KPMG

Beyond the tipping point

A primer on online casual gaming in India

June 2021

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Contents

Foreword

Gamechilling is something that has emerged over the last 12 months, as a direct consequence of the pandemic, resulting in the business of online gaming turning into a serious opportunity, and generating tremendous interest amongst corporates and investors alike. When we compare India to global gaming markets, the definition of online gaming and classification into various segments, with exclusions such as gambling, is divergent, complex and at times, confusing.

The purpose of this report is to simplify what online gaming, and especially online casual gaming means and how it can be seen through various cuts. We have chosen to take a deep dive into the world of online casual gaming in India, as it is the largest segment in terms of consumption. We aim to showcase the entire value chain of online casual gaming as it exists today as well as the landscape. We also highlight the market potential for online casual games and the aspects which need to be considered to build successful monetisation models across Ads and In App Purchases (IAPs). Finally, we take a look at some of the trends that are likely to define online casual gaming going forward.

As we mentioned at the beginning, COVID-19 has been the proverbial tipping point for the consumption of gaming in India. With people being forced to stay indoors for an extended period of time in 2020, and now in 2021 as well; online gaming as a form of entertainment has well and truly come to the fore. With games adding social elements to their product, and people looking at gaming as a proper means to take a break from work, almost all the metrics, be it the game downloads, average time spent on gaming, or the conversion from a Daily Active User (DAU) to a paid user; are operating at a higher new normal as compared to the pre COVID-19 lockdown time.

Having said that, inspite of India being home to the second largest base of online casual gamers in the world at 420 million[1], the monetisation levels in terms of Average Revenue per User (ARPU) are amongst the lowest in the world. Also, unlike developed global gaming countries, advertisement-led monetisation is something that is still significant in India and is likely to remain so in the future.

That isn't to say that Indians aren't ready to pay for online casual gaming. Some successful Battle Royale and casual games like 'Ludo King' have yielded good results when it comes paid user conversions. COVID-19 has also lent a hand to increased consumer monetisation in terms of paid user conversions, and incentivised advertising has also been on the rise of late. We foresee a very strong growth for online casual gaming sub-segment in India, likely to grow to INR 169 billion in FY25, from a size of INR 60 billion in FY21[1]. What is likely to drive this growth is both demand side factors such as growth in digital infrastructure, a young population and increasing adoption of digital payments; as well as supply side factors such as increasing supply of world class gaming titles due to Indian studios achieving scale, active investor interest, localisation of gaming content and ecosystem growth factors such as adoption of Esports in India.

Over the long term, developments like the advent of cloud gaming (although in an emerging state globally) has the potential to transform access and consumption of games for the Indian population, where device investments have always been a constraint. This coupled with growth in investments in the gaming ecosystem, increasing scale of Indian studios and the adoption of emerging technologies such as Augmented Reality/Virtual Reality (AR/VR) and Artificial Intelligence (AI); is likely to ensure that the Indian online casual gaming market remains on track to be amongst the fastest growing gaming markets globally.

We hope you find the findings of our study useful.

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1. KPMG in India analysis, 2021, based on primary and secondary research

Evolution of online casual gaming

Weekly time spent on mobile games in India (Pre and Post COVID)[3]

- Pre COVID - 2.5 hours (11% of total smartphone time)
- Week of 25 April 2020 - 4.1 hours (15% of total smartphone time)
- Week of 27 June 2020 - 3.1 hours (12% of total smartphone time)

India mobile game downloads - CY2020[2]

- 1.8 billion Q1 2020
- 2.7 billion Q2 2020
- 2.9 billion Q3 2020

Online gaming market India FY21[1]

Users: 433 mn

Revenue: INR 136 bn

- Casual: INR 60.2 bn
- Real Money Games: INR 49.8 bn
- Online Fantasy Sports: INR 24.3 bn

Online gaming market India FY25[4]

Users: 657 mn
Revenue: INR 290 bn
- **Casual: INR 169 bn**
- **Real Money Games: INR 61.3 bn**
- **Online Fantasy Sports: INR 54.3 bn**

Casual gaming market users by device - FY21[5]

Total: 420 mn
- **Mobile: 94%**
- **PC: 9%**
- **Console: 4%**

Casual gaming market size split (INR bn)[6]

Ads: 36.2 Consumer spend: 24.1	Ads: 98.9 Consumer spend: 69.7
FY21	FY25

Online casual gaming ARPU[7]

INR 152	INR 268
FY21	FY25

Monthly active users for top 100 mobile games in 2020 (in millions)[8]

425 - 475	630 - 670	480 – 520
March	June	December

India Esports market size (INR bn)[9]

1.7	5.7
FY21	FY25

1. KPMG in India analysis, 2021, based on primary and secondary research
2. KPMG Media and Entertainment Report, 2020
3. Broadcast Audience Research Council Insights, KPMG in India analysis, 2021, based on secondary research
4. KPMG in India analysis, 2021, based on primary and secondary research
5. KPMG in India analysis, 2021, based on secondary research
6. KPMG in India analysis, 2021, based on primary and secondary research
7. KPMG in India analysis, 2021, based on primary and secondary research
8. Based on industry discussions
9. KPMG in India analysis, 2021, based on primary research

Introduction: Aiming for the stars

The Pre-COVID-19 period saw sustained and rapid growth

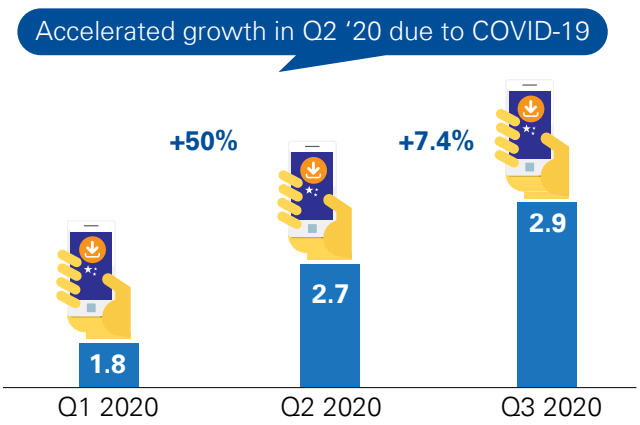
The Indian online gaming market has seen a tremendous growth in the years leading upto the pandemic, with an increase in both the number of gamers as well as user engagement levels. From ~250 mn gamers at the end of FY18, the numbers of gamers in India grew to ~400 mn by the mid of CY20, the second largest base of online gamers in the world after China.[1]

This growth was on the back of

- **Technology infrastructure development** through
  - Availability of high-speed internet and affordable data prices post the launch of 4G services by operators in late 2016
  - Rapid growth in the digital payments infrastructure, which saw a boost due to demonetisation and the government's focus on Unified Payments Interface (UPI)
- **Growing device penetration** with close to ~500 mn[2] smartphones in the country at the end of FY20 (including smart feature phones)
- **Rapid expansion in supply and quality of games** with availability of high quality global and Indian titles, wherein the likes of Ludo King and Teen Patti appeared at the top of the app store charts

COVID-19 – The tipping point for online gaming in India

India mobile game downloads (in bn)



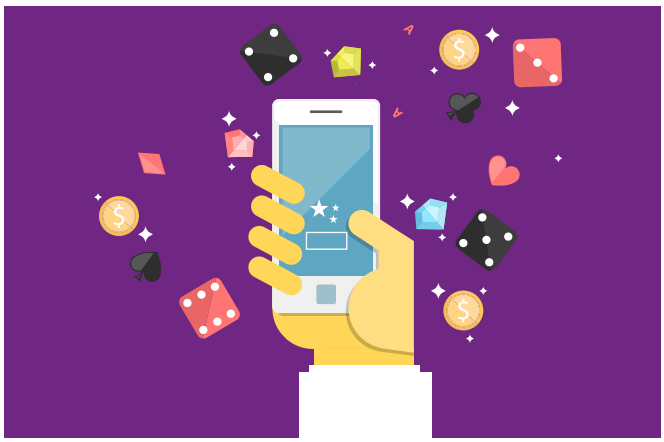
Source: KPMG in India's media and entertainment report, 2020

The pandemic, with all its ongoing tragic consequences, did end up providing a significant bump up to online gaming, both globally and in India, as people across demographics took to gaming in a major way as a form of escapism and entertainment. Some of the key triggers for this acceleration in online gaming were:

1. An overall increase in online and media consumption owing to people staying home during the lockdown and working from home
2. Virtual social interactions replacing the physical interaction time between family and friends. This manifested into a strong interest in multiplayer games with a social element to them
3. An uptake in digital transactions, which coupled with an increase in gaming consumption, resulted in higher monetisation for casual games.

Though there has been some normalisation since the early days of the lockdown during Q1FY21, most of the key metrics are operating at a higher new normal as compared to the pre-pandemic era. However, with the second wave of COVID-19 in India currently being experienced, and further lockdowns announced in many parts of the country, online gaming consumption is likely to see another uptick in this period.

As a result, the online gaming industry is on a significant growth trajectory across both user and monetisation metrics. With the growing digital penetration and sophistication across India, the gaming segment will be a key beneficiary and will likely rival other key traditional forms of media and entertainment in both size and scale.



1. KPMG in India analysis based on industry discussions
2. KPMG in India analysis based on industry discussions

Breaking it down

Overall state of the gaming market in India[3]:

FY21
Users (in mn)

433

FY 21
Revenues (in INR bn)

136

Categorisation of the online gaming market in India:

By device:

- **Mobile/ Tablet**
- **Console**
- **PC/ Laptop**

By game category and genre: Sub-segmentation of the market by the game genre

- **Casual**
  - **Casual/ Hyper-casual**
  - **Classic**
  - **Mid-core**
  - **Hard-core**
- **Real Money Games (RMG: Card/casino games)**
- **Online Fantasy Sports: (OFS)**

By monetisation model:

- **Subscription**
- **Ad revenue**
- **In-app purchases**
- **Commission**

By gamer skill:

- **Casual**
- **Mid-core**
- **Hardcore**
- **Professional**

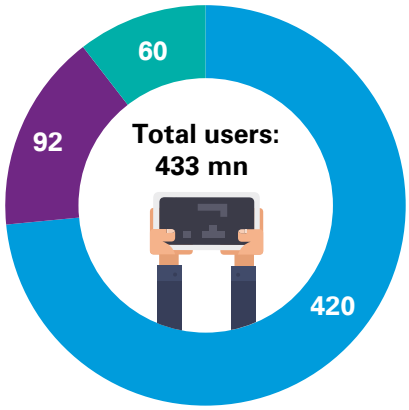
3. KPMG in India analysis based on industry discussions

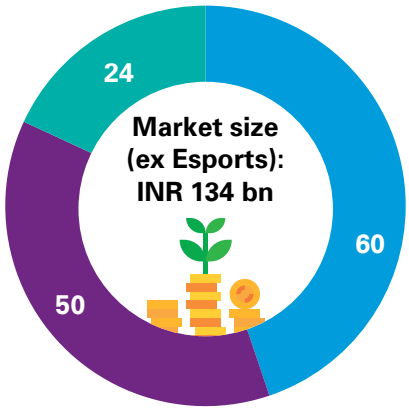
Game category segmentation

Casual games drive user base; but are currently under indexed on monetisation

Casual gming	Real Money Games (RMG)- Card and casual based	Real Money Games (RMG)- Online Fantasy Sports
These games are played across devices and don't involve real money or monetary rewards	Includes any type of game played online in which real money is wagered on the outcome of the game and a monetary prize is received	Players make virtual teams online and get rewards from an overall prize pool based on the points accrued for the particular match/event
Candy Crush, Free Fire, Ludo king, Dota 2, PUBG, FIFA 20, Real Cricket etc.	Rummy, Poker, Multi-gaming platforms like MPL, etc	Daily and season long fantasy sports like Dream11, MyTeam11 and My11Circle

Market statistics FY21





Casual RMG: Card OFS

Source: KPMG in India analysis based on industry discussions and secondary research

There is an overlap in the casual RMG and OFS users which results in the sum of the segment wise users to be greater than the total gamer user base. This happens on account of the same user playing more than a single genre within a year.

Game genre segmentation

Casual

					Examples		
Casual/ Hyper-casual	Action	Arcade	Adventure	Puzzle	Candy Crush Saga	Temple Run	Coin Master
Classic	Casino	Board	Trivia	Word	Teen Patti	Ludo King	Snakes and Ladders
Mid-core	Sports	Multiplayer	Strategy	Racing	Clash of Clans	Sachin Saga	FAU-G
Hard-core	Multiplayer Online Battle Arena (MOBA)	First person shooters	Massively multiplayer online roleplay games (MMORPG)		DOTA 2	Call of Duty	Order and Chaos Online

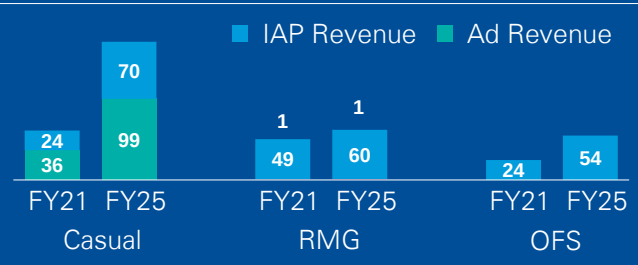
Monetisation model segmentation

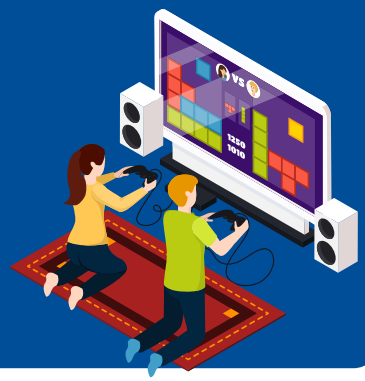
Primarily Ad led; consumer spends including IAPs seeing rapid traction

*Consumer spends include In App Purchases (IAPs), subscriptions and contest entry spends in real money games

Monetisation models		Operating model	Examples
Ad spends	Revenues derived from displaying ads in games in various forms. Revenue received is based on number of impressions, click through rates, or other parameters as defined by the model. This form of revenue generation is predominantly present in casual games. Rewarded/Incentivised ads are seeing increased deployment of late, by developers during in-game play. These advertisements incentivise a gamer to move up a level, gain additional lives; essentially helping the gamer progress in the same; in lieu of watching an advertisement which cannot be usually skipped.	Free-to-play, Freemium	Casual/Hyper-casual games like Join Clash 3D, Real Cricket have part or majority of revenues coming from Ads.
In-app purchases (IAPs)	Revenues which are derived from purchases of virtual goods within a game, upgrading to ad-free models, battle passes, in-game currency, advancing to further levels of the game, power ups, cosmetics etc. are accounted for in the IAPs. They are prevalent in mid core and hard core games and to a certain extent in casual games. At present, these form a low proportion of the total gaming market, but are seeing increased traction	Free-to-play, Freemium, Paid	Classic and mid-core games like Teen Patti, Clash of Clans and Free Fire rely majorly on IAPs
Subscription	This model involves subscribing to games through paying an initial fee which is typically considered for a fixed time period (ranging from 1 year to lifetime access) which gives access to one (whole or part) or multiple games on a platform throughout the subscription period	Freemium, paid	Prevalent in cloud gaming and online adventure and RPG games
Commission income	This model is typically prevalent in the RMG and OFS segments. Users typically pay a fee to take part in a game or contest and receive monetary rewards on winning. These OFS and RMG platforms retain part of the entry fee pool as a commission which is the primary source of their income.	Paid	RMG and OFS platforms like Adda52, PokerDangal, Dream11, My11circle etc.rely on commission-based income

Revenue splits of gaming segments in FY21 and FY25 (in INR bn)





Note: OFS revenue comprises almost entirely of commission income*

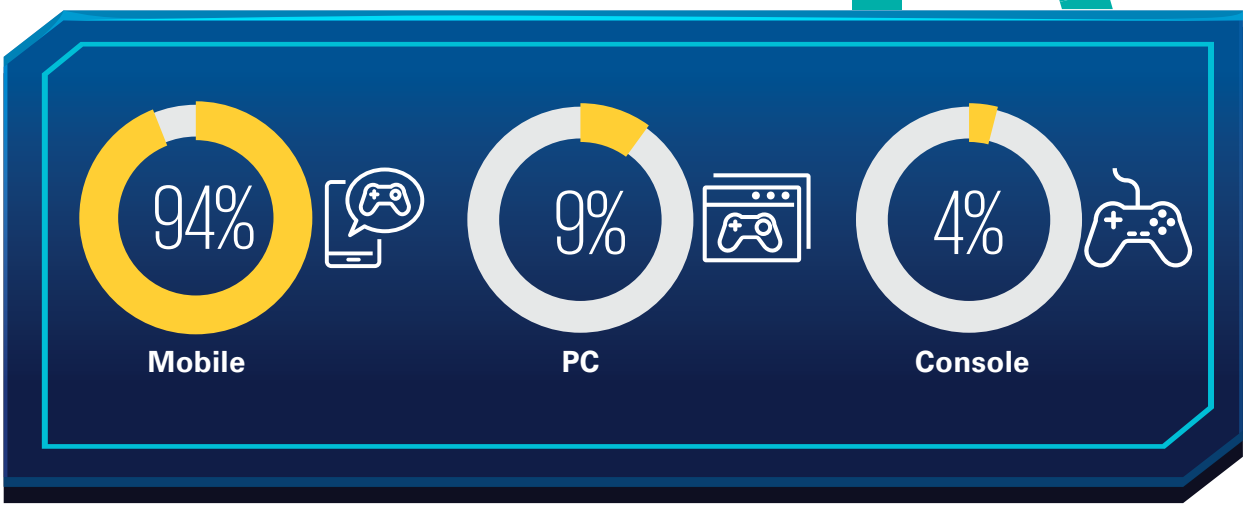
Source: KPMG in India analysis based on industry discussions and secondary research

Device segmentation

Mobile led, leapfrogging the console model

Casual gaming market users by device – FY21

Total users: 420 mn



Source: KPMG in India analysis based on industry discussions and secondary research

Note: This split does have an overlap in users across devices which results in the sum of the segment wise users to be greater than the total gamer user base. This happens on account of the same user playing across more than a single device within a year.

India remains a mobile first gaming market, with mobile phones/smartphones the most preferred device amongst online gamers. This is owing to factors around affordability as compared to console, and the flexibility they offer in terms of the 'anytime, anywhere' usage.

Further, console gaming has a high rate of adoption in the developed gaming nations like USA, Japan, South Korea etc., but remains at a low proportion in India primarily on account of the high entry costs of both the hardware as well as the titles.

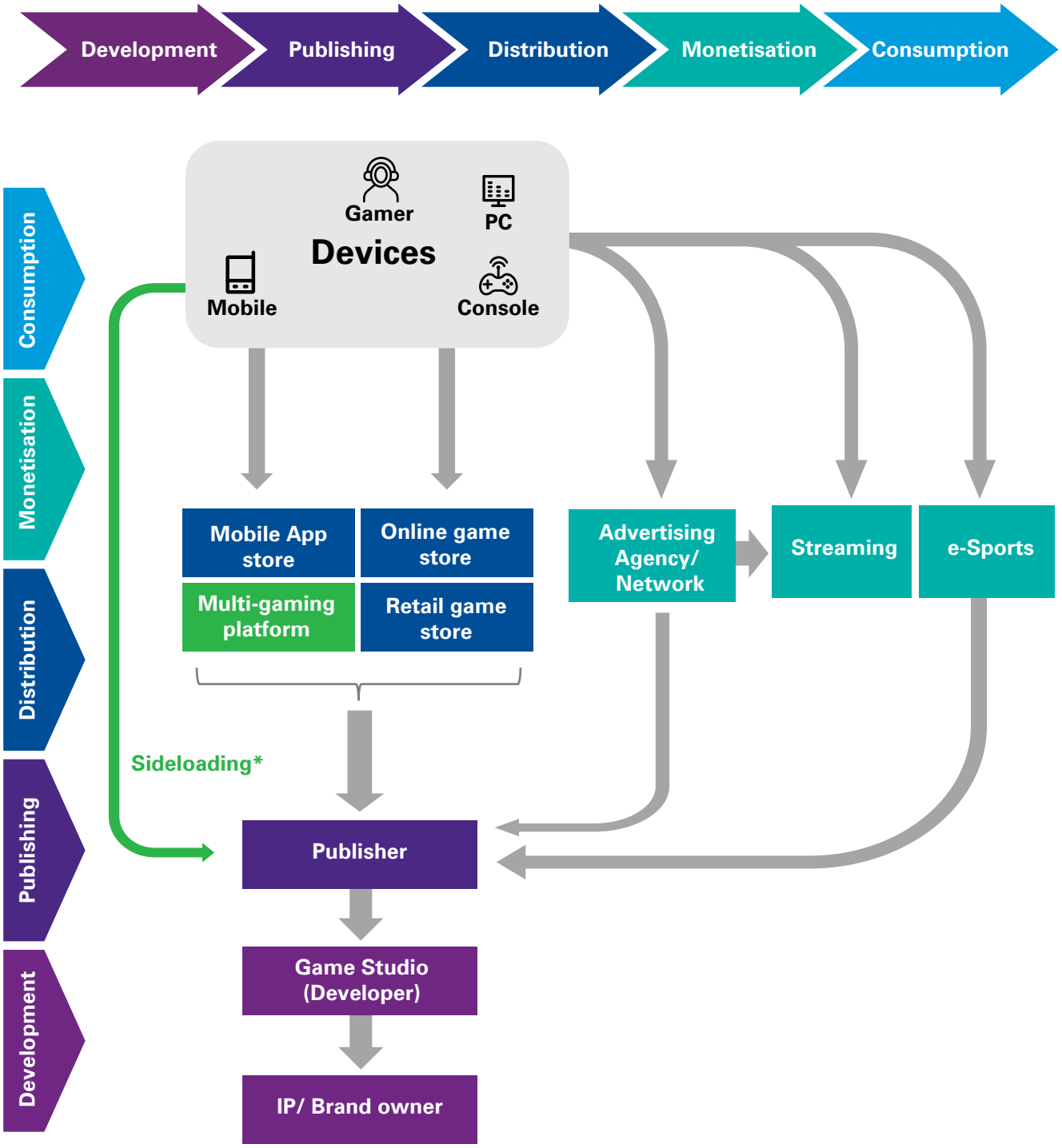
Gamer segmentation

Currently driven by casual gamers; midcore gamers growing as users mature

Type of gamer	Description
Casual	Players who enjoy video games designed for ease of gameplay without devoting significant time to it, playing it spontaneously and irregularly
Mid core	Players with a wider range of interest than casual gamers but would not dedicate as much time as a hard-core gamer towards learning and competing
Hard core	Players who spend considerable time and effort, typically in complex games, with a highly competitive spirit and are willing to spend extensively
Professional	A full-time competitive player who plays games for a salary or prize money. These gamers are normally paid by their team organisations or sponsors. Due to a large fan following, online live streaming is also a lucrative option for most professional players to earn money.

Online casual gaming value chain: The what's what and the who's who

Online casual gaming value chain[1]



**Sideloading is the process of downloading apps on a mobile device from places other than app stores*

Note: *Sideloading and multi-gaming platforms are elements that typically cater to RMG and Fantasy Sports apps*

1. KPMG in India analysis based on industry interactions & secondary research

Stakeholder	Description
IP/Brand Owner	They own the brand or IP for which a game is being developed and receive licensing fee generally as a share of the revenue
Developer/ Game Studio	The game studios comprise of a team of developers and designers responsible for designing, developing and testing the game. They also undertake ***live ops*** to ensure smooth running of the game by releasing regular updates and fixes to the game. **Examples:** Gametion Technologies, Nazara Technologies, Octro Gaming, Jet Synthesis
Publisher	A publisher essentially takes the game to the intended by target group (TG) by using an established channel of distributors and marketing activities planned around the game. An experienced publisher would also have developers on board to partner with developers in terms of suggesting tweaks to the game and ensure that the gameplay is in line with the market needs. Developers in India are usually self-publishing games as the app stores have democratised distribution of games. **Examples:** Gametion Technologies, Nazara Technologies, Octro Gaming, Jet Synthesis
Distributor	Distributors offer the games through their platforms, for use by the end gamer. Majority of the online casual games are distributed through the two largest app stores For PC and console games, in addition to console specific stores, there other options such as Steam Store, Epic Games Store etc. Sideloading or direct downloading of games is also popular in India. This enables a developer to directly access the customer, thus saving on revenue share to the app stores, but requires significantly higher customer acquisition costs **Examples:** App stores of the major mobile operating systems, Epic Games Store, Aptoide Store, Telco platforms, E-commerce platforms, OTT platforms
Advertising agency/ networks	Enable serving of advertisements through their advertisement networks. While the mobile game is being played, it sends ad requests directly to these ad networks or through ad mediation platforms (aggregator for ad networks) which plugs in advertisements in predefined places within the game based on a minimum set cost per mille (CPM) and the publisher receives revenue for displaying these advertisements **Examples**: Google AdMob, Facebook Audience Network, Inmobi, Ironsource

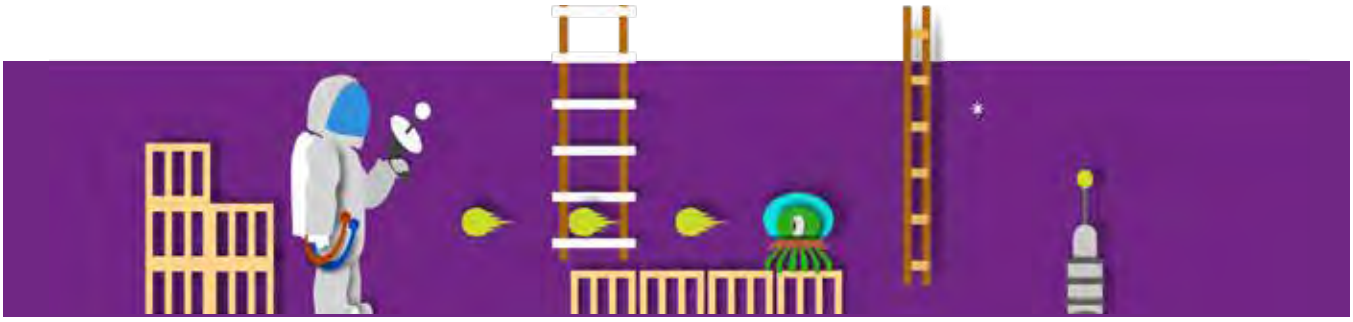
Global view

The key difference between Global and Indian publishers is around the integrated presence that global publishers have been able to build across the value chain. Some of the leading publishers such as Tencent, Microsoft, Epic; have been able to build a strong presence across the development, publishing and distribution.

Part of this is owing to the large scale that global publishers have been able to achieve as a result of the maturity in terms of monetisation in global markets.

Other key enablers in the gaming value chain

We outline below some of the key enablers in the gaming value chain, which play an important role in aspects like consumer awareness, marketing of the game, greater choice to the gamer in terms of the product and making distribution democratised to the Indian gamer.



Esports organisers

They organise and manage esports tournaments for professional teams in unison with global Esports organisers, publishers, esports teams and professionals, sponsors, streaming companies, etc.

Esports acts as one of the important tools to take casual games (especially mid-core and hardcore titles) to the gamers, helping publishers popularise the game amongst the elite gamers, which can have knock on effects on consumption and monetisation by the general casual gamer. Some of the examples of esports companies in India include Nodwin gaming, U Sports, Paytm First games, WinZo, AFK Gaming (content)

Streaming platforms

These platforms enable live streaming of gameplay by individuals (known as streamers) as well as streaming of professional esports tournaments. Streaming helps in the growth of the gaming ecosystem by bringing in viewers and potential gamers who are also motivated to stream or try new games. These streamers earn revenue through donations, subscriptions, ad revenues, sponsorships, etc.

Multi-gaming platforms – A unique distribution/ publishing ecosystem

Multi gaming platforms have gained significant traction in the last two years in India and are uniquely aligned to the monetisation opportunities in India. These platforms offer various card, casual/ hypercasual and mid-core games, either self-developed or developed by 3rd party developers, in a free to play or RMG/ eSport formats.

What makes these platforms unique is that the standard casual/hypercasual games are offered in a format which allows players to compete against each other for real and non-real money rewards, thus bringing in a social layer to the gaming experience.

Multiplayer gaming platforms also provide a viable platform for alternate distribution of games by third party developers, and are in a way, emerging as major publishers on their own.

Some of these platforms include MPL, Paytm First Games, WinZo etc.

The Indian casual gaming landscape

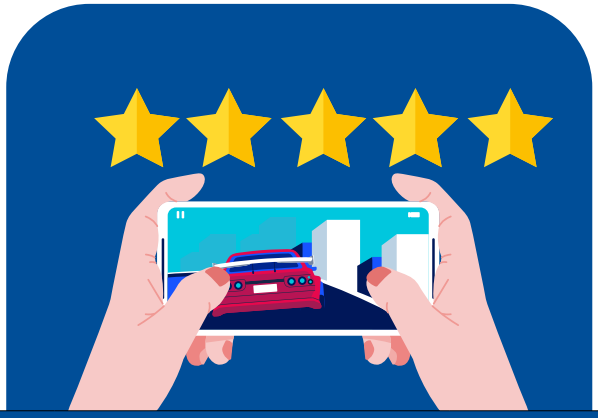
The Indian gaming market has evolved from people hooked onto coin-based arcade games such as 'Tekken' in gaming parlors, moving onto the handheld consoles such as Nintendo and the subsequent launch of consoles such as PlayStation and Xbox's of the world, to the internet revolution that we saw in late 2016, which has led to online mobile gaming come to the fore.

Gaming was essentially regarded as and referred to as 'Video Games', before even the turn of the century, being seen as somewhat of a vice, rather than a source of entertainment, as it has become now. Hand operated Arcade machines helped bring popular titles to India and consoles, which were being used by gamers on a per hour fee basis, helped popularise video games in India. With the availability of PC based internet gaming; and increasing popularity of consoles in late 2000s and early 2010s, the market began to recognise casual gaming in a serious way with multiple titles available to users, irrespective of boundaries.

The 4G revolution in 2016 and the subsequent push on both the digital infrastructure and smartphone hardware side, has helped bring online mobile gaming as a proper means of online entertainment, bringing demographics which weren't originally associated with gaming (i.e. 30+ year olds and women population), into the fold. With robust distribution through app stores and growing focus of Indian developers to provide high quality content, casual gaming has matured significantly from the 'Tekken' days (albeit still not at the global maturity levels), and is set to grow manifold in the years to come.

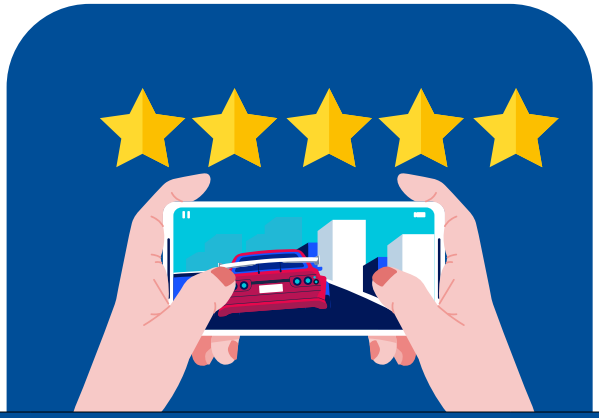
Genres	Top games	Major Indian games
Casual	Coin Master, Candy Crush Saga	Tambola
Board	Ludo King, Carrom Pool	Ludo King, Ludo Club
Multiplayer	Free Fire, PUBG	FAU-G, Indian Air Force
Sports	8 Ball Pool, eFootball PES 2020	Real Cricket 18, World Cricket Championship 2, Sachin Saga
Casino	Teen Patti, Teen Patti Gold	Teen Patti, Teen Patti Gold

Source: KPMG in India analysis from secondary research



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	Ivy	U.S.



Top 10 grossing games (Google Play Store) – April 2021

Rank	Game	Publisher	Country
1	Garena Free Fire	Garena International	Singapore
2	Ludo King	Gametion Technologies	India
3	Clash of Clans	Supercell	Finland
4	Call of Duty: Mobile	Activision Publishing	U.S.
5	Lords Mobile: Kingdom Wars	IGG.COM	U.S.
6	Teen Patti by Octro	Octro, Inc.	India
7	Coin Master	Moon Active	Israel
8	Candy Crush Saga	King	Sweden
9	eFootball PES 2021	Konami	Japan
10	Gardenscapes	Playrix	Ireland

Source: Google Play Store, accessed in April 2021

Over the last 4-5 years, Indian studios have significantly evolved in terms of operations and have expanded their user reach by entering new genres. Several top Indian studios have also shown success in key genres like board, action and RPG, gaining top spots in terms of user base and downloads on the Google Play Store.

Top Indian gaming studios

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

Source: KPMG in India analysis based on industry discussions and secondary research

Emerging players in niche segments

nCore Games is a mobile games and interactive entertainment company that launched India's first battle royale game, FAU-G, touted as PUBG's replacement in India. FAUG was launched in January 2021 and has a free to play model with IAPs for customisation of player avatars with skins etc[2]. Founded in 2018, nCore primarily works on mid-core and multiplayer games[3].

MindYourLogic Studios majorly develops animated word and puzzle games in regional languages like Hindi, Marathi, Malayalam etc. Their games revolve around stories on characters like detective Mehul, Jagga etc. and adds logic and puzzle solving to them. Jigsaw Doors and Paheli time are their most popular games and the studio has seen more than 2.5 million downloads from its games.

Glance by Inmobi is a lockscreen app which offers fashion, news, sports, games etc. on the lock-screen of a mobile phone. It launched the online gaming feature in 2019 wherein 100+ hyper-casual games are embedded on the mobile lock-screen on a rotation basis for the users to play. The app is pre-installed and is currently available on Samsung and Mi phones. The app reportedly witnessed more than 100 million DAUs on the platform in the first 21 months of its launch[4].

2. FAU-G 'Made in India' Gaming App is Available Now, NDTV, Jan 2021
3. MindYourLogic Studios Linkedin page
4. 'inmobis glance tops 100 million daily active users in 21 months', Techcrunch

Market metrics: David becoming Goliath

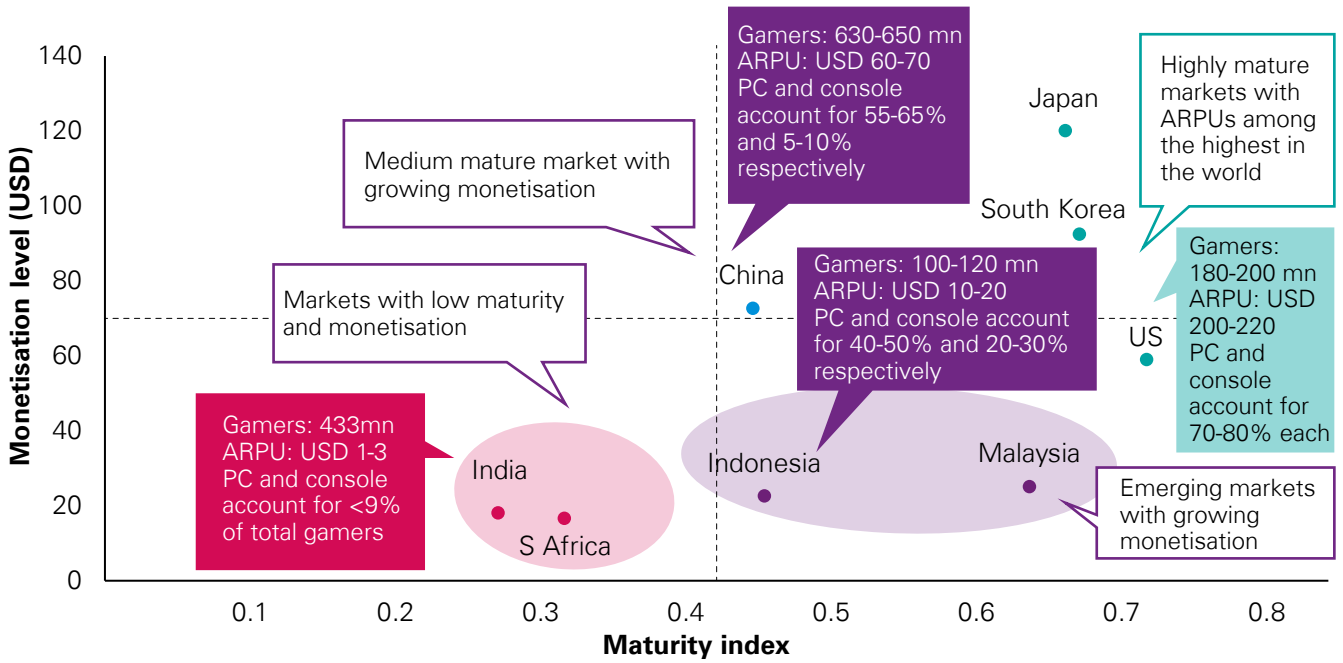
Emerging market with unique features and huge potential

As compared to global markets, online gaming in India is young and at a nascent stage but is among the fastest growing gaming markets in the world. India, while having the world's second highest number of gamers[1], is significantly under indexed on monetisation with lower ARPUs as compared to even the developing, comparable gaming markets such as Indonesia, Malaysia and South Africa etc.[2]

Some of the reasons for this under-indexation of India in terms of ARPU are as below:

1. Relatively lower maturity of casual gaming as a segment with the recency of the digital revolution and low PC and Console penetration
2. Significantly lower GDP per capita of India as compared to mature gaming markets
3. Lack of purchase price parity for game pricing (India vs. developed markets) by major studios
4. Historical negative perception of gaming in India
5. Absence of overt government support historically to the gaming ecosystem

Maturity Index vs. monetisation levels of gamers



Note: India figures for FY21 and other country figures for December 2020*

Note: Monetisation level of the gamer in the country is ARPU adjusted for GDP per capita on PPP basis; Maturity index of the gamers is calculated using gaming user penetration among population and proportion of gamers across devices – PC, console & mobile- with PC & console gamers considered to be more sophisticated

Source: KPMG in India analysis, based on secondary research around ARPU. GDP per capita and gaming penetration

With India's movement up this maturity curve, the monetisation and as a result, ARPUs are likely to increase significantly on the back of increased user penetration with young gamers adopting gaming, rising disposable incomes, increased propensity to spend on gaming as a form of entertainment and higher time spent on gaming.

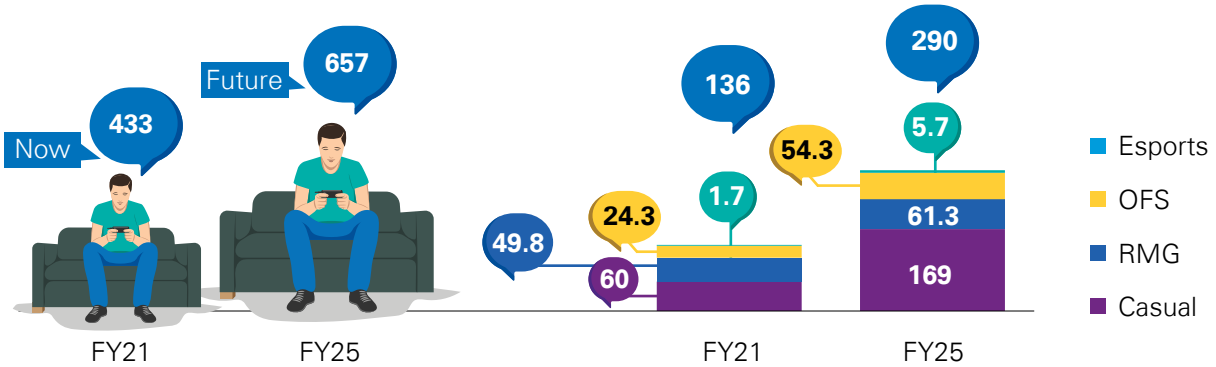
1. KPMG in India analysis based on industry discussions and secondary research
2. KPMG in India analysis based on industry discussions and secondary research

Online casual gaming market potential - 3..2..1..blast off!

Of the total online gaming market size of INR 136 billion at the end of FY21, the casual gaming segment is the most significant one and currently accounts for INR 60 billion, i.e. ~44 per cent of the total online gaming revenues. Given that in terms of users, the casual gaming segment, at ~420 mn gamers in FY21 accounted for ~97 per cent of the total gamers in India, this revenue contribution is currently underindexed.

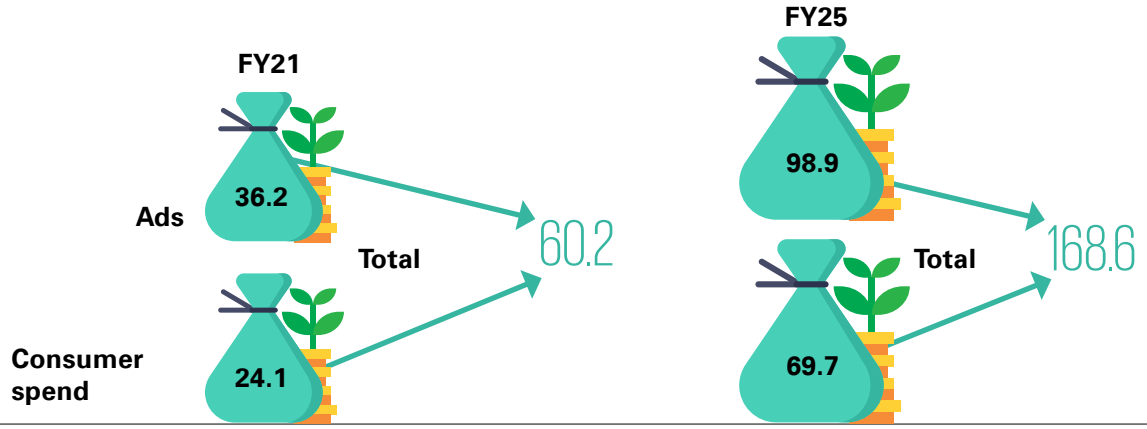
This under-indexation is likely to correct to an extent in the future, with online casual gaming projected to grow at a CAGR of ~29 per cent over the next 4 years to reach revenues of INR 169 billion by FY25 and account for ~58 per cent of the market revenues.[4]

Indian gaming user base and market size (FY21 and FY25)



Source: KPMG in India analysis based on industry discussions and secondary research

Online casual gaming market size (INR bn)



Source: KPMG in India analysis based on industry discussions and secondary research

Monetisation measure of online casual gaming (INR)

Source: KPMG in India analysis based on industry discussions and secondary research

3. KPMG in India analysis, 2021, based on primary and secondary research

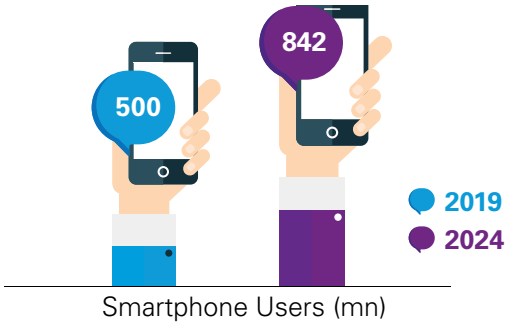
4. KPMG in India analysis based on industry discussions and secondary research

Key growth drivers and levers

A. Macro factors

Increasing penetration of smartphones

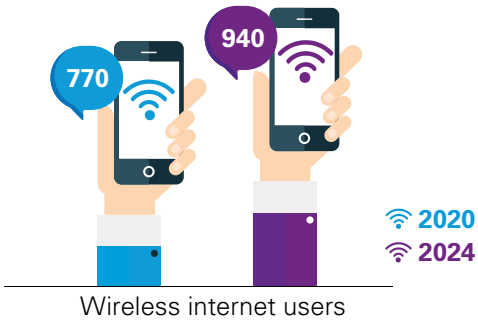
Feature rich smartphones and the focus of developers and publishers on pushing downloads of apps is likely to help drive consumption of gaming.



Source: Cisco, KPMG in India analysis

Growing Internet penetration

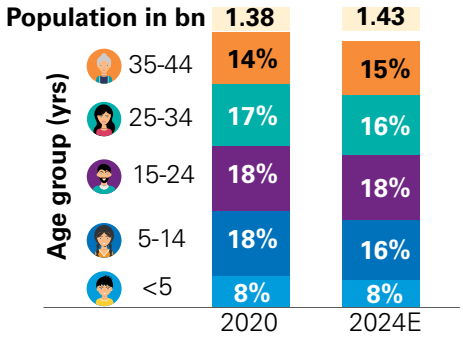
India is a data-rich market with cheaper mobile data as compared to global averages. India being a mobile first gaming market, is expected to benefit immensely from this growing internet penetration.



Source: TRAI performance indicator report December 2020

Young population

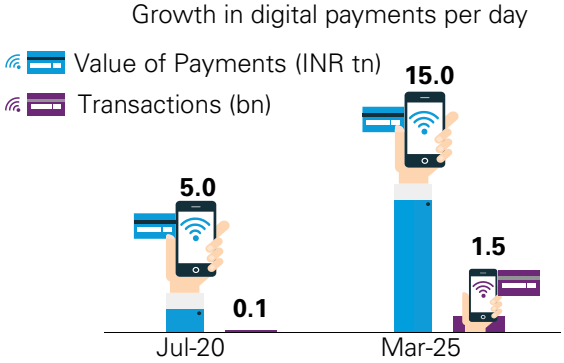
Gaming has a higher adoption amongst the younger population in India with the 18-30 age group highly engaged users of gaming[5].



Source: KPMG in India analysis based on industry discussions and secondary research

Adoption of digital payment methods

Increase in penetration of digital payments instruments driven by demonetisation and the COVID-19 induced lockdown has reduced the friction for digital purchases in-game and has contributed to the rapid growth in online payments on gaming portals. Digital payments are expected to increase at a rapid pace over the coming years on account of the increasing rate of adoption witnessed.



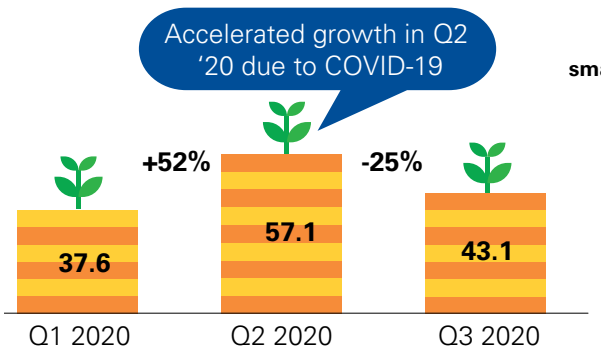
Source: "Digital transactions could reach Rs 15 trillion a day by 2025: RBI", Business Standard, July, 2020

5. KPMG in India analysis, 2021

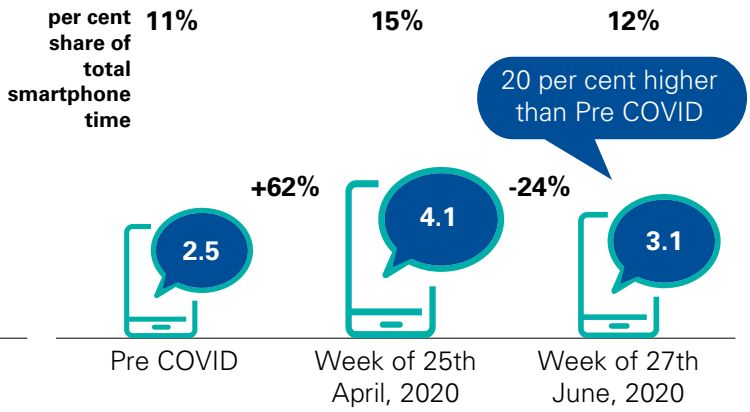
B. COVID-19 pandemic impact

- The COVID-19 lockdowns resulted in people being confined to their homes and with limited entertainment options. People across demographics and social strata have begun adopting gaming as a means of entertainment and socialising.
- Virtual social interactions replaced the physical interaction time between family and friends, manifesting into a strong interest in multiplayer games with a social element to them.
- Metrics like weekly time spent on gaming and the revenue from games settled at a higher average than the pre-COVID levels, indicating that the growth due to COVID-19 was here to stay.
- Further, the lockdowns due to the second wave in CY2021, are expected to further result in a growth in consumption of online gaming.

India mobile games revenue (IAPs, USD mn)



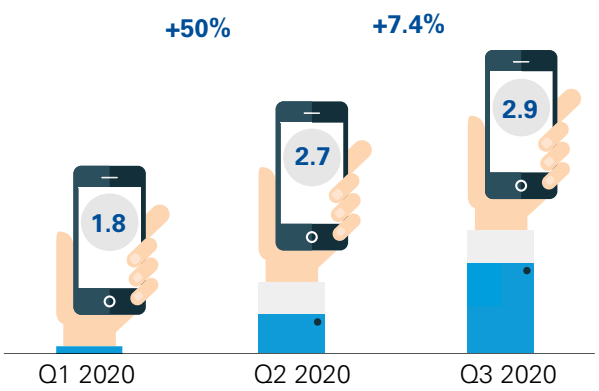
Weekly time spent on mobile games (in hours)



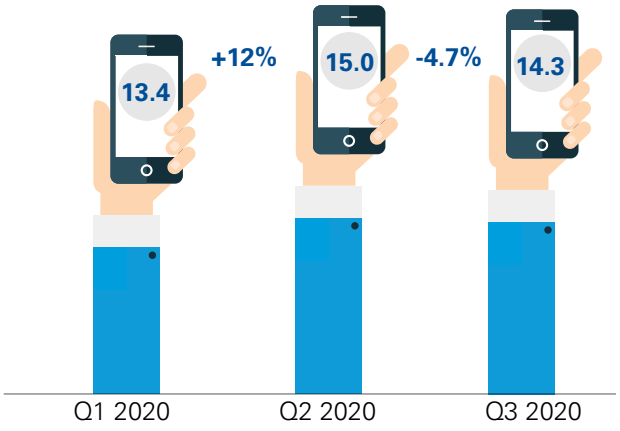
Source: KPMG in India analysis based on industry discussions and secondary research

- India had the highest game downloads in the casual mobile gaming segment in the world (excluding China) in 2020 with Q1-Q32020 downloads standing at 7.3 billion accounting for 17 per cent of the global mobile game downloads (approximately 43 billion, excluding China) during the same period.[6]

India mobile game downloads (in bn)



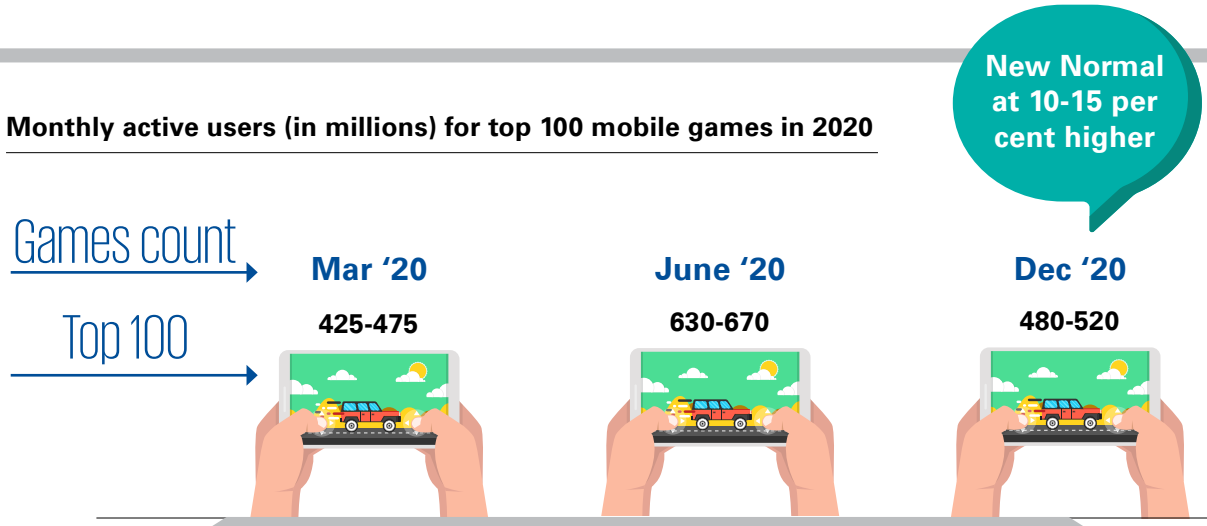
Global mobile game downloads (in bn)



Source: "India mobile game downloads accounted for 17 % of global total", Business of Apps, November 2020

6. Business of apps and Sensor Tower data, accessed in January 2021

Monthly active users (in millions) for top 100 mobile games in 2020



Source: Based on industry discussions

- The MAUs eventually reduced post lockdown but tapered off at a higher average than pre-COVID times indicating that the increased adoption of gaming witnessed was not just during the lockdown and the industry is growing at a faster pace now.
- Another factor that helped sustain this growth is the introduction of social elements in gaming like adding friends, texting and voice calling features etc. in multiplayer games which allowed players to communicate with each other establishing gaming as a social activity.

The second wave of the COVID-19 pandemic, which is currently being experienced in India, has resulted in full or partial lockdowns across the country. It is envisaged that the online gaming uptake is likely to be robust during this phase, providing a potential upside to our consumption and monetisation estimates.

C. Development of the Gaming ecosystem – Demand side factors

01

Gaming has become mainstream

Online gaming has gained increasing acceptance in India with a growth in number of players reaching a tipping point. In addition to metros and tier 1 cities, penetration beyond tier 2 cities ha also started gradually taking place. Further, there are an increasing number of women gamers and the social stigma and resistance to online gaming, specifically casual gaming, is gradually fading away.

02

Growing digital and gaming sophistication

There is a growing digital sophistication among Indians, with a higher awareness of online modes of payment, forms of entertainment like OTT, etc., which has led to a shift towards online gaming

03

Recognition for esports as a standalone sub-segment

E-sports has been a growing and emerging sub-segment in the country with close to 10-15 mn E-sports viewers in India in FY20 and projected to grow to 130+ mn viewers by FY25[7]. It has also been officially recognised by the Indian Olympic Association by establishing the Esports Federation of India as the leading governing body of Esports in the country[8].

7. KPMG in India analysis based on industry discussions
8. KPMG in India analysis based on secondary research

D. Development of the Gaming ecosystem – Supply side factors

01

New trends driven by popular games

Games like PUBG and Ludo King have helped transform the gaming segment in India. PUBG pioneered the rise of multiplayer mobile gaming in India which was earlier considered as a very data intensive activity. It also strengthened the esports and streaming ecosystem in the country. Ludo King, on the other hand attracted new demography of players (45 years and older) that had been relatively lower in India and turned gaming into mainstream entertainment and a social media alternative.

02

Increase in supply of game developers and titles

There has been an increase in the number of online game developers specifically in the casual mobile gaming segment in India owing to the increasing significance of the segment. The number of game titles across various genres have also increased over the last few years, leading to a wide spectrum of games being available to gamers.

03

Increasing games with localised content

Most of the popular games in India like Teen Patti by Octro, Ludo King by Gametion and others provide options to play games in local languages like Hindi, Gujarati, Marathi etc., thus attempting to target a large local audience

04

Initiatives to increase gamer engagement

Online gaming companies have started to incorporate various social elements such multiplayer modes, chat functionality, leaderboards, etc., specifically after the COVID-19 pandemic to increase gamer engagement.

05

Growth in investments

Various global investment firms have made significant investments in Indian game sector over the past 2-3 years, helping gaming companies achieve operating scale.

USD 544 mn

Gaming sector investment in India during the August 2020-January 2021 period[9].

9. Gaming sector in India attracted investments worth $544 million during Aug 2020-Jan 2021: Report", Deccan Herald, March2021

Key challenges faced by the online gaming segment

- **Low average revenue per paying user (ARPPU):** Spending on virtual purchases in casual games is considerably low in India (~USD 5-10 in FY21) as compared to the global average (~USD 130-140 in 2020). However, with the increasing maturity of the segment and acceptance of gaming as a mode of entertainment, there is likely to be an increase in the user spends going forward.[10]
- **Lack of scale for Indian studios:** Not many Indian studios have made a mark on the global stage due to the relative nascency of Indian market, low consumer spends on games, relatively lower game design capabilities and a comparative lack of overt support from the government. Substantiating this aspect is the fact that Ludo King, developed by Gametion Technologies, is the only Indian game in the top 10 downloaded mobile games in India.[11] However, there has been a rise in the investments in this sector over the last year driven by the COVID-19 pandemic, which is likely to see many Indian studios scaling up and catering to the global market.

10. KPMG in India analysis based on primary and secondary sources
11. 42matters, Accessed in April 2021

Cashing in the currency: Upping advertisement monetisation

Advertising dominance is unique to India

India is a unique market where monetisation for gaming is largely on the back of advertising, particularly in the casual gaming segment. In FY21, advertising revenues in the casual gaming segment aggregated INR 36 bn (~60 per cent of casual gaming revenues) and is expected to grow at a CAGR of ~29 per cent to ~INR 99 bn by FY25.[1] The current dominance of advertising driven model in casual gaming in India is on the back of advertisers increasingly targeting online gamers and a relatively low proportion of paying users.

The casual gaming advertising value chain

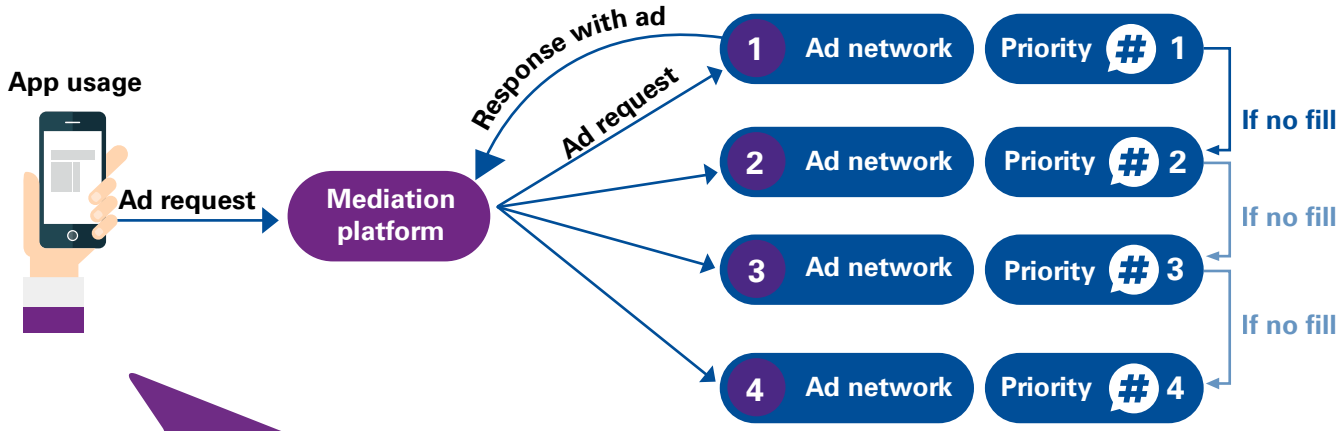
Figure 1.1 Gaming advertising value chain and key players in each segment

Stakeholder	Description	Examples
Game publishing companies	Publishers are gaming companies that create advertising inventory by providing a platform to serve advertisements on their web sites or mobile apps. For example, JetSyntheses, Games2Win create ad inventory that gets sold to advertisers and agencies.	Jet Syntheses, Games2Win
Supply Side Platforms (SSP)	These are ad exchanges that represent publishers and help them sell their inventory. They set prices through bidding system and aim to maximise publisher earnings.	Rubicon, OpenX
Demand side platforms	They represent buyers (marketers) and help them in making efficient purchasing decisions.	Turn, Google Adwords
Ad networks	An Ad network purchases ad space/ad inventories from publishers or SSPs and aggregates these ad space/ad inventories for onward sale to advertisers. Small publishers are usually unable to sell their inventory due to the lack of an internal sales team while large publishers are unable to get appropriate value for their inventories. Thus, Ad networks provide a platform to these publishers for selling their inventories optimally. Example – Google AdSense, unity Ads etc.	Ironsource, Google Adsense
Ad agencies	Ad Agency buys ad inventories on behalf of their client i.e brands or advertisers. They plan media strategy on their behalf that will provide maximum value.	Omnicon, WPP
Advertisers	Advertisers sell their advertisement to publishers and ad networks, they put advertisements for brand marketing (raising general awareness) and direct response marketing. They are motivated by getting the best ROI on their ad investment.	CocaCola, Toyota

1. KPMG in India analysis based on industry discussions and secondary research

Ad Buying models in the casual gaming space

Waterfall model:



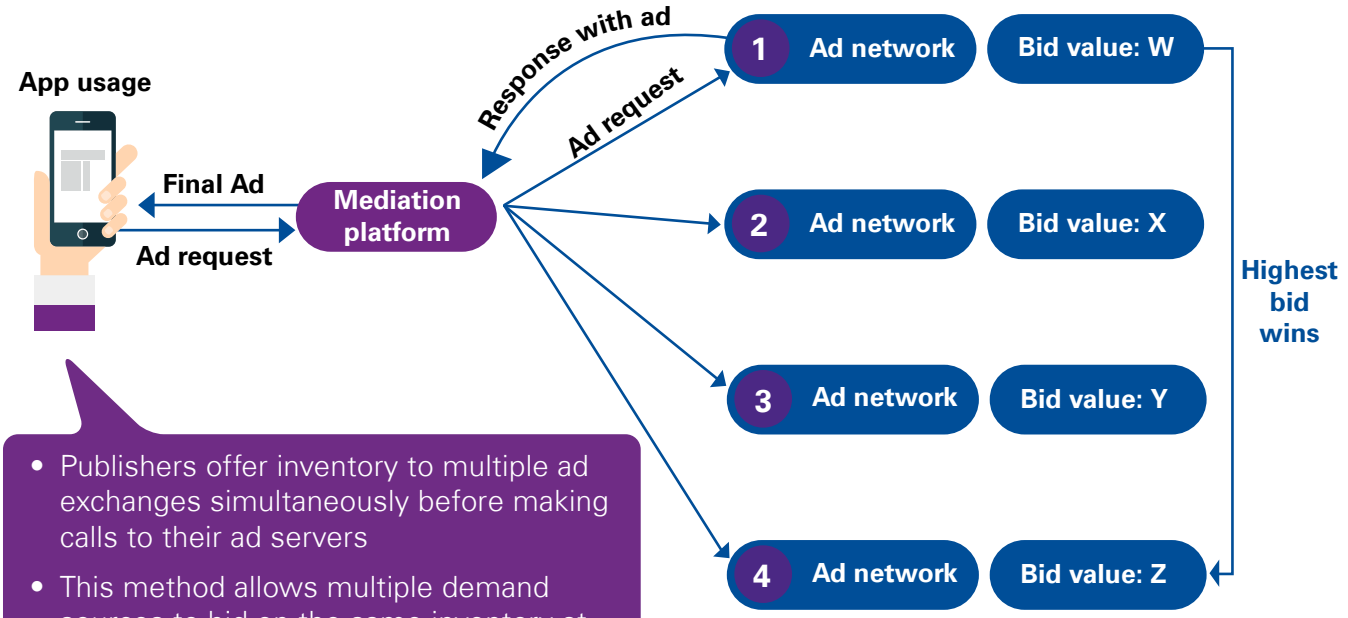
The app triggers an ad request which goes through a mediation platform

- A mediation platform is an aggregator where various ad networks are plugged in

The game defines the ad units (interstitial, rewarded, banner) which need to be plugged in at various spots in the game

- A waterfall (priority order of traffic to ad networks) is then set
- Once the floor value (minimum eCPM of filled ads) is met, the ad is filled

Bidding model:



- Publishers offer inventory to multiple ad exchanges simultaneously before making calls to their ad servers
- This method allows multiple demand sources to bid on the same inventory at the same time, and letting publishers increase their yield and generate higher revenues

At present, most mediation networks use a weighted waterfall model in which each ad network is assigned weight based on the performance of the network.

Types of ads served

Major types of advertisements in games and preferences				
Banner	**Native**	**Interstitial**	**Playable**	**Rewarded**
Placed at the top or bottom of the screen	Built into the game environment	Occupies the entire screen	Offers a real gameplay with a link to download	Gives players items for performing an action

In online gaming, following are the various types of advertisements that are prevalent:

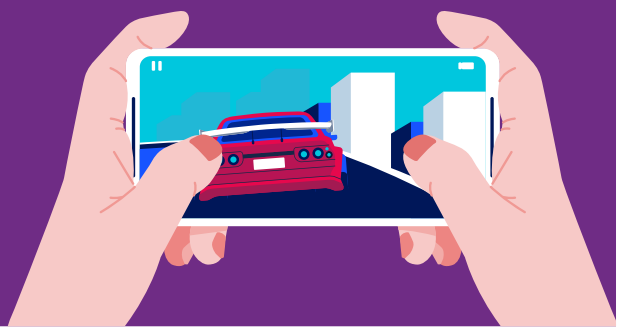
Banner: These types of ads are one of the popular forms of advertising in the form of images encapsulated on the screen that showcase a product or brand. The purpose of such type of advertising is to attract users to visit the advertiser's website. Such type of ads are believed to be economical, quantifiable, and effective in increasing the brand awareness.

Banner ads are preferred as they do not intrude in the game play. However, such ads have relatively lesser user engagement and recall value to users as compared with video ads. Thus, over the years such ads have lost their sheen to video ads.

Native: These types of ads are a paid form of advertising where the ad complements the form, appearance, and function of the user experience on which it appears. Native Ad formats include advertorial, instant content, sponsored listings, recommended content, search advertising etc.

Interstitial: These ads are interactive, full-screen ads that appear while the user is playing games, acting as a transition points or breaks in an ongoing activity. These ads can be in the form of text, video, image etc.

Playable: These types of ads engage the user to play a demo version of the game which is followed by a call to action for downloading the game. Playable interactive ads require higher attention span of the gamer thus, provide best engagement of the users



What are rewarded ads?

Rewarded advertisements provide an opportunity for users to watch a video or engage with a playable ad in exchange for a reward within the app. For example, mobile game players will eventually 'die' or get stuck upon reaching a critical point. As the users would ideally want to continue playing instead of starting over from the beginning; they might potentially be comfortable watching an ad for a reward or continuing the game from the same position. In each rewarded ad "funnel," there are four main events that can occur:

- Ad prompt, where the user is presented with the option to view an ad in exchange for a reward.
- Opt-in, when the user opts-in to watch the ad.
- Ad reward, whereby the user completes viewing the ad, and receives a reward such as an extra 'life' or power-up.
- Item used, once the user consumes the reward and is able to continue playing the game from where he or she left off.

As the users would like to keep playing, they'll often convert throughout the whole funnel.

High clickthrough rates and balance between monetisation and retention

These types of advertisements are most popular among mobile gamers as it enables them to control when and where they want to watch the ad. Given the quid pro quo model of rewarded ad format, it draws the gamers' attention as watching the ad takes them to next level of the game or provides them with virtual goods/ coins. These ads have a higher click through rate as compared to the other form of display ads such as text, image, etc.

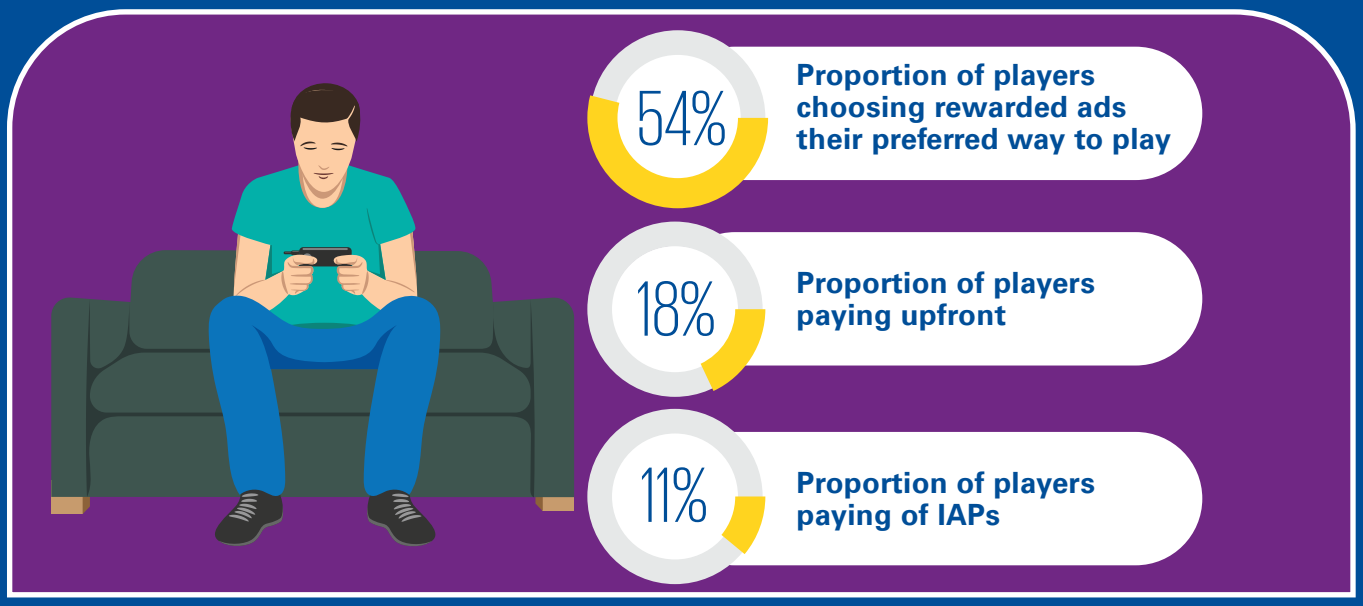
Further, publishers are moving towards structures that provide balance between monetisation and retention of users. Typically, rewarded ad formats tend to strike an optimum balance between monetisation and user retention followed by interstitial and playable ads. For instance, Gogii Games - a casual game publisher - has not only experienced positive impact on revenue and rise in the time spent by users due to rewarded ads but requests from users to add rewarded ads to more games as players relished the opportunity to earn more in-game currency[1].

Video based rewarded ads seeing traction

Both, image-based and video ads continue to monetise a huge number of games, however, with the rise of video and platforms that support it, static image ads today hold a less significant position in the evolution of mobile games and their monetisation.

1. Gogii Games Reveals How to Monetize with LTV in Mind, Facebook, September 2019, accessed on May 10, 2021

The gamer's perspective on rewarded advertisements



As per a recent global survey by Unity Ads 54 per cent of the players specifically choose rewarded ads as their preferred way to 'pay' for games, whereas 'paying up front' and IAPs account for 18 per cent and 11 per cent respectively[2].

The ads allow publishers to pursue a more balanced business model, diversify revenue sources and dial down the practice of targeting the high spending users (roughly 2 per cent of players, also known as whales[3]) who account for the lion's share of in-app purchases. Rather than hunt for whales, publishers can double-down on models like rewarded advertising that offer greater value to a wider pool of players.

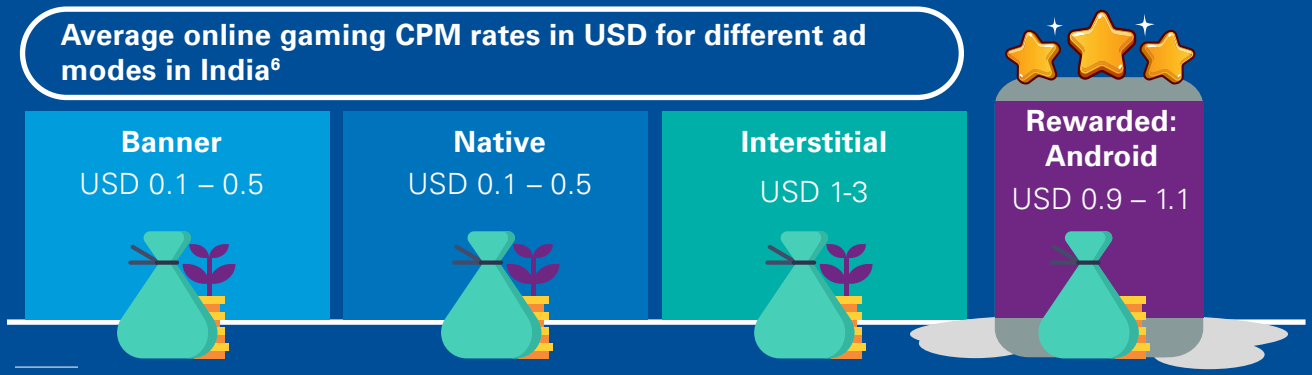
Furthermore, rewarded ads are most effective in games that also offer IAPs as the gameplay and design of the game places a high importance on the in-game goods which can be purchased or received through rewards increasing the synergy when IAPs and rewarded ads co-exist. Unity Ads substantiates this fact by claiming that 86 per cent[4] of the developers integrating rewarded ads into a game with existing IAP saw in-app purchasing remain unaffected.

Some key advantages and aspects about rewarded ad videos as per statistics by Ironsource, a global ad mediation network[5] are as below

- Increases app revenue by 20 per cent to 40 per cent
- Users who watch rewarded video ads are 6x more likely to make IAPs
- The average rewarded video eCPM (globally) varies between $10 to $50 (highest eCPM in mobile video ads)

According to Unity Ads, when introducing rewarded video ads, less than 1-in-10 developers saw retention drop and 62 per cent saw retention climb or stabilise.

Average online gaming CPM rates in USD for different ad modes in India[6]

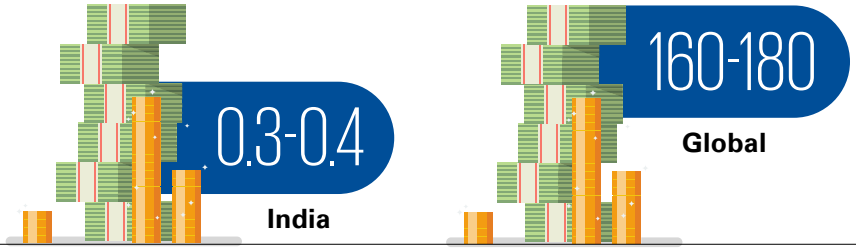


2. 'In-game advertising the right way', Unity Ads
3. Rewarded advertising diversifies revenue and motivates mobile gamers during pandemic gaming boom', Forbes, Sep 2020
4. In-game advertising the right way', Unity Ads
5. IronSource, Rewarded ads monetisation, accessed on May 23, 2021
6. KPMG in India analysis based on primary and secondary research

Consumer and monetisation: Consumers and the colour of money

A majority of the mature gaming markets across the world started with PC & console gaming which inherently deploy the 'buy to play' monetisation model, helping foster an acceptance for the concept of paying for online gaming through purchase or IAPs. However, India being a mobile first gaming market, has seen the primary deployment of the 'free to play model' which has led to a relatively low penetration of paid models in casual gaming till now.

Casual gaming consumer spends (in USD bn)



Note: Global figures for December 2020 and India figures for FY21*

Source: KPMG in India analysis based on secondary research

Some of the key reasons for low IAP in India as compared to the global average are lower GDP per capita as compared to mature markets, aversion of gamers to pay for online gaming and the abundance of free-to-play games.

However, strong trends of monetisation via IAPs at scale are starting to emerge in the Indian market.

In FY21 the total IAP revenue for online casual gaming was ~INR 24 bn which accounted for ~40 per cent of the total revenues of online casual gaming segment and is expected to increase to ~INR 70 bn in FY25 at a CAGR of ~30 per cent on the back of increasing number of mid-core titles released on mobile and game developers investing in providing an immersive gaming experience on mid-core games which is likely to attract a higher number of gamers.[1]

To build successful paid models, the inherent motivations for paying need to be well understood. These motivations typically fall under the following categories

To achieve milestones/ progress in a game

Users spend on IAPs to unlock milestones, premium features and other purchasable virtual goods. They also spend to progress further in the game in case they are unable to move beyond a particular level/ milestone

To escape grinding

Grinding is a phenomenon of carrying out an activity, typically in a game, multiple times, in order to move to the next milestone in a game. Grinding, while feasible, can be significantly time consuming, and can lead to boredom or a gamer dropping off the game. Games offer IAPs to escape grinding and help the gamer maintain their interest in the game.

To socialise and/or compete with family and friends

With multiplayer and social layers an integral part of casual gaming, gamers consider them as a viable means to socialise and spend time virtually with family and friends. This leads to them potentially paying to create their virtual profiles and customisations in the game, as well as to compete with family and friends.

1. KPMG in India analysis based on industry discussions and secondary research

Case Study

Role of PUBG and e-sports in unlocking monetisation potential of games in India

Player Unknown's Battlegrounds (PUBG) is a 'Battle Royale' multiplayer game launched by Tencent (publisher) in India in March 2018. Before it's India ban in 2020, the game was a massive hit among Indian gamers. This was primarily due to a series of marketing activities undertaken by Tencent for the launch that included the first ever TV commercial for a mobile game shown across Hindi and English channels, hosting esports tournaments, influencer marketing etc.

Key Statistics at a glance – PUBG India[2]

Downloads
175 million

Active Players
~40 million

Lifetime IAP Revenues
USD 40-50 million

PUBG's duo and squad modes (i.e. multiplayer format), in-game communications (voice chat and text-based communications), and virtual goods like skins and cosmetics helped in higher adoption of the game. The multiplayer aspect of the game also enabled it to grow in the esports segment as well.

PUBG tournaments accounted for 40 per cent of all Esports tournament prize money in 2019.

PUBG employed IAPs to promote spending in the free to play game bagging the top spot in consumer spending in games in India in 2019.

- **In-game currency**
- **Cosmetics**
- **Weapon skins**
- **Battle passes**

2. "At just 1.2% of global earnings, PUBG India revenue was 'chicken dinner'", ET Now, September 2020, accessed on May 10, 2021

In-game currency: All purchases within PUBG were done through its in-game currency which could be purchased within the app with real money. The virtual products in the game let players create their own individual characters. These items could be bought, sold, and traded by players amongst themselves creating a community market and an in-game economic system.

Battle pass: Battle passes which were a limited time purchasable unlock to an event, were used to encourage players to log in every day, complete challenges on a daily and weekly timescale, and level up. By leveling up, users could unlock exclusive rewards that can only be earned through the Event Pass, and not purchased via the in-game stores.

Success of PUBG led to the following positive developments across the Indian casual gaming landscape

Acceptance of larger game sizes

Higher smartphone specifications for lower prices

Multiplayer gaming

Spending on mobile data for multiplayer gaming

PUBG helped foster local developers to foray into multiplayer gaming as well which had a relatively lower adoption in India on mobiles before the game hit Indian shores.

Key growth levers for IAPs in India[3]

1. Pricing of IAPs

a. **Consideration of purchasing power parity:** Majority of the global games do not take into consideration the purchasing power parity of India in pricing of IAPs which makes these purchases unviable for Indian gamers.

Factoring this in the pricing would help to reduce the prices on some of the IAPs and could help to increase the number of paying users.

b. **In-game rewards:** Majority of the games that rely on IAPs have incorporated the mechanics of grinding (playing the game extensively) in the gameplay, based on which rewards are given to players.

These are typically probability-based rewards and are priced such that the player finds them affordable and considers these IAPs better than grinding through the game.

c. **In-game rewards:** Majority of the games that rely on IAPs have incorporated the **Differentiation between types of users for monetisation:** Low and high-ticket users are usually accommodated differently within games.

While high ticket users are typically offered IAPs and bundles, which consist of rewards that cannot be attained by grinding or spin the wheel mechanics, low ticket users are offered lower priced bundles or monetised through spin the wheel mechanics which drops rewards based on probability.

2. Localisation of content

Localisation of content and gameplay has enabled higher adoption rates in countries like Japan and China where users prefer games with a specific type of art and content that is endemic to these countries.

However, in India games published by global publishers have been more popular; with 8-9 games from global studios in the top 10 downloaded games on Play Store in India. However, the success of gaming titles such as Ludo King and Teen Patti have shown that games which are localised and developed based on the local ethos of the target market, have the wherewithal to succeed and build a viable monetisation model.

3. KPMG in India analysis based on industry discussions

3. Banking on the social aspect of gaming

With the rise of social and multiplayer gaming and the rising acceptance of gaming as a means of entertainment, gamers have become more open to spending on online games.

Multiplayer games utilise the social aspect of the game leading to better engagement which results in better monetisation. Eg: Ludo King introduced voice chat in the gameplay to capitalise on the social element of gaming and increased the number of players that could play simultaneously, becoming one of the top grossing games by an Indian publisher.

4. Emerging monetisation models across multi-gaming platforms

Most multi-gaming platforms offer a variety of casual games across sub-genres like card, racing, sports etc. and conduct free contests where players can compete against each other. These platforms monetise casual games through commissions taken from the overall collected prize pool consisting of the entry fee paid by the players.

Multi-gaming platforms bank on the users' competitive drive to hone and showcase their skills amongst each other and the incentive of monetary rewards to drive consumption and time spent on their platforms.

5. Investments in Artificial intelligence and Analytics

Investments in Artificial intelligence and Analytics: Like any digital business, the understanding of consumer behaviour in terms of what a consumer prefers in terms of content, consumption patterns, triggers for IAP based monetisation and game switching behaviour is critical to game design and pricing decisions.

This is where the role of Analytics including the deployment of AI becomes critical. These technologies can act as critical inputs to game design including points in the gameplay where gamer consumption is at its peak, and how can it be effectively monetised. AI also helps personalise the gaming experiencing of each gamer in real time, helping them interact with a real time feedback loop.

Eg: AI gaming startup Krikey, funded by Reliance Jio, has an Augmented Reality (AR) game Yaatra, which helps gamers defeat monsters using multiple weapons[4].

4. www.Krikey.com, accessed in May 2020

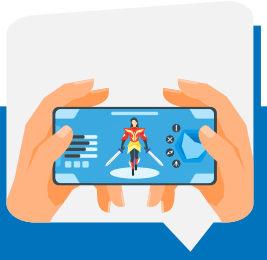
Looking ahead - Subscription-based monetisation models

Subscription-based models in casual mobile gaming are currently prevalent in global markets at a very small scale and similarly are at a nascent stage in India as well. Examples of successful subscription models have been primarily in the console gaming space with Sony Playstation and Microsoft XBox offering subscription packages. In the mobile gaming space, Google has launched subscription services for limited geographies but has yet to achieve significant scale.

In spite, of the low uptake, there are some key advantages which subscription-based models offer for game developers and publishers:

Ability to generate a steady income stream

With a subscription-based model, revenues are likely to be steadier and more predictable as compared to ad and IAP revenues



Increased user engagement

Subscribers are likely to have increased levels of engagement, leading to a higher lifetime value of the gamer

Gain a loyal user base

With the large number of games flooding the market and low entry barriers, a subscription-based model is likely to ensure lower switching between games

Going forward, subscription-based models could gain share in the mobile based casual gaming markets globally and in India, with the advent of 5G and cloud-based gaming which are complementary to such models.

Further, subscription-based models in India are gaining traction in other forms of entertainment namely OTT platforms for video-based entertainment and music streaming platforms. In order to increase user engagement on the platform and diversify their offerings, these players could offer bundled gaming subscription along with their core services. However, high quality gaming titles would be a definite pre-requisite for such bundles to see any form of traction, even in the future.

Conclusion

As India moves higher up the maturity curve when it comes to online casual gaming, coupled with the increasing comfort of the Indian digital consumer to pay online for products and services, we are likely to see an accelerated uptake of paid monetisation models around casual gaming in India.

Publishers need to be cognizant of what the consumer expectations are from the game, and design IAPs in a suitable manner, to stimulate demand. Further, aspects like social layers to gaming, localisation to Indian context and the growing popularity of multi gaming platforms; are likely to act as catalysts for paid models seeing traction in the near to medium term.

Themes of play: The future of gaming

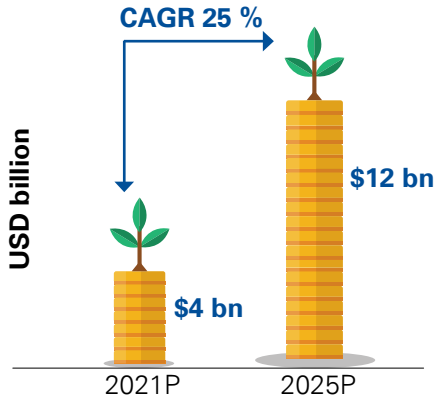
- **Cloud gaming**
- **Esports: The flavor of the season**
- **Outsourcing of game development: Reducing time to market**
- **Platform plays and multi game platforms**
- **Artificial Intelligence in casual gaming**

Cloud gaming

Cloud gaming helps compute and run the game on remote servers called cloud servers and streams the audio and video of the game to the user's device which allows the user to play the game remotely without the requirement of expensive hardware.

Globally, the growth in cloud gaming is expected to be driven by advanced connectivity technologies like 5G, which offers the required low latency and high-speed connectivity, and the ability to handle the high data demands expected from gaming platform subscribers. In the Indian context, cloud gaming is at a nascent stage, but could see traction once 5G hits Indian shores at scale.

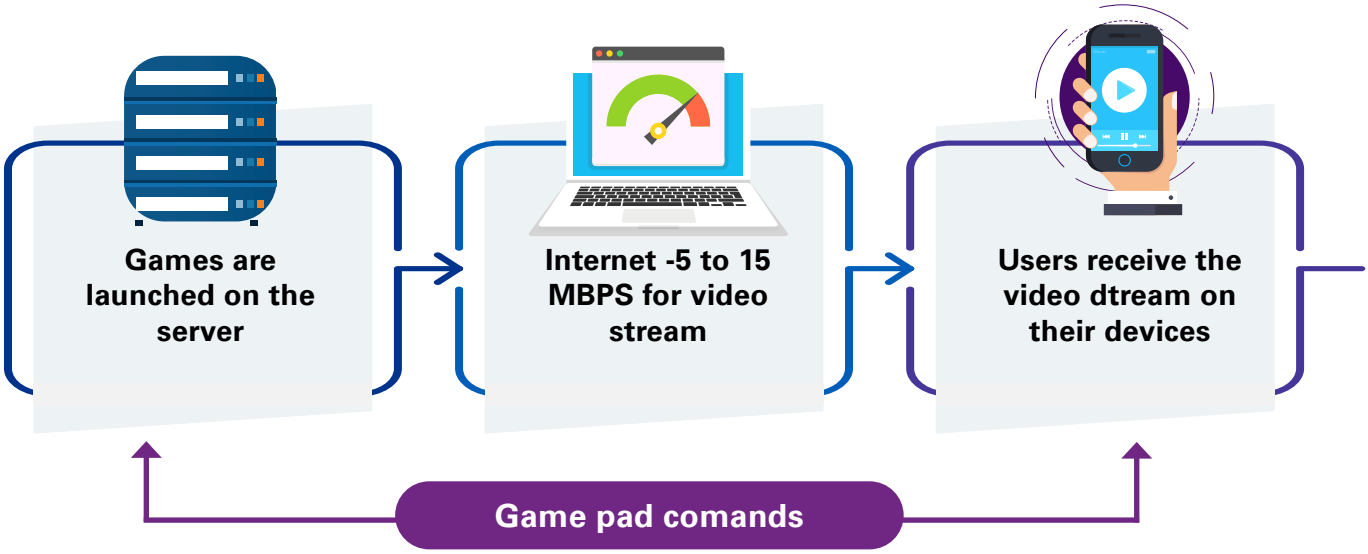
Projected global cloud gaming revenue



Source: "Cloud Gaming Revenues to Soar to $12B by 2025", Technewsworld, September, 2020

Cloud gaming is gaining prominence globally due to the key benefits it offers:

- Games are available 24/7 without having to be downloaded and installed locally on the device of the gamer
- Games can be accessed from any device and from any location
- Cloud gaming can offer a higher level of cybersecurity as compared to downloaded games since they store information on remote servers
- The limitations pertaining to hardware requirements placed on online games are eliminated



Impact of 5G on cloud gaming

The rollout and adoption of 5G is critical to the cloud gaming landscape, in the following ways

- Cloud gaming requires high processing speeds and a low latency and zero jitter experience which can be provided by 5G
- With 5G's super-fast speeds and low latency response time, cloud gaming is a very appealing use case that will drive subscribers to upgrade to 5G devices and price plans
- Cloud gaming will get redefined with 5G as it will provide better gaming experience and consumers can opt to pay more or switch connectivity providers for the new gaming experience

Business models for cloud gaming

The most common business model for cloud gaming requires the user to sign up for varied plans such as monthly / weekly / daily subscription or unlimited subscription with a library of games the user can stream. Typically, games are bundled under a subscription model and unlimited access is provided to users. This benefits both the game publishers as well as the game stores.

Subscription models provide a regular revenue stream and a consistent demand that operators can monetise through micro-transactions and paid downloadable content. It also reduces the risk associated with delivering top-performing premium titles on a regular basis. Through the subscription model, publishers may be able to increase their share in the value chain and reach the user directly.

Going forward, cloud gaming providers will look to reduce the cost and technology barriers and attract all game genres across geographies. Also, they aim to create a new engagement model with gamers by providing "gaming as a service", wherein users can access gaming at any time, on any device, and in any location.

Cloud Gaming: The India perspective

Like most global markets, cloud gaming is very nascent in India, both in terms of the required technology as well as the uptake from a demand point of view.

Cloud Gaming in India – Emerging players but low uptake

There are a few cloud gaming service providers in India like 'The Gaming Project', 'Doofy', 'Vortex' etc. with plans ranging from unlimited day passes to yearly plans. These platforms enable graphic intensive games to be played on non-gaming PCs and mobile phones, without the need for expensive hardware.

This is crucial for a gaming nation like India, which has practically bypassed the console gaming curve and has moved on directly to the mobile gaming stage. Based on industry discussions though, we understand that the uptake of these services is very low currently.

Technology infrastructure in terms of wired broadband needs to evolve

Cloud gaming in itself requires a robust technology backbone, with assured broadband speeds and the provider needs to have infrastructure in place to provide low latency services, as this is one of the major challenges that cloud gaming providers face.

While India has 747 million broadband subscribers at the end of CY20, only ~26 mn[1] of these are wired internet subscribers, and of these about 2-3 million as FTTH subscribers[2]. Hence there is a very small population from a demand side point of view, that exists today.

Commercial 5G – A potential game changer for cloud gaming in India

As outlined earlier, the launch of 5G services from a commercial consumer standpoint, can be the inflection point for adoption of cloud gaming in India. Reliance Jio is potentially considering the launch of its cloud gaming service with AAA titles post the launch of its 5G services[3].

However, given the high spectrum costs associated with the 5G auction, it is unlikely that a mass rollout of 5G will take place in the next 2-3 years.

To summarise, cloud gaming holds a revolutionary potential, both in terms of consumption and monetisation, to solve the hardware problem that led to India skipping the console gaming revolution.

However, given the challenges associated with cloud gaming adoption with the current technology infrastructure in India, we see FY24-FY25 as a realistic timeline when cloud gaming could come to the fore in India.

1. TRAI Performance Indicator Report, December 2020, accessed on May 21, 2021
2. KPMG in India analysis, based on industry discussions
3. Reliance Jio will likely bring AAA PC games to its cloud, India Today Gaming, April 2021, accessed on May 20, 2021

Esports: The flavor of the season

Esports as an enabler of online gaming is at an emerging stage in India as compared to some of the developed countries like Japan, South Korea and U.S., but is slowly gaining importance as a means to increase gamer engagement (especially around mid-core and hardcore titles) as well as increase monetisation.

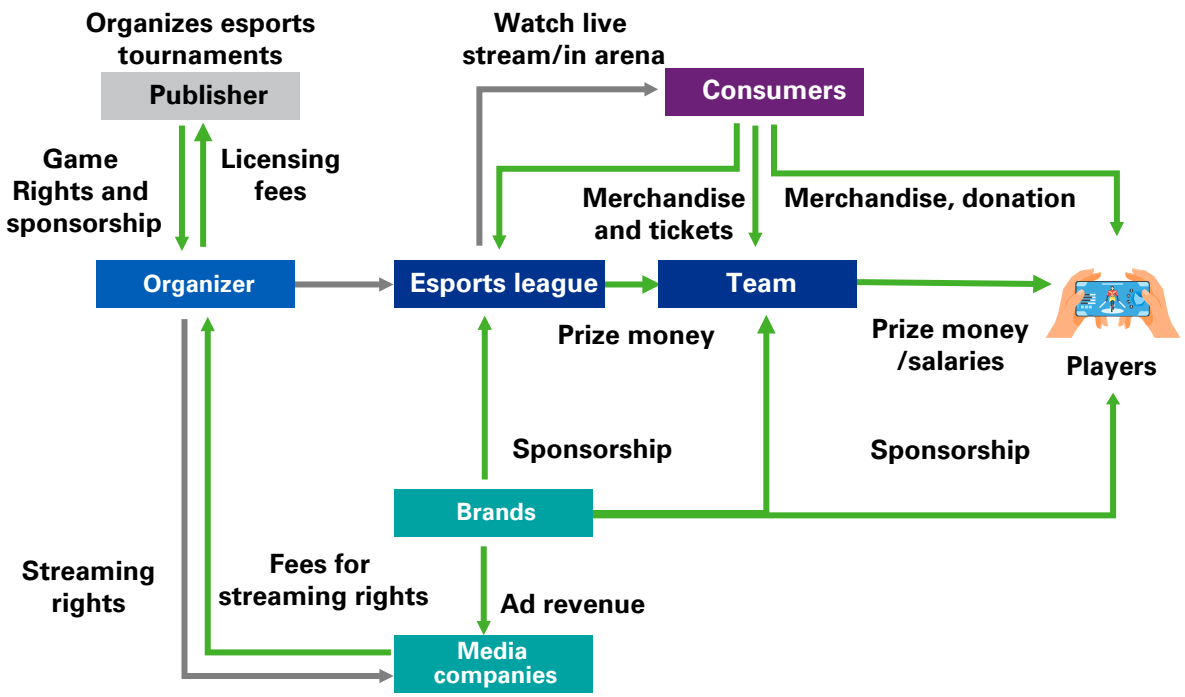
The games played in esports are typically online, multi-player games requiring a high degree of skill and an element of sports (where physical response determines the result). Esports events are prevalent across devices - PC (Counter Strike, Dota2), Console (FIFA 20, Fortnite) and mobile (PUBG Mobile, COD Mobile).

Before the launch of PUBG Mobile in India, esports in India was extremely limited with only a few competitions being held for games like Counter Strike (1.6 and Global Offensive) and Dota 2. The esports industry picked up massively with the arrival of PUBG Mobile in 2018 which accounted for 40 per cent of all esports prize money in 2019.[4] As competitions and events were held with PUBG Mobile as the main game, other games like Counter Strike, Dota 2, FIFA, and Call of Duty were also hosted, which resulted in the overall growth of the esports industry in the country.

There are mainly four types of e-sports events:

1. **League:** Teams and players compete over a period against each other with the best advancing to the grand finale. E.g. ESL India Premiership 2019
2. **Tournament:** A culmination of single or multiple qualifiers in an on-ground finale. E.g. ESL One Mumbai 2019
3. **Festival:** A gathering of Esports enthusiasts under one roof. E.g. DreamHack Mumbai 2018
4. **Activations:** Custom gaming championships for casual and esports gaming audience with nationwide reach. E.g. Dew Arena 2019

The E-sports value chain[5]:



Esports in India is currently primarily driven by publishers who partner with organisers or brands to host esports tournaments to promote their titles. Hosting esports events for a game helps increase the popularity of the game increasing adoption. For example, Sachin Saga, an Indian developed cricket game was hosted at Dreamhack Delhi 2018 with a prize pool of INR 8 lacs which helped promote the game[6].

4. Esports observer, January 2020, accessed in May 2021
5. KPMG in India analysis based on industry discussions and secondary research
6. KPMG in India analysis based on secondary research

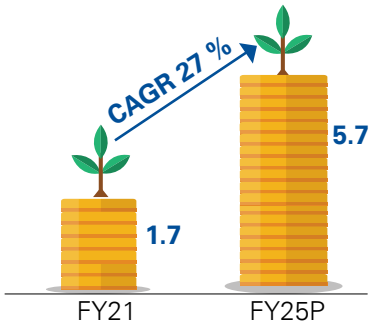
Major tournaments in India from 2019 to 2020

Tournament	Peak viewers	Prize Pool
PUBG Mobile Pro League	268k	USD 200,000
PUBG Mobile Club Open	94k	USD 370,000
DreamHack 2019	-	~USD 52,000
ESL One Mumbai	146k	USD 300,000
ESL India Premiership	-	~USD 150,000

Source: Liquipedia, accessed in April 2021

Over the next 5 years, the esports segment is expected to grow rapidly due to increased interest from brands for sponsorship, publishers to promote games & entry of new players across the value chain ranging from organisers to participating teams.

Indian esports market size in INR bn



Source: KPMG in India analysis based on industry discussions and secondary research

Some of the key trends and growth drivers playing out in Esports are as follows:

Regional language e-sports: E-sports tournaments are being organised and streamed in regional languages (PUBG tournament streamed on WinZO), which is helping in the rapid expansion of user base in lower tier markets in India

International recognition of esports: Esports has gained recognition as a sport in 19 countries and in the Asian games, encouraging the growth of professional gamers.

Popularity of mobile e-sports titles: Mobile esports titles are currently the most popular on account of growing smartphone penetration, low data prices, launch of key esports titles in mobile (PUBG, COD etc.) and multiple tournaments organised in mobile titles

Online promotions and streaming: The promotions done on online streaming platforms such as YouTube and Twitch has helped the esports market grow in India, by increasing user engagement in the events and increased publicity of tournaments and competitions held.

Growth in viewership and tournament prize-pools: The esports viewership in India doubled to 17 million viewers in CY20, and the prize pool grew by 25-30 per cent despite a pandemic[7]. The uptick in prize money was as high as 180 per cent in 2019[8], and post the pandemic, the segment is likely to see a resurgence. The rising popularity of online gaming streaming, accelerated by the pandemic, has enabled professional gamers to earn money through streaming as well which has made the esports and streaming industry more lucrative.

Overall, e-sports in the Indian market has been more of an enabler to help increase engagement around Midcore, Sports and Hardcore games. However, with the increasing adoption of esports along with rising viewership, this enabler has the potential to emerge as a viable sub-segment on its own in the near to medium term. Further, with the increase in awareness of online gaming and acceptance of gaming as an alternative means of entertainment, a large number of professional gamers are likely to enter the market, which will help increase the popularity of e-sports in India.

7. Esports is the new rage in the Indian arena, Economictimes, March 2021, accessed on May 20,2021
8. Indian Esports prize money grew by 180% in 2019, Esports Observer, Jan 2020, accessed on May 21, 2021

Outsourcing of game development: Reducing time to market

Game development is a complex and time-consuming process and development budgets for video games often runs in tune of millions of dollars requiring large teams of highly skilled people. Outsourcing tends to resolve many challenges pertaining to cost, talent and time to market.

A game engine helps develop games, virtual worlds, digital simulations, and immersive experiences. Outsourcing the use of game engines by its developer is a critical example in the gaming as a service segment. Two of the engines used to develop games are the Unreal and the Unity engine which gaming developers in India have been using as well (Eg: Raji – An ancient epic, was developed by Nodding Head Games using the Unreal engine[9]). Use of these engines enables content creators to be more productive, allowing small teams to build next generation games that function across platforms without a high budget. These engines make most of their revenue via a licensing fee, typically as a percentage of revenue (usually 5 per cent).

Gaming Backend as a Service (BaaS) is something that is being increasingly adopted by Indian developers, to diversify their revenues from pure development and publishing, to utilisation of their game engines to smaller developers in creating games. Eg: JetSynthesys offers gaming backend outsourcing services, which can be utilised by developers who lack capital when it comes to game creation.

Some of the key benefits of outsourcing the gaming backend are as follows:

01

Increased cost efficiency: Outsourcing to an offshore company to develop a part or the entire game can be economical relative to hiring a full-time in-house team of developers. Typically, a team of in-house developers works on various company projects which may lead to inefficient work effort and redundancy. However, outsourcing tends to optimise such inefficiencies as a dedicated team is assigned a task which leads to minimisation of errors and delays.

02

Access to advanced software/ technology: Advanced game development requires exclusive software, tools and equipment which may overrun budgets for small gaming studios. Outsourcing provides business access to top notch equipment at a fraction of the cost and benefits of cutting-edge gaming technology.

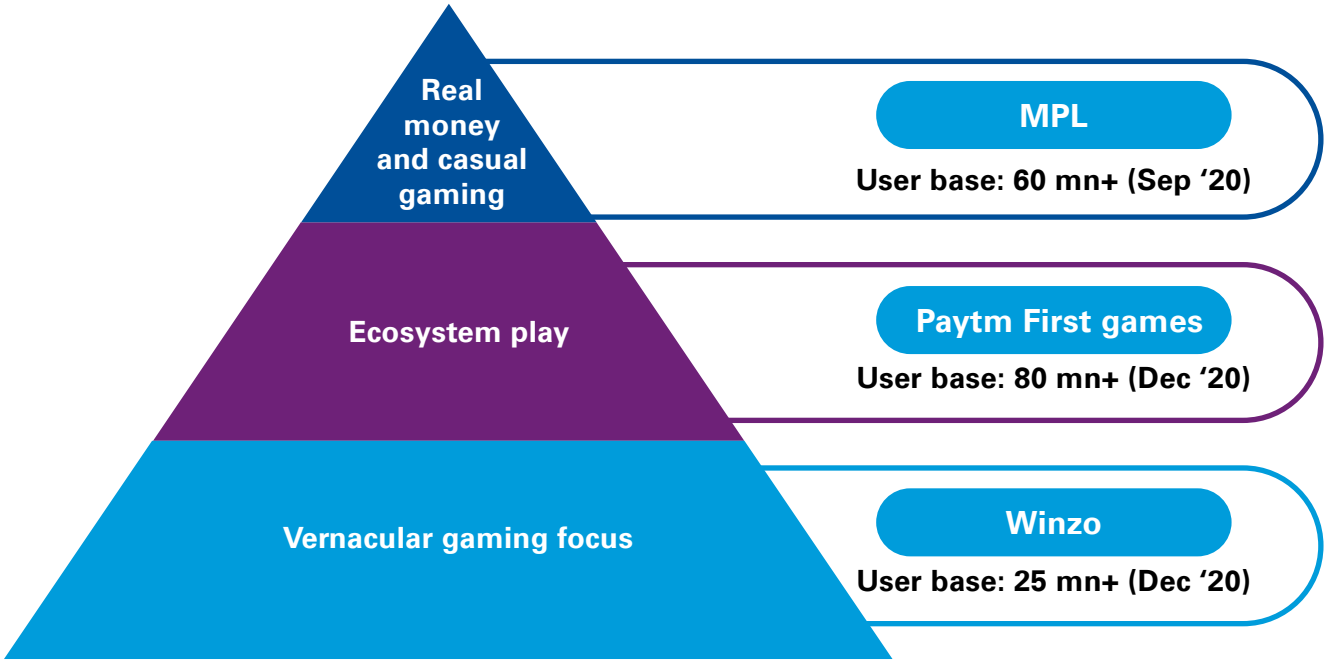
03

Reduced time to market: Outsourcing enables the company to cut time on various important processes or activities associated with game development such as compliance, testing, making improvements, managing employees etc. By outsourcing, companies can concentrate on core aspects of the business such as generation of new game ideas and promotion of product to the target audience. Outsourcing is thus likely to reduce the time to market for a game launch as compared to hiring of a full-time in-house team.

9. Unreal Engine Developer interviews, Unrealengine.com, October 2020, accessed on May 18,2021

Platform plays and multi game platforms

Multi-gaming platforms have emerged as distributors/publishers which are unique to the Indian online gaming market. These platforms have a library of games which can be played directly on the platform (website or app) or downloaded. They typically have tie-ups with 3rd party game developers and publishers and have 50-100 games listed on their platform[10].



Source: KPMG in India analysis based on secondary research

10. KPMG in India analysis, 2021

Key features of multi-gaming platforms:

- **Types of games:** Most of the multi-gaming platforms have casual, hyper casual and fantasy/card based real money games
- **Platform-wide tournaments:** Most of the platforms host e-sports tournaments for gamers across various games on the platform and offer cash prizes to the winning teams
- **Platform-wide leaderboards:** Multi-gaming platforms typically have common leaderboards across all games played on the platform and have daily/ weekly/ monthly prizes for players accumulating the highest points in these games

These platforms have different monetisation models which makes use of these different game modes. Three of the most popular models are:

Battles

This format typically includes short duration player versus player (multi-player battles also included based on type of game) matches where each player pays a small entry fee and the winner takes the prize while the platform retains a percentage of the entry fee, typically between 15-25 per cent as commission.

Leader boards

These are daily and weekly contests where a pre-disclosed categories of battles count towards an overall score of the player on the leader boards and the top players receive monetary rewards

Tournaments

These are typically held for multiplayer games like Free Fire, PUBG, COD Mobile etc. where players pay an entry fee to take part and the top players win the prize money. The typical commission grossed from these tournaments is 25 per cent of the entry fee pool. This part of the multi-gaming platforms is in effect an esports for the masses.

These platforms are particularly popular in India as they offer players a chance to hone and test their skills against other players and receive a monetary reward in return. Although a typical Indian gamer is less likely to spend money in games, these platforms have contests and competitions with entry fees as low as INR2 which enables these platforms to attract a large number of players. As people from tier 2 and tier 3 cities, which form a large share of the players on these platforms, evolve digitally, becoming accustomed to digital payments and microtransactions, these platforms are likely to see increased traction.

However, the ban on gaming transactions under INR 50 through the Unified Payments Interface (UPI) platform is likely to be a setback for paying users transacting on these platforms[11].

11. "UPI Payments Of Rs 50 For Gaming To Be Banned, Medianama", April 2021, accessed on May 19, 2021

Artificial Intelligence in casual gaming

Artificial intelligence (AI) has become an integral part of the gaming industry over the years. The technology is being widely used across game development (using AI generated storylines), player engagement, interactive experiences across gameplay, and personalisation of each gamer's journey with games.

Key benefits/ use cases of incorporating AI in online gaming:

- AI helps developers to discover ways of monetising their game space by using big data to measure, predict, and track player behavior to then be able to enhance the experience for the player as well as further encourage in-game spending.
- AI also helps in the critical task of user acquisition and retention by customising the path of each player within a game, as well as providing immersive experiences using Virtual Reality (VR) technologies
- AI is also used for object detection offer life-like immersive game experiences and controlling the game flow by running them through infinite-state game machines.
- Popular games across the globe have implemented AI in different ways. PUBG uses AI technology to identify cheaters or fake players on their system[12] . 'King' uses AI to build a QA bot to test Candy Crush Saga[13].

Though this concept is still in the nascent stage with respect to the Indian gaming context, some gaming startups have made strides over the past few years.

Company	Description
Latitude	Specialises in developing AI-powered games geared towards player freedom and self-expression
Krikey	Launched mobile AR game 'YAATRA' with Jio, where using their phone cameras, players can participate in the action-adventure game
Osmo	Built around a proprietary Reflective Artificial Intelligence, it expands the playing field and encourages creative thinking and social interaction
MPL	Invested in AI-powered tools for quick creation and incorporation of all gaming elements
Quytech and Someshwara Sofware	These companies offer AI development and AR/VR capabilities to gaming companies for development of game mechanics and visuals

12. PUBG Developers Now Using Machine Learning To Find Cheaters, AnalyticsIndiaMag, March 2019, accessed on May 25, 2021
13. How King uses AI to test Candy Crush Saga, InfoQ.com, Dec 2019, accessed on May 25, 2021

Conclusion

Gaming as a segment has indeed skipped a complete generation in India, with minimal adoption of PC and console gaming. However, the mobile internet and smartphone revolution in India, which started in 2016, has ensured that this segment has come to the fore, with giant strides being undertaken on the supply side and consistent demand emerging from the gamers.

The COVID-19 induced lockdown in 2020, while devastating for the economy at large, helped online gaming get a leg up in terms of both consumption and monetisation. A further uptick is expected owing to the lockdowns in 2021, on account of the second wave of the pandemic in India. Gaming has become an alternate form of entertainment, competing with the share of time with other forms of entertainment such as Television, OTT video, Music streaming etc. However, while consumption and interest in gaming is at an all-time high in India, the casual gaming segment is severely under-indexed in terms of monetisation, with ARPPUs amongst the lowest in the world.

It is this gap, which makes the casual gaming sub-segment in India extremely attractive from a short to medium term point of view. With robust consumption, innovations around building paid gaming models, and advertisers seeing gaming as a viable medium to advertise on, the monetisation in India is likely to move steadily up the maturity curve.

That doesn't mean casual gaming in India doesn't have its challenges. Lack of scale for India studios due to limited monetisation, the current dependence on Real money format to monetise, and a relatively lower maturity publishing ecosystem are some of the aspects India's gaming segment needs to grapple with and overcome.

Overall, the opportunities far outweigh these challenges. Indian studios are steadily moving to create world class products, with the success of Ludo King and Teen Patti having demonstrated the same. Further, with emerging trends such as Cloud gaming and Multi gaming platforms, which are a unique phenomenon to India, likely to see traction over the medium to long term, the casual gaming landscape in India holds significant potential.

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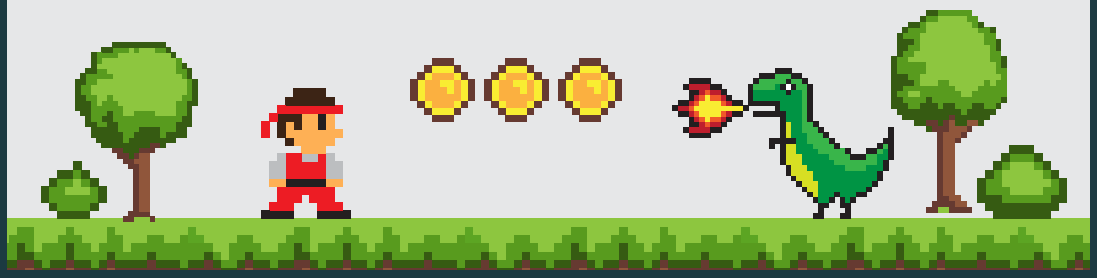

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