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BRC BYTES

The Power of Play: Exploring the Growing **Gaming Market**

Aug 2024
Sector Research

Executive Summary

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The Indian and Global Gaming Market: A Rapidly Evolving Landscape

The Indian gaming market is set to grow substantially, projected to reach $8.6 billion by 2027, while the global market is expected to hit $340 billion.

From FY 2020 to FY 2023, the Indian gaming industry has experienced a remarkable 28% CAGR.

Regulatory Challenges and Industry Responses

However, the introduction of a 28% GST on total deposits for real-money gaming (RMG) companies, up from the previous 18% GST on gross gaming revenue, has created significant challenges, including:

- Geographical diversification by RMG companies seeking more favorable tax regimes
- Shutdowns and stalled revenue growth for some firms
- A funding winter and layoffs across the industry

Evolving Business Models and Regulatory Advocacy

In response, RMG companies are making structural changes to their business models to ensure viability. They are also actively advocating for regulatory authorities to devise taxation standards similar to those in other countries, which typically tax based on gross gaming revenue rather than total deposits.

Executive Summary

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Bright Spots in the Gaming Ecosystem

Despite the challenges, certain segments of the gaming industry have shown promising growth in engagement, user base, and investor interest:

- *Esports*
- *Indie game studios ("estudios")*
- *Mobile-based casual games*

Emerging Opportunities in Gaming

The segments that have the potential for significant growth in the coming years:

- *Blockchain in gaming*
- *AR/VR gaming*
- *Generative AI in gaming*

Understanding the Gaming Landscape

To provide a broader context, the deck covers the gaming sector's parlance, value chain, and three key metrics relevant to every gaming company:

- *Engagement*
- *Genre*
- *Monetization*

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Evolution of the Gaming Industry: Past to Present

A Basic Roots Consulting Deck

Which Segment of the Entertainment Industry is the Largest?

Music Industry ~$25 Bn[1]

Hollywood ~$40 Bn[2]

Gaming Industry (GI) ~$200 Bn[3]

OG* of Entertainment Industry

Gaming industry is 8x of Music Industry, 5x of Hollywood

* OG – Original Gangster

A Journey through Decades

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1

1972

Rise of Arcade: Pong becomes first commercially successful arcade

2

1975

Release of first Home console: Atari releases first home version of Pong

3

1977

Sales through the roof: Atari sell million units of home console[4]

4

1982

Raining Money: Arcade making more money than pop music and box office

5

1983-85

The video game crash: Eager to capitalise on a growing market, companies flood market with poor quality devices and games

6

1985

Beginning of new tech race: Nintendo entertainment system releases Mario, revives console

7

1989

Gameboy: Release of first handheld

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Early '90s

8

PC emergence: PC games started gaining popularity

90s

9

The battle for market dominance: Market split between PC, Console, Handheld and Arcade

1997

10

The new beginning: Nokia release cell phone with "Snake"

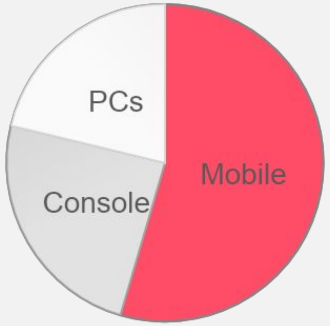
2001-2020

11

The Mobile gaming revolution: Mobile and internet is set to change the way games are played forever

At Present

Mobile games dominates the Industry: capturing >50% of Market

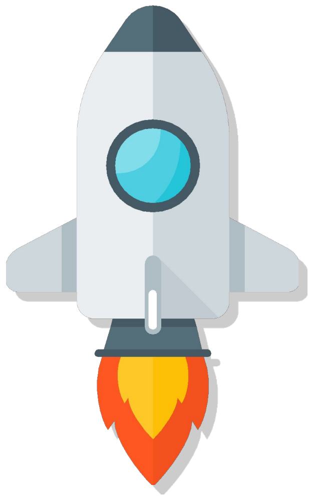


The Gaming Industry takes the World by Storm
A Market on the Rise

Gaming Market Set to Fly

$340 Bn[3]

2027



$198 Bn[3]

2022

~50%[3] Share

India has a long way to go

Global gaming landscape: a comparative analysis of key metrics across leading gaming nations

	India	USA	China	Japan	South Korea	Germany
CAGR of gaming market (FY20-23)	28%	9%	7%	7%	5%	2%
Gaming market size in the country (FY23); INR crore	16,428	363,600	370,064	161,600	63,832	53,328
Gaming market size in the country as a % of global gaming market (FY23)	1.1%	24%	25%	11%	4.3%	3.6%
Number of gamers (FY23); Mn	425	191	750	102	34	50
Growth of gamers (FY22-23)	7%	1%	1%	5%	7%	3%
Gamer penetration % (FY23)	30%	56%	53%	83%	66%	60%
Mobile gamers as a percentage of total gamers (FY23)	94%	37%	62%	48%	36%	43%

Sources: All correct estimates; Worldometer; 2023 Newzoo Global Games Market Report; industry discussions

Source : EY

Beyond Gaming: Exploring the Emergence of a Robust Supporting Network

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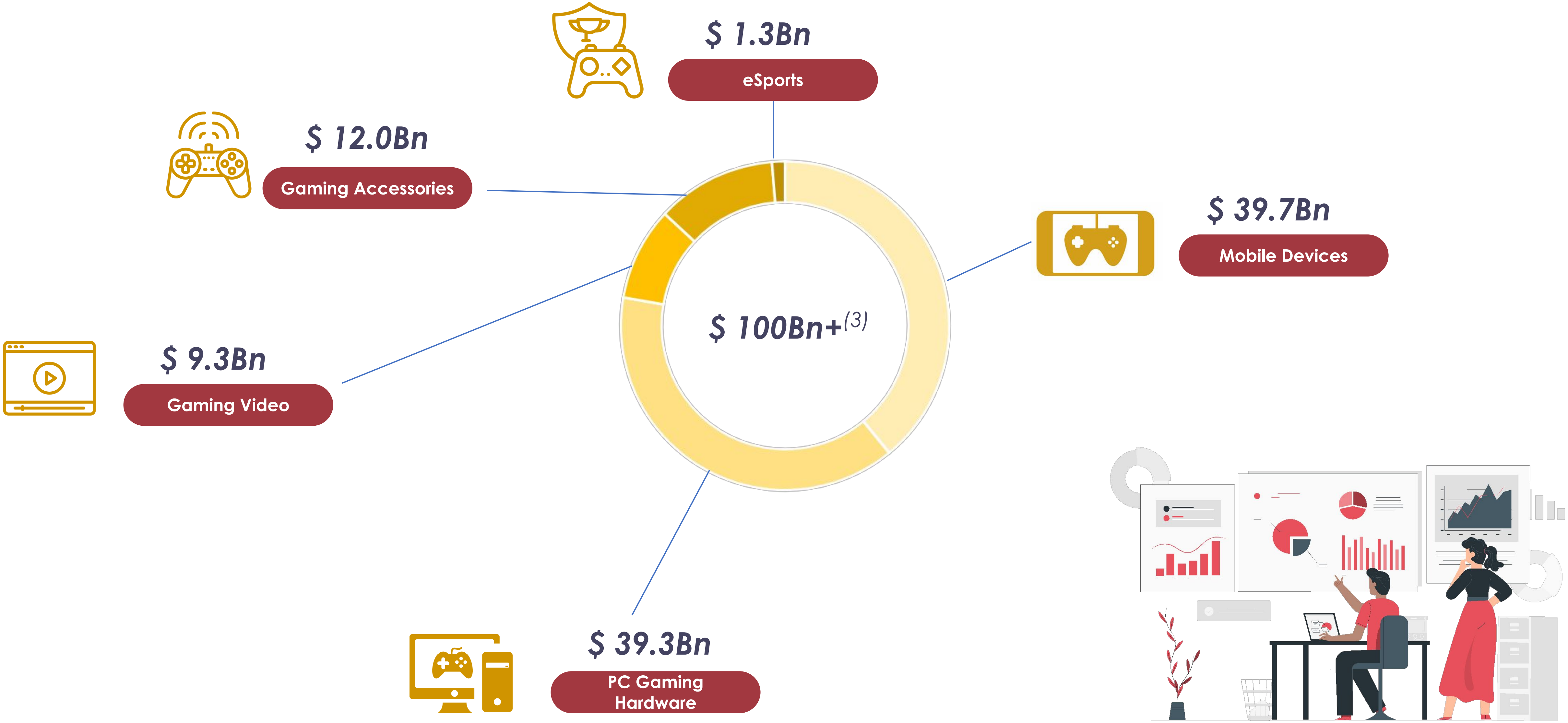

Gaming Industry - Value Chain

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1 **IP/Brand Owner:** Owns the brand/IP for the game | Receives licensing fee as a share of revenue

Nazara | gametion TECHNOLOGIES PVT.LTD. | Nintendo | Microsoft Studios

2 **Developer/Game Studio:** Designs, develops and tests the game |Undertakes live ops (updates, fixes)

EA SPORTS | gametion TECHNOLOGIES PVT.LTD. | R | GAMELOFT

3 **Publisher:** Takes the game to target audience through distribution and marketing | Partners with developers for game tweaks, market needs

SONY | ACTIVISION | BLIZZARD | Microsoft Studios | EA SPORTS | Tencent Games

4 **Distributor:** Offers games through platforms for end-gamers | Majority of casual games through play/app stores | PC and console games also through console stores and platforms

EPIC GAMES | Aptoide | TELCO SYSTEMS | XBOX

5 **Advertising agency/network:** Serves advertisements through their networks | Ad requests sent directly to networks/mediation platforms |Publisher earns revenue for displaying ads

Google AdMob | by facebook | ironSource | INMOBI

6 **Gamers:** Individuals playing games } Categorized as casual, mid-core, hard-core, professional
Example: Candy Crush players, Fortnite players, Esports athletes.

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Evolution of Indian Gaming Industry

A Basic Roots Consulting Deck

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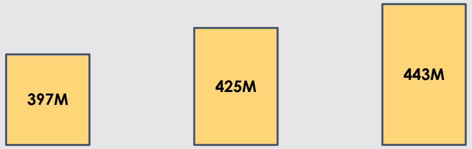
A Quick Glimpse on how the Last Few Years looked like in India

Number of Gamers

FY 22 FY 23 FY 24E



Online Gaming Market Size

$ 2.6 Bn
Current

$ 8.6 Bn
By 2027

Key Stats

~90% gamers in India are mobile gamers

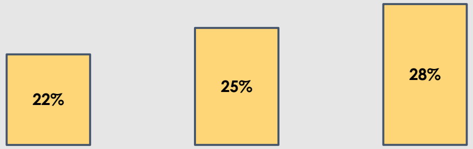
India has captured only ~1.5% of the global market by revenue

RMG comprises of ~82.8% of market share in FY 23 with more than 400 RMG startups

10-12 Hours
Average time spent by per active user on gaming in a week

% Share of Paying Gamers

FY 22 FY 23 FY 24E



Investments in Gaming Cos

~$ 2.8 Bn

Investments since FY 20

RMG - Real Money Gaming

Source : EY, GT, Blume & BRC Research

India has Mix of Homegrown & Global Players, Competing across Value Chain (1/2)

Players	Place in Value Chain	Role
Unity	Enablers	Game Tech
Unreal Engine	Enablers	Game Tech
Lucasfilm Ltd	Content development	Independent IP owners
Xigma Games	Content development	Independent IP owners
Nazara™	Content development	Independent IP owners
gametion Technologies Pvt. Ltd.	Content development & Marketing	Studios & Publisher

Players	Place in Value Chain	Role
Gameskraft	Content development & Marketing	Studios & Publisher
Krafton Game Union	Content development & Marketing	Studios & Publisher
Games 24 Seven	Content development & Marketing	Studios & Publisher
Tencent Games	Content development & Marketing	Studios & Publisher
Ubisoft	Content development & Marketing	Studios & Publisher
TSMFTX	Content development	eSports Team

India has Mix of Homegrown & Global Players, Competing across Value Chain (2/2)

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Players	Place in Value Chain	Role
FNATIC	Content development	eSports Team
WINZO	Marketing & Distribution	Gaming platforms
Paytm First GAMES	Marketing & Distribution	Gaming platforms
ROBLOX	Marketing & Distribution	Gaming platforms

Players	Place in Value Chain	Role
INMOBI	Marketing	Ad networks
Google AdMob	Marketing	Ad networks
NODWIN GAMING	Distribution	Esports League
ESL INDIA PREMIERSHIP	Distribution	Esports League

Other Enablers & Interface: App Stores | Payment Gateways | Devices | Social Media Platforms

When the Industry Showed a lot of Promise, What Changed the Trend?

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9.5 Bn game downloads in 2023, capturing 16% of the global market share in downloads

The number of gamers was projected to grow significantly

Changes in Regulations: Instead of 18% GST on GGR, 28% GST will be charged on the total deposits

Substantial Funding Decline

from INR 12,740 Crs in FY 22

to INR 796 Crs in FY 23

Resulted in
Layoffs
Tax Notices
Shutdowns
Hit on Margins

GGR - Gross Gaming Revenue

Source : EY

The Impact of the Change in Numbers

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One Way Outcomes : Winners May Lose Losers Lose More
Under the new GST regime, **winners may end up losing money in some cases**, while **losers incur losses that are 35.7% more**, as illustrated below.

Before

GST @18% on Gross Gaming Revenue

Rounds	Contribution by Player X	Contribution by Player Y	Platform Fee @ 11%	GST on Platform Fee @ 18%	Prize Pool	Winner
Round 1	100	100	22	3.96	174.04	X
Round 2	100 (from Winning Pool)	100 (Additional Contribution)	22	3.96	174.04	Y
Round 3	74.04 (from Winning Pool) + 25.96 (Additional Contribution)	100 (from Winning Pool)	22	3.96	174.04	X
Round 4	100 (from Winning Pool)	74.04 (from Winning Pool) + 25.96 (Additional Contribution)	22	3.96	174.04	Y
Round 5	74.04 (from Winning Pool) + 25.96 (Additional Contribution)	100 (from Winning Pool)	22	3.96	174.04	X

Final Cashflow Position	Net Contribution (A)	Net Amount Won (B)	Difference (B - A)
Player X - wins 3 rounds	151.92	174.04	**22.12**
Player Y - wins 2 rounds	225.96	74.04	**-151.92**

After

GST @28% on Total Deposits

Rounds	Contribution by Player X (Inclusive of GST)	Contribution by Player Y (Inclusive of GST)	Platform Fee @ 11%	GST on Deposits @ 28%	Prize Pool	Winner
Round 1	128	128	22	56	178	X
Round 2	100 (from Winning Pool)	128 (Additional Contribution)	22	28	178	Y
Round 3	78 (from Winning Pool) + 28.16 (Additional Contribution)	100 (from Winning Pool)	22	6.16	178	X
Round 4	100 (from Winning Pool)	78 (from Winning Pool) + 28.16 (Additional Contribution)	22	6.16	178	Y
Round 5	78 (from Winning Pool) + 28.16 (Additional Contribution)	100 (from Winning Pool)	22	6.16	178	X

Final Cashflow Position	Net Contribution (A)	Net Amount Won (B)	Difference (B - A)
Player X - wins 3 rounds	184.32	178	**-6.32**
Player Y - wins 2 rounds	284.16	78	**-206.16**

At the end of 5 games, the net outcome for both the players stands negative indicating that both the players are losing money irrespective of whether they are winning or losing the game.

Has RMG Adjusted to 28% and this is the New Normal?

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Strategic adjustments and business pivots by online gaming companies post the GST amendment

Evaluating the tradeoffs:

Whether or not to absorb the GST impact:
- absorb the entire GST liability
- pass on the burden partially or completely to the users

Impending wave of industry consolidation

Smaller companies either winding up or undergoing acquisitions

Product innovation and diversification

Considering innovative strategies to reduce CAC, improve unit economics and exploring non-RMG gaming alternatives could provide a means to diversify revenue streams

Geographical diversification

The GST amendment provides further impetus for RMG firms to diversify operations into other geographies, offering a viable growth lever

Cost rationalization measures

RMG companies are prioritizing cost-cutting measures to combat the challenging unit economics and achieve sustainable growth

Advocating for the Policy Change

Industry bodies like FIFS, EGF, and AIGF have been actively engaging with policymakers to highlight the adverse impact of the GST amendment

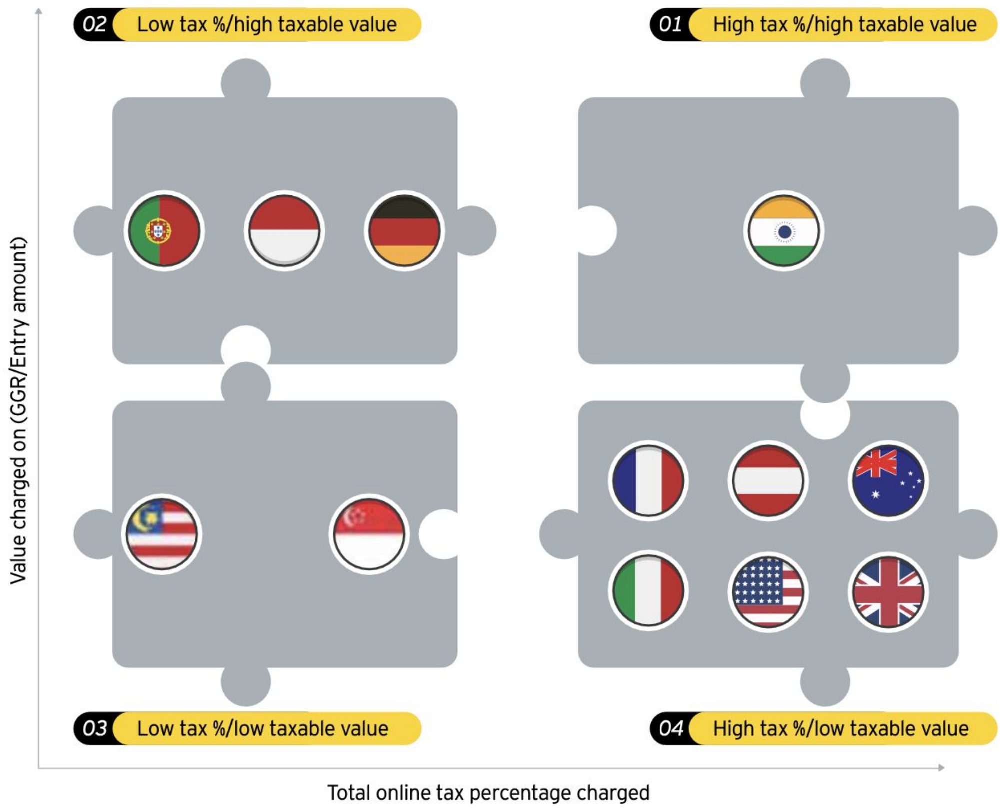
Source : EY

International Standards for Regulating and Taxing Online Games

Landscape of the global online RMG taxation

Source: New frontiers – Navigating the evolving landscape for online gaming in India, EY report
Report titled GST on online gaming, July 2023
Report titled Online Gaming in India: Taxation Quandary

Landscape of the global online RMG taxation



Source: New frontiers – Navigating the evolving landscape for online gaming in India, EY report

Source : EY

By studying and potentially adopting best practices from these international models, India could create a more favourable environment for its online gaming industry, aligning with global standards and attracting more international investment.

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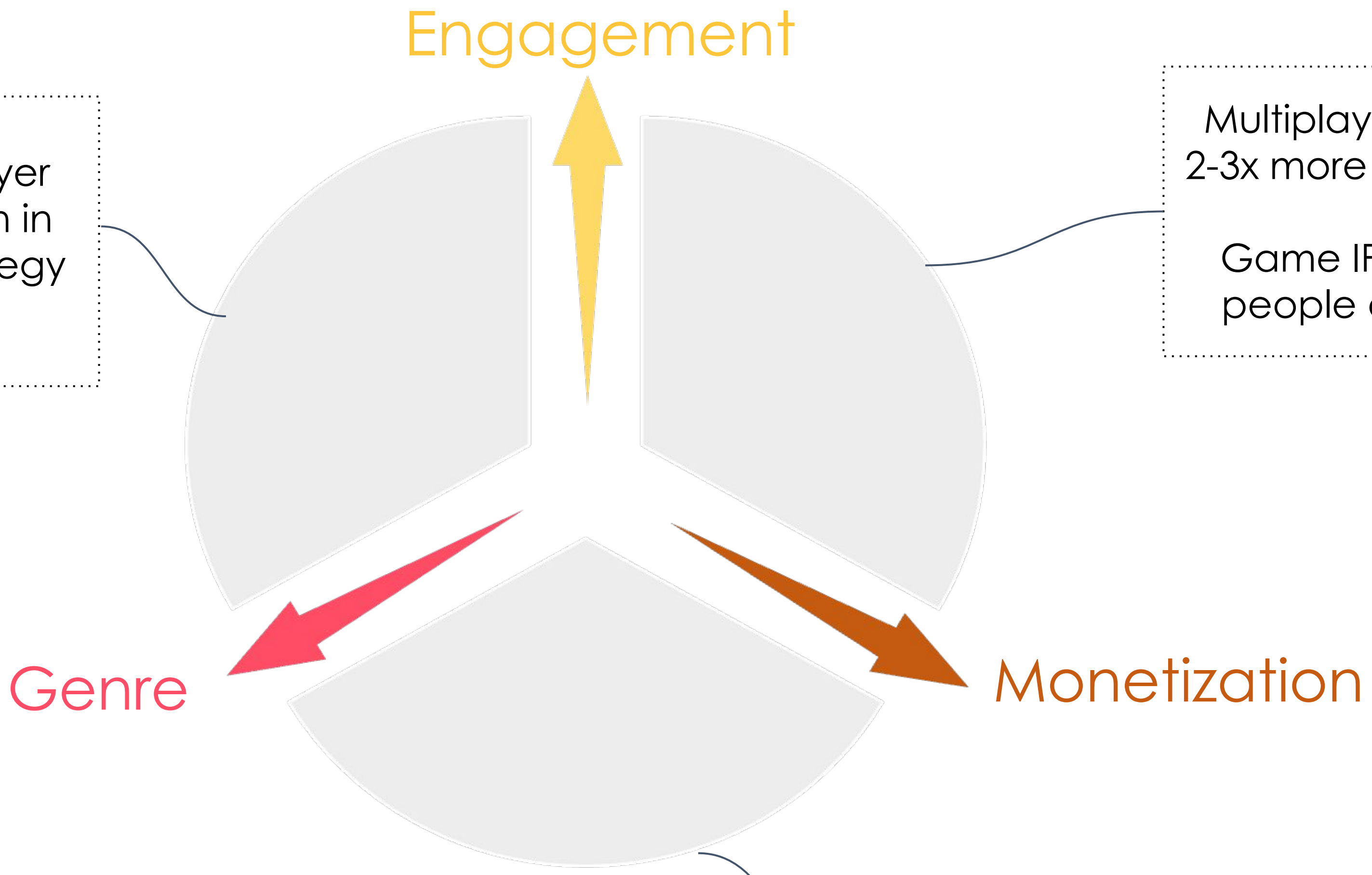
How does the Gaming Industry Operate?

3 Dimensions of Modern Gaming

Higher multiplayer interaction seen in action and strategy type games



Multiplayer gamers, on avg. spend 2-3x more than single player gamers.

Game IP also monetized through people engaging as "spectators"

IAPs are more viable in complicated action or strategy type games where users are more invested

IAPs- In App Purchases

Source : BCG

Engagement: Multiplayer sees Higher Time Spent

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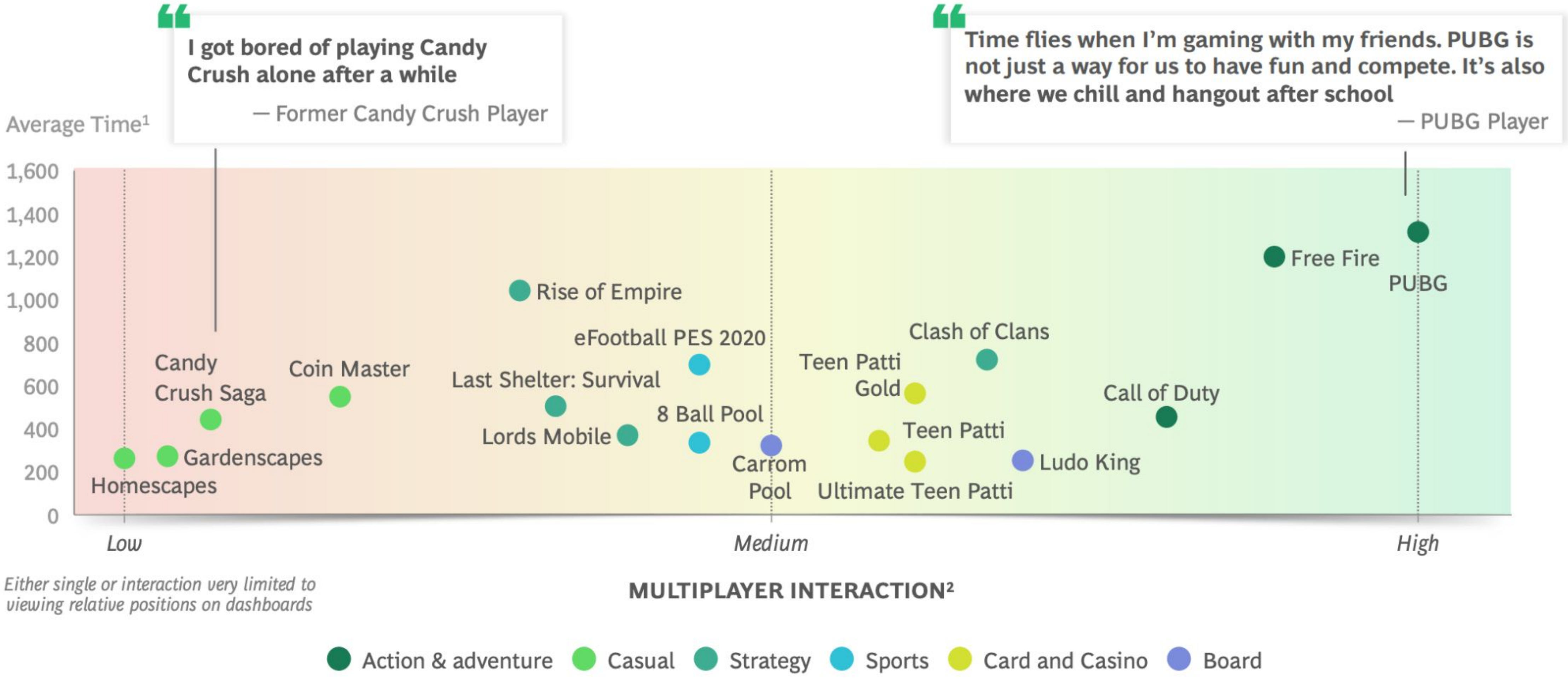

Source : BCG

Market Expansion Fueled by Emerging Game Genres and Increasing Smartphone Adoption

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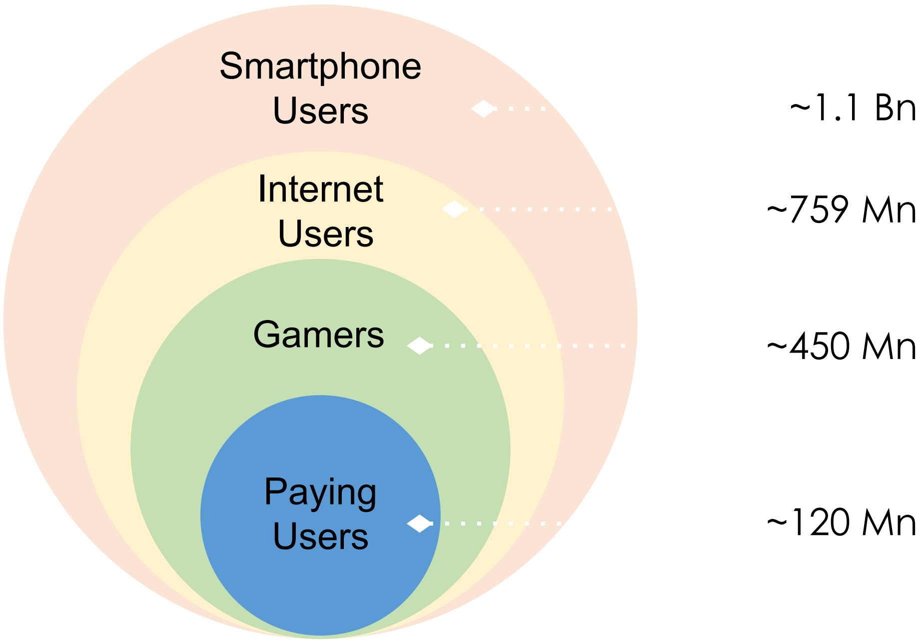
Introduction of new gaming genres

Game Genres

Casual / Hyper-casual	Action	Adventure	Puzzle
Classic	Casino	Board	Word
Mid-core	Sport	Strategy	Racing
Hard-core	Multiplayer Battle	Shooting	Massively Multi Player

Positive Impact of Rise in Smartphone and Tablet Ownership



Comprehensive Gaming Ecosystem: User Types and Platform Preferences

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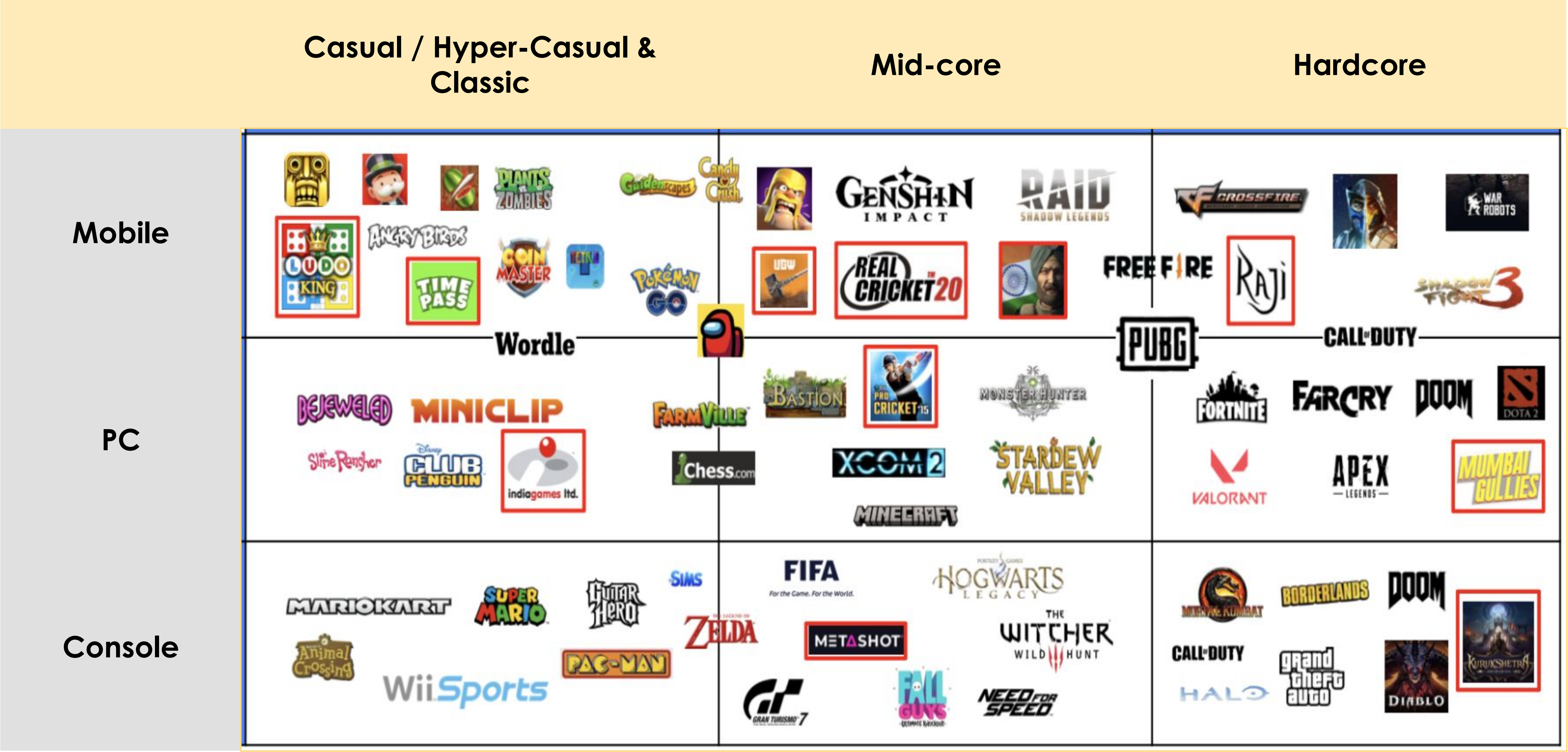

Indian Games

Source : Blume Gaming Bluprint

Global Gaming Devices: A Breakdown of Mobile, PC, and Console Popularity

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The Device Selection Depends on the Budget and Gaming Preferences of the User.

Mobile Gaming

- 3 Bn users
- Presents most lucrative revenue opportunities

PC Gaming

- 1.2 Bn users
- Leading way to cloud gaming

Console Gaming

- 600 Mn+ users
- Acting as an enabler to other opportunities like e-sports, sports video, accessories

Generally dominated by casual gamers

Dominated by hardcore and midcore gamers

Mobile Gaming - Packed With Casual Gamers

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India's mobile gaming industry is growing, with ~90%, of 450+ Mn users playing casual games

Casual Games

Key Characteristics

- Played across devices
- Simple and easy-to-learn gameplay
- Free-to-play or low cost

Key Statistics

- Google Play store has ~18,000 games published by Indian distributors.

Breaking it down based on skills

Casual / Hyper-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

Hard-core

- Players who spend considerable time and effort, typically in complex games.

Professional

- A full-time competitive player who plays games for a salary or prize money

Rise of eSports

eSports is competitive video gaming where teams participate in organized tournaments for games like Call of Duty, Fortnite and a variety of game genres like real time strategy, first time shooters, battle royale etc

eSports	Game Developers & Publishers	Tournament Organizers	Games
	RIOT GAMES, VALVE, EPIC GAMES, BLIZZARD ENTERTAINMENT	ESL, MLG MAJOR LEAGUE GAMING, DREAMHACK	  
	Infra / Accessories	**Teams**	**Streaming Platforms**
	NVIDIA, Discord, XBOX ONE, ASUS	TEAM LIQUID, FNATIC, T1, CLOUD9	twitch, rooter, YouTube, LOCO

eSports represents the intersection of gaming and competitive sports, combining elements of both to create a unique and rapidly growing global industry.

India's Gaming Paradox: High Downloads, Low Monetization

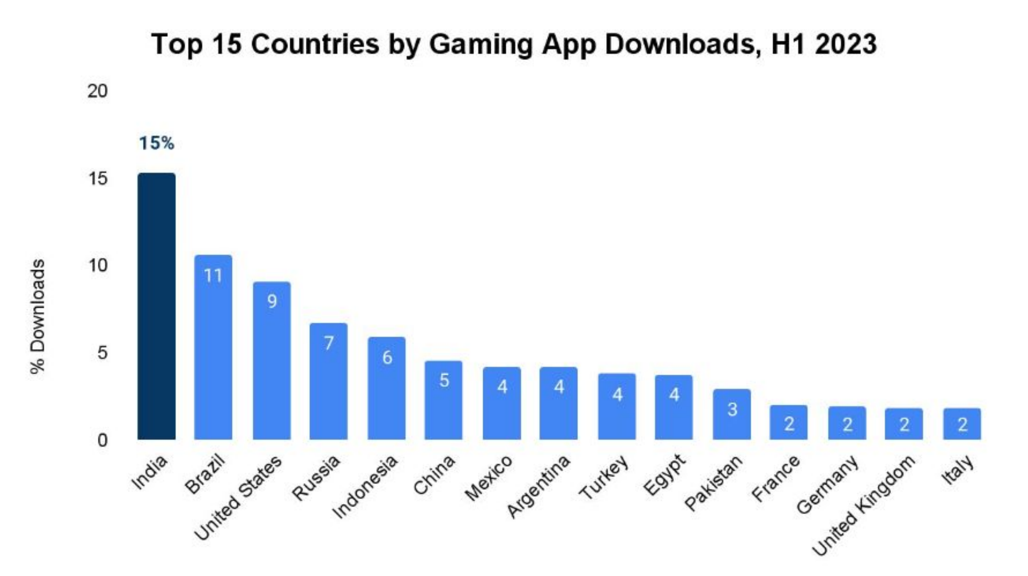
Despite leading in global game downloads, India's monetization rates lag significantly, highlighting the untapped potential and the long journey ahead for Indian gaming companies

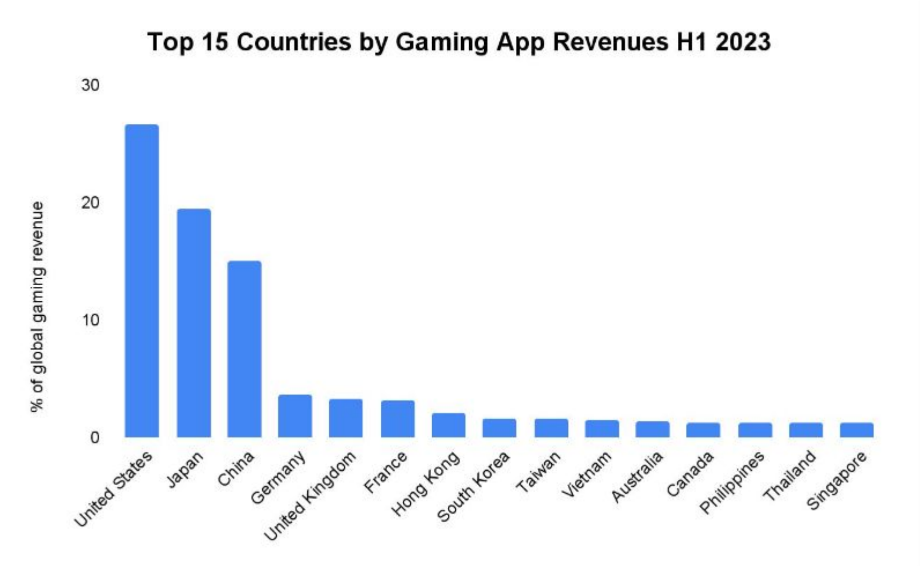
Downloads

India ranks #1 in the world in terms of gaming app downloads

Payments

India does not rank in the Top 15, for gaming app revenues





💡 ***Free Fire, BGMI, CoinMaster, Clash of Clans are amongst the highest grossing apps in India generating $150mn+ in revenue through In App Purchases (IAP). The success of these titles has shown that Indians will pay if the game is good.***

Source : Blume

Monetization majorly Led by Real Money Games

RMG Contributes ~82% of total revenue of the Gaming Sector in India

Beyond Casual Gaming	Real Money Games (RMG) – Card and casual based	Real Money Games (RMG) – Fantasy League
Characteristics	• Includes any type of game played online • Real money is wagered on outcome of the game	• Players make virtual teams online • Monetary rewards from the overall prize pool based on points accrued
	RUMMY, POKER, WINZO PLAY MORE WIN MORE	DREAM11, MY11CIRCLE

After huge success of RMGs, now traditional casual games and new categories are enabling sachet size betting, fading the line between casual games and RMG.

Gaming Companies across Sub-Segments are Focusing more on Monetization

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Companies Are Typically Opting for More Than 1 Monetization Model

- Ad Revenues
- Subscription
- Commission
- In-App Purchases

The Indian market is heavily skewed towards revenue from the top 20 apps, with 90%[(5)] of user-generated revenue coming from these applications.

Brands recognize the high engagement levels of gaming company TG, leading to significant ad revenue.

Despite being a small percentage, subscription revenue is becoming a promising revenue model for hyper-social games.

The emergence of real-money games has significantly increased the potential revenue from commission.

IAP are projected to grow at the highest rate at around 35% CAGR with the rise of paying users being across casual and core genres

How much do the Established Companies make

15+ Companies are generating over a billion dollar in revenues.

Players	Year of Establishment	Revenue 2023/2024 (in USD Bn)	HQ
SONY PlayStation	1993	27.5	Japan & US
Tencent Games	2003	24.0	China
Nintendo	1974	13.4	Japan
Microsoft Studios	1997	15.5	US
NetEase Games	1974	9.8	China
Activision Blizzard	2008	8.5	US

..And They are only Getting Larger

Historically gaming sector has seen large consolidation, and it continues to see the same trend.

Microsoft Studios

ZeniMax Media Inc.: Acquired in 2020, ~ $7.5 Bn All Cash Deal(7)

Activision Blizzard: Acquired in 2022, ~ $68 Bn - All Cash Deal(8)

Sony PlayStation

Bungie: Acquired in 2022, ~ $3.6 Bn(9)

Savage Game Studios: Acquired in 2022 (10)

Repeat.gg: Acquired in 2022(11)

Firewalk: Acquired in 2023*

* Tracxn

Tencent Games

50+ Deals in 2021 (12)

Over 20 Investments in Last 3 Years*

* Despite being under regulatory scanner

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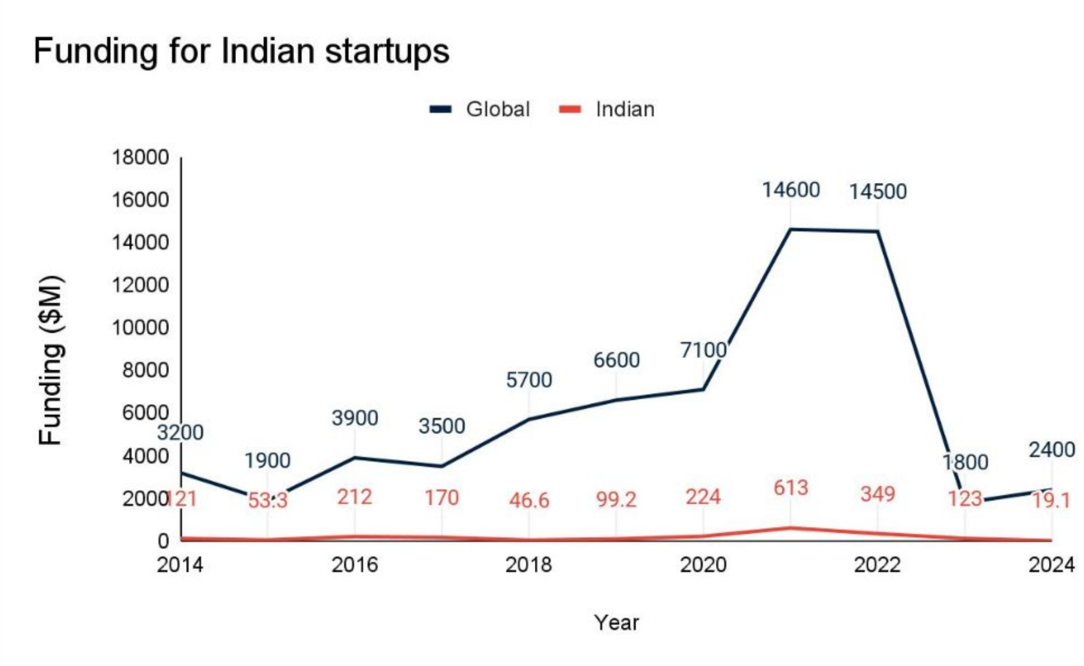
Investments in Indian Gaming Startups and Companies

A Basic Roots Consulting Deck

India's Gaming Industry: High on Gamers, Low on Funding Love

India has the highest number of gamers globally yet Indian gaming startups attract <10% of global gaming funding.



Company	Total funding ($M)
Dream Sports	> 1,400*
MPL	406
WinZo	147
Nazara	133
Zupee	122
Games24x7	107

Real money Games (RMG)

Note: 2024 data as on and until Apr'24
Source: Tracxn
*includes large secondary transactions (money that was transferred to shareholders and did not go in growing the business)

Source : Blume & Tracxn

Recently Funded Indian Gaming Companies

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Casual game has remained favorite pick for the Investors

Casual Mobile Game

	Lightfury Games	Liquidnitro Games	HighXP
Total Fundraise	**$8.5 Mn**	**$5.25 Mn**	**$3.91 Mn**
Last Fundraise	$8.5 Mn, Seed - Apr 24	$5.25 Mn, Seed - Mar 24	$2.2 Mn, Seed - Jun 23

	Fun Stop	Felicity	QuriousBit
Total Fundraise	**$1.5 Mn**	**$700 K**	**$2 Mn**
Last Fundraise	$1.5 Mn, Seed - Oct 23	$1.5 Mn, Seed - Oct 23	$2 Mn, Seed - Sep 23

Streaming Content Community

rooter — **$50 Mn** — $20.3 Mn, Series B - May 23

eloelo — **$38 Mn** — $22 Mn, Series A - Sep 23

Studios

Mayhem Studios — **$20 Mn** — Undisclosed, Series A - Jul 24

Blockchain

Circle of Games — **$1.54 Mn** — $1 Mn, Seed - Apr 24

Real Money Gaming

MPL Mobile Premier League — **$396 Mn** — $2.6 Mn, Tranche of Series E - Aug 23

eSports

Hitwicket — **$3.91 Mn** — Undisclosed, Seed - Apr 24

Revenant Esports — **$1 Mn** — Undisclosed, Angel - May 23

Nodwin Gaming — **$84.9 Mn** — Acquired

Esports XO — **$1.1 Mn** — Undisclosed, Angel - Dec 23

Where does the Opportunity lies Next?

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The gaming industry is about to undergo significant transformations in the next 3-4 years

1

AR and VR in Gaming

Integration of AR and virtual reality solutions in mobile and wearable devices and people's craving for immersive gaming experiences propel this growth

2

Generative AI in Gaming

Generative AI revolutionizes gaming, enabling dynamic, responsive experiences with AI-generated content and characters that adapt to player actions in real-time

3

Competitive Multiplayer Mobile Gaming

Multiplayer mobile games, fueled by the esports phenomenon and titles like PUBG Mobile, are set to dominate the gaming landscape in 2024 and beyond

4

Blockchain-Based Gaming

Gaming could gain benefits from this technology in making in-game purchases safer

5

Studios

Studios innovate gaming experiences, driving advancements in graphics, gameplay, and storytelling, making them pivotal for the industry's growth through immersive content.

Who is Investing ?

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Some of the Top Tier Funds Are Investing Across the Value Chain Collectively

kalaari capital
Accel
BLUME
nexus venture partners
Index Ventures
Bessemer Venture Partners
GENERAL CATALYST
GEMBA CAPITAL LISTEN • INVEST • NURTURE
chiratae VENTURES
Lightspeed
WFC
HIRO CAPITAL
BITKRAFT
GALAXY INTERACTIVE
ah! ventures bridging ideas and money
SEQUOIA
BENCHMARK
9UNICORNS
IndiaQuotient
3ONE4 CAPITAL
leo capital
a16z
TIGERGLOBAL
Lumikai
G/
PLAY VENTURES
Redpoint.
GRIFFIN GAMING PARTNERS
kae capital
SHIMA CAPITAL
matrix PARTNERS INDIA : Z47
infoedge ventures
MAKERS FUND
Sony Interactive Entertainment
Tencent 腾讯
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Source & citation

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