# Lightbox

SPACES

India's Gaming Inflection:
Non-RMG at Scale





# Lightbox At a Glance

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Years Funds Brands

Lightbox is a Mumbai based venture capital firm focused on early growth investments in technology led businesses that are shaping the future of consumption in India. We manage approximately \$400 million and have built a portfolio of differentiated businesses with a cumulative value of \$3 billion.

Our strategy is to take concentrated bets on business models that are designed to capitalise on the unique opportunities India presents as a market. India is tipped to become a \$10 trillion GDP economy by 2034 and domestic consumption is expected to be powered by a 5X growth in middle class consumption. We are already seeing traditional industries being redefined by technology and new industries being created around new consumption models. There are substantial opportunities for product-led and technology enabled differentiation in the consumer market and Lightbox has a stellar track record building market leading companies.

The team at Lightbox, led by Sandeep Murthy, has been investing in venture capital in India since 2005. As a team, we engage deeply with a few handpicked entrepreneurs who we believe are building unique solutions to organise India's large, unorganised consumption markets. Our sizable ownership in each of these businesses coupled with the compelling macroeconomic factors at play in India position us to drive significant value accretion across our investments.

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# **Foreword**

India's gaming story is unfolding now. With over 600 million players, it's one of the world's largest markets. Yet India is a paradox among the highest in downloads but trailing in monetization. That paradox has also become its greatest potential, powered by a young, aspirational player base that is engaging more deeply, spending more widely, and making gaming a cultural mainstay.

For decades, conversations around Indian Gaming have been dominated by real-money gaming (RMG). But the findings of this report highlight what many in the ecosystem have long believed that non-RMG gaming is on the cusp of its breakthrough moment. Whether it's in-app purchases, community-driven commerce, or brand partnerships, the pathways to sustainable revenue are opening up.

At Rooter, we see this shift firsthand. Our Gamer survey reveals an encouraging willingness to spend, especially among younger cohorts. It also debunks certain assumptions about their spending behaviour. For example, it's easy to assume time-on-platform would predict spend, but the data has been more nuanced - a significant share of gamers who play more than two hours daily spend over ₹1,000 (USD 11) per month, but so do a sizable share of gamers who play less than thirty minutes every day. The existence of high-affinity spenders across short and long session cohorts indicates the sharp possibilities for monetization, both immediate and distributed over time. When given the right content, value, community, and perhaps time, Indian gamers are ready to pay. This is not a future hypothesis — it's already happening.

This is also a pivotal moment for investors and industry stakeholders. With capital seeking redeployment, the non-RMG ecosystem offers a wide, underexplored canvas from casual and mid-core titles to social and community-driven platforms. The opportunity is here: to build a vibrant, diversified gaming industry that reflects the scale of India's players and the depth of their engagement. If unlocked with intent, India can move from being a volume story to becoming a value story."

#### Piyush Kumar, Founder and CEO, Rooter

India's leading Game and eSports content platform

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# **Executive Summary**

Gaming is at a pivotal juncture globally. Once a niche sub-culture, it's now a \$178 billion-plus colossus that has outpaced movies and music combined in annual revenue. But as growth stabilises in mature markets, new momentum is building in high-volume, under-monetised geographies. India, home to the world's second largest gamer base at nearly 500 million, India presents an outsized, under-monetised opportunity for all stakeholders.

With India's government moving to enact the Promotion and Regulation of Online Gaming Act, 2025, and ban real-money games (RMG), the regulatory risk around RMG has crystallised while non-real money games (non-RMG) including esports, social and casual games now enjoys clear tailwinds and legitimacy. The signal to gaming companies, local and global, and investors is to redeploy talent and capital towards domestically produced IP, live-ops, adtech and alternative

payments that monetise India's vast, price-sensitive user base via micro-transactions, subscriptions and in-game ads. The combination of policy clarity and scale gives India a credible shot at becoming a non-RMG powerhouse.

This report explores the contours of the non-RMG opportunity, drawing on global market data and industry analysis to unpack India's unique position: young, multilingual and mobile-native, but still early in its monetisation arc. Additionally, the report is informed by primary insights from a survey conducted by Rooter, India's biggest game streaming and commerce platform. The survey data shows a user base that plays daily, prefers regional content, and engages deeply with games.

The report argues that while RMG may have powered India's gaming boom until now, it is non-RMG that will power India's bid to emerge as one of the world's most important gaming markets. From the rise of local studios and live-service games to the integration of AI and cloud infrastructure, the building blocks are falling into place. India is on the brink of a new era – one defined not by betting apps or cash contests, but by the creation of durable, culturally resonant, and monetisable gaming experiences.







## Game On:

The State of the Global Gaming Market

After a sharp surge between 2019 and 2021, the global gaming market is now growing steadily. Newzoo estimates the market at \$177.9 billion in 2024, up 0.6% YoY. Mobile remains the key driver, up 2.8% YoY to \$97.6 billion. Console revenue fell 3.9% YoY to \$42.8 billion on weaker premium releases and underperforming titles. PC revenue stagnated, growing just 0.1% YoY to \$37.3 billion, chiefly on account of a lag in spending. Both console and PE gaming are expected to bounce back, starting with the console category, which is lined up for major upcoming releases such as Grand Theft Auto VI.

Newzoo projects that the market will touch \$198 billion by 2027. A separate Market Research report points to faster growth, putting the market at \$230.96 billion in 2024 and \$349.89 billion by 2032.

## 1 • 1 Regional Market Dynamics

More than 3.42 billion people play games worldwide. China, India and the US are home to the largest base of gamers at 702 million, 419 million and 221 million respectively. However, in terms of ARPU (average revenue per user), the US leads with \$215 followed by China at \$68. India's ARPU is at \$3.03 – signaling significant headroom for monetisation.

Broadly, the Asia Pacific region leads the global gaming market accounting for 47% of revenues at \$84.1 billion, growing at 0.6% YoY, and 1.81 billion gamers. North America comes in second at \$49 billion (28% share of revenues and 0.1% YoY growth) and 244 million gamers. Europe at \$30.7 billion accounts for 17% of revenues (a 1.6% decline YoY) and 454 million gamers.

China and the US together account for 52% of global spends at \$47 billion and \$46.1 billion respectively, underscoring their dominance. However, growth in these established markets is slowing, shifting the attention of global companies and investors to high-volume, under-monetized markets like India. Latin America and the Middle East & Africa also look promising, with 6.2% and 7.5% YoY revenue growth respectively, each contributing 4% to global revenue. The Middle East & Africa also recorded the fastest player with a growth rate of 8.2% YoY to 559 million.

In mature markets such as the US and Europe, console gaming is expected to drive growth, supported by new hardware releases like the Nintendo Switch 2, the established PlayStation 5 base and a better release slate. PC is also expected to see strong growth, with Europe outpacing the US. The launch of blockbusters like Grand Theft Auto VI are expected to materially lift premium PC revenue in 2026 and beyond. Mobile, which rebounded in 2023, will continue to expand as companies push D2C monetization.

In the Asia Pacific region, growth in major East Asian markets has slowed while smaller Central and Southeast Asian markets are accelerating. In China, PC and mobile revenue growth has cooled. Surprise hits like Black Myth: Wukong will boost PC spends temporarily, but mobile growth remains marginal even after successes like DnF Mobile and AFK Journey. In Japan, PC gaming continues to grow but remains smaller than mobile, which is nearing saturation. Console growth is also slowing, though the Nintendo Switch 2 is expected to reverse the trend.

Several key trends are emerging against these market dynamics.

- Off-platform payments: To grow their mobile footprint, game developers are bypassing the 30% commission on the Google and Apple app stores by using web-based third-party payment providers like Xsolla and Coda Payments with lower fees (5-10%). This is highly relevant for under-monetized, price-sensitive developing markets like India. Gaming companies are actively integrating alternative payment solutions to improve user convenience.
- Engagement-monetization decoupling: Globally, players are spending more time on games but are becoming more selective with their spending. This is particularly notable in markets such as India, Indonesia and Brazil, where the number of gamers is high but spending is low. This is driving the need for deeper integration of in-game purchases (micro-transactions).
- Live service dominance: Games like Fortnite, Roblox, and BGMI/PUBG that are constantly updated as <u>"live services"</u> with seasonal passes, discounts and premium monthly content continue to capture the majority of playtime and revenue.
- Market correction: After the post-pandemic surge, which led to an expansion of game studios and an oversupply of content, the market corrected with a record 16,766 people laid off during the year more than in 2022 and 2023 combined.

## 1)•2 Emerging Monetisation Models

Globally, monetisation approaches are evolving beyond conventional one-time purchases to accelerate the gaming industry worldwide and drive user growth.

There's been a rise in the number of microtransaction-based, free-to-play games, where players get free access to games but pay for specific in-game items. Micro-transactions accounted for 58% and 32% of PC and console revenues respectively in 2024. Subscription-based services such as Xbox Game Pass, Apple Arcade and PlayStation Plus are also growing, enabling users to access several games at once on a given hardware for a fixed monthly fee. Game Pass alone has over 35 million subscribers.

Cloud gaming services such as Xbox Cloud and GeForce Now, where players don't need dedicated hardware, are on the rise growing slowly but projected to hit \$121 billion by 2032.

Finally, in-game advertising is on the rise with static and dynamic ads, and advergaming, where players play a specific part of a game and then a click takes them to download and play more.

A bunch of technological innovations are also driving growth.

- Oloud gaming, where games are hosted on remote data center servers, is removing the need for expensive hardware, allowing players to play titles on their web browsers. This makes gaming more accessible.
- The Integration of AI into different aspects of modern-day games, right from developing game content like adaptive NPCs with dynamic storytelling to usage-based personalization. AI is also helping teams accelerate the development timelines with support for coding, bug detection, testing and asset generation (maps and characters).
- The <u>resurgence</u> of niche VR and AR technologies with new/upcoming headsets from Meta, Sony, and Apple is reviving immersive and mixed reality gaming

## 1.3 Regulatory Headwinds

Globally, rising concerns over addiction and loot-box gambling have fueled demands for greater transparency (such as disclosure of win odds) and stronger age verification systems. As a result, some governments are tightening their grip on game monetisation practices. European countries like Belgium and the Netherlands have banned or restricted loot-box mechanics due to their gambling-like nature. In the US, lawmakers have proposed bills targeting these features along with stricter rules on data usage and protections for minors. The UK has taken a lighter, self-regulatory stance.

China, the biggest gaming market in terms of both revenue and users, stands out with some of the strictest policies including a three-hour weekly play limit for minors and heavy curbs on in-game spending.

India has recently taken a decisive step towards reining in RMG with the enactment of the Promotion and Regulation of Online Gaming Act, 2025. The law bans RMG (skill or chance), outlaws their advertising and financial rails, and introduces strict penalties. Leading RMG platforms have already suspended cash games and begun pivoting to free-to-play/social games.





# **India Rising:**The Mobile-First Gaming Nation

In 2024, India had the largest gamer base in the world after China. <u>AllCorrect</u> estimated the gamer base at over 419 million, though local bodies and reports indicate slightly higher numbers at <u>442 million</u> (AIGF) and <u>488 million</u>, respectively, with approximately 110 million daily gamers and currently growing at a CAGR of 5-6%. According to a FICC EY report – <u>Shape the Future</u> – the country is on track to have 517 million gamers in 2025.

Prior to the enactment of the online gaming law, the RMG-dominated market was estimated at around \$3.8 billion in FY2024 and was projected to grow to \$9.2 billion by FY2029, per a Lumikai report in November 2024.

The explosive growth in the Indian gaming market is powered by <u>several factors</u>: over 560 million smartphone users, some of the world's cheapest mobile data, the seamlessness of UPI for digital payments, content localisation, a packed cricket calendar, and a massive youth population, with over 80% of gamers under the age of 35.

But beneath these staggering numbers lies the central paradox of Indian gaming: immense volume, but low value. As AllCorrect reported, the average revenue per user (ARPU) is a mere \$3.03 – a stark contrast to the significant spent by players in the US, Japan or China. It may be argued that India's low ARPU is also a function of lower per capita income compared to markets such as China and the US. But, this is the core challenge that every developer and publisher in India is working to solve.

Up until now, the gaming market in India itself is split into two distinct worlds. On the one hand was RMG, where players staked actual money to participate in games and could either win or lose real cash based on the outcome. This category accounted for an estimated 83-86% of total revenues in the Indian gaming market. Non-RMG, which largely involves casual and mid-core, competitive games without real cash stakes and monetisation via ads and in-app purchases largely existed in the shadow of RMG.

Gaming has also attracted private capital in droves. Between 2005 and 2024, gaming startups raised over \$3.7 billion from leading private equity and venture capital investors, per data from Venture Intelligence. RMG alone cornered \$3.3 billion. Investments peaked in 2021, when RMG companies reeled in a record \$1.6 billion-plus.

Fundchart mapping out funding towards non-RMG vs RMG from 2005 to 2024 (via <a href="Iraxcn">Traxcn</a>)

Year	Funding in Gaming (\$Mn)	Funding in RMG (\$Mn)	Funding in Non-RMG (\$Mn)
2010	0.87	0.87	-
2011	25.40	19.40	6.00
2012	5.03	2.99	2.04
2013	12.00		12.00
2014	97.90	4.17	93.73
2015	41.70	0.33	41.37
2016	184.00	1.43	182.57
2017	173.00	6.77	166.23
2018	145.00	116.00	29.00
2019	73.50	71.30	2.20
2020	153.00	135.00	18.00
2021	1,400.00	1,300.00	100.00
2022	367.00	332.00	35.00
2023	218.00	20.60	197.40
2024	167.00	19.50	147.50

## 2.1 Affordable Smartphones Drive Mobile Gaming

Mobile gaming worth close to \$3 billion accounts for nearly 80% of India's gaming market, driven by widespread affordable smartphone use, data plans and a predominantly young, tech-savvy population. According to <u>Sensor Tower</u>, India led the world in mobile game downloads with 8.45 billion installs in FY 2025, more than double Indonesia's 3.34 billion downloads. The player base skews heavily toward younger demographics with 77% in the 18-34 age group, predominantly male at 86%.

Battlegrounds Mobile India (BGMI) by Krafton, Free Fire by Garena, Call of Duty: Mobile by Activision in partnership with Tencent's TiMi Studios, Subway Surfers by SYBO Games, Candy Crush Saga by King (an Activision Blizzard subsidiary) and Clash of Clans by Supercell are among the most popular and highest-grossing mobile games from international studios.

Key domestic players include *Nazara Technologies* - with interests in gamified early learning, esports and mobile games like Chhota Bheem. *Gameskraft* - known for popular RMG titles like Rummy Culture. *Mobile Premier League* (*MPL*) - a mobile esports and skill-gaming platform offering a variety of games, including fantasy sports, rummy, and casual games. *WinZO Games* - a vernacular social gaming platform with a focus on Tier 2-5 cities, offering a wide array of games in multiple regional languages. *Octro Inc.* - developer of popular Indian card games like Teen Patti and Indian Rummy. *Dream11* - the dominant player in the Indian fantasy sports market. *Zupee* - known for skill-based casual games, particularly Ludo, and has seen significant user growth and *Gametion Technologies* - the creator of the immensely popular Ludo King.

Ludo King by Gametion has maintained its position as India's most downloaded mobile game since 2017, surpassing 1.25 billion all-time downloads and continuing to lead FY 2025 download rankings. The top 10 downloaded games for FY 2025 include Ludo King at #1, Free Fire (Garena) at #2, followed by Zupee's Ludo variants, Dream11, Indian Bikes Driving 3D (Rohit Gaming Studio), Cricket League (Miniclip), WinZO Ludo, Subway Princess Runner, and Carrom Pool.

## 2 Download Dynamics

Broadly, the download landscape is led by accessible genres simulation games (22% of downloads), Arcade games (19%), and Puzzle games (17%) with driving simulators like Indian Vehicles Simulator 3D and platformers like Subway Princess Runner showing particularly strong performance in their

respective sub-genres. Fantasy sports platforms, which make up the core of India's RMG category, have also carved out a significant niche on mobile with Dream11 consistently ranking among the top downloaded games (#4 in FY 2025) and establishing a massive user base through cricket and other sports-focused gameplay. These platforms tap into India's sports enthusiasm, particularly cricket, creating engaged communities around familiar sporting events and leagues.

Platform specific breakdowns show consistent post-pandemic download momentum, with hyper-casual and culturally familiar titles continuing to drive user acquisition. Games featuring local themes, simple mechanics, and multiplayer social experiences maintain the strongest engagement across India's diverse, cost-sensitive mobile gaming user base.

## 2.3 Monetisation

In terms of revenue, the mobile category generates money through various sources, including advertising (with developers earning revenue from brands), in-app purchases (or microtransactions by players), real-money gaming stake (such as fantasy sports and skill games) and direct game purchases.



The total revenue from in-app purchases via mobile games stood at \$400M in 2024, with shooting games, particularly battle royale titles like BGMI (Battlegrounds Mobile India) and Free Fire, along with Call of Duty: Mobile, being the highest revenue generators through IAPs. Strategy games, such as Clash of Clans, and popular Match-3 games like Candy Crush Saga, also rank high in terms of monetization.

A clear divergence exists between the genres that achieve the highest download volumes (typically hyper-casual, casual, and simulation games) and those that generate the most revenue through direct player spending (shooting, strategy and RMG).

This suggests the presence of at least two distinct player archetypes or engagement models in the Indian market. The first is a massive base of casual players who are primarily monetized through in-game advertising or very occasional, low-value IAPs. The second is a more dedicated and higher-spending base of players who are willing to make significant in-app purchases in core games or participate actively in real money gaming. Successful game publishers and developers in India often need to devise strategies that cater to both these segments, either by having a diverse portfolio of games or by implementing sophisticated monetization mechanics that can effectively bridge this gap – for example, by using highly engaging casual games as an acquisition funnel for more deeply monetisable titles.

# 2 • 4 PCs and Consoles





While smaller than mobile gaming, the PC gaming segment is experiencing steady growth. It contributes approximately 15% of the total market revenue. This growth has been supported by an increasing demand for high-performance gaming laptops, particularly as users seek devices that can serve both gaming and professional or educational needs.

Precise, comprehensive data for revenue and downloads across PC for the entirety of 2024 wasn't available, but a clear picture of the market leaders emerges from industry reports, player statistics, and market analysis. Titles such as Valorant, Riot Games' free-to-play tactical shooter; Krafton's Battlegrounds Mobile India; Counter-Strike 2, Valve's iconic first-person shooter; Rockstar Games' open-world masterpiece Grand Theft Auto V & GTA Online; Respawn Entertainment's fast-paced battle royale Apex Legends; and Dota 2, the free-to-play multiplayer online battle arena from Valve consistently feature among the most played and highest-grossing.

The console gaming segment holds the smallest share of the Indian market at <u>less than 10%</u>. Popular global titles like FIFA (now EA Sports FC) and Call of Duty drive engagement within this segment, driven by demand from dedicated gamers. However, the high upfront cost of gaming consoles and games themselves remains a significant barrier to widespread adoption.

While there can be an overlap in terms of PC and console titles with publishers launching on both platforms (mostly first on console and then on PCs), hardware providers are distinct in both PC and console categories. In consoles, global giants like Sony Corporation (PlayStation), Microsoft (Xbox), and Nintendo dominate as the primary hardware providers. Major game publishers such as Electronic Arts (EA), Ubisoft, and Take-Two Interactive Software (which owns Rockstar Games and Zynga) have a significant presence, either through direct game sales or by operating development studios in India.

All these global publishers dominate the Indian market with a range of titles, with GTA VI (set for 2026) from Rockstar being one of the most anticipated releases. Some Indian developers (e.g. Dhruva Interactive, JetSynthesys) also contribute to global PC/console game development.

## (2)<sub>°</sub>(5) Optimise for Mobile

The overwhelming dominance of mobile gaming establishes India as a "mobile-first" and, for a significant majority of its players, a "mobile-only" gaming nation. This has profound implications for the entire gaming value chain. Game design must be optimized for touch controls, variable

screen sizes, and shorter play sessions suitable for on-the-go consumption. Developers need to ensure their games perform adequately across a wide spectrum of Android devices with varying hardware capabilities. Distribution is primarily through mobile app stores (Google Play, Apple App Store), although alternative distribution channels and direct APK installations are also prevalent. Monetization strategies are heavily skewed towards free-to-play models, relying on in-app purchases for cosmetics or convenience, and in-game advertising.



PC and console gaming, while niche in comparison, cater to a more core gaming audience that tends to have higher spending power and engagement with premium gaming experiences. Consequently, global trends in PC and console gaming may have a more delayed or muted impact in India compared to developments in the mobile gaming sphere.

# (3.0)

#### Inside:

## The Non-RMG Opportunity

Non-RMG represents an increasingly vital segment of the Indian gaming industry. With RMG now practically non-existent, non-RMG offers alternative avenues for growth, innovation, and player engagement.

## (3)•(1) Core Characteristics and Differentiation from RMG

Non-RMG, as detailed in the examples cited earlier, encompasses a broad category of games where players do not stake real currency with the primary aim of winning real money prizes. Instead, the motivation for playing is typically entertainment, skill development, social interaction or achieving in-game objectives.

These games employ several distinct monetization models to generate revenue, with the free-to-play (F2P) approach being the most prevalent, especially on mobile platforms.

- $\Rightarrow$
- **In-app purchases (IAPs)**: This is the cornerstone of monetization for many non-RMG titles. Players can make voluntary purchases of digital goods or services within the game using real money. These may include:
  - Cosmetic items: Character outfits, weapon skins, emotes, and other visual customizations that do not impact gameplay mechanics but allow for personalization (e.g., in BGMI, Free Fire).
  - Virtual currency/Premium resources: In-game currencies bought with real money, which can then be used to acquire items, speed up progress, or access content.
  - Consumables/Power-ups: Items like extra lives, energy refills, boosters, or temporary advantages.
  - Unlocking new content: Paying to access new levels, characters, game modes, or story chapters.

<u>The FICCI-EY report</u> projects that IAPs in the Indian gaming market will grow at a robust CAGR of 20%, indicating an increasing player propensity to spend within games. Shooting games like BGMI and Free Fire are consistently top-grossing games driven by IAPs. The projected growth, despite India's generally low ARPU, suggests an interesting dynamic. While one industry expert, Rohit Agarwal (founder of Alpha Zeus), <u>noted</u> that less than 5% of gamers in India make in-app purchases, the growth in this segment indicates that either this small percentage of spenders is increasing or existing spenders are willing to spend more.

- In-game advertising: This model allows developers to earn revenue by displaying advertisements to players. Common ad formats include:
  - Rewarded video ads: Players voluntarily watch a short video advertisement in exchange for an in-game reward (extra currency, an additional life, or unlocking a feature). This format is generally well-received by players as it offers a clear value exchange.
  - Banner Ads: Static or animated ads, typically displayed at the top or bottom of the game screen.
  - Interstitial Ads: Full-screen ads that appear between game sessions, levels, or loading screens.
  - Offerwalls: Portals within a game where players can complete tasks (like installing another app or filling out a survey) in exchange for in-game rewards.



Photo via Game Analytics

Advertising revenue in the Indian gaming sector experienced steady growth of <u>10% in 2024</u>. Casual and hyper-casual games, with their high download volumes and broad reach have become popular platforms for brands to engage with younger, upwardly mobile audiences across Tier I, II, and III cities. Incentivized ads, which offer tangible rewards, have seen increased deployment as they enhance user engagement and allow for more ad impressions per session.

- Subscriptions: While less common in the Indian mobile F2P market compared to IAPs and ads, some games offer subscription models. These might provide players with a regular stream of in-game currency, exclusive content, an ad-free experience, or other ongoing benefits for a recurring fee.
- Premium games (Pay-to-Play): This traditional model involves players paying an upfront cost to purchase and download the full game. It is more common in PC and console gaming but less so in the Indian mobile market, which heavily favors F2P.
- Hybrid monetization: Many successful non-RMG titles employ a hybrid approach, combining multiple monetization methods. For example, a game might be free to play with both IAP options for cosmetics and progression, as well as rewarded video ads for players who prefer not to spend money.



Photo via Mobile Marketing Magazine

In contrast, RMG explicitly involves players wagering real money (or its equivalent in kind) with the expectation of winning tangible real money rewards. This fundamental difference in the flow of money and the nature of winnings is what distinguishes RMG from Non-RMG.

The free-to-play (F2P) model is predominant within the Non-RMG segment, particularly in mobile gaming. F2P games allow users to download and play the core game content without any initial payment. This lowers the barrier to entry and attracts a large user base which is reflected in the download numbers of games like Ludo King and Garena Free Fire. Revenue is then generated through optional IAPs or by serving advertisements to the players.

Non-RMG revenue streams like IAPs for virtual goods or advertising income are not directly subject to the <u>contentious 28% GST</u>, though they are subject to standard GST rates (18%) applicable to

digital services or goods. This regulatory and tax distinction will be critical in shaping the strategic direction of the Indian gaming industry. Non-RMG presents a comparatively more stable, albeit differently challenging, pathway for growth and investment. This divergence is likely to heavily influence investment flows, the allocation of talent and resources, and the focus of innovation within the Indian gaming landscape, potentially accelerating the development and diversification of the Non-RMG sector.

## (3)•(2) The Non-RMG Ecosystem

The Non-RMG ecosystem in India is vibrant and diverse, encompassing a wide range of game developers, distribution platforms and content types that cater to a massive player base.

Among key international studios like King (developer of Candy Crush Saga), Supercell (Clash of Clans, Clash Royale), Activision (Call of Duty: Mobile), Garena (Free Fire), and Krafton (BGMI, which, while having competitive elements, primarily monetize through IAPs for cosmetics) have a significant presence with highly popular Non-RMG titles. Domestic companies are also making their mark. Gametion Technologies, the creator of Ludo King, is a prime example of an Indian studio dominating a segment of the Non-RMG market. Nazara Technologies has a portfolio that includes casual and educational games. Many smaller indie studios also contribute to the diverse content pool.

The primary distribution channels for Non-RMG titles, especially mobile games, are the major app stores: Google Play Store and Apple App Store. There is also an emerging interest in alternative app stores in India, potentially offering different terms or reach. Web-based play, where games can be accessed directly through a browser without needing an app download, also exists for certain types of casual games. Esports platforms like NODWIN Gaming, Gamerji, and others also form part of this ecosystem, hosting tournaments for non-RMG titles that have competitive scenes.





Photo via Clash Champs Photo via Ludo King

## (3)·(2)·(1) Content Categories

Compared to RMG, the non-RMG universe offers a much richer and diverse experience in terms of the sheer types of content and entertainment available.

- Casual, simulation, and board games: This covers casual games like Ludo King, Snakes & Ladders, Carrom, Chess, quiz games, etc. Many of these have both free versions and paid variants. Other social/casual titles (often free-to-play with in-app ads and purchases) include cricket/football games (e.g., Nextwave's World Cricket Championship), trivia apps, and hyper-casual mobile games by companies like Nazara and Moonfrog.
- Mid-core gaming: These games require more skill and engagement than casual games and include titles like Battlegrounds Mobile India, Call of Duty: Mobile, and Free Fire, which engage players with an average daily playtime of 80 minutes. These games drive monetization primarily through in-app purchases and form a major part of the non-real money gaming (non-RMG segment), alongside casual games.

The global interest in this category is also palpable. Sean Hyunil Sohn, CEO of Krafton India, said, "India is within the top five in terms of revenue contribution" from BGMI and "we want to build more depth capacity within the country so that we can make games for the Indian market but also export them or make those games available for global audiences."

- Puzzle and arcade games: Classic genres like puzzle games (e.g., Candy Crush Saga, Bubble Shooter, Fruit Ninja clones, etc.) and arcade games (e.g., Subway Surfers) maintain enduring popularity and contribute significantly to downloads and engagement.
- Educational/skill-based games: These games help players develop a specific skill or learn something new and are emerging, for example Mioris LTD's Erudite (math quizzes) and Merriman Games backed Physics Cake (physics simulation games), although these remain small.
- AAA game titles: These are high-budget games from publishers, aimed particularly at advanced hardware like gaming PCs and consoles. This is the smallest category of

games in the Indian market, with studios increasingly developing titles based on Indian mythology and local culture. Notable examples are Raji: An Ancient Epic, Yodha, and Mumbai Gullies.

## (3)•(3) Esports and Competitive Gaming

Esports is also growing, with the category generating revenues at \$100 million in 2024, largely via sponsorships. It involves organized, competitive gaming, often with professional players and teams, large spectator audiences, and significant prize pools.

Firms like NODWIN Gaming and Skyesports run major events (covering games like Battlegrounds Mobile/Valorant) and are building a professional ecosystem around competitive mobile titles. The segment is witnessing growth fueled by increasing prize money, the entry of new game titles into the competitive scene, and the rising popularity of Indian esports athletes and influencers.

The Indian esports market was valued at \$101.4 million in revenue in 2024, with sponsorship being the largest revenue contributor (61.0%). Notably, there are also dedicated streaming/influencer platforms (CarryMinati has ~40M YouTube subs). Esports can be grouped under both RMG (when played for money) and casual play, non-RMG.

## (3)•(4) Scaling Challenges in Non-RMG

Despite the growth and opportunities in the non-RMG segment, developers and publishers face several significant challenges when trying to scale their operations and achieve sustainable success in the Indian market.

#### Monetisation

The non-RMG ecosystem thrives on attracting and engaging a large volume of players. The immense popularity of hyper-casual and simulation games, as evidenced by their leading download shares, signifies a vast audience receptive to easily accessible, low-commitment digital entertainment. However, these genres often have lower direct monetization rates through IAPs. This presents a key challenge and strategic imperative for developers: to effectively convert this widespread engagement into revenue.

As highlighted earlier, India's ARPU in gaming is significantly lower than developed markets. Indian users are accustomed to free content and may be reluctant to make inapp purchases. This makes it difficult to convert engagement into substantial revenue, whether through IAPs or advertising. For ad-based models, low eCPMs (effective cost per mille/thousand impressions) in the region can mean that massive scale is required to generate significant income.

Success often hinges on implementing sophisticated and non-intrusive advertising monetization strategies, designing light and appealing IAPs that casual players are willing to purchase, or strategically using these high-volume casual games as an acquisition funnel to introduce players to other, more deeply monetizable titles within a publisher's portfolio.

It will also be important for developers to identify, nurture, and retain "high-value players" or "spenders" with Al-powered player segmentation, behavioral analysis, and personalized offers, tailoring IAP offerings to their preferences and spending pat.

#### Infrastructure and Technological Hurdles

- Backend scalability: Games that achieve sudden viral success can experience an overwhelming surge in concurrent users. If the backend infrastructure is not designed to handle such spikes, it can lead to server crashes, poor performance, and a negative user experience, ultimately squandering the viral momentum. This "viral success paradox" is a real threat, especially for hypercasual games, and underscores the critical need for scalable cloud-based backend solutions and proactive infrastructure planning, even for games that seem simple on the surface. Backend-as-a-Service (BaaS) platforms can offer a lifeline to developers, allowing them to offload much of the complexity of managing scalable infrastructure and focus on core game development and content creation.
- Device and network optimization: The Indian mobile landscape is characterized by a wide diversity of Android devices with varying hardware capabilities and intermittent or low-speed network conditions in many areas. Optimizing games to perform smoothly across this spectrum is a constant technical challenge.

- Cost of infrastructure: Building and maintaining robust backend infrastructure (for player data management, leaderboards, real-time interactions, etc.) can be prohibitively expensive for indie developers and smaller studios.
- Fragmented tooling: Developers often have to integrate and manage multiple third-party tools for essential functions like LiveOps, analytics, player engagement, and social features, which can be complex and inefficient.

#### → Talent Bottlenecks

While India has a large pool of IT talent, there can be a shortage of professionals with specialized skills in advanced game development areas, such as AI programming for games, complex game design, or niche engine expertise. Furthermore, the lack of a strong domestic publishing ecosystem means developers often lack support in areas like marketing, distribution, and global outreach.

### (CAC) High Customer Acquisition Costs

The market is highly competitive, making it expensive to acquire new users, particularly for games that rely on achieving significant scale.

#### (Data Protection)

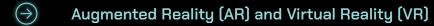
The introduction of India's Data Protection and Digital Privacy (DPDP) Act presents a new layer of compliance for game developers. The costs and complexities associated with adhering to data privacy regulations, especially concerning user consent for data processing (crucial for targeted advertising) and the handling of children's data, could potentially impact ad revenues for F2P games if not managed effectively. This could reduce ad effectiveness or increase operational overheads, thereby squeezing the already thin margins for some developers.

### Digital Fraud

While more commonly associated with RMG, non-RMG platforms with valuable virtual items, player accounts, or integrated economies can also be targets for identity theft, account takeovers, and promo abuse.

## (3)•(5) The Role of Emerging Technologies

The non-RMG landscape in India is set to be further shaped by <u>emerging technologies</u> that promise to enhance player experiences, democratize access, and introduce new gameplay paradigms. Artificial Intelligence (AI) is also poised to play a transformative role across the board.





- AR and VR technologies offer the potential for highly immersive gaming experiences by blending digital elements with the physical world (AR) or transporting users to entirely virtual environments (VR) with the market is projected to grow at a CAGR of 30-35% in the coming years.
- In India, the adoption of VR in gaming is still in its nascent stages but is growing, supported by the increasing availability of more affordable VR devices and the rollout of 5G networks, which can provide the low latency required for smooth experiences. VR headsets (Quest 3, PSVR2) have launched, and localized VR content (e.g., VR versions of Indian-themed games) is a potential growth area.

- Developers from Indian companies like Octro Inc., Nazara Technologies, and Nodwin Gaming are also <u>reportedly</u> focusing on AR applications that integrate real-world elements, such as location-based mobile games like Pokémon Go and multiplayer AR experiences.
- While widespread AR/VR gaming is yet to take off, case studies of AR/VR applications are more prevalent in marketing/utility-focused campaigns by Indian brands (e.g., Lenskart's virtual try-on, Asian Paints' color visualizer). However, specialized AR/VR game testing is an emerging service sector in India, indicating development activity.
- Key challenges for AR/VR gaming include the need for specialized testing to address issues like motion sickness, ensuring consistent immersion across different hardware, and broad device compatibility. The market for AR/VR games is also considered a component of the broader game-based learning market.

### Cloud Gaming



Photo via Samsung

Cloud gaming technology allows users to stream and play high-end, graphics-intensive games on devices with basic hardware specifications (like smartphones, low-spec laptops, or smart TVs) by processing the game on remote servers and streaming the video output to the player's device.

- This trend is gaining traction in India, facilitated by relatively low mobile data prices and the ongoing deployment of 5G infrastructure, which promises higher bandwidth and lower latency.
- Cloud gaming has the potential to democratize access to premium gaming experiences, particularly for users in Tier II and Tier III cities who may not own expensive gaming consoles or PCs.
- The Indian cloud gaming market, though starting from a small base (estimated at \$9.98 million in 2024 by IMARC), is projected to experience very high compound annual growth rates. Grand View Research projects a CAGR of 49.9%, reaching \$1,323.8 million by 2030, while IMARC forecasts a CAGR of 46.20%, reaching \$445.30 million by 2033.
- Key players are entering the market; for instance, JioGamesCloud was launched by Reliance Jio in January 2023, and Nvidia has announced plans to extend its GeForce Now cloud gaming service to India. Mobile cloud gaming, allowing high-end games to be played on smartphones via the cloud, is identified as a major trend within this segment.

### Artificial Intelligence (AI) in Non-RMG

All is not just an upcoming trend but an increasingly foundational technology that is set to permeate various aspects of non-RMG development and operation.

- Hyper-localization and content generation: All can be used to generate culturally relevant game content, including narratives, dialogues, and character designs tailored to India's diverse linguistic and cultural landscape. This includes creating storylines inspired by Indian mythology or pop culture and delivering them in multiple regional languages. Over 45% of Indian gamers prefer content in regional languages.
- Personalized player experiences: Al algorithms can analyze player behavior to create personalized gameplay loops, dynamically adjust difficulty levels, recommend relevant content, and power adaptive LiveOps (live game operations) to keep players engaged.

- Dptimized monetization: All can help in optimizing monetization strategies by enabling personalized offers for in-app purchases, dynamic pricing based on user behavior, and A/B testing different monetization models to identify what works best for specific player segments.
- ≥ Enhanced user acquisition and retention: Al tools can improve the efficiency of user acquisition campaigns and predict player churn, allowing developers to take proactive measures to retain users.
- Smarter game worlds: All can create more believable and intelligent Non-Player Characters (NPCs) with adaptive behaviors, leading to more dynamic and interactive storytelling.
- Development efficiency: Al can accelerate development processes, including tasks like software testing, debugging, and even asset creation.

Despite its potential, Al adoption faces hurdles such as a shortage of skilled Al professionals in the gaming domain, limited access to large datasets and computing power for smaller studios, ethical considerations around Al-driven personalization, and ensuring authentic Indian cultural representation in Al-generated content.

## (3)•6 Opportunities for New Entrants

The non-RMG sector in India offers several promising opportunity segments for new entrants and existing players looking to diversify. These segments often cater to specific needs or leverage unique market characteristics.

#### → Game-Based Learning (GBL)

GBL, <u>valued at \$873.3 million in 2024</u> and projected to reach \$5,395.9 million by 2033, involves the use of games and game mechanics to facilitate learning, enhance engagement, improve problem-solving skills, and boost knowledge retention.

India's large student population and strong interest in edtech suggest games that teach coding, math, languages, or life skills could find an audience and transform traditional

teaching. The government and investors are increasingly interested in "edutainment" – for example, initiatives under the AVGC (Animation-Visual Effects-Gaming-Comics) task force explicitly encourage games with learning value. Studies also show that integrating game elements like challenges, points, and <u>rewards can boost student</u> engagement by up to 60%.

Minecraft Education Edition for teaching subjects like math and science, or simulation games like SimCity for concepts in urban planning and management, are good examples in the category. It can also include AR/VR educational games, Al-based adaptive learning games, assessment and evaluation games, training simulations, knowledge-based challenges, and language learning games — targeted at learners from primary school to corporate levels.

#### Skill Development Games

Distinct from RMG "games of skill" that involve monetary wagers for cash prizes, this category focuses on games designed to demonstrably improve cognitive abilities or practical skills such as concentration, strategic thinking, decision-making capabilities, memory, and reflexes. Monetization typically occurs through premium versions, content packs, or institutional licenses, similar to GBL, rather than through wagering.

For example, the <u>Probo app</u>, which offers knowledge-based challenges where users predict outcomes of real-world events by answering "Yes" or "No," rewards analytical skills and knowledge. This model operates by engaging users in skill-based prediction without involving direct wagering on the game outcome itself in the traditional RMG sense (if prizes are structured as rewards for knowledge rather than direct winnings from stakes).

This segment offers an opportunity for new entrants to leverage the appeal of "skill" and intellectual challenge without navigating the regulatory complexities and tax burdens associated with RMG.

### Hyper-Localization and Culturally Resonant Content

There is also a strong and underserved demand for gaming content that resonates with India's diverse cultural and linguistic landscape, titles based on Indian mythology,

folklore, history, pop culture, and local stories. Approximately <u>75% of Indian users</u> prefer gaming content in Hindi or other regional languages. Al can be a powerful enabler for hyper-localizing game dialogues, narratives, avatars, and user interfaces at scale. Raji: An Ancient Epic and Venba, which draw from Indian culture and narratives and have gained recognition, demonstrate the appeal of such content. It also offers unique content for global audiences interested in diverse cultural experiences.

#### Social Gaming and Community Platforms

Gaming is an inherently social activity for many. Multiplayer games, esports, and platforms that foster community building are experiencing growth and can prove critical in building a strong user base for driving ad revenue (think something like Facebook or Instagram but with a touch of gaming). To achieve this, teams should enhance social interaction around games, facilitating team formation, enabling content sharing, and building vibrant fan communities. For example, the startup STAN aims to become an "Indian Discord," a dedicated communication and community hub for gamers in India.

#### Gamification in Non-Traditional Areas



The application of game mechanics and design principles to non-gaming contexts is also a growing field. For instance, like education, gamification can be leveraged in healthcare (e.g., for patient adherence or wellness programs), advertising (for interactive brand engagement), e-commerce (for loyalty programs and user engagement), and employee training and motivation.



## Rooter User Survey: Young Mobile Users are Already Paying – At Low Ticket Sizes



A Rooter survey of 462 respondents finds three in four gamers already spend on non-RMG in-app purchases, while overall time spent in games continues to rise.

The sample skews young, male and mass-market: 74% are aged 18–24, 85% identify as male, and 72% report annual income below Rs 5 lakh. Yet despite limited spending power, 74.9% say they buy something non-RMG. Among payers, the most common monthly outlay is at the bottom of the price ladder - ₹0-₹100 (36.4%) — followed by Rs 1000+ (31.2%), Rs 501–Rs 1000 (17.3%) and Rs 101–Rs 500 (15%). Using midpoint assumptions, the survey implies a monthly ARPU of Rs 584, underscoring both monetisation traction and headroom.

Spending is concentrated in 'live-service' baskets. Battle passes and subscriptions account for 40% of reported purchases, closely followed by cosmetic upgrades (37%), with unlocking levels/features (23%) forming the third leg. That pattern favours regular content drops, seasonal events and progression system-operating models that convert engagement into predictable, compounding revenue without relying on cash gaming.

Device usage remains overwhelmingly smartphone-first (mentioned by 395 respondents), but higher-value segments sit on larger screens. Self-reported payer incidence is higher on PC (84%), console (82%) and tablet (93%) than on smartphone (73%). For publishers, that mix suggests a dual track: keep mobile funnels broad and low-friction while using PC/console ports and tablet-optimised UX to lift average spend.

Advertising remains viable up to a point. While 38% say they would stop playing if ad load is excessive, roughly 50% are neutral or have no strong opinion and 12% simply "find them annoying." Read together, the responses argue for hybrid models that lean on rewarded and contextual ads with tight frequency caps, using ads to subsidise free play while nudging micro-transactions.

Language is a scale lever rather than a barrier. In multi-select responses, English (49% of mentions) and Hindi (34%) dominate; Tamil (7%) and Telugu (4%) are meaningful. For developers, that points to a pragmatic localisation stack — Hindi-first with English, then selective southern languages to expand reach efficiently.

Crucially, engagement is still moving in the right direction: 52.4% report that their playtime has increased over the past five years (24.4% unchanged; 23.1% decreased). Payer incidence also rises with age: 70.8% among 18–24s versus 86.2% for 24–35 and 87.5% for 35+. As the cohort matures and incomes rise, the spend curve should steepen even without real-money mechanics.

For platforms and investors recalibrating after the RMG ban, the survey outlines a clear playbook. Build rails before chasing hits: UPI-friendly off-store payments for Rs 10-Rs 99 top-ups and

Rs 99-Rs 129 passes; disciplined live-service cadence (events, drops, progression); hybrid monetisation that combines small IAP with rewarded ads; and cross-device expansion to capture higher-value users. With a half-billion-strong gamer base, the path to leadership in non-RMG runs through operational excellence turning time-rich engagement into affordable, repeatable spend at a national scale.



