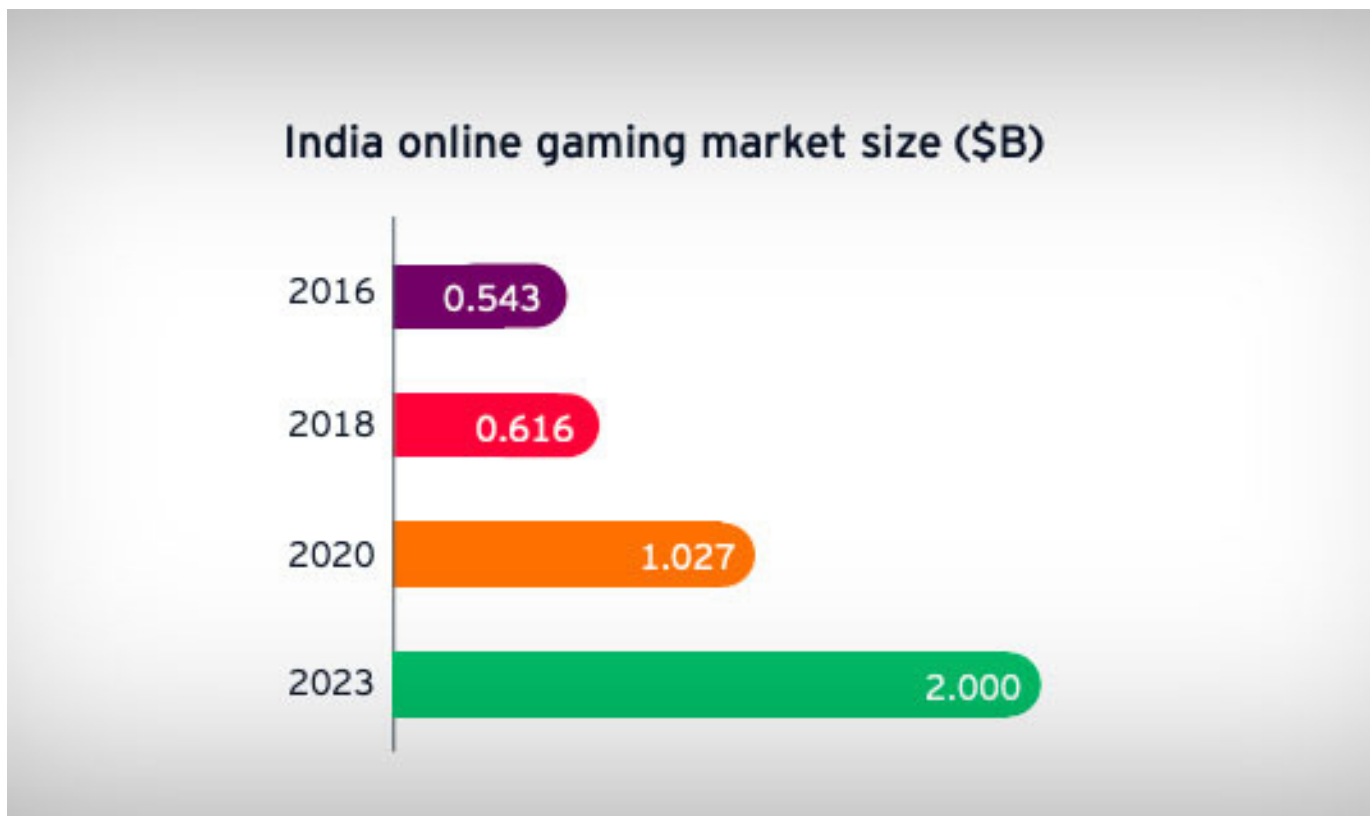
As a smaller player in the Indian gaming market, Rolocule Games Private Limited may not have a significant market share compared to multinational corporations like Sony, Nintendo, and Microsoft. However, it has carved out a niche for itself with its focus on mobile gaming and innovative gameplay experiences.

- **Unique Selling Proposition (USP)**

Rolocule Games differentiates itself through its emphasis on motion-based gaming and intuitive controls, leveraging technologies like augmented reality (AR) and virtual reality (VR). The company's games offer immersive and engaging experiences tailored for mobile platforms, appealing to a diverse audience of casual and hardcore gamers alike.

- **Valuation**

Rolocule Games' valuation may be more modest compared to industry giants like Sony, Nintendo, and Microsoft. However, its innovative approach to mobile gaming and potential for growth in emerging markets like India could attract investor interest and drive valuation upwards in the future.



FUTURE OF GAMING

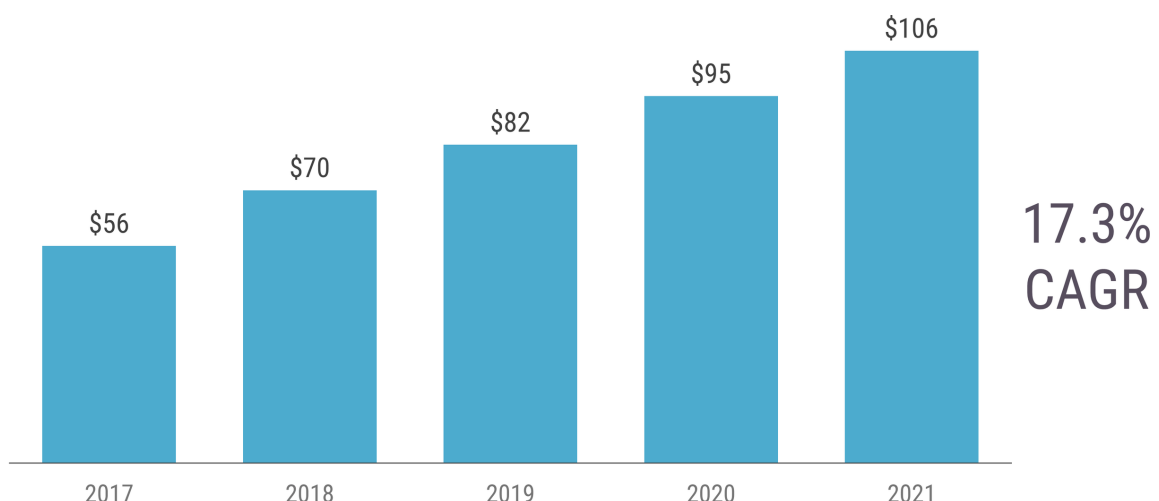
MARKET TRENDS

The gaming market in India is set to witness a rise from \$2.6 B (Rs 20,800 Cr.) in the fiscal year 2022 to \$8.6 B (Rs 68,800 Cr.) in the fiscal year 2027, with a compound annual growth rate (CAGR) of 27% according to state of India Gaming Report.

India's emerging gaming industry has witnessed remarkable growth in recent years, turning India into one of the biggest global markets for gaming. According to a KPMG report, India currently has more than 400 gaming companies and has 420 million online gamers, second only to China. Experts estimate that by 2028, the Indian gaming market could reach \$8-10 billion annually.

Mobile is the highest growth segment of the gaming industry

Estimated mobile gaming revenues in \$billions, 2017 – 2021



The number of gamers across all platforms in India is forecast to reach 641.2 million in 2027, growing at a 5-year CAGR of 10.1%. India is a mobile first market with 96.8% of total gamers playing on a smartphone or tablet

AI is being employed not only to develop intelligent characters but also to enhance pathfinding, decision-making, non-player characters, interactive stories, and environmental conditions in games. The use of AI can provide valuable insight into player behaviour and preferences, enabling game designers and studios to better understand what parts of the game are most enjoyable.

BLOCKCHAIN TECHNOLOGY IN GAMING

Blockchain opens the door to interoperable gaming experiences, enabling players to use their assets across multiple games and platforms.

Blockchain technology introduces a transformative element to the gaming landscape by enabling players to genuinely possess their in-game assets through the innovative concept of non-fungible tokens (NFTs). With the advent of blockchain Technology in Future Gamers can have genuine ownership of their in-game items, characters, and assets. These assets can be traded, sold, or used across different games, platforms, and ecosystems.

Non-fungible tokens or NFTs are digital assets with the proof of ownership being stored on the blockchain, establishing the ownership of the digital asset. It gives players more control over what happens to these items and makes them easier to trade and sell since there's no need for an intermediary like another player.

Future of Gaming with Blockchain

Blockchain technology can help in preventing fraud, cheating, and hacking in games. Using it makes it virtually impossible to alter game data. This means that gamers can trust their in game assets are secured and can't be stolen.

Blockchain technology can provide transparency in gaming by recording all transactions on a public ledger. This means that both gamers and developers can verify the authenticity of in-game assets. Blockchain seems to empower players but in future it will benefit both players as well as developers too. One notable benefit is the capacity for developers to govern their gaming economies efficiently by leveraging smart contracts.

FACTORS BEHIND THIS

Future of Mobile Gaming

The Mobile Games market in India is projected to see a significant increase in revenue, reaching US\$139.20m by 2023. This growth is expected to continue with an annual growth rate of 7.49% from 2023 to 2027, resulting in a projected market volume of US\$185.80m by the end of 2027.

Furthermore, the number of users in the Mobile Games market is anticipated to reach 239.6m users by 2027.

This indicates a steady increase in user penetration, which is estimated to be 13.8% in 2023 and is projected to reach 16.3% by 2027.

Increase in Console and PC Gaming

Although mobile gaming will maintain its predominant position in the gaming industry, there is anticipated growth in the popularity of console and PC gaming in India. With the launch of advanced gaming consoles like the PlayStation 5 and Xbox Series X/S, along with the availability of high-end gaming PCs, the console and PC gaming segments are expected to see growth. This is fueled by an increasing number of gamers seeking a more immersive and high-performance gaming experience.

ROLE OF ARTIFICIAL INTELLIGENCE

AI is set to further redefine the future of the gaming industry, involving a new era of innovation, engagement, and limitless possibilities.

The integration of artificial intelligence (AI) in gaming will continue to advance in the future. AI can be used to create more immersive and intelligent gaming experiences and improved gameplay mechanics. Gaming companies can also use AI to personalize game experiences for individual players, creating a more tailored experience for each user.

Developers are utilizing Artificial Intelligence (AI) to create games that are more responsive, adaptive, and challenging.

FUTURE OF CRYPTO CURRENCY IN GAMING

Crypto-based gaming will become popular because of the involvement of real money or cryptocurrency as rewards. It could potentially revolutionize the gaming industry, as it offers several advantages such as:

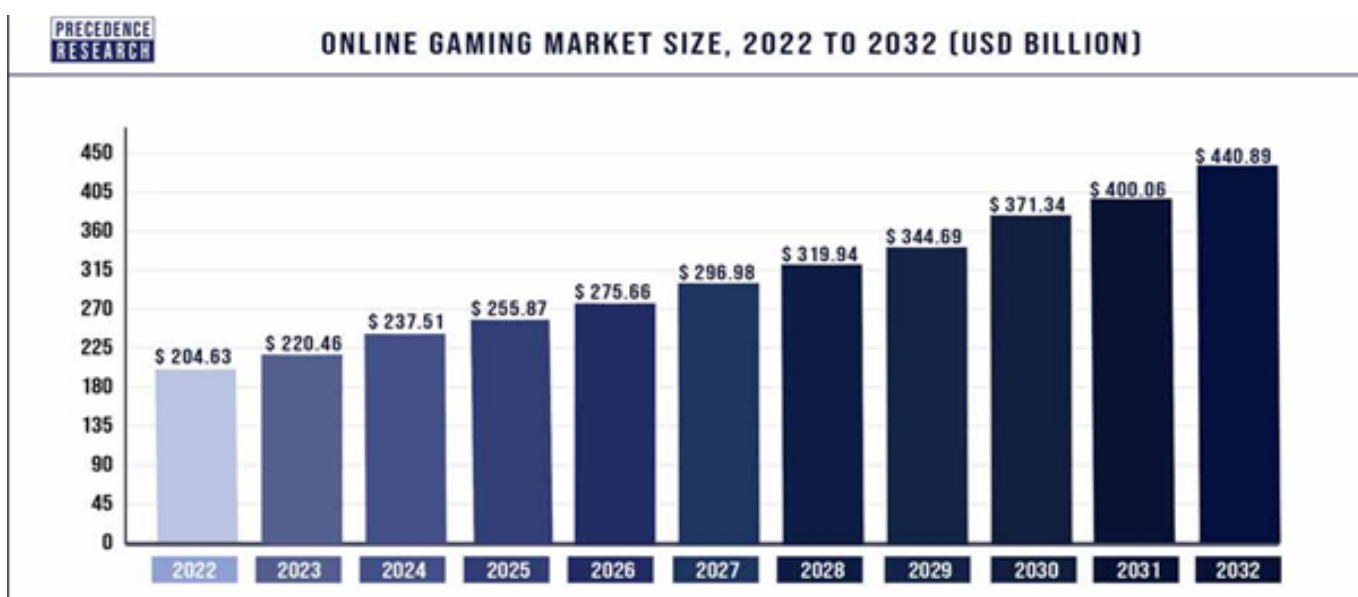
1. Enhanced security and transparency due to blockchain technology.
2. Players can earn real money or cryptocurrency as rewards.
3. The ability to create unique gaming experiences with crypto-enabled tokens.

FUTURE OF ESPORTS IN INDIA

The future of esports in India looks bright, with the industry expected to continue growing in the coming years. The esports industry in India is expected to grow at a compound annual growth rate of 36% between 2023 and 2025, reaching a market size of INR 18 billion by 2025.

One of the key factors driving the growth of esports in India is the increasing popularity of mobile gaming. Mobile gaming is expected to continue to be a major driver of growth in the esports industry in India, with games like Free Fire and PUBG Mobile expected to continue to attract large followings.

Esports is currently experiencing a tectonic shift and by capitalising on growing popularity, constructive policy framework, and widening access to internet and gaming devices, the category can become a billion-dollar industry in the next couple of years.



FUTURE OF CLOUD GAMING IN INDIA

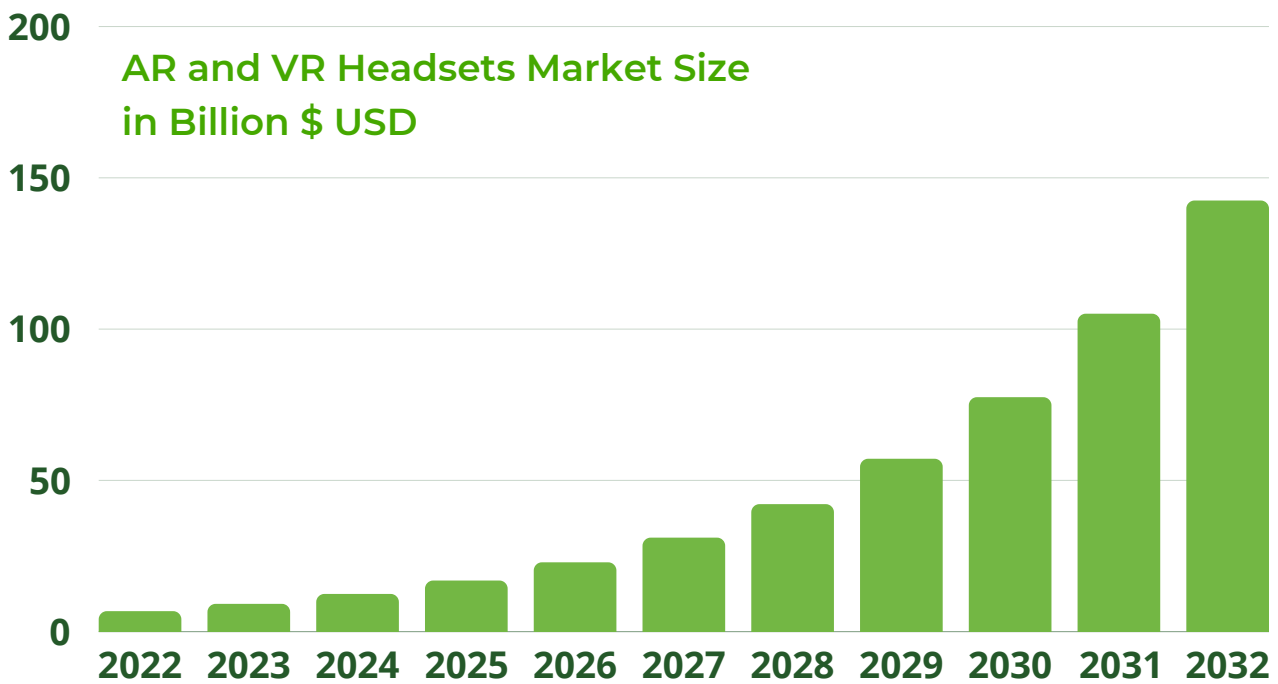
Cloud gaming has had a monumental impact on the gaming culture in India. Just like any cloud service, cloud gaming service enables gamers to play games on a remote server and stream the gameplay back to their device. According to the Cloud Gaming Market Report the cloud gaming market is estimated to be valued at USD 306 million in 2019 and it was projected to reach USD 3,107 million by 2024, at a CAGR of 59.0%.

Reliance Group's Jio has launched its new cloud gaming platform JioGamesCloud in beta mode on its JioGames app. JioGamesCloud is currently allowing users with stable internet connections to stream games directly to any compatible device without installing, downloading, or updating the games. In a tweet, JioGames said that the gaming platform can be accessed via smartphones, web browsers, and Jio Set Top Box. JioGamesCloud is Jio's own home-grown cloud gaming technology. Graphic-heavy games once required expensive hardware requirements in the form of consoles and accessories. Now, says Jio, they can be played directly on the JioGames app without any hardware strings attached, powered by the cloud technology on Android smartphones, the Jio set-top box and popular web browsers.

FUTURE TECHNOLOGICAL DEVELOPMENTS

Virtual Reality (VR)

The future of virtual reality is increasingly leaning towards multisensory experiences. It's not just about what users can see; it's about what they can touch, smell, and even taste. The more realistic the virtual world, the more immersive and captivating the experience for the user in a game. The market size of VR in gaming industry is expected to reach \$54 billion by 2028. VR holds the potential to completely transform the gaming industry. While VR headsets have gained significant momentum already, they are likely to get more lighter and comfortable with time, along with becoming completely wireless, enabling freedom of mobility while gaming. Games equipped with VR enable players to be more involved.



Augmented Reality (AR)

The future of augmented reality in gaming is promising. With the continuous advancements in technology, we can expect to see more immersive and lifelike AR experiences. From enhanced gameplay and real-world interactions to cross-platform integration and social gaming, AR has the potential to revolutionize the gaming industry. Augmented reality game development is still in its early stages, but the potential for growth and innovation is significant. With the growing popularity of AR technology and the increasing demand for immersive gaming experiences, the future of AR games looks bright.

EFFECT OF 5G ON THE INDIAN GAMING INDUSTRY

The imminent arrival of 5G signals a revolutionary shift in telecommunications, bringing superfast downloads, seamless multiplayer gaming, and real-time experiences to the forefront. This advancement is set to democratize access to high-budget AAA games, traditionally the domain of major publishers, making them widely accessible.

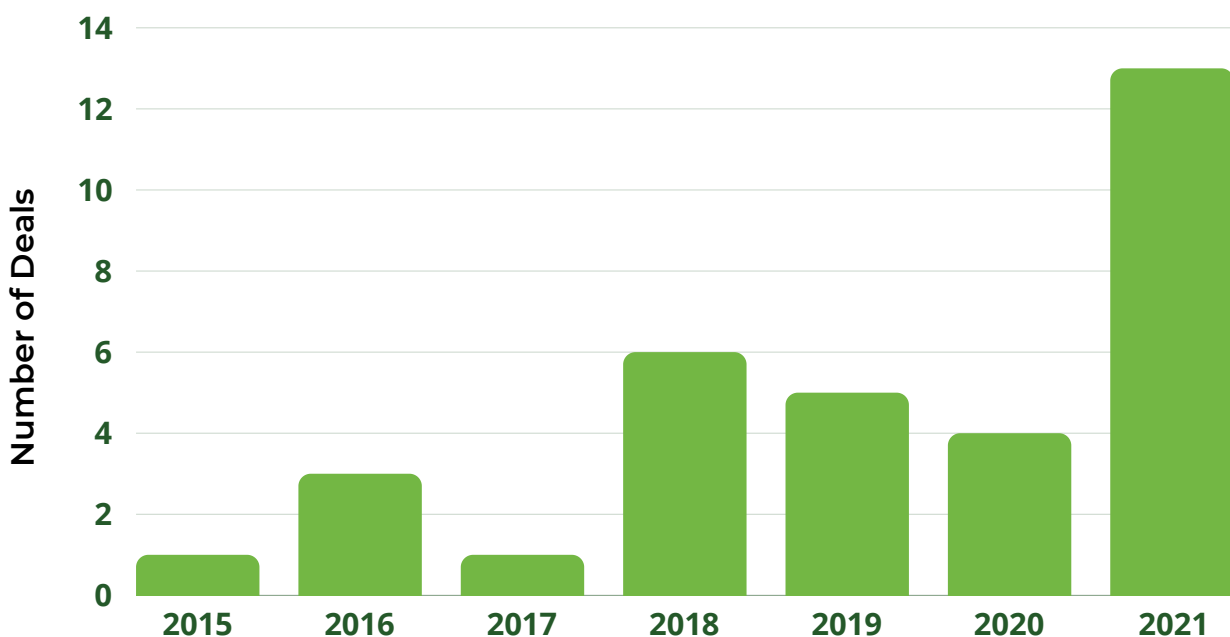
The surge in gaming's popularity, driven by social and multiplayer dynamics, is poised to escalate with 5G, enhancing interactions and connectivity. This boost is expected to propel the gaming industry's growth, making immersive technologies like AR and VR readily available.

Beyond gaming, 5G empowers tournament organizers to host local events with greater participation and viewership, opening lucrative sponsorship avenues for brands. With an impressive latency reduction to five milliseconds, 5G is poised to transform online gaming and cloud services. As 5G networks launch, mobile operators have a pivotal opportunity to showcase these advancements, marking a transformative moment in gaming.

MERGERS AND ACQUISITIONS IN GAMING

Gaming Industry players announced 68 mergers and acquisitions were announced in 2022, according to research and analysis firm [GlobalData](#). While that figure marks a steep drop from the 130 and 111 deals recorded in 2020 and 2021 respectively, the total value of those deals represent a whopping \$74.4bn in total. That's up from the \$24.9bn recorded in 2020 and the \$24.4bn of 2021. These deals not only represent some of the biggest changes in the industry to date, but also highlight how video games are a tour de force to take seriously. Nazara Technologies, one of the leading mobile gaming companies in India, has been actively involved in acquisitions. They acquired companies like NextWave Multimedia, Nodwin Gaming, and SportsUnity, expanding their presence in various gaming segments.

It seems that more such deals are to be seen in the future signifying a positive future for mergers and acquisitions in the gaming industry of the country.



CONCLUSION

The gaming industry in India is experiencing a remarkable surge, characterized by exponential growth, burgeoning talent, and increasing recognition on the global stage. As this sector continues to flourish, it not only fosters economic prosperity but also presents new avenues for innovation and employment. In this discourse, we delve into the factors propelling the growth of the gaming industry in India, explore the challenges impeding its full potential, and delineate strategies to surmount these obstacles, thereby ushering in a future replete with promise and opportunities.

The Rising Demand for Game Developers

The burgeoning demand for game developers stands as a testament to the robust expansion of the gaming industry in India. With a burgeoning population of avid gamers and an escalating preference for digital entertainment, there is an insatiable appetite for diverse and immersive gaming experiences. Consequently, game developers are poised to play a pivotal role in catering to this burgeoning demand, crafting captivating games that resonate with both domestic and international audiences.

The emergence of Indian game developers on the global stage underscores the prowess and potential harbored within the country's gaming ecosystem. With a rich tapestry of cultural narratives, technological adeptness, and creative ingenuity, Indian game developers are carving a niche for themselves in the global gaming landscape. This burgeoning recognition not only amplifies the visibility of Indian gaming studios but also augurs well for the future trajectory of the industry.

The Bright Future of the Gaming Industry

The future of the gaming industry in India shines luminously, buoyed by an array of factors poised to catalyze its growth and evolution. The pervasive penetration of smartphones, coupled with the democratization of internet access, has democratized gaming, ushering in an era of unprecedented accessibility and engagement. Furthermore, the burgeoning phenomenon of eSports has emerged as a cultural juggernaut, captivating audiences and fostering a burgeoning community of competitive gamers.

Moreover, the advent of cutting-edge technologies such as Virtual Reality (VR) and Augmented Reality (AR) holds immense transformative potential, promising to revolutionize the gaming landscape by endowing players with immersive and interactive experiences. The convergence of these technological innovations with the burgeoning gaming market in India is poised to unleash a wave of creativity, innovation, and disruption, propelling the industry to new heights of success.

Localization of games, integration of Artificial Intelligence (AI), and increased investment represent additional catalysts driving the growth of the gaming industry in India. Localization facilitates the adaptation of games to cater to the unique cultural nuances and preferences of Indian audiences, thereby enhancing their appeal and relevance. Furthermore, the integration of AI augments gameplay mechanics, imbuing games with dynamic and responsive elements that enhance player engagement and immersion.

Challenges and Opportunities

The realization of the full potential of the gaming industry in India is contingent upon addressing a myriad of challenges that threaten to impede its progress. Chief among these challenges is the lack of robust infrastructure, encompassing factors such as inadequate internet connectivity, limited access to gaming hardware, and a dearth of specialized training and educational institutions.

Additionally, there exists a pervasive lack of awareness regarding gaming as a viable career option, perpetuating misconceptions and inhibiting the influx of talent into the industry. This dearth of skilled professionals not only hampers the growth and innovation within the sector but also exacerbates the existing talent gap, thereby impeding the industry's capacity to realize its full potential.

To surmount these challenges and unlock the latent potential of the gaming industry in India, concerted efforts must be undertaken to address these systemic impediments. Investment in infrastructure development, including the expansion of broadband connectivity and the establishment of specialized gaming hubs, is paramount to foster an environment conducive to industry growth and innovation.

Furthermore, initiatives aimed at raising awareness about gaming as a lucrative career option must be implemented, targeting educational institutions, vocational training programs, and career counseling initiatives. By dispelling misconceptions and showcasing the myriad opportunities inherent within the gaming industry, these initiatives can effectively catalyze the influx of talent, thereby replenishing the talent pipeline and fostering a vibrant ecosystem of skilled professionals.

Summing Up

In conclusion, the gaming industry in India stands at the precipice of unprecedented growth and opportunity, poised to emerge as a formidable player within the global gaming landscape. The confluence of technological innovation, burgeoning demand, and burgeoning talent converge to create a fertile environment ripe with potential and promise.

By addressing the prevailing challenges and seizing upon the myriad opportunities afforded by this burgeoning sector, India can position itself as a powerhouse within the global gaming industry, fostering economic prosperity, technological innovation, and creative expression. Through strategic investments, policy reforms, and collaborative initiatives, India can harness the transformative potential of the gaming industry, thereby unlocking new horizons of growth and prosperity for the country and its youth.

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