


Gaming platform monetization models and strategies for startup success: A case study from India

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Article Info	Abstract
<p>Original article</p> <p>Main Object: Computer Science & Technology</p> <p>Received: 12 October 2025 Revised: 11 December 2025 Accepted: 31 December 2025 Published online: 08 February 2026</p> <p>Keywords: MICMAC analysis, mobile gaming in India, monetization strategy, rational choice theory, real money gaming.</p>	<p>Background: The evolution of monetization models and marketing approaches in the digital industry has redefined the growth trajectories of startups.</p> <p>Aims: This study explores monetization strategies in India's gaming startup ecosystem, examining their influence on user behavior, preference, revenue retention and venture capital (VC) attraction.</p> <p>Methodology: Aligned with a focus on the microstructure of the gaming market, investor behavior, and capital markets, the research employs a mixed-method framework combining interviews, surveys, and MICMAC analysis, grounded in Rational Choice (RC) theory. Using Mobile Premier League (MPL) as a case study, the present research evaluates three monetization models: Real Money Game (RMG), Free-to-Play (F2P), and hybrid strategies.</p> <p>Findings: Key findings indicate that RMG significantly enhances user engagement while demonstrating a stronger signaling effect for VC attraction. Empirical results suggest that the RMG monetization strategy offers greater potential for investors decision-making and ensures more robust revenue continuity compared to F2P and hybrid alternatives.</p> <p>Conclusion: The study contributes to the literature by bridging behavioral finance and capital market governance within the context of digital innovation in emerging economies.</p>

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1. Introduction

The evolution of monetization models and marketing approaches in the digital industry has redefined the growth trajectories of startups. In the gaming startup ecosystem, strategies such as Real Money Game (RMG), Free-to-Play (F2P), and hybrid models have emerged not only as primary revenue drivers but also as core mechanisms for user engagement, retention, and scalability. Unlike traditional industries, where monetization typically follows product-market fit or service delivery, gaming platforms integrate monetization strategies as fundamental components of the user experience itself. Successful gaming startups have created self-sustaining ecosystems where user satisfaction, engagement, and revenue generation reinforce one another. This strategic integration of monetization models distinguishes the gaming industry—particularly in India—from other digital markets such as fintech, edtech, and health tech.

The Indian gaming industry has experienced exponential growth, emerging as a significant player in global markets. According to a report by Klynveld Peat Marwick Goerdeler (KPMG) and Google Analytics (KPMG, 2020: 10), India's digital gaming sector is projected to reach \$8.6 billion in 2025. This surge is attributed to the increasing number of mobile users and easy access to internet and shifting customer preference toward digital entertainment and mobile gaming. The COVID-19 pandemic further accelerated this trend, as users spent more time online, leading to a spike in the popularity of digital games (*Statista*, 2025). The rise of successful startups like Mobile Premier League (MPL) underscores the immense potential of India's gaming sector. By leveraging diverse and user-centric monetization models, MPL has attracted a massive user base, establishing itself as one of India's leading gaming platforms. Comparatively on a global scale, India portrays a distinctive gaming monetization strategy. While mature markets like the U.S. and China face saturation in F2P models and rely heavily on subscription services, India's market favors skill-based RMG models, appealing to cost-conscious users motivated by financial incentives. Although the gaming market is massive in China, strict limitations on RMG restricts the widespread adoption of such models. On the other hand, India occupies a unique strategic position in monetization models of games, where flexibility, consumer behavior preferences and venture capital streams to create a productive ground for innovative monetization strategies (*Deloitte*, 2023).

The significance of monetization models in India's gaming ecosystem cannot be overstated. India's gaming environment is intensely competitive, with rising user acquisition costs and volatile loyalty. In this landscape, strategic monetization design determines market survival and scalability. Startups that fail to implement effective monetization strategies risk losing competitiveness, struggling to secure sustainable investments, achieve positive unit economics, or maintain

user engagement. MPL's success exemplifies this principle: by integrating RMG and hybrid models, it has sustained user engagement, attracted significant venture capital, and achieved unicorn status.

Given this context, the study addresses the following research questions:

- How do different monetization models and marketing approaches influence the success of gaming startups?
- How has MPL strategically leveraged monetization models to drive its success in India's gaming ecosystem?

2. Literature review

The monetization strategies of gaming platforms have become a very crucial point in the gaming industry. The global gaming market has shifted from traditional one-time purchase in game platforms to a more dynamic monetization approaches such as F2P, IAP, RMG, Hybrid models and advertising-based revenue purchases. Understanding how these models' effects on gaming development is crucial for the companies seeking to optimize user engagement and fund-raising sustainability.

The field of game production, consumption and the monetization strategies of gaming platforms are completely intertwined with the role of culture and its influence. The gaming industry in India has been growing in recent decades. Traditional games have gradually given way to digital games. This trend has had a significant impact on the behavior of users in how they spend their leisure time. Two fundamental points in this trend have changed the equations of digital games in India, the availability of gaming platforms and game distribution systems have been able to increase interest in digital games (Sharma et al., 2024).

Joonas Mäkinen (2022) highlights a crucial development in the monetization models for *Battle Cards*, a F2P monetization mobile game developed by *Rockbite Games*. A qualitative and quantitative method has been used to conduct the study, specifically benchmarking industry leaders' approach and A/B tools have been conducted. Benchmarking identifies common monetization methods such as loot boxes, IAP, advertising-based revenue models. A/B testing has been conducted to examine the impact of different in-game platform layouts and currency pack configurations on revenue and user retention. The key findings indicate that *Battle Cards* game has suffered from lack of retention and its poor strategies, which prevents effective monetization. Mäkinen (2022) recommends discontinuing game development and focusing on better retention potentials of the game.

Joel Sormunen (2019) examined the sustainability of revenue models in gaming industry, specifically video games focusing on loot boxes and microtransactions. The study findings indicate that many games portray characteristics akin to gambling, raising ethical concerns especially their impact on adult users. The key results highlight that:

- The emergence of digital distribution transformed revenue models from traditional physical models to digital monetization strategies.
- The F2P model in mobile gaming has become dominant because it allows users to access game features for free while monetizing through microtransactions.
- Microtransaction strategies in front of loot boxes have become hugely criticized because of their gambling-like mechanisms, which can lead the users' psychological tendencies.
- As loot boxes provide rewards randomly, there is a huge concern about games addictions and money they spend through IAP.
- Aggressive monetization strategies, like F2P, can lead to players' negative experience, their dissatisfaction and back lash from the gaming industry. Vis-à-vis, the sustainability of the monetization models is questioned due to potential regulatory changes, having effects on users' well-being and gaming criticism in the industry.

According to Matthew E. Perks (2020), the study demonstrated that how critical games journalism affects game design strategies and decisions, especially regarding monetization and loot boxes. The study analyses the interaction between journalistic critique, game developers and users in shaping culture, using *Luc Boltanski's pragmatic sociology of critique* as the core framework. The method of study involves qualitative research, examining public discourse analysis and developers' responses. The key results highlight that journalistic critique plays a significant role in deciding monetization strategies and models, leading to designing significant changes in response to public pressure and customer preference (CP).

In addition to the existing literature, in recent years, the gaming industry has been developing by increasing per capita income, increasing user engagement and increasing the number of players. Recent literature has contributed to the transformation of the customer preferences and user interests within the gaming industry (Sharma et al., 2024). The digital gaming market in India is projected to grow significantly, driven by the increasing adoption of smartphones and gaming consoles. One of the factors that precipitated changes in recent years has been the outbreak of COVID-19, which has led to an increase in the number of users and games downloaded during this period (ibid). Due to investments by leading tech-based firms such as Alibaba, Nazara, Tencent, Azure, MPL and several others, the market in India has grown rapidly. The number of new job opportunities in the gaming industry in the country is a key indicator of the sector's robust growth. In 2022, the industry employed more than 40 thousand people. Although a relatively recent development, gaming as a profession

demonstrates significant potential and is projected to become a major part of India's mainstream industries by the end of 2025. The industry witnessed its highest growth to date during the lockdown due to the COVID-19 pandemic, when most people considered mobile games as a source of socialization and entertainment.

A further contribution is made by Zeiler and Mukherjee (2022) who investigated the development of video games in India, which provides a critical analysis of cultural and creative industry that encompasses India's regional cultural heritage. In this article, their work centers on the consumption patterns of games and the influence of these patterns on culture, and recent changes in this industry indicate the effective integration of the cultural initiatives in the context of games.

Building on the theme of cultural specificity, Liboriussen and Martin (2016) investigate how local cultures and folklore influence the consumption patterns of games in India. In this research, they explicitly studied postcolonial games and examined the scenarios of this era on the changing patterns of production and consumption of the games industry.

To better address how monetization models can lead to the gaming startup success, Hofacker et al. (2016) in a comprehensive study, outlined the gamification and mobile marketing effectiveness argued the key ideas of monetization strategies for gaming platforms. The study starts with a full definition of gamification and its effects on mobile marketing strategies. The objective of gamification strategies in gaming platforms enhance marketing effectiveness by increasing customer loyalty, user engagement and consumer motivation. Vis-à-vis Hofacker et al. (2016) theorized the monetization models and their effects on gaming platforms and user attraction. They mentioned In-App Purchases (IAP), Freemium Model (FM) and Subscription Services (SS) as the most effective models for the increasing of user engagement. The significant argument they have raised is the question why user experience and engagement are important. Their answer simplifies the equations; successful monetization strategy and model rely on creating a compelling user experience and engagement that makes players come back to the platform. They also mention a significant challenge of implementing the monetization models and increasing user satisfaction. Excessive focus on the application of monetization strategies on gaming platforms can alienate users. To avoid this, all platforms should maintain a good balance which prioritize user satisfaction and enjoyment. This can be done out of excessive understanding of Consumer Behavior (CB). Gaming startups should leverage time-to-time data analytics to understand Consumer Preference (CP) and the tailor experiences accordingly.

Hidayat et al. (2022), in a comprehensive study, delineate a framework for understanding how venture capitalists assess and value startups—especially those in technology-driven sectors such as gaming.

They argue that, for technology-based startups, valuation is increasingly influenced by intangible and innovation-based assets rather than solely by financial performance. The study highlights factors such as platform compatibility, cross-device functionality, network effects, and data analytics capabilities, which collectively contribute to a startup's strategic position in the competitive gaming market. Bustamante et al. (2021) also analyzed the development of VC markets in emerging economies. In the context of gaming startups, some of the points Bustamante et al. (2021) argued is highly relevant. Gaming ventures rely heavily on innovation, user management and new monetization strategies, thrive in ecosystems that emphasize risk taking, digital creativity and entrepreneurship. The study focuses on the emerging market, as per case study focuses on Chile, which helps to address the flow in these markets. They implied that successful fundraising and monetization strategies must be supported not just by financial investment, but also by an entrepreneurial culture that values international market vision, business models and originality of businesses.

Markopoulos (2018) conducted research on the impact of monetization strategies in the gaming industry, using a combination of methods such as case studies and survey research. The analysis included monetization strategies such as a study on microtransactions, subscriptions, crowd funding and advertisements with careful consideration on ethical and cultural areas. The survey conducted in Markopolos research involved 390 participants, answering their gaming preferences (customer preference test) and their attitudes toward monetization. The results indicate that implementing monetization strategies are crucial for sustaining game development, poor strategies like pay-to-win mechanics and loot boxes can have negative effects or harmful user experience and negative brand reputation. The findings highlight the significance of a balanced monetization strategy which can enhance user engagement without alienating players.

Within the broader context of gaming platforms, Roshan et al. (2018) mentioned some key challenges faced by gaming startups regarding the fund raising and capital attraction as well as user engagement. As startups always have fund raising problems because of their nature (especially early-stage startups), they also face with the fierce competition among gaming platforms in the market and having the problem of visibility for users.

Further significant research by Vaigankar and Chodanker (2021) examines the growth of Indian economy through gaming industry. First, they document the significant growth of the Indian gaming market during COVID-19 pandemic lock downs. They note that India's large youth population, who predominantly play games on mobile phones and other consoles, is a key driver of this growth this statement goes beyond arguments as they tend to play games via mobile phones or any other gaming consuls. A central challenge they identify is sustaining

user engagement and preventing churn. Vaigankar and Chodanker presented types of monetization models which can help gaming platforms to make their players remain interested and engaged, in other words they can say they make them loyal by offering different innovative ways of monetizing. The most important method of monetization model in their paper mentioned is, In-App Purchases (IAP). The players will spend money on additional features or enhancements on the platform. This should be done in a very wise and innovative way, so that the customer is more interested in engaging with IAP.

Despite considerable research on various segments of the Indian gaming industry, there is a noticeable gap in comprehensive studies comparing the effectiveness of different monetization strategies in the context of startup success and investor interest. Specifically, limited research directly compares different monetization models such as RMG, F2P, and hybrid regarding their financial performance, user engagement, fundraising policies and venture attraction. Few studies specifically address how this monetization strategies impact the success of gaming startups, but still there is a lack of detailed analysis on which models are most appealing to investors. Additionally, insufficient research exists on the long-term sustainability and scalability of hybrid models in the Indian market.

The present research is designed to bridge existing literature gaps by conducting a comprehensive analysis of monetization strategies within India's gaming startup ecosystem, paying particular attention to their impact on venture success. The research will evaluate the relative effectiveness of different monetization models across three key dimensions: financial performance, user engagement, and retention rates. By systematically examining how these strategies contribute to startup success, the study seeks to develop actionable recommendations for new market entrants and policymakers in the gaming industry.

3. Theoretical framework

The study focuses on established theories related to monetization models in the digital games industry, such as rational choice theory, to frame understanding of how different monetization models affect user and investor attraction. Rational Choice (RC) theory is mostly used in economics and social sciences if consumers can make decisions based on their rational evaluation of costs and benefits associated with the choices (Fayzullayev et al., 2025: 49). It raises the idea that consumers normally act towards their self-interest, with the purpose of maximizing their utility (regarded as satisfaction) with a direct plan to minimize the costs. Utility maximization points out the consumers who aim to achieve the highest level of possible satisfaction from their rational choices. On the other hand, the Cost-Benefit examines the expected benefits against the costs involved in the decision-making procedure.

The RC Theory posits that investors make informed decisions based

on available data and risk assessments (Ormerod, 2010: 1763). It helps to understand how investors evaluate various revenue generation models and the factors influencing their investment decisions. Game investors can assess various monetization strategies by analyzing market demand, potential revenue and probable risks (Asl & Sadeghi, 2025). Understanding the Consumer Preference (CP) and user behavior through the lens of the theory illustrates how players and consumers engage with gaming platforms to maximize their satisfaction, through the monetization model chosen by the gaming platform (Chauhan, 2025).

Customers and players assess various monetization models based on the potential to enhance their gaming experience. The fact the In-App Purchases (IAP) will benefit the customers to participate in more tournaments and pay more to remain in the game, showcases the rational choice and decision making by them. RC theory emphasizes the significance of cost-benefit analysis in customers' decision-making process. In the gaming industry players are influenced by market trends, which can shape their preferences when choosing certain types of games. If a game aligns with the current market trends, while offering engaging content, users are more likely to invest both their time and money in the platform.

Based on the principles of conducted theory, MPL's strategy to enhance user engagement through gamification and personalized content fosters customer loyalty to their platform, thereby maximizing their utility. This theory also helps investors to analyze various monetization models and strategies to determine which ones exhibit the highest potential for returns. Investors, whether angel or venture capitalists, utilize this theory to make rational decisions about where to allocate their resources.

4. Method and Data

4.1. Methodology

To better address the roadmap of gaming startup in India, especially monetization model strategies, the present study conducts a comprehensive method supported by an established theoretical framework. The study employs a mixed-methods approach, combining qualitative and quantitative analysis, vis-à-vis MPL serves as the core case study. The rationale for choosing a mixed method is to provide a holistic approach that reviews both numerical trends and nuanced contextual insights.

The mix method approach conducted in the present research involves qualitative and quantitative analysis. The qualitative section includes the in-depth interviews and questionnaires which shape the MICMAC (Matrice d'Impacts Croisés-Multiplication Appliquée à un Classement) primary data. The quantitative section designed by the MICMAC analysis matrixes and results.

The MICMAC method was applied to analyze the relationships

between the identified variables driven from interviews and surveys. This method enabled authors to pinpoint key variables and examine their interactions across various contexts, including fundraising and user engagement. The analysis begins with constructing a matrix (Table 3) that illustrates relationship among different variables, including the monetization models, the factors influencing capital attraction, and user engagement. This matrix (Table 3) provides a visual representation of both direct and indirect relationships. These may include the type of monetization model, user acquisition costs, and marketing strategies. Then, the study examines how changes in one variable could impact others. For instance, adjustments to pricing strategy might lead to variations in user acquisition rates and investment levels.

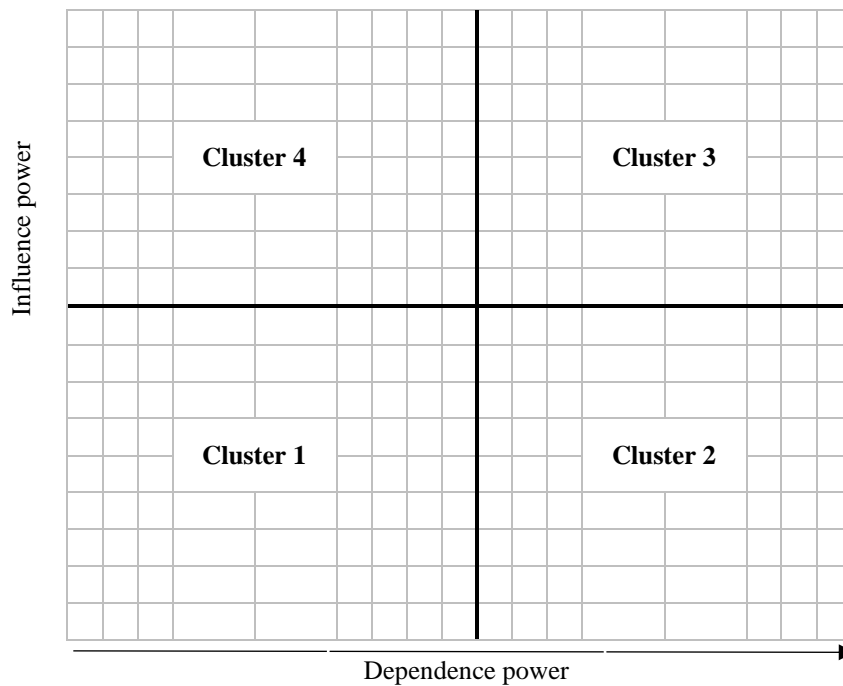
The findings from the MICMAC analysis will be compiled into a report highlighting key insights and strategic recommendations for startups. MICMAC method maps the pairwise relationships and directional influences among the identified system variables in Matrix of Direct Influence (MDI). As shown in Table 1, influence strengths are quantified on a 0-3 scale to illustrate the influence each variable have on each other. This analytical framework enabled MPL's executive team (comprising senior strategists and monetization experts) to evaluate each variable's relative impact on monetization model selection. Their expert assessments, visualized in Figure 1, reflect careful consideration of how each variable influences strategic decision-making within the platform's business model.

Table 1. Definition of influence, based on MICMAC standards

Value	Definition of influence
0	No influence
1	Weak
2	Moderate influence
3	Strong influence
P	Potential influence

According to what is customary in MICMAC analysis, the influence/dependence maps are categorized into four clusters (Ahmad et al., 2019: 13). Cluster 1 (Figure 1) represents variables with the least influence and dependence on other factors. In Cluster 2, there are dependent variables that have the highest dependence and the least influence on other variables. Cluster 3 represents linkage variables. Linkage variables have the highest level of both influence and dependence on other factors. Finally, Cluster 4 includes key factors that have a very strong influence on other factors but are independent (Figure 1). The factors in Cluster 4 are among the most critical and influential factors.

The present study's data collection process involved two primary methodological approaches: (1) in-depth interviews with experts and elites in gaming industry specializing in the Indian market, and (2) a structured questionnaire designed based on the present study's theoretical framework.



Reference: The Authors

Figure 1. MICMAC analysis map clusters

The participants in the questionnaire were selected from a pre-purposive sampling, targeting those with strategic or operational background in gaming monetization models and strategy. The online questionnaire has been distributed among three key purposive groups: game producers (Appendix A), venture capitalists and investors (Appendix B) and professional gamers (Appendix C). The survey was designed to gather key variables of user preferences, investment and fundraising trends, and user perceptions of monetization models, incorporating both market-level strategies and end-user behavioral data. Totally 43 participants in sum responded the questionnaire, from which 12 variables have been detected as the key variables. Then the industry elites (group of 5 from MPL) have approved the variables. Also, the approval of the variable validation was double checked based on the literature review. At first glance, the number of participants may appear limited. Although this could be regarded as a limitation of the study, the reality is that since the research topic concerns the examination of monetization strategies in gaming platforms and the interview population consists of specialists in the relevant field, the respondents were purposefully selected from individuals with expertise and professional experience in the gaming industry. Therefore, this number does not undermine the generalizability of the research findings.

In addition, secondary data was collected via a comprehensive review of industry official reports such as *Deloitte* (4), *KPMG* (9,10)

and other academic papers. These sources provided a macro-level understanding on market trends, fundraising flows and consumer preference and behavior, supporting the primary data.

To achieve this, the MICMAC (Omran et al., 2014: 39) methodology serves as the study’s primary analytical tool. This approach allows the identification of the connections among various variables and explores how they influence one another. The significant goal is to understand how these models impact investment attraction and user engagement.

The data collection process led to the finalization of a list of 12 variables (Table 2). For the MICMAC analysis, the finalized variables were shared with five elites of the MPL company, who assessed the direct and indirect influences of each variable (Figure 1). The assessment took place within a meeting where all elites were gathered, discussed about rates and importance of each variable and assessed. Once the data were collected.

Table 2. List of variables derived from interviews and surveys

Number	Variables’ Long Label (VLL)	Variable Short Label (VSL)
1	Customer Engagement	CE
2	Customer Preference	CP
3	Monetization Effectiveness	ME
4	Market Trends	MT
5	Scalability and Market Expansion	SME
6	Funding Strategies	FS
7	Adaptability to Trends	AT
8	Brand Building and Reputation	BBR
9	Revenue Growth	RG
10	Cost Management	CM
11	Loyalty Strategies	LS
12	Risk Management	RM

Source: The Authors

4.2. Data

MPL operates within India’s rapidly growing and complex gaming ecosystem, employing diversified monetization strategies to maintain its competitive position in the market (Jain, 2024). As a leading mobile gaming and eSports platforms, MPL utilizes a multifaceted monetization model and strategies comprising four primary revenue streams: (1) entry fees for tournament participation, (2) a 20% hosting

fee on total prize pools, (3) in-app purchases for virtual goods and enhancements, and (4) advertising revenues (ibid).

The entry fee model requires players to pay for participation in various tournaments and competitive events, with MPL retaining a significant portion as revenue. Additionally, the platform imposes a standardized 20% hosting fee on all prize pools generated from player contributions. To enhance user engagement and gaming experiences, MPL offers optional in-app purchases that enable players to acquire virtual goods and performance-enhancing features. These monetization strategies collectively contribute to MPL's sustainable revenue generation while maintaining player engagement in India's competitive gaming market.

MPL's diversified monetization strategy has significantly enhanced both revenue growth and user engagement, enabling the platform to amass over 90 million registered users in India while offering a portfolio of more than 60 games spanning fantasy sports, puzzles, and casual gaming categories (ibid). This success demonstrates MPL's exceptional market adaptability, innovative approach, and expansive game offerings, which have collectively solidified its position as a dominant player in India's gaming ecosystem.

The platform's financial performance underscores this growth trajectory, with reported revenues reaching \$9.93 million (₹814.2 crore)¹ in 2023, representing a 35.56% rise from the previous fiscal year's \$9.93 million (₹600.6 crore). This substantial growth reflects the company's effective implementation of several key strategies: (1) robust risk management protocols, (2) comprehensive market trend analysis, (3) revenue optimization techniques, and (4) targeted user engagement initiatives.

The research methodology employed in-depth interviews with Nitesh Jain, Vice President of MPL, complemented by structured surveys administered to five gaming industry experts (see Figure 2 for response patterns). This dual-method approach facilitated the identification of twelve critical variables influencing MPL's monetization strategy. These variables were subsequently evaluated through expert validation by a panel of three senior MPL executives, whose assessments are systematically documented in Table 3.

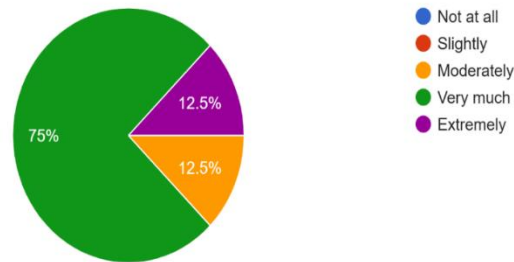
- Sharad Arora (Former Vice President)
- Shubham Sharma (Business Development Head)
- Nitesh Jain (Vice President)

The experts assessed the interrelationships between these variables through a Direct Influence Graph analysis. For the subsequent MICMAC analysis, the research team established both long and short labels for each variable (Table 2).

1. To change the rates from Rupees to USD, we should follow the equation of 814,200,000,000 Rupees divided to the current rate of USD in India.

Perceived Impact of VC on Unicornization: a. To what extent do you believe VC funding contributes to the unicornization of startups in the gaming industry?

8 responses



Source: The Authors

Figure 2. Survey question from the experts in MPL, derived from google docs

Table 1. MDI valuation, values by elites in MPL

Platform impacts / Customer and Market influenced	CE	CP	ME	MT	SME	FS	AT	BBR	RG	CM	MS	RM
Customer Engagement	0	1	P	1	3	1	2	0	P	P	3	2
Customer preference	3	0	0	2	P	1	P	P	1	1	1	2
Monetization effectiveness	P	1	0	0	1	2	1	2	0	3	0	P
Market trends	2	P	3	0	P	3	2	0	2	0	P	3
Scalability and Market expansion	P	0	2	3	0	3	0	1	0	2	3	0
Funding strategies	P	2	1	0	1	0	1	1	3	2	0	0
Adaptability to trends	2	1	2	2	3	3	0	P	P	1	1	1
Brand building and Reputation	3	P	P	P	P	P	2	0	1	0	1	2
Revenue growth	1	2	0	0	1	0	3	P	0	1	1	1
Cost management	0	3	2	2	0	2	1	3	2	0	0	2
Loyalty strategies	1	P	3	2	P	1	P	0	P	1	0	1
Risk management	0	2	0	3	1	2	3	1	2	3	2	0

Source: The Authors

5. Findings and Discussion

5.1. List of variables derived from interviews

The twelve key variables, derived through comprehensive interviews with MPL executives and surveys of five gaming industry experts (Table 3), constitute a robust analytical framework for examining the determinants of monetization strategy effectiveness. As illustrated in Table 1, these empirically validated factors collectively shape MPL's strategic approach to user base expansion and retention. The framework elucidates the complex interdependencies among critical success factors, providing actionable insights for sustaining competitive advantage in India's rapidly evolving gaming ecosystem.

5.2. MICMAC analysis results

5.2.1 Matrix of Direct Influence (MDI)

Table 3 presents the number of 0,1,2,3,4 of the matrix and shows the rate of filling calculated as a ratio between the number of MDI values different from 0 and the total number of elements of the matrix. The matrix size illustrates that the number of 12 variables were analyzed in the research. Then MICMAC reports the numbers of each value: how many zeros, one, twos etc. are assessed in Table 3. The fill rate of 75.69% (Table 4) shows a robust interconnection between variables, leveraging that many variables and factors are playing significant roles in shaping MPL's game monetization strategies. The rows in this table illustrate the platform's impact on variables in the "Customer" and "Market Influenced" columns.

Table 2. MDI characteristics by MICMAC

Indicator	Value
Matrix size	12
Number of iterations	2
Number of zeros	35
Number of ones	33
Number of twos	29
Number of threes	22
Number of P	25
Total	109
Fill rate	75.69444%

a) MDI stability

If it were demonstrated that any matrix must converge towards stability at the end of a certain number of iterations (generally 6 or 7 for a matrix of size 30), it would be interesting to be able to follow the evolution of this stability during successive multiplications. In the absence of mathematically established criteria, it was chosen to rely on the number of permutations (bullets sorting) necessary to each iteration to classify, by influence and dependence, the whole set of the variables of the MDI matrix. The stability of the MDI matrix has been assessed by two iterations, illustrating a high percentage of influence (97%) and dependency rate (100%) in the second iteration. Table 5 shows that relationships and relevance between variables are strong and stable over time.

Table 3. MDI stability by MICMAC

Iteration	Influence (%)	Dependence (%)
1	97	95
2	97	100

b) MDI row and column sum

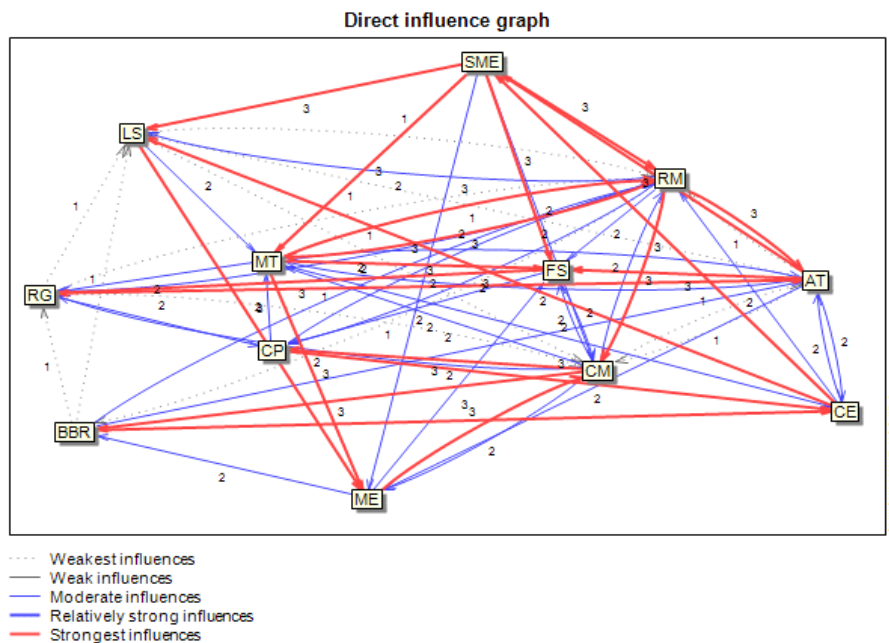
The row and column sums represent the total influence exerted by each variable and indicator. For example, Risk Management had the highest row sum (19) indicating that this variable plays a critical role in shaping MPL’s game monetization strategy framework. Table 6 provides a summary of the row and column sums from the MDI matrix, offering insights into the relative influence of each factor.

Table 4. MDI row and column sum

N°	Variable	Total number of rows	Total number of columns
1	Customer engagement	13	12
2	Customer preference	11	12
3	Monetization effectiveness	10	13
4	Market trends	15	15
5	Scalability and Market expansion	17	10
6	Funding strategies	11	18
7	Adaptability to trends	16	15
8	Brand building and Reputation	9	8
9	Revenue growth	10	11
10	Cost management	17	14
11	Loyalty strategies	9	12
12	Risk management	19	17
	Totals	157	157

The direct influence graph (Figure 3) illustrates various factors that play a significant role in shaping MPL’s revenue generation strategies. The nodes in this graph are connected by lines of different colors, each representing either a direct influence on or a direct dependence from other factors. According to this diagram generated by the MICMAC software, the two factors ME and RG both exert direct influence on other factors and are directly influenced by them. This highlights the multi-dimensional relationship between monetization and revenue growth, which can even lead to changes in funding strategies—especially considering that MT, RG, and SME have a direct impact on FS. Moreover, as shown in the graph, CE has a very strong direct influence on ME, indicating that understanding and effectively engaging with target customers is crucial for shaping revenue strategies and ultimately achieving startup success. Alongside this, the graph also shows the direct impact of CP and loyalty strategies (LS) on ME. The fact that CP also has a direct influence on ME demonstrates that MPL—or any startup adopting this strategy— must be cautious about the preferences and behaviors of its target consumers when selecting its revenue model strategies. This is because customer preference directly

affects engagement. Customer loyalty and retention are especially critical in shaping revenue models through gaming platforms, particularly in F2P (Free-to-Play) and Hybrid models. Another point worth noting in this graph is the direct impact of ME on RM, which indicates that the startup must conduct a thorough analysis and evaluation of potential risks associated with its revenue models, especially in areas related to payments and user trust on the gaming platform, where these concerns become particularly important.



Source: The Authors

Figure 3. Direct influence by MICMAC

5.2.2. Matrix of Potential Direct Influence (MPDI)

The Potential Direct Influence (PDI) illustrates the relationships between variables with a focus on their potential impacts. Like Matrix of Direct Influence, the MPDI also shows a fill rate of 75.69%. This consistency shows the importance of the identified variables in shaping MPL’s monetization strategy.

Table 7 presents the number of 0, 1, 2, 3, 4 of the matrix and shows the rate of filling calculated as a ratio between the number of MPDI values different from 0 and the total number of elements of the matrix.

a) MPDI stability

If it were demonstrated that any matrix must converge towards stability at the end of a certain number of iterations (generally 6 or 7 for a matrix of size 30), it would be interesting to be able to follow the evolution of this stability during successive multiplications. In the absence of

mathematically established criteria, it was chosen to rely on the number of permutations (bullets sorting) necessary to each iteration to classify, by influence and dependence, the whole set of the variables of the MPDI matrix (Table 8).

Table 5. MPDI valuation characteristics

Indicator	Value
Matrix size	12
Number of iterations	2
Number of zeros	35
Number of ones	33
Number of twos	29
Number of threes	47
Number of P	0
Total	109
Fill rate	75.69444%

Table 6. MPDI stability by MICMAC

Iteration	Influence (%)	Dependence (%)
1	93	76
2	97	111

b) MPDI row and column sum

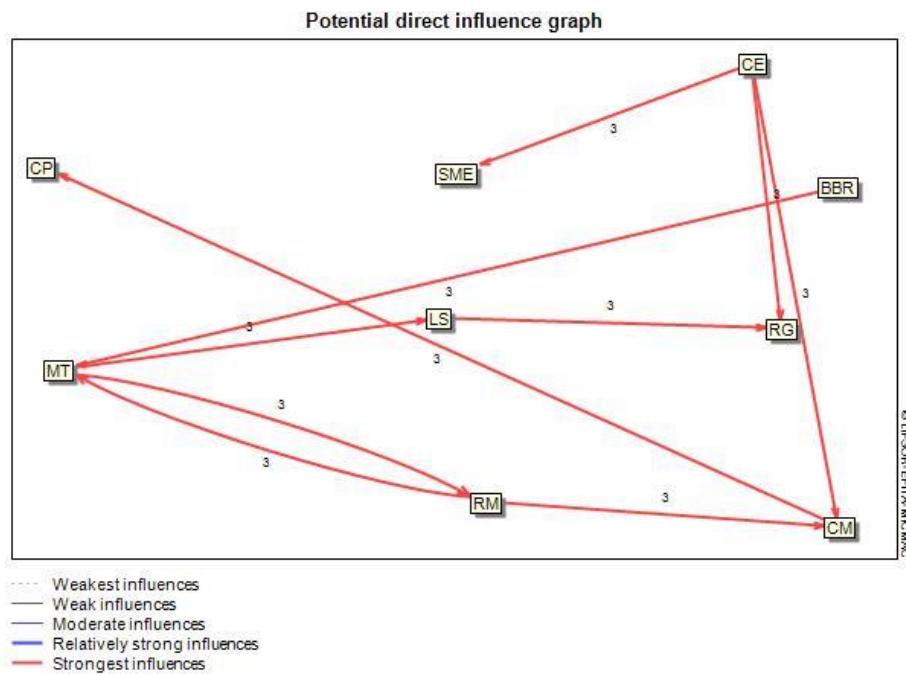
Table 9 allows getting information about the sums in the rows and columns of the MPDI matrix.

Table 7. MPDI row and column sum

N°	Variable	Total values of rows	Total values of columns
1	Customer engagement	22	21
2	Customer preference	20	21
3	Monetization effectiveness	16	19
4	Market trends	24	18
5	Scalability and Market expansion	20	22
6	Funding strategies	14	21
7	Adaptability to trends	22	21
8	Brand building and reputation	24	17
9	Revenue growth	13	20
10	Cost management	17	17
11	Loyalty strategies	21	15
12	Risk management	19	20
Totals		157	157

5.2.3. Potential direct influence graph

Figure 4 illustrates the potential direct influence of variables on one another. The red lines indicate the strongest influences. By analyzing this diagram, we observe that MT, in addition to being influenced by BBR, also exerts influence on loyalty strategies (LS). The trends in the Indian gaming market have consistently confirmed this pattern—pursuing loyalty strategies can significantly help companies succeed in aligning with market trends. An interesting point lies in the relationship between the variables Risk Management (RM) and MT. These two variables mutually influence each other, indicating a dynamic and interdependent relationship. The variable CE appears to be a key influential factor in this diagram, as it simultaneously influences SME, RG, and CM, while not being influenced by any other variable.



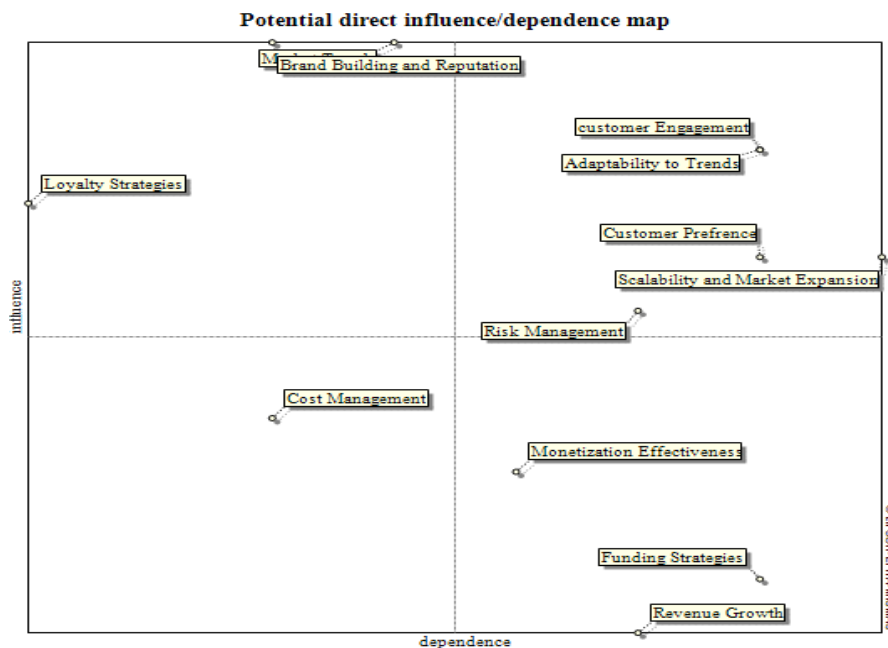
Reference: The Authors

Figure 4. Potential direct influence graph

5.2.4. Potential direct influence/Dependence map

Figure 5 illustrates the relationships and direct influence of various variables on shaping the revenue generation strategy at MPL. According to this map and the cluster classification: In Cluster 1, the variable CM appears as a factor that neither influences nor is influenced by other variables. This indicates that cost management is an independent factor in shaping the revenue strategy. In Cluster 2, the factors ME, FS, and RG are placed. These are dependent variables that are influenced by other variables. For example, it was previously

explained that FS is influenced by AT and CP. In Cluster 3, variables such as CE, AT, CP, SME, and RM represent variables with the highest levels of both influence and dependence on other factors. Therefore, the key and influential factors in this map are MT, BBR, and LS, which are located in Cluster 4. This clearly indicates that loyalty strategies and market trends influence all other variables but are not influenced by any of them.

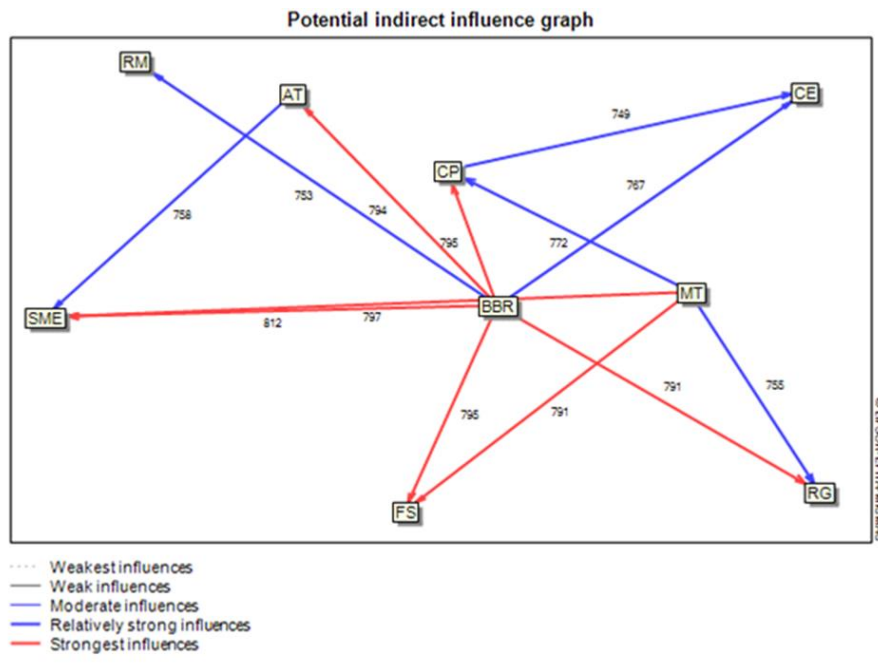


Reference: The Authors from MICMAC
Figure 5. Potential direct influence/ dependence map

5.2.5. Potential indirect influence graph

Figure 6 presents a more advanced version of the analysis compared to the Matrix of Direct Influences (MDI), as it not only assesses current influences, but also examines potential future impacts. According to this graph, Customer Engagement (CE) and Brand Building and Reputation (BBR) possess the highest potential influence. The graph, generated by MICMAC, illustrates the indirect impacts of key variables on one another. It clearly demonstrates that some variables, despite having no direct impact on others, can play an essential role in shaping the network of relationships through intermediary variables. As shown in this graph, BBR is identified as a central factor that exerts relatively strong indirect influence on other variables such as SME, FS, and RG. The bold red lines between these variables indicate strong influence of BBR on key processes within MPL’s revenue strategies framework. On the other hand, variables like CE and AT are situated in the indirect influence network through weaker connections, represented by blue

lines in the graph. These variables are more affected by other variables rather than playing an active role in driving systemic change themselves. Additionally, SME plays a vital role in strengthening brand positioning by exerting strong influence on BBR, which in turn indirectly affects other strategic dimensions. The variable CP, while influenced by MT and BBR, also exerts influence on CE. This highlights the fact that customer behavior and preferences continuously impact customer engagement, confirming the critical link between consumer attitudes and interaction strategies.



Reference: The Authors from MICMAC
Figure 6. Potential indirect influence graph

Hofacker et al. (2016) emphasize the importance of user experience (UX) and customer engagement (CE) in the success of monetization models and are consistent with the findings of the present study on the key role of CE and CP in increasing retention and revenue. They, in line with the present study, emphasize the balance between revenue generation and customer satisfaction, and if this equation is disrupted, revenue generation strategies will face challenges. In this regard, Mäkinen (2022) illustrated that the lack of proper retention and the failure to adopt a proper and correct revenue generation strategy is a serious factor in the failure of a gaming platform. In line with the conclusion of the present study, the RMG model combined with IAP has been able to improve retention, improve user engagement, and as a result, perform better than other revenue generation models. Hidayat et al. (2022) also agrees with Rational Choice analysis, which shows that

investors have chosen the RMG model with a correct analysis of profit and revenue.

Table 8. Key differences of direct and indirect influences

Differences	Direct influence	Indirect influence
Relation type	Just direct influence among key variables	Includes multi-layered and mediated relationships
Calculation method	Row and column sum of the original matrix	Multiply a matrix by itself (to powers 7-8)
Goal	Identifying primary key variables	Discovering important mediating latent variables
Result table	More simple and quick	More complex and deep
Application	Primary analysis and classification of variables	Network analysis and system stability

In addition to the similar opinions, the findings of Sormunen's (2010), contrary to the present study, emphasize that models that focus on IAP can create a negative experience for users, especially if they use tools such as Loot boxes. Since RMG sometimes uses such revenue generation tools in its strategy, Sormunen concerns about brand credibility and user satisfaction, which is somewhat contradictory to the conclusions of the present study on the adoption of RMG. In this regard, Markopoulos (2018) has warned that excessive or uncritical use of paid strategies such as IAP can lead to a negative user experience and even threaten brand reputation in some cases. Unless user satisfaction, cybersecurity, content diversity and user gamification are maintained in adopting these strategies

Table 9. Main Results of Key Variables

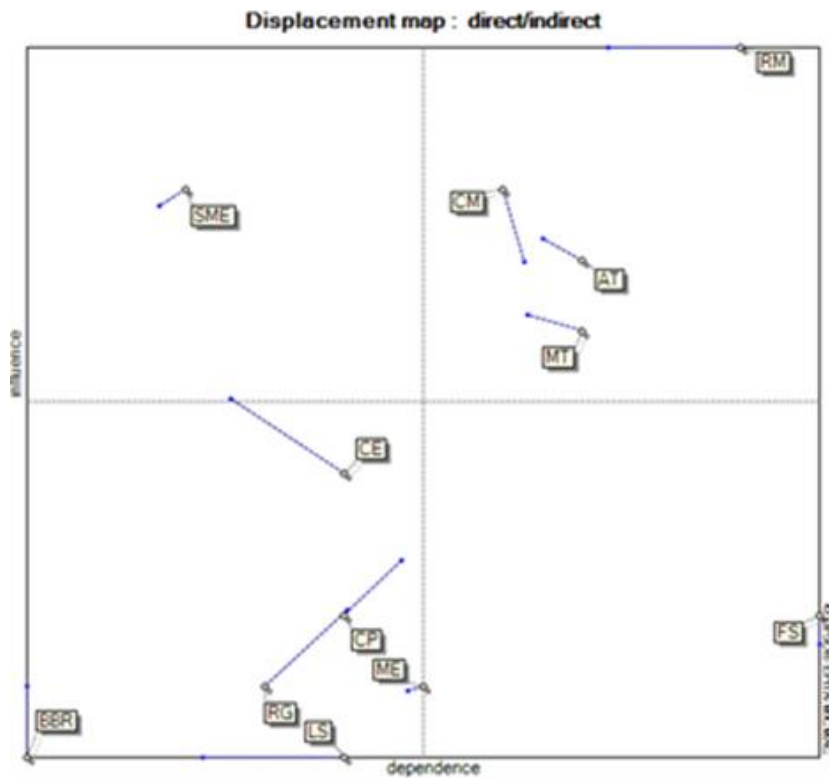
Variable name	Variable type	Influence type	Key result
SME	Linked variable	Direct influence	The main engine of the revenue system, main pillar of the platform revenue generation strategy/the most direct impact
BBR	Independent	Potential direct influence	The highest potential of impact, highest indirect impact/highest growth potential
MT & RM	Independent (MT), Linked (RM)	Potential/ Direct influence	A linking role in both direct and potential dimensions, meaning that if managed properly, they can have positive effects on the system.

To better understand the above concepts, it is better to know the key differences between direct and indirect impact graphs and matrixes. In the analysis of variables with direct influence in MICMAC, only the relationships between variables are examined, but in the analysis of the indirect matrix, the relationships are more multilayered and the mediators are also analyzed. The goals of these two matrixes are also different. In the indirect influence matrix, important mediating latent variables are discovered and analyzed, but in the direct one, the primary

key variables are identified and analyzed. This indicates that the goal of indirect graphs and matrixes is network analysis and the stability of the system of variables, while the direct matrixes help us in the initial classification and analysis of variables. As a result, the output diagram that we have in the MICMAC analysis of the direct influence matrix leads us to a conclusion more simply and quickly, while in the indirect effects, the output graph is more complex and is used for deeper analysis.

5.2.6. Displacement map

When analyzing the direct and indirect influence and dependency graph, the displacement map becomes a crucial tool, as it reveals a deeper layer of insight beyond previous analyses. This map illustrates how the positions of variables shift between different analytical frameworks, thereby indicating the stability or volatility of each variable's role within the system. Specifically, the displacement map compares the positions of variables in the direct and indirect influence analyses. A variable exhibiting minimal displacement suggests a stable role in the system, whereas significant displacement implies an unstable role—potentially highlighting hidden importance or sensitivity.



Reference: The Authors from MICMAC

Figure 7. Displacement map

Occasionally, variables that appear to have limited significance in conventional analyses emerge as influential when examined through the displacement map. This underscores the value of the displacement map and its potential application in future research. Moreover, the map provides insight into the system's complexity by revealing the intricacy of inter-variable relationships. High levels of displacement across the system suggest strong indirect dependencies and a complex network structure.

In this map, the length of the arrows represents the degree of change in a variable's influence or dependency role. For instance, variables such as SME, CE, CM, and MT, which are associated with short arrows and low displacement, demonstrate relatively stable roles. In contrast, variables like RG, ME, LS, and, to a lesser extent, AT, show longer arrows and greater displacement, indicating more dynamic and unstable roles. Variables such as FS, RM, and BBR, located at the periphery of the map, maintain a clear and consistently key role within the system.

6. Discussion and Remarks

Following an extensive review and analysis of the MICMAC Analytics Network, the study identifies Brand Building and Reputation (BBR), Adaptability to Trends (AT), and Monetization Effectiveness (ME) as the most influential variables in shaping MPL's revenue strategy formulation. Insights derived from in-depth interviews with senior executives at MPL indicate that the platform adopts a Real Money Gaming (RMG) monetization model, which is deemed optimal in alignment with its overarching business objectives. The RMG model underscores several critical factors previously identified, including the enhancement of customer loyalty through targeted Loyalty Strategies and the strategic significance of brand development (BBR) in fostering sustained user retention. Furthermore, the model accentuates the importance of robust risk management (RM) and effective customer engagement mechanisms in mitigating financial exposure and enhancing overall user experience (UX).

These findings are consistent with Rational Choice (RC) theory, which asserts that decision-makers—be the users or investors—evaluate options based on anticipated gains and losses. In the context of MPL, users typically select games that optimize utility and entertainment value by aligning individual preferences (CP) and prevailing market trends (MT). A tangible illustration of RC theory in practice is the observed increase in user satisfaction associated with the In-App Purchase (IAP) mechanism. This monetization approach enhances the overall platform experience, fosters greater engagement in games and competitive events, and contributes to elevated levels of user satisfaction.

From an investor's perspective, Rational Choice (RC) theory similarly informs systematic evaluations of potential returns on

investment. The Real Money Gaming (RMG) model— characterized by high revenue potential, robust user acquisition, and flexible service customization— is perceived as a rational and comparatively lower-risk avenue for resource allocation.

The integration of MICMAC analysis with RC theory in this study yields strategic insights for optimizing MPL's revenue architecture. The prioritization of RMG as the core monetization strategy, supplemented by In-App Purchases (IAP) for diversification, strategically positions MPL as a prominent actor within India's gaming sector. Moreover, addressing critical challenges such as user cybersecurity and payment security is imperative for long-term sustainability. MPL can strengthen user protection by deploying multi-layered security frameworks, including two-factor authentication for financial transactions.

These findings gain further relevance when contextualized within the Indian market. India's gaming industry is unique due to its large youth population, high mobile internet penetration, and cultural diversity. Indian users differ from global counterparts in their sensitivity to IAP pricing, local regulations affecting RMG strategies, and preferences for native language interfaces and payment systems such as UPI. Consequently, MPL must tailor its strategies to meet the specific needs and sensitivities of the Indian market, while continuing to focus on RMG and IAP-based revenue generation.

This study offers a practical framework not only for MPL but also for other gaming startups seeking to identify effective revenue strategies. MPL's management can leverage these insights to better understand market dynamics, particularly given the system's quantitative instability. According to MICMAC analysis, an L-shaped output indicates system stability; however, the absence of such a pattern in this study suggests variable instability. This observation prompts a recommendation for future research: Given the dynamic nature of gaming startups, further investigation is needed to determine whether market fluctuations or elite stakeholder perspectives within MPL contribute to this instability.

7. Conclusion

In response to the first research question— how different revenue models affect gaming startups— the findings suggest that each model presents distinct advantages and challenges. For example, the Free-to-Play (F2P) model may attract initial users but struggles with monetization and user retention. In contrast, the RMG model, when combined with IAP, improves retention, customer satisfaction, and return on investment— key indicators of startup success identified in this study.

In addressing the second research question, MPL's strategic implementation of the Real Money Gaming (RMG) model in

conjunction with In-App Purchases (IAP) has yielded a favorable user experience and contributed to increased profitability. Through the integration of gamification techniques and a deliberate balance between revenue generation and user satisfaction, MPL has cultivated a loyal user base and reinforced its competitive standing within the market. The company's reliance on profit-loss evaluations, consistent with the principles of Rational Choice (RC) theory, underscores that its revenue strategy is shaped by both user preferences and investor expectations. From an investment perspective, the RMG model is particularly attractive due to its potential for high returns and its inherent flexibility in service customization.

In the analytical phase of the study, BBR, AT, and ME were identified as principal drivers within the variable network. These factors exert substantial influence on the system by enhancing user and investor trust, aligning products with market trends, and ensuring financial stability. Situated in driver cluster, any change in these variables has the potential to affect the entire revenue generation framework. Consequently, they warrant prioritization in strategic decision-making processes, while linkage variables (e.g., CP, CE) should be calibrated in response to optimize overall system efficiency.

Conflict of interest

The authors declared no conflicts of interest.

Ethical considerations

The authors have completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc. This article was not authored by artificial intelligence.

Data availability

The dataset generated and analyzed during the current study is available from the author on reasonable request.

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Appendices

You may find Appendices A, B and C in Attached files of this Article in the Website.

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