# Overview and Analysis of the Indian Gaming Industry

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Abstract: The smartphone boom has given rise to mobile gaming in India, which is a relatively new market. The paper intends to provide an overview of the industry, with current trends and practices rampant across the sector. The reasons for its growth, possible opportunities in the next 5 years and the impact COVID-19 had will be investigated, along with parallels drawn to the video gaming industry. Data has been collected from both primary and secondary sources and analyzed for further clarity on the subject in the form of various diagrams and models. The aim is to gain a clearer understanding of the sector and evaluate whether it has the potential and impact it is believed to have. We also collected data by conducting survey by circulating google forms, in which we asked them various questions that would help us with our research, the survey shows that mobile gaming is indeed a popular form of entertainment and gaming. It had 48 respondents, out of which 77% did in fact play mobile games. The ages are between 17 to 28. The average age of our sample population is 23 years.

*Keywords*: Government initiatives, Indian mobile gaming industry, Indian gaming market, key trends and indicators of growth, mobile gamers.

#### 1. Introduction

From playing "Snake" on our Nokia 6110's to the Augmented Reality games available on our smartphones today – we've come a long way. Certain games that were thought to have only been played on video game consoles are now being played on mobile phones (e.g., Call of Duty). This has, however, only been possible because of the increasing popularity and demand for mobile games and easy access to smartphones. (TOI, 2021)

The mobile gaming industry currently stands at \$1.5 billion and is expected to reach almost \$5 billion by 2025. There has been an unprecedented growth reaching about 40% in the years 2019-2020 – which is more than other media sectors including Television, OTT platforms and social media. Currently, most of the revenue is generated through advertisements but it is expected that with the growing popularity and willingness to pay, games will have different possible avenues for user monetization. (Scoop Team, 2021)

Unlike most product categories and markets, mobile gaming users are not defined by their demographic. No matter what their background, every user has their own distinct game preference not majorly influenced by their demography. (Scoop Team, 2021)

With the onset of COVID-19, mobile gaming saw a huge spike in its user rate owing to the lockdowns and the fact that there wasn't enough to do at home. Once the lockdowns came to an end, it was expected for the sudden growth to take a drastic dip and it did go down, however, it steadied proving that mobile gaming is here to stay and not just a fad.

#### 2. Literature Review

(Karvinen & Mayra, 2018) In the report, the author's study has revealed that mobile gaming has seen a significant rise, from 44% to 57% in the recent years. There's been a relatively lesser demand for other gaming platforms, when compared to the mobile gaming. One of the major reasons for the shift is believed to be the technological advancements as to how the concept of a mobile has evolved. While this technological evolution took place, the understanding of what a "a mobile game" is or could be, has also radically changed. While there has been an evident increase in the number of people, due to the ease of accessing mobile gaming, in the virtue of social and cultural changes, it's also felt by both gamers and non - gamers that not all the changes associated are for good.

(Deloitte, 2015) In one of the reports published by Deloitte global, it was predicted that by 2016, mobile phones shall become one of the leading gaming platforms, by generating 35 Billion dollars of revenue, which should be 20% higher than 2015. However, they still feel that the rise of mobile games will not solely out market the existing gaming platforms including consoles and computers, with respect to revenue generation, not in the medium term. It is believed that all the three platforms will co – exist in the market, with each platform serving large groups of varied groups, supported by business dynamics. According to the author, the gaming industry faces the similar challenges when compared to mainstream media, where creating fascinating content and making people pursue it, by marketing it in the most convincing way is a must.

(IAMAI, 2021) Author in the research paper, "Building up the e- gaming ecosystem of India and the influence of smartphones": Hardcore gaming is proving to be the fastest growing category in mobile gaming sector. These are multifaceted and complex, detailed like Free fire and BMI (earlier PUBG). Although the most popular genre in India is casual games like Angry birds, Ludo king, but it is hardcore

games that generate more revenue in this sector as compared to other categories. The gamers in this category are also the most engaged cohort, often spending four times more money and time on gaming, in comparison to the casual gamer. In a survey conducted consisting of around five hundred hardcore gamers, 70% of the respondents stated that they play 2-5 games during a particular time frame and spend significantly money on gaming. Amongst surveyed hardcore gamers, penetration or usage of higher – end phones are also higher in comparison to numbers of units of phone sold by category. Among all the other sub categories of Indian Mobile Gaming Industry, the growth of hardcore gaming sub category is projected to outpace

(Kalyani, 2017) Author in the research paper, "An Empirical Study on Gaming Industry in India with Special Reference to the SmartPhone Games & Smart Generation Players of School and College": More than movies and music industry, gaming industry is said to be a multi - million-dollar industry worldwide which is growing rapidly. Beginning from the Mario to the latest games such a Dota, GTA, etc. in Consoles, PC or in Mobile phones there is a far drastic change in animation and graphics that has significantly improved people experience in gaming and has drawn so much attention to the sectors. In this research paper the researcher has aimed at exploring the specific area of smartphones gamer and smart generation users of colleges and schools, due to wide availability of different categories smartphones in different price range, which one of the reasons that the gaming market is on the boom. The research paper has used a series of questionnaire to find out the different aspects about the smartphone's gamer and games.

## 3. Objectives

The objectives of this study include:

- 1) In-depth understanding and workings of the mobile gaming industry.
- 2) How the mobile gaming industry compares to the video gaming industry and their scope respectively.
- What are the categories that exist within mobile gaming and which are the most preferred categories?
- To evaluate the way Indian consumer view mobile gaming and their opinion about the industry.

# 4. Hypotheses

The following hypotheses have been framed for the research:

- 1) The mobile gaming industry will continue to grow and will be twice the size of its current rate in 5 years.
- 2) Consumers will gradually lean towards mobile gaming as compared to video gaming.
- Mobile Gaming is extremely popular amongst young adults.

## 5. Indian Gaming Market Characteristics

The following data tells us about the important characteristics of the Indian gaming market and also the growth in these factors from 2016-21:

1. Growth – online gaming market grew 3.4 times from \$290 Mn to \$1010 Mn.

- 2. Gamers Number of online gamers grew 2.6 times from 120 Mn in 2016 to 310 Mn in 2021.
- 3. Population there was an 63% increase in the total population which are below the age of 35 years, and they are the ones who play more games as compared to older age groups.
- Internet users internet users in India grew by 1.8 times from 409 Mn in 2016 to 735 Mn in 2021.
- Smartphone users due to increase in smartphone penetration in India, smartphone users increased by 1.6 times from 290Mn in 2016 to 470Mn in 2021.
- Smartphone to feature ratio due to rapidly advancing technology the features in smartphones grew by 10%.
- Data consumption per active smartphone users increased by 1.4 GB/Month to 7 GB/Month, that's 5X increase, this is because of various reasons majorly because of the cheap data availability which happened when Jio disrupted the telecommunication market.
- Disposable income 1.6 times increase in disposable income from 2280 in 2016 to 3750 in 2021.

# A. Key Trends and Indicators of Growth

- 1. Rising Disposable income
- Young India 2.
- 3. Affordable Technologies
- 4. Localized games
- 5. Internet reaching every corner and remote locations of the country
- Constant increase in smartphone penetration
- User base in the digital payment platforms is rapidly
- 8. Rapidly growing ecosystem with local developers

## B. Types of Gamers

## 1) Casual gamer

Players who enjoy playing mobile games playing it spontaneously and irregularly, without putting too much thought into it, these Games are designed for ease of gameplay which do not require significant amount of time.

### 2) Mid core gamer

These are players with a wider range of interest as compared to casual gamers but at the same time would not believe in dedicating as much time as a hard-core player towards competing and learning.

# 3) Hard core gamer

Gamers who spend considerable amount of time and effort, usually in complex games, also play with a highly competitive spirit and are willing to spend extra money for the experience and be good at what they do (Gaming).

## 4) Professional gamer

A professional gamer can be described as a a full-time competitive player, playing games for a prize money or salary. These gamers are usually paid by their sponsors or team organisations. Today due to rising trend of livestreaming and access to huge population, online live streaming can also be a lucrative option for most of the professional players to earn their money.

## C. Key Trends and Indicators of Growth

### 1) Casual/Hyper- Casual

Types - action, arcade, adventure, puzzle

Example – Candy crush saga, temple run, coin master

#### 2) Classic

Types - casino, board, Trivia, word

Example - Teen Patti, Ludo King, Snakes and Ladders

#### 3) Mid - Core

Types - Sports, Multiplayer, strategy, racing

Example – Clash of Clans, Sachin Saga, Fau-G

### 4) Hard – Core

Types - Multiplayer online battle arena, first person shooters, massively multiplayer online roleplay games (MMORPG)

Example – DOTA 2, Call of Duty, Order and Chaos Online. According to a KPMG report, an average gamer in India has the following characteristics:

- 1. Gamer Profile: An average Indian gamer is about 24 vears old.
- 2. Genre Preferences: Puzzle, Action and Adventure games are preferred across age groups and genders.
- Consumption Drivers: Friends, Family and Peer group play a critical role in discovery and download of a new game.
- 4. Payment Behavior: Availability of free substitutes and perception of high pricing are limiting the realization of revenues through gamer(s).

## 6. Indian Gaming Studios & Games

Тор	Indian	gaming	studios	
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Company	Top Games	Genre presence
Gametion	Ludo King, Carrom king	Board
Games2win	International Fashion Stylist, Driving Academy 2	Role playing games
Octro	Teen Patti, Tambola, Indian Rummy	Casino and Card
Moonfrog	Teen Patti Gold, Ludo Club	Card and Casino
Reliance games	WWE Mayhem, Real Steel Boxing Champions	Action
Gameberry	Ludo Star, Parchisi Star	Board
Blacklight Gaming	Ludo Superstar Game, Callbreak Superstar	Board
JetSynthesys	Sachin Saga Cricket Champions, WWE Racing, Real Cricket	Sports
Nazara Technologies	Chhota Bheem Jungle Run, Motu Patlu Speed Racing	Casual

Fig. 1. Indian gaming studios

	Top 10 downloaded games (Google Play Store) – April 2021						
Rank	Game	Publisher	Country				
1	Ludo King	Gametion Technologies	India				
2	High Heels	Zynga	U.S.				
3	Carrom Pool: Disc Game	Miniclip.com	Switzerland				
4	Garena Free Fire	Garena International	Singapore				
5	Xtreme Boat Racing 2019	Monster Games Production	Australia				
6	Hill Climb Racing	Fingersoft	Finland				
7	Join Clash 3D	Supersonic Studios Ltd.	Israel				
8	Howzat Fantasy Cricket	Howzat Pvt. Ltd.	India				
9	Temple Run 2	Imangi Studios	U.S.				
10	Subway Princess Runner	lvy	U.S.				

Fig. 2. Top 10 downloaded games (April, 2021)

## 7. Reasons for Growth in the Industry

## A. India's Young Population

46% of the total population is under the age of 25 and 67% between 15-64 years, this gives India a significant demographic advantage in comparison to the other countries, and also points out to the fact that there is immense untapped potential in the India gaming sector, because demography is often considered to be the major growth factor in the Gaming sector.

KPMG conducted a survey, which shows that 50% of people in the age group of 37-50, reported that they play mobile games more than 4 times a week. 75-80% people in the age group of 25-36 and 18-24 reported playing more than 3 times a week. (IBEF Knowledge centre, 2022)

## B. Huge Penetration of Gaming Friendly Phones

There are around 502.2 million smartphone users in India, with a steady and attractive penetration rate of 36.7 %. In the year 2021 India's smartphone shipments saw an increase by 23%. Apart from the smartphone penetration alone what is more important is that the penetration of gaming friendly smartphones.

For example, the RAM of a smartphone plays an important role in the gaming experience, and RAM in the smartphones has increased by at least 3-4 times in the last 4-5 years, same with display, sound, touch quality, etc. All this are offered as features and improve the value of smartphones which in turn drives the growth in the gaming sector. (KPMG, 2021).

### C. Faster and Better Internet Quality at Cheaper Rates

The big revolution brought in the by the Indian Telecommunication giant Reliance Jio in the sector, where in begin with offering data at no cost for over a year, gave the entire population across all the income levels, an exposure to the Internet, this made them aware of the benefits, entertainment and other things linked with interned and made them habituated.

After that Jio continued to offer data at low rates and they kept in acquiring market share, this forced the other players in the sector to offer data at lower prices, as a result 1 GB data in India costs US\$ 0.26 as compared to the average global rate of US\$ 8.53. This has lead to heavy internet usage, with 46% of the total population being active user. Average monthly mobile data usage per person in India is 15.6 GB where as in US it is 11 GB. (Dey, 2021)

## D. Access to Top Notch Games

Increasing availability of first tier games such as Fortnite, PUBG, COD, etc. has helped Indians to get acquainted to more sophisticated games. With over 50 Mn active users per month, India accounted for around 25% of the global downloads of PUBG. Indian games such as Ludo king, MPL, Dream 11, etc. have already registered over 100 Mn downloads.

This exposure has resulted in quicker learning curves among the Indian populations when it comes to playing new games, this enables, motivates and excites them to keep on trying new games. A study also found that Indians had a quicker learning curve in comparison to Chinese players when the same games were launched online. (IBEF Knowledge centre, 2022)

## E. Increased Marketing Efforts by Companies

Along with the software, technological infrastructure one more factor that has boosted the growth in the sector is heavy and effective use of marketing. This has been done through different ways; sponsorship, TV ads, social media, in game ads, influencers, promotions etc.

Over 20 Indian gaming influencers have 1Mn+ followers on YouTube, Dream11 was the official sponsor of IPL and MPL sponsors the sports kit of the Indian cricket team.

Get Mega recently launched their game using over 200+ YouTube influencers including content creator and comedian Tanmay Bhat, in the campaign influencers explained how to use the app over a live stream, the campaign reportedly onboarded around 1Mn+ users. (Dey, 2021)

## F. Rapid Rise in Digital Adoption by People during Pandemic

COVID-19 lockdown restricted people's movement, people didn't have much to do sitting in their respective households, people stared looking for pastimes to spend their few times, it's during this time India saw spike in the number of gamers.

Playing time spent increased by over 40% in the first month itself (March 2019). In April 2019, mobile game download number increased sharply, showing a peak of 197Mn in a single week, a whopping 75% increase as compared to the previous quarter's weekly average. There was 75% increase in the popularity of Board games like Ludo king, carrom, etc. for family and friends group.

During lockdowns more people attention was grabbed by mobile games and esports, which resulted in popularity and growth of the gaming industry in India. In the year 2020 India recorded around 365Mn online gamers, and around 500Mn in 2022. (Dey, 2021)

#### G. Government Initiatives

Initiatives taken by the government also boosted the growth in the gaming industry to next level. The government has implemented following initiatives to boost the growth in the Indian gaming industry:

- 1. Govt. has set up the (AVGC) Animation, Visual Effects, Gaming and Comic Centre with IIT Bombay, for Excellence and Collaboration.
- 2. Additionally, govt. is now also allowing 100% foreign direct investment (FDI) in gaming.
- Digital India, India's flagship programme, has also helped the gaming industry to a great extent.
- Digital Village scheme is also focused at increasing smartphone penetration and boosting Internet usage in rural India.
- The Union Ministry of Education is currently working on educational policies to create job opportunities for students in gaming industry. India also conducting competition and events like the Smart India Hackathon this help students showcase their gaming skills and also adds to the popularity of the sector.
- 6. Providing digital infrastructure for upcoming gaming

companies through Data centre parks and related initiatives in the country (IBEF Knowledge centre, 2022).

## 8. Key Trends of the Indian Mobile Gaming Industry

### A. Familiarity in Content

When some games are launched by a company about which people are already aware of either through previously launched editions or similar games or through a offline games.

For eg. Indian population are already familiar with Ludo king since they have already player it offline for many years, it's just a mobile avatar of their favourite household game, with new added features and scope, with the online version you can play with your friends who are away from you. (Kumar K. 2021)

## B. Simplifying Onboarding and Attracting New Customers Through Live Communication

Today many games offer chat facility in their game which attracts new customers, to take this to next level, gaming platforms have also started offering voice chat functions. This is the major reason for popularity of many games that offer voice chat along with PUBG in India, PUBG is a really interactive and action orientated game which can be played in group with friends, so when you can talk to your friends through the gaming app in the language of your choice, in sync with everyone playing at the same time, it takes gaming experience to whole another level, making it interactive, fun and more exciting. (Kumar K. 2021)

## C. India is Emerging as a Talent Hub – For the World and for the Country

International studios and game producers such as Ubisoft, EA and Zynga have setup their game development centres across India in the early 2010s.

Following are some examples of few Indians who worked in the above international companies and later founded the following companies:

MPL - Valued at \$950Mn within a period 3 years of launch PLAYSIMPLE - Acquired for \$360Mn by Swedish company MTG

Moonfrog - Acquired by Stillfront for \$100Mn Bombay Play - Raised \$2.5Mn from Leo Capital, Lumikai *Hypernova Interactive* - Raised \$1Mn+ from Graph Ventures and Kae Capital

This shows the immense potential India has interns of Human Resource in gaming sector, till now the potential was not realised by people but now it is and also directed in the direction of growth and prosperity. (BCG & tSequoia, 2021)

# D. Investors are Actively Shaping and Scouting Gaming Space

Gaming is considered to be as the most attractive sector to invest in during the current scenario, due to the number of key factors which we have already discussed in the previous section.



#### Total number of gaming companies in India

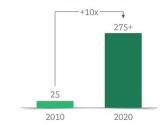


Fig. 3. Total number of gaming companies



Fig. 4. Trends and growth in investment (Indian Mobile Gaming Industry)

Even though gaming might have boomed during pandemic but it won't go away from consumers mind so easily, COVID-19 was just a trigger for gaming for which Indian people always had interest for, but never realised. It has become a part of people's lifestyle and hence will continue to grow that's why we see a lot investors looking forward to this sector. (BCG & Sequoia, 2021)

## E. Attractiveness of the Gaming Sector Especially the Gaming **Platforms**

Within the Gaming sector Gaming platforms such as MPL, Paytm First Games, Winzo etc. have got the attention of investors, and accounted for around 88% of all VC fundings in the gaming sector in the year 2020, the reason investors are bullish on Gaming platforms in comparison to games because it mitigates the hit-driven nature associated with games. (BCG & Sequoia, 2021)

## 9. Survey and Findings

A survey was conducted to better understand the characteristics and interest towards mobile gaming of a certain age group of individuals. The average age of the ones who participated in the survey was 22 years.

The survey shows that mobile gaming is indeed a popular form of entertainment and gaming. It had 48 respondents, out of which 77% did in fact play mobile games.

The following graph depicts the age group that the survey has been conducted for. The ages are between 17 to 28. The average age of our sample population is 23 years. Total 48 responses were collected by circulating Google form to various individuals, in which we asked them various questions that would help us with our research.

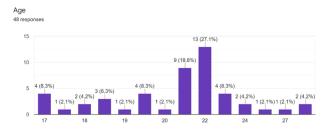


Fig. 5. Age range of respondents

Out of these respondents, 77% play mobile games – more than half of them. This proves that mobile games are comparatively popular amongst young adults.

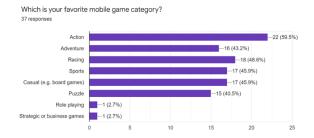


Fig. 6. Popular mobile gaming categories

The survey also found out that the most popular gaming categories are Action and Racing.

37.8% of them play games daily, however only 21.6% of them call themselves gamers.

From the data collected for the study, we could draw the conclusion that there is a significant relationship between the people who call themselves gamers and their inclination towards action and racing games.

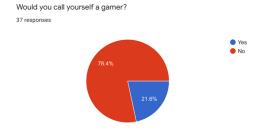


Fig. 7. Ratio of those respondents who identify themselves as gamers and those who don't

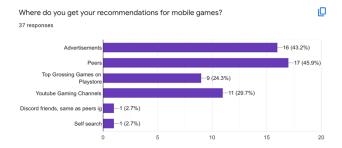


Fig. 8. Percentage of different ways in which respondents get their mobile game recommendations

We also found that people irrespective of the fact, whether they call themselves gamers or not, still are not willing to spend which proves that majority of the people are Casual and Midcore Gamers, two more reasons for this conclusion could be that, majority of them didn't spend much money on games or neither did the follow gaming channels on YouTube.



Fig. 9. Ratio of respondents who make in-app purchases and who don't

Most of them get their recommendations from their peers and other advertisements.

#### 10. Conclusion

Mobile gaming is a lucrative market with immense potential for growth. According to reports, the market (worldwide) is estimated to reach the size of about \$420.386 billion. As mentioned, this has largely been possible due to increased access to smart phones and faster internet. The Indian Media & Entertainment sector has been growing rapidly and the gaming segment has been particularly the fastest moving one. Due to this, India is in the world's top 5 mobile gaming markets.

Due to COVID-19, the mobile gaming segment flourished. It

became a popular way of entertainment since it is convenient, easy to use and just as fun as compared to other rival activities. Hence the increased profitability and popularity as a result of more downloads and playtime.

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