

THE PIVOTING OF BYTEDANCE GAMING ADVENTURE

Analysis of ByteDance's decision to quit gaming sector

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FIRM GROWTH, INNOVATION AND INDUSTRY DYNAMICS

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Summary

Introduction

ByteDance, predominantly known for its global phenomenon TikTok, embarked on an ambitious venture into the gaming industry, marking a significant expansion beyond its core domain of social media and content creation. This study explores ByteDance's strategic entry into gaming, focusing on the development and eventual retraction of its gaming division, particularly examining major ventures such as "Crystal of Atlan" and the acquisition of Moonton, and the rise of mini-games on Douyin.

Literature Review

The global gaming industry is highly competitive, dominated by giants like Tencent and NetEase. ByteDance's entry was seen as an attempt to diversify its portfolio, leveraging its technological prowess in a new domain.

In 2019, ByteDance began its gaming journey with the establishment of Team "Ohayoo" and Nuverse. The acquisition of game publishers Shanghe Internet Technology and Mokun Technology was strategic, aiming to compete directly with Tencent. Later in 2020 and 2021, ByteDance's aggressive investments included an attempt to buy a stake in CMGE and the notable acquisition of Moonton Technology for \$4 billion. These moves symbolized ByteDance's aspirations to become a

key player in the global gaming market. In 2022, ByteDance achieved success with "One Piece: The Bloodline," which generated significant revenue. However, the game's performance was not sustained over time, reflecting the volatile nature of the gaming market. In 2023, ByteDance faced challenges with its self-developed games like "Crystal of Atlan," which did not maintain their initial success. This underperformance was a significant factor in ByteDance's decision to exit the gaming industry.

Analysis

"Crystal of Atlan" initially showed promise but faced challenges in maintaining player interest and revenue. The game's in-game economy and monetization structure, along with its community reception, contributed to its decline.

The acquisition of Moonton was significant but did not achieve the anticipated global impact. The profitability plateaued post-acquisition, leading ByteDance to consider selling Moonton.

The rise of mini-games on Douyin provided a contrast to the challenges faced in major gaming projects. These mini-games leveraged the massive user base of Douyin, offering a more sustainable and integrated approach. ByteDance's pivot to mini-games was a strategic realignment, focusing on leveraging its strengths in short video and e-commerce. The minor contribution of gaming to ByteDance's overall revenue underscored the division's peripheral status.

Conclusion

ByteDance's exit from the gaming industry represents a strategic realignment, prioritizing its core strengths and market position. While marking a retreat from one sector, it also highlights the company's agility in adapting to changing market dynamics. The study offers insights into the dynamics of the gaming industry and the strategic decision-making processes within a rapidly evolving digital landscape.

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CHAPTER 1. INTRODUCTION

Section 1. INTRODUCTION

In the dynamic landscape of today's digital economy, the gaming industry stands as a titan of market influence, captivating a global audience of over 3 billion players. Within this vibrant sector, ByteDance, a Chinese multinational internet technology company renowned for its video platform Douyin (TikTok for its foreign version), embarked on an ambitious journey into the gaming world. This venture signified a diversification of ByteDance's portfolio and reflects the evolving nature of digital media companies in the 21st century.

Section 2. RATIONALE FOR THE STUDY

The foray of ByteDance into the gaming sector, marked by strategic moves, aggressive investments, and its eventual decision to pivot, presents a unique case for examination. This study aims to understand the strategic rationale behind ByteDance's subsequent shift in the gaming industry, a sector that is highly competitive and distinct from ByteDance's core competencies in social media and content distribution. The case of ByteDance offers valuable insights into corporate strategy, market adaptation, and the challenges faced by tech giants venturing into new, highly competitive domains.

Section 3. RESEARCH OBJECTIVES AND QUESTIONS

The primary objective of this research is to analyze and understand the strategic shifts in ByteDance's gaming venture, the performance and impact of its major acquisitions, and the evolving role of mini-games in its business model.

1.3.1. Key research questions

- 1) What challenges and outcomes defined its gaming ventures, particularly the development and launch of "Crystal of Atlan" and the acquisition of Moonton?

2) What factors influenced ByteDance's strategic shift away from its in-house game development?

Section 4. OVERVIEW OF BYTEDANCE'S GAMING VENTURE

ByteDance's venture into gaming began with the establishment of Nuverse, signaling a significant expansion beyond its established social media domain. Such ambition was further confirmed by strategic decisions like acquiring game publishers like Moonton Technology, known for "Mobile Legends: Bang Bang," and launching major gaming titles like "Crystal of Atlan" (Hogue, Costa & Heaven, 2021)[2]. However, the company's trajectory in the gaming industry took a notable turn as it decided to cut off its entire gaming sector at the end of 2023 (Zhou, 2023)[8].

Section 5. SIGNIFICANCE OF THE STUDY

This research holds significant value in understanding the strategic decision-making processes of tech companies venturing into new industries. It sheds light on the challenges and dynamics within the gaming industry and offers a case study of ByteDance's adaptability and strategic planning. The findings from this study contribute to academic discussions on corporate strategy in the tech industry and provide practical insights for businesses facing similar market conditions and expansion decisions.

Section 6. METHODOLOGY OVERVIEW

This research predominantly relies on a comprehensive analysis of secondary data sources. Given ByteDance's private status and the consequent unavailability of direct financial reports, the study extensively utilizes news articles, industry journals, market analysis reports, and industry whitepapers. These sources were carefully selected for their relevance, credibility, and depth of information regarding ByteDance's gaming ventures and the broader industry context.

The analytical approach employed in this research is multifaceted, incorporating content analysis, thematic analysis, inferential analysis, and discourse analysis. This structured approach

allows for a detailed dissection of ByteDance's strategic decisions and the market dynamics influencing these choices. It also provides a nuanced understanding of the company's positioning within the competitive gaming industry.

Section 7. OUTLINE OF THE THESIS

The thesis is structured as follows:

1.7.1. Literature Review

This section provides an overview of the global gaming industry, ByteDance's early developments in gaming, its expansion and investments, and the performance of its gaming division. It also discusses the challenges faced in 2023, strategic shifts, and the broader business strategy of ByteDance, including its exit from the gaming sector.

1.7.2. Methodology

This part details the data collection methods and analytical approach, discussing how secondary sources were utilized to build a comprehensive picture of the evolution of ByteDance's gaming division, its market impact, and the strategic considerations behind its closure.

1.7.3. Analysis

The analysis section delves into ByteDance's gaming trajectory, the detailed breakdown of specific games like "Crystal of Atlan," comparative and contextual analysis, financial and market analysis, and a critical evaluation of strategic decisions.

1.7.4. Discussion

This segment interprets the findings and discusses the strategic implications, challenges, and prospects of ByteDance's pivot in the gaming industry.

1.7.5. Conclusion

The final section synthesizes the key findings, reflecting on the implications and lessons learned from ByteDance's gaming venture, and offers concluding thoughts on the broader industry

implications and future directions.

Section 8. CONCLUDING REMARKS OF THE INTRODUCTION

This thesis aims to comprehensively analyze ByteDance's strategic movements within the gaming industry, offering insights into digital companies' challenges and opportunities in dynamic market environments. By exploring ByteDance's journey, this study contributes to a deeper understanding of how tech giants navigate new ventures and adapt to changing market landscapes.

CHAPTER 2. LITERATURE REVIEW: BYTEDANCE’S FORAY INTO GAMING AND STRATEGIC RETREAT

Section 1. INTRODUCTION

ByteDance, a Chinese multinational internet technology company widely recognized for its social media application Douyin, ventured into the gaming industry with high ambitions. This literature review aims to explore ByteDance's journey in the gaming sector, analyzing its strategic moves, investments, and the eventual decision to scale back its gaming division. The review draws from various sources, including news reports and industry analyses (mostly from Sensor Tower, AppAnnie, and Qimai, three famous third-party Appstore and Google Store data platforms), to piece together the narrative of ByteDance's gaming endeavors.

Section 2. GAMING INDUSTRY LANDSCAPE

The global gaming industry presents a highly competitive landscape dominated by established giants such as Tencent and NetEase. For new entrants like ByteDance, penetrating this market posed significant challenges. The gaming sector requires substantial financial investments, innovative game design, robust player engagement strategies, and effective marketing to capture and retain a significant user base. ByteDance's foray into this sector was seen as an attempt to diversify its portfolio and leverage its technological prowess in a new domain.

Section 3. EARLY DEVELOPMENTS IN GAMING (2019)

ByteDance's initial foray into gaming began in 2019. Team “Ohayoo¹” was first established as a casual game publisher, serving as the icebreaker of ByteDance’s game business. With several successes from the casual games, ByteDance soon announced Nuverse, its original game developing department, and marked their serious entry into this competitive arena (Cortese, 2019)[1]. In June 2019, Nuverse initiated an “Oasis Project,” recruiting over 100 team members to develop nine demo

¹ <https://zhuanlan.zhihu.com/p/451497961>

games(Cortese, 2019)[1]. This move directly challenged Tencent, the reigning giant in China's mobile gaming space, and signaled ByteDance's intention to diversify its portfolio. In addition, the acquisition of two game publishers, Shanghe Internet Technology and Mokun Technology, further bolstered ByteDance's game development and publishing capabilities(Cortese, 2019)[1]. These acquisitions were strategic for obtaining technological and creative assets and gaining a foothold in the competitive gaming market dominated by Tencent. By leveraging its experience in short video content, ByteDance aimed to carve out a niche in the gaming industry, which is rapidly evolving with the rise of mobile and social gaming.

Section 4. EXPANSION AND INVESTMENTS (2020-2021)

At the end of 2020, ByteDance sought to buy a stake from CMGE, a mobile game firm in China that owns many famous IPs and is generally considered Tier 3 in the Chinese mobile gaming industry (Zhu & Yang, 2020)[9]. Even though this deal with CMGE was unsuccessful in the end, it is reasonable enough to characterize ByteDance's approach to gaming as aggressive investments and expansions. On February 3rd, 2021, ByteDance was listed as 24th in AppAnnie's Global Top 50 Publisher Awards 2021 ranking². This ambition was further amplified by strategic acquisitions, most notably the purchase of Moonton Technology, a studio known for its strong mobile game "Mobile Legends: Bang Bang" in Southeast Asia area, for a staggering \$4 billion in March 2021, a move that doubled the bid made by Tencent (Hogue, Costa & Heavens, 2021)[2]. Several days after this acquisition, Nuverse announced the establishment of a "Nuverse Inspiration Fund³" to invest in game studios and companies globally. A month after this, Nuverse acquired Youai Huyu⁴, another Chinese game company with products previously launched in the Japanese market and others aimed at the global market. These moves were not just financial investments; they symbolized ByteDance's aspirations to become a key player in the global gaming market. It was a strategic step to avoid the overcrowded Chinese market and position itself as a global competitor, particularly against Tencent's

² <https://youxiputao.com/article/21340>

³ <https://youxiputao.com/article/21516>

⁴ <https://www.jiemian.com/article/5946412.html>

expanding global footprint. Nuverse, under ByteDance, aimed to leverage the company's data-driven growth model, which had proven successful in its other ventures.

Section 5. PERFORMANCE OF BYTEDANCE'S GAMING DIVISION (2021-2022)

ByteDance's gaming venture showed great promise with the release of famous IP product "One Piece: The Bloodline" on April 22nd, 2021, which ranked 7th in the revenue ranking⁵ on its release day and generated significant revenue of over 15 million US dollars in its initial week. In addition, different from previous products from Nuverse, "One Piece: The Bloodline" had a sustained performance to maintain around rank ten even until the end of May. Based on the data analysis provided by Sensor Tower, "One Piece: Bloodline" 's revenue in May grew 141%. Nevertheless, it is important to note that "One Piece: The Bloodline" is made by CMGE, and Nuverse is just the game's publisher. However, at least this has proven Nuverse's ability in the gaming publishing segment. The game's success raised ByteDance's hopes of competing with Tencent's "King of Glory," as well as NetEase's "Dream Journey to the West" and "Onmyoji." According to the ranking made by Sensor Tower, ByteDance's revenue in the game sector was at Rank 6 of all Chinese publishers by May 2021. Soon after this success, in November 2021, the CEO of ByteDance, Rubo Liang, managed a structural improvement in ByteDance and assigned Nuverse as one of the company's "Great Six"⁶ business modules. This was to prepare for Nuverse's first self-developed game, "The Moon in the Heart of Flowers and Mountains"⁷, which gained over 7 million Wishlist before its release and entered the top 10 of revenue ranking on the release day.

Based on data from Sensor Tower, from June 21st, 2021, to June 20th, 2022, games published by Nuverse generated over 1 billion US dollars⁸. According to the president of Nuverse, Shou Yan, 80% of Nuverse's revenue comes from overseas products, which is mainly contributed by "Mobile Legends: Bang Bang" by Moonton and "Houchi Shoujo" by Youai Huyu, two major studios acquired by Nuverse in 2021. Moreover, by the end of 2022, Nuverse announced the combination of

⁵ <http://www.gamelook.com.cn/2021/06/443494>

⁶ <https://youxiputao.com/article/22624>

⁷ <https://zhuanlan.zhihu.com/p/451497961>

⁸ <http://www.gamelook.com.cn/2022/06/488245>

domestic and international publishing lines and named it "ONE Publishing Studio⁹."

Section 6. CHALLENGES IN 2023

It is essential to understand that by the end of 2022, most of the great success gained by Nuverse will come from its publishing, and the in-house development has yet to witness huge success. Two big self-developed games are "Crystal of Atlan" and "Earth: Revival." The release of "CoA" did bring triumph to Nuverse's development team, with a striking 110 million revenue in its initial month (Jing, 2023)[3].

However, the game's momentum waned, generating 68 million for the next two months. It fell to 11th place in September from 5th in August based on the data from Sensor Tower, reflecting the gaming market's volatile nature and the challenges in sustaining player interest over time (Jing, 2023)[3].

Section 7. STRATEGIC SHIFTS AND INTERNAL DECISION-MAKING

ByteDance's leadership, including Founder Zhang Yiming and Chairman Liang Rubo¹⁰, played a pivotal role in evaluating the performance of the gaming division. Despite the initial high hopes, the company's top executives quickly grew impatient with Nuverse's failure to develop global hits and retain players. A significant point of disappointment was the performance of "Crystal of Atlan," which had started strong but failed to maintain its momentum. This game's underperformance may have been a key factor in the decision to exit the gaming industry. This move aligned with ByteDance's history of decisively cutting ties with business ventures that did not meet expectations, as seen in its scaling back of initiatives in education, real estate, and virtual reality sectors.

In an internal annual meeting, Chairman Liang emphasized the need for ByteDance to be "focused" and "pragmatic." This approach indicated a strategic shift towards reinforcing the

⁹ <https://youxiputao.com/article/24415>

¹⁰ <https://seekingalpha.com/article/4656116-bytedance-bdnce-declares-game-over-for-gaming-division>

company's investment in advertising and e-commerce services, which are closely tied to its main businesses like short video and news aggregation. By classifying gaming alongside other emerging ventures like education and PICO (VR headset business), Liang suggested that the gaming business was not central to ByteDance's future strategy.

Section 8. BYTEDANCE'S BROADER BUSINESS STRATEGY AND GAMING EXIT

ByteDance's broader business strategy has been marked by a focus on leveraging its strengths in short video and e-commerce areas. The success of Douyin, which contributes substantially to the company's advertising and e-commerce revenue, starkly contrasts with the minor contribution of the gaming division. In 2021, gaming generated only 10 billion RMB out of ByteDance's total revenue of 360 billion RMB, underscoring the division's relatively minor role in the company's overall financial performance (Weinberg, Osawa & Yang, 2023)[5]. Thus, the decision to exit the gaming industry seems less surprising when viewed in the context of ByteDance's overarching business goals and strategic focus on areas with proven success and growth potential.

Section 9. THE ROLE OF MINI-GAMES AND DOUYIN

Nevertheless, the rise of mini-games on Douyin in 2023 provided a new perspective on the company's gaming strategy. Unlike traditional gaming projects, these mini-games leveraged Douyin's massive user base, offering low-cost and time-flexible gaming experiences. The success of these mini-games provided a stark contrast to the challenges faced by ByteDance's major gaming projects. They showcased a new model of gaming that was more aligned with ByteDance's strengths in social media and content creation, offering a more sustainable and integrated approach to cash out Douyin's traffic within the company's existing ecosystem.

Section 10. CONCLUSION OF THE LITERATURE REVIEW

ByteDance's exit from the gaming industry, as evidenced by the phasing out of its Nuverse gaming division, is a multifaceted decision shaped by a combination of internal strategic shifts and

external market pressures. The company's foray into the gaming market, marked by significant investments and acquisitions, faced stiff competition from established players like Tencent and NetEase. Despite early successes, ByteDance struggled to sustain momentum and develop global hits, leading to a reevaluation of its gaming strategy.

Furthermore, ByteDance's broader business strategy, heavily focused on short video and e-commerce, was increasingly seen as incompatible with the high-risk, high-investment gaming sector. The minor contribution of gaming to ByteDance's overall revenue further underscored the division's peripheral status within the company. This realization led to a pragmatic decision to realign resources towards more profitable and strategic areas, reflecting ByteDance's adaptive approach to market trends and corporate priorities.

However, it is important to note the role mini-games played on Douyin emerged in this strategic shift. With their low development costs and high user engagement, these games offered a more synergistic approach to gaming within ByteDance's existing social media platforms. This model contrasted traditional, large-scale game development projects requiring significant resources but yielded little returns.

In conclusion, ByteDance's decision to exit the gaming industry is a strategic realignment, prioritizing its core strengths and market position. While marking a retreat from one sector, this move also highlights the company's agility in adapting to changing market dynamics and focusing on areas of established success and potential growth.

CHAPTER 3. METHODOLOGY

Section 1. DATA COLLECTION

The methodology for analyzing ByteDance's strategic decision to exit its major gaming division and the impact of mini-games, particularly within the Douyin platform, relies primarily on secondary data sources, given the company's private status and the consequent unavailability of direct financial reports or official closure statements.

The research extensively utilizes *secondary sources* to gather relevant information. These sources are carefully selected to ensure a comprehensive and multifaceted understanding of ByteDance's strategic decisions in the gaming industry.

3.1.1. News Articles and Industry Journals:

- 1) Global and Regional News Outlets: Articles from international and regional news sources like Reuters are reviewed to understand the global perspective and regional specifics of ByteDance's gaming strategy.
- 2) Specialized Gaming Industry Publications: Journals and articles from gaming industry-specific publications provide deep insights into the gaming market dynamics, trends, and ByteDance's positioning within this context.
- 3) Analysis of News Trends: Trends and shifts in media coverage over time can offer insights into changing perceptions and market reactions to ByteDance's gaming ventures.

3.1.2. Market Analysis Reports and Industry Whitepapers:

- 1) Gaming Market Reports: Comprehensive market analysis reports from official agencies like CADPA (China Audio-video and Digital Publishing Association), which provide data on market size, growth, and competitive landscapes.
- 2) Industry Whitepapers: Detailed reports and whitepapers from consulting firms or industry groups offering in-depth analyses of specific aspects of the gaming industry relevant to ByteDance's decision-making.

3.1.3. Public Statements and Interviews:

- 1) Executive Statements and Interviews: Analysis of public statements, interviews, and speeches by ByteDance executives and industry experts can provide direct insights into the company's strategy and perspective.
- 2) Social Media Analysis: Social media posts and discussions around ByteDance's gaming ventures, particularly on platforms like LinkedIn or Twitter, are examined.

3.1.4. Industry Forums and Blogs:

- 1) Online Discussions and Forums: Analysis of discussions on industry forums and tech blogs can offer grassroots perspectives and insights from gaming enthusiasts and industry insiders.

3.1.5. Selection Criteria:

Sources are chosen based on relevance, credibility, and the depth of information they offer regarding ByteDance's gaming ventures and the broader industry context.

By utilizing these diverse secondary sources, the research aims to build a comprehensive picture of the evolution of ByteDance's gaming division, its market impact, and the strategic considerations behind its closure.

Section 2. ANALYTICAL APPROACH

The research employs a detailed and structured analytical approach to dissect and understand ByteDance's strategic decision to exit its major gaming division and pivot towards mini-games on Douyin. This approach encompasses several layers of analysis:

3.2.1. Content Analysis:

- 1) Document Review: A systematic review of all collected documents, including news articles, journals, and public statements. This involves coding the content to identify recurring themes, patterns, and narratives.

- 2) Thematic Analysis: Themes identified from news articles, public statements, and market reports are analyzed to extract insights into ByteDance's strategic decisions. This involves identifying patterns and trends that shed light on the company's shift from major gaming projects to focusing on mini-games within Douyin.
- 3) Inferential Analysis: Due to the lack of direct financial data, the research often relies on inferential analysis. This involves concluding available financial estimates, market trends, and the company's public statements to understand the underlying reasons and implications of ByteDance's strategic shift.
- 4) Discourse Analysis: Examining the language and rhetoric used in public statements and interviews to understand the framing of ByteDance's gaming strategy, including how the company communicated its challenges and decisions.

3.2.2. Case Analysis

The analysis of “Crystal of Atlan”, Nuverse's initial and notably successful self-developed game, is pivotal for this study. It is perceived as a catalyst for the eventual discontinuation of the Nuverse. Examining its gameplay mechanics, publishing strategy, operational strategies, and business model will provide essential insights into Nuverse’s approach to game development and the factors contributing to its unsustainable trajectory.

3.2.3. Comparative and Contextual Analysis:

- 1) Industry Benchmarking: Comparing ByteDance's gaming division's performance and strategies with key competitors in the industry. This helps contextualize the company's position in the market and identify its unique challenges or advantages.
- 2) Temporal Analysis: Examining how ByteDance's strategies and market position evolved over time, especially about the emergence and growth of Douyin's mini-games.

3.2.4. Financial and Market Analysis (Inferential):

- 1) Financial Estimation: Where direct financial data is unavailable, financial performance will be estimated based on available data from market reports and industry analyses.

This includes estimating revenue contributions, investment returns, and cost implications.

2) Market Trend Analysis: Analyzing market trends and consumer behaviors to understand the external factors influencing ByteDance's strategic decisions. This includes examining the rise of mini-games and changing consumer preferences in the gaming sector.

3.2.5. Critical Analysis:

1) Evaluating Strategic Decisions: Critically assessing the strategic rationale behind ByteDance's decision to exit major gaming ventures. This includes examining the alignment of this decision with the company's broader business objectives and market trends.

2) Synthesizing Multiple Perspectives: Integrating insights from various sources to provide a balanced view. Recognizing that each source may offer a different perspective, the analysis aims to synthesize these to present a comprehensive understanding.

This detailed analytical approach aims to provide a multi-dimensional understanding of ByteDance's strategic shift in the gaming industry. By combining content, comparative, financial, and critical analyses, the research will offer a nuanced view of the company's decision-making processes and the broader industry context.

Section 3. LIMITATIONS

The research methodology acknowledges certain limitations:

3.3.1. Lack of Direct Financial Data

As ByteDance is not publicly listed, direct access to its detailed financial reports is not available. The analysis, therefore, relies on inferred financial data and performance indicators from secondary sources.

3.3.2. Dynamic and Rapidly Changing Industry

The gaming industry is subject to rapid changes and developments, which might affect the relevance and accuracy of the data over time.

Section 4. ETHICAL CONSIDERATIONS

In conducting this research, ethical considerations play a crucial role, especially when dealing with secondary data sources:

3.4.1. Source Credibility

The credibility and reliability of sources are taken into consideration. News articles, journals, and market reports are selected from reputable publications and organizations known for their accuracy and journalistic integrity.

3.4.2. Bias and Perspective

The research acknowledges that different sources may present varying perspectives, especially in a competitive industry like gaming. Efforts are made to balance these perspectives to provide a comprehensive and unbiased analysis.

3.4.3. Data Privacy and Confidentiality

While the research does not involve primary data collection from individuals, it respects the privacy and confidentiality of the information in the public domain. The analysis refrains from speculative assertions about the company's internal strategies that are not backed by publicly available data.

Section 5. INTEGRATION OF FINDINGS

The final phase of the methodology involves integrating findings from both qualitative and comparative analyses to provide a cohesive understanding of ByteDance's decision to exit the major gaming sector. This integration aims to link the micro-level data (specific details about ByteDance's

gaming projects and Douyin's mini-games) with macro-level insights (trends in the global gaming industry and strategic business shifts).

Section 6. CONCLUSION OF METHODOLOGY

This research methodology provides a structured approach to understanding ByteDance's strategic decision to phase out its major gaming division in favor of mini-games on Douyin. By relying on a mix of qualitative and comparative analyses and acknowledging the limitations inherent in using secondary data, the research aims to offer a comprehensive view of ByteDance's business strategy within the dynamic context of the global gaming industry.

CHAPTER 4. ANALYSIS

Section 1. OVERVIEW OF BYTEDANCE'S GAMING TRAJECTORY

4.1.1. Entry into Gaming and Key Milestones

ByteDance, primarily known for its social media phenomenon Douyin, embarked on a strategic venture into the gaming industry in 2019 (Cortese, 2019)[1]. This move marked a significant expansion beyond its established domain of content creation and distribution. ByteDance's entry into gaming was heralded by the establishment of its game publishing arm, Team Ohayoo, focusing initially on casual games. This step was not only an entry into a new market but also a direct challenge to Tencent's dominance in China's mobile gaming sector.

In its nascent stage, ByteDance's gaming foray was defined by strategic investments and a focus on developing a diverse gaming portfolio. The establishment of Nuverse, ByteDance's dedicated gaming development department, underscored the company's commitment to this new venture. Nuverse's "Oasis Project" in 2019, which involved recruiting a significant team to develop multiple game demos, clearly indicated ByteDance's ambition to carve out a significant space in the competitive gaming landscape (Cortese, 2019)[1].

4.1.2. Major Gaming Ventures and Investments

ByteDance's approach to gaming was marked by aggressive expansion and significant financial investments. In late 2020, ByteDance attempted to buy a stake in CMGE, a mobile game firm with numerous popular IPs, signaling its intent to compete in the upper echelons of the gaming industry (Zhu & Yang, 2020)[9]. Although the CMGE deal did not materialize, it set the tone for ByteDance's ambitious gaming strategy.

2021 was a landmark year for ByteDance in the gaming sector. The company was ranked 24th in AppAnnie's Global Top 50 Publisher Awards, reflecting its rapid ascent in the gaming domain. A pivotal moment was the acquisition of Moonton Technology for approximately \$4 billion in March 2021. Moonton, known for its hit game "Mobile Legends: Bang Bang," gave ByteDance a

strong foothold in the Southeast Asian gaming market. This acquisition was complemented by the establishment of the "Nuverse Inspiration Fund," aimed at investing globally in game studios and companies.

ByteDance further bolstered its gaming portfolio by acquiring Youai Huyu, another Chinese gaming company with a global market focus. These strategic moves were not merely financial investments but a declaration of ByteDance's intent to become a global gaming powerhouse.

Throughout 2021 and 2022, ByteDance's gaming division achieved notable success. The launch of "One Piece: The Bloodline" in April 2021, a game developed by CMGE and published by Nuverse, garnered significant revenue and sustained high performance in the gaming market. This success showcased ByteDance's growing influence in the gaming sector, with Sensor Tower data indicating over \$1 billion in revenue generated by Nuverse-published games from June 2021 to June 2022. By the end of 2022, Nuverse announced the consolidation of its domestic and international publishing lines into "ONE Publishing Studio," further streamlining its gaming operations.

Section 2. ANALYSIS OF BYTEDANCE'S IN-HOUSE DEVELOPED GAME

In this section, "Crystal of Atlan", Nuverse's pivotal game will be examined in chronological order.

4.2.1. Debut Analysis of "Crystal of Atlan" in 2021

The debut of CoA can be traced back to August 2021, when Nuverse first showcased its gameplay demo at the Unreal Engine Fest in Shanghai. Originating from the "Oasis Project" initiated at the end of 2019 and based in Beijing, CoA was poised as a strategic release for Nuverse.

Figure 1: Comparison of In-game Screenshot of CoA and Genshin Impact



Screenshot of CoA's early trailer in 2021

Screenshot of Genshin Impact

Source: Screenshot of CoA trailer on YouTube and Genshin Impact game

Early trailers and comparisons with Mihoyo's "Genshin Impact" (refer to Figure 1) revealed certain stylistic and thematic similarities between the two games, leading to speculation that CoA was Nuvverse's response to the success of "Genshin Impact." However, media reports from those who experienced the UE Fest demo gameplay suggested that CoA leaned more towards a DNF-like¹¹ gameplay than that of "Genshin Impact." Additionally, the anime-style graphics of CoA were noted to be more aligned with Korean aesthetics rather than the Japanese style evident in "Genshin Impact." This distinction becomes more pronounced when comparing the berserker characters from all three games (refer to Figure 2), where CoA's art style closely resembles that of DNF's berserker, differing significantly from "Genshin Impact's" approach.

¹¹ DNF(Dungeon & Fighter) is an online massively multiplayer side-scrolling action roleplaying game that features multiple classes to choose from. It is developed by Nexon, a famous Korean game giant and was released in 2005.

Figure 2: Comparison of Berserker Characters in DNF, CoA and Genshin Impact



Source: Pictures downloaded from each game's official website

Nuverse promoted CoA as a 3D MMOARPG¹². With "Genshin Impact" being a 3D non-MMO ARPG open-world game and DNF being a 2D MMOARPG non-open-world game, CoA aimed to blend elements from both games to cater to a diverse gaming audience.

4.2.2. Advertising Strategy During CoA's Pre-Release Stage

A year following its debut, CoA obtained its publishing license¹³ in July 2022, followed by the release of its first playtest in September 2022. On the prominent gaming community platform TapTap, CoA's playtest version scored an impressive 8.9, signaling a promising start. The advertising strategy during this phase centered around two key features:

- 1) Fast-Paced and Exciting Combat: It emphasizes the fluid combat experience reminiscent of DNF. CoA's marketing also highlighted the dynamic and engaging combat mechanics, a crucial aspect expected from a game with DNF-like gameplay.
- 2) Non-open world Level Design: Initially, there was an expectation for CoA's level design to mirror the open-world concept of "Genshin Impact." However, Nuverse opted for a

¹² MMOARPG (Massively Multiplayer Online Action Role-Playing Game)

¹³ <http://news.16p.com/901749.html>

non-open-world design akin to a 3D version of DNF's level design. This strategic choice was a departure from the prevailing trend of open-world games, focusing instead on structured, level-based gameplay.

The advertising approach clearly positioned CoA closer to the DNF gameplay style. This alignment with DNF-like mechanics was further reflected in the subsequent advertising strategies during CoA's publishing phase, indicating Nuvverse's intention to target a specific gaming market segment and differentiate itself from existing open-world RPGs.

4.2.3. Advertising Strategy During the Publishing Stage of CoA

As "Crystal of Atlan" approached its release in 2023, it had already amassed a significant level of anticipation, evidenced by 8 million¹⁴ individuals adding it to their Wishlist. During the critical publishing stage of CoA, the promotional efforts were strategically distributed across various platforms to maximize reach and engagement. Approximately 40% of the game's promotions were channeled through Bilibili (refer to Appendix 1), a video-sharing platform immensely popular among younger generations of players and content creators. This choice of platform ensured that CoA was exposed to an audience that is not only large but also actively engaged in gaming culture.

In addition to leveraging external platforms, about 35% of the promotional activities were concentrated on ByteDance's own channels, including Douyin (refer to Appendix 1). While the volume of advertisements on ByteDance's platforms may not have matched those on external sites, the company effectively utilized its in-house resources to augment the visibility of CoA. Particularly on Douyin, ByteDance implemented the innovative Douyin Game Publisher Program¹⁴, which incentivized content creators by offering cash rewards of up to \$720 based on the viewership of their videos under the CoA publishing channel.

The Douyin Game Publisher Program proved to be a significant catalyst in driving the game's popularity. Within just three days of its launch, the program successfully attracted over 2,000 content creators, who collectively produced around 3,300 videos¹⁴. This content blitz resulted in an impressive 800 million views, demonstrating the effectiveness of ByteDance's strategic promotional

¹⁴ <http://news.16p.com/901749.html>

approach.

The advertising narratives employed can be categorized into three primary groups (refer to Appendix 2 for details):

- 1) **Gameplay Focus:** The advertisements heavily emphasized gameplay elements such as combos, skills, equipment, and class types. This approach highlighted the dynamic and engaging nature of the gameplay, appealing to players who value intricate and challenging mechanics.
- 2) **KOL (Key Opinion Leader) Involvement:** A notable strategy was the focus on “Brother Bao,” the nickname of Xuxubaobao, a renowned Chinese streamer in the "Dungeon Fighter Online" (DNF) community with a fan base of over 20 million. Leveraging his popularity and credibility within the gaming community, Nuverse aimed to attract a dedicated and enthusiastic player base from the existing DNF community.
- 3) **Game Feel Focus:** The advertisements also accentuated the game's immersive qualities, such as hit response and visual effects, emphasizing the sensory and aesthetic appeal of the game.

This strategic focus marked a distinct departure from the advertising trends of mainstream anime-style games like "Genshin Impact." According to Tencent's 2023 report¹⁵ on game advertisement, anime-style games typically emphasize "contents" while downplaying gameplay elements. Their narratives are built around character art, world-building, storylines, and music, providing emotional value to resonate with players. In contrast, CoA's advertising strategy centered on gameplay, showcasing the depth and variety of in-game experiences.

Furthermore, while anime games generally adopt a strategy of "broadening the player demographic" – simplifying gameplay and lowering barriers to attract a broader audience, CoA chose to emphasize hardcore gameplay mechanics. This included extensive skills, multiple interactive buttons, and complex combo sequences. Additionally, CoA focused on the social aspects

¹⁵ <https://e.qq.com/insights/detail/?pid=9022>

of MMO¹⁶ gaming, such as free trade and farming for trade, catering to players who enjoy a deeper and more socially integrated gaming experience.

In summary, CoA's advertising strategy during its publishing stage in 2023 demonstrated a clear preference for highlighting advanced gameplay mechanics and social interaction elements. This approach was strategically aligned to appeal to a more hardcore gaming audience and differentiate CoA from other anime-style games that prioritize content and narrative over gameplay complexity.

4.2.4. Analysis of CoA's in-game economy and monetization structure

1) Overview of In-Game Currencies: Crystal of Atlan utilizes a three-tier currency system, each with distinct acquisition methods and utilities:

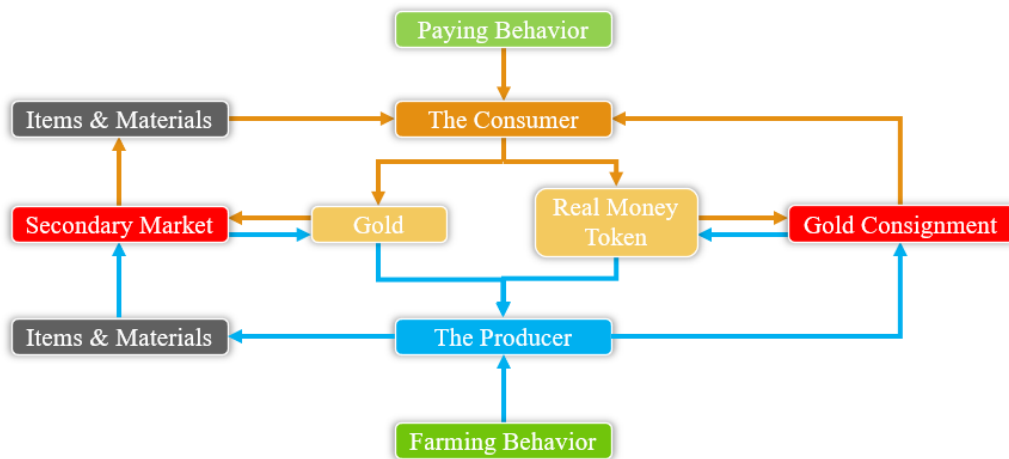
- i. Gold: Earnable through regular gameplay. Gold serves as the foundational currency, facilitating character development such as weapon and equipment upgrades. It also operates within an in-game secondary market, allowing players to exchange Gold for Crystals or purchase items listed by others.
- ii. Crystal: Primarily obtained through Gold exchanges in the secondary market, Crystals are used to acquire exclusive cosmetics and key items from the game store.
- iii. Opal: Tied directly to real-world currency, Opal is obtained through financial transactions within the game. It mirrors the function of Crystals in the game store and enables players to purchase Gold offered in the secondary market.

2) Secondary Market Dynamics: The secondary market in CoA is a pivotal feature, fostering a dynamic in-game economy. It allows for the trading of not only currencies but also gameplay-dropped items, creating an ecosystem that segregates players into 'Consumers' and 'Producers.' Consumers, who invest real money (Opals), seek Gold from Producers – the free players who farm Gold. The dynamic exchange rate between Gold and Crystals, influenced by the in-game economy and player progression milestones, maintains a balanced flow of currency and preserves the value of Gold to

¹⁶ MMO (Massively Multiplayer)

counter rapid inflation or depreciation. Nevertheless, the amount of Gold required to upgrade weapons and equipment will also rise after those milestones, maintaining the overall Gold amount at a certain level to prevent rapid depreciation.

Figure 3: The Player Ecosystem in CoA



Source: authors elaboration

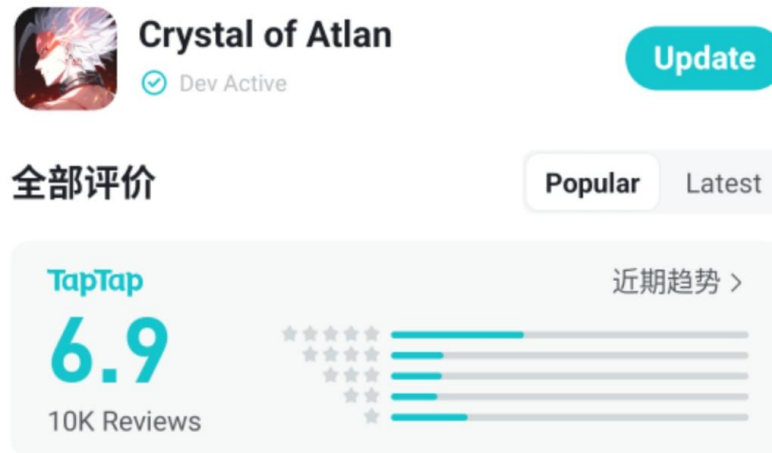
- 3) Economic Ecosystem and Player Interaction: This economic structure is a hallmark of DNF-like games, requiring a symbiotic relationship between paying and non-paying players. CoA's end-game content is tailored predominantly towards paying players, particularly with the weapon upgrade mechanics post +15 level. When players upgrade their weapons to +15, each upgrade after that until +25 has a chance to fail and cause the weapon to break. A broken weapon needs to be "repaired" to be restored, and the repairment causes Gold and is also a chance event. As I have mentioned previously, the weapon upgrade also consumes large amounts of Gold, especially for high-level weapons. The risk of weapon breakage and the need for Gold-intensive 'repairs' elevate the demand for Gold, often beyond the reach of non-paying players.
- 4) Challenges in Sustaining the Economic Model: The biggest challenge faced by CoA is apparently its reliance on the consumers. After one month of the game's release, paying players will have all their weapons and equipment upgraded. This means the need for

Gold will rapidly increase, causing the rapid depreciation of Gold in the secondary market. If the Gold is depreciated, then the normal players will have less motivation to farm Gold in the game, stop playing this game, and switch to other games. If CoA cannot provide new objectives for The Consumers, this chain effect of falling will continue and cause the entire game's ecosystem to fall apart. To counter this, CoA introduced heightened difficulty levels in newly released dungeons, aiming to spike the demand for advanced weapon upgrades. With the need for Gold increase in the secondary market, the Gold value will then increase and keep the normal players interested in farming Gold in the game. Nevertheless, this boosted hurdle of the new dungeon will inevitably be recognized as forcing players to pay, especially by those players that are usually categorized as "middle paying players" who both pay a certain amount of money and still farm in the game to seek a balance in their work, life, and gaming. These players have some money to spend on games and have some leisure time to farm in the game. However, escalating pay-to-progress barriers disrupt their gaming equilibrium and pose huge pressure on their mental ability to keep playing the game.

4.2.5. Analysis of Polarization of CoA's Reviews in the Community

Three months post-launch, CoA experienced a notable drop in its TapTap score, declining from an initial 8.9 to 6.9. This shift was marked by an increase in extreme ratings (both 5-star and 1-star reviews), indicating a significant polarization within the player community (refer to Figure 4). A deeper analysis of these contrasting reviews reveals several underlying factors beyond the accusations of "pay-to-win" practices due to increased dungeon difficulty.

Figure 4: Community Reviews of CoA



Source: Screenshot of CoA's review page on TapTap

1) Stylistic and Thematic Dissonance: Despite the developers' emphasis on CoA being distinct from typical open-world anime games, the community's perception and subsequent categorization of CoA as part of the anime genre led to a clash in expectations. This misalignment was especially pronounced among players who initially joined the community anticipating an experience akin to authentic anime games.

- i. Narrative Approach: MMORPGs¹⁷ like CoA prioritize the player's individual adventure, with less emphasis on other in-game characters. This contrasts sharply with anime games, where emotional storytelling and character interaction are central. Anime games present a "grand hotel theme," showcasing diverse character traits, whereas MMORPGs resemble an "autobiography" focused solely on the player.
- ii. Social Dynamics: DNF-like games, including CoA, encourage cooperative play, particularly in boss battles, which diverges from the predominantly single-player structure of anime games. Anime game fans, often less inclined towards socializing with strangers, may find the group coordination aspect unappealing.

¹⁷ MMORPG (Massively Multiplayer Role-Playing Game)

- iii. Character Buildup Risks: While "randomness" in gacha elements is common in anime games, the "risk" factor, such as weapon breakage during upgrades, introduces a level of frustration unfamiliar to anime game players. This feature, reminiscent of older games like DNF, can deter players accustomed to more predictable outcomes.
- iv. Inter-Account Resource Sharing: A critical element in DNF-like games is the ability for players to farm resources across multiple sub-accounts, pooling them into a single account. While enhancing replayability and resource allocation for non-paying players, this mechanism poses a steep learning curve for younger, newer players unfamiliar with such a system. The time-intensive nature of starting and maintaining multiple sub-accounts starkly contrasts with the streamlined, time-efficient mechanics prevalent in contemporary anime games.

These key discrepancies, particularly the divergence in narrative approach, social dynamics, character development risk, and inter-account resource sharing, have significantly contributed to the polarized reception of CoA in the gaming community. While aligning with traditional MMORPG and DNF-like elements, the game's design and mechanics clash with the expectations and preferences of anime game enthusiasts, leading to a divided player base and mixed reviews.

2) Summary of CoA's Performance and Community Reception

The intricate in-game economy and monetization strategy of Crystal of Atlan, alongside the community's divided response to its gameplay and thematic elements, have had a great impact on the game's overall performance. CoA's launch was initially met with significant commercial success, evidenced by an impressive revenue of 110 million RMB in the first month. This strong start was largely driven by its unique monetization system, which incorporated a blend of in-game currencies and a dynamic secondary market, catering to both paying and non-paying players.

However, the game's focus on a rigorous monetization model, characterized by the high-risk upgrading of weapons and a heavy reliance on paying players, led to a noticeable decline in

sustained revenue. In the following two months, the game's revenue dropped to a total of 68 million RMB. This reduction can be attributed to several key factors:

- i. **Aggressive Monetization Tactics:** The game's heavy emphasis on monetization, particularly the high stakes involved in weapon upgrades and the necessity for real-money investment, likely deterred a segment of the player base.
- ii. **Increasing Difficulty of New Content:** The heightened challenges introduced in new dungeons were seen as a deliberate push towards more spending, causing dissatisfaction among players, especially those in the 'middle paying' category.
- iii. **Polarized Community Reception:** As analyzed, the game's reception in the community was sharply divided. The disparity between CoA's MMORPG and DNF-like elements and the expectations of anime game enthusiasts led to a polarization of reviews. These disconnects, particularly in narrative style, social dynamics, and character development risk, further impacted player engagement and retention.
- iv. **Stylistic and Thematic Dissonance:** The confusion regarding CoA's categorization as an anime game or a distinct MMORPG created a mismatch in player expectations. This not only led to dissatisfaction but also potentially drove away a significant portion of the player base seeking an authentic anime gaming experience.

In summary, while Crystal of Atlan demonstrated initial financial success, its aggressive monetization strategy and the polarized community response to its gameplay mechanics and thematic approach have presented challenges in maintaining steady revenue and player engagement. The game's performance underscores the importance of aligning monetization tactics with player expectations and preferences to foster a sustainable and engaging gaming environment. After four years of development as one of ByteDance's initial and highly anticipated "Oasis Projects," Crystal of Atlan ultimately fell short of its mission to provide a stable, long-term revenue source for

ByteDance's gaming division. However, the downfall of CoA was not the sole catalyst for ByteDance's decision to discontinue the entire Nuverse division.

Section 3. ANALYSIS OF BYTEDANCE'S AGGRESSIVE ACQUISITION STRATEGY

4.3.1. A Brief Case Analysis of the Moonton Acquisition

Moonton, established in 2014 by a team with roots in Tencent's successful projects, quickly gained traction due to its pioneering presence in Southeast Asia's mobile gaming scene. In an interview¹⁸, Moonton's CEO attributed their early triumphs to this strategic first-mover advantage. The company's pivotal release was "Mobile Legends: Bang Bang" (MLBB) in 2016, a game that shared striking similarities with Tencent's "Honor of Kings." Capitalizing on the nascent, technologically lagging gaming infrastructure in Southeast Asia, Moonton managed to secure a stronghold in the region, drawing the attention of ByteDance.

ByteDance, with grand aspirations for the global gaming market, identified Moonton's potential for international expansion, offering an aggressive \$4 billion to secure the acquisition—outbidding Tencent's \$2 billion offer aimed at consolidating the SEA market that "Honor of Kings" could not penetrate.

However, Moonton's success was not replicated in North America and Europe, and the company's profitability plateaued, maintaining an annual profit of around \$200 million post-acquisition¹⁸. When juxtaposed with the hefty acquisition cost, the investment's returns were underwhelming. By 2023, ByteDance's patience for Moonton's global market breakthroughs was wearing thin. Recent reports suggest that ByteDance is exploring the sale of Moonton, targeting a \$5 billion asking price (Ye, 2023)[7].

According to the Chinese government's latest industry report¹⁹, which indicates a 5.65% decline in overseas revenue from Chinese self-developed games in 2023—marking the second consecutive year of decline—the global gaming market expansion is no longer perceived as an untapped opportunity. ByteDance's decision to offload Moonton appears to be a strategic retreat

¹⁸ <https://youxiputao.com/article/25757>

¹⁹ <https://www.cgigc.com.cn/details.html?id=08dbfd31-eaf6-4e3a-8cb3-de8ce675d432&tp=news>

from a market that no longer promises the lucrative prospects it once did.

Section 4. ANALYSIS OF DOUYIN'S MINI-GAME PLATFORM

Douyin ventured into the casual in-app gaming market in February 2019 by introducing a mini-game on its official game account (Xu, 2020)[6]. Nevertheless, due to technical and compatibility challenges specific to in-app games, Douyin's mini-game initiative did not capture significant attention in the gaming industry for the following two years.

In September 2022, the sudden popularity of "Sheep A Sheep," a WeChat mini-game, revolutionized the Chinese market, amassing over 100 million RMB in its first month and attracting 25 million daily active users²⁰. This unexpected success was attributed to two factors:

- 1) The game's title, "Sheep A Sheep" (directly translated from its Chinese name, "Yang Le Ge Yang"), cleverly played on the word "Yang," which means "Sheep" but also phonetically resonates with "Positive" in the context of Covid-19.
- 2) Ironically, the game was a crude copy of a lesser-known studio's matching game. The developers of "Sheep A Sheep," lacking expertise in replicating the original game's matching rules, opted for a completely random game mechanism. This resulted in an almost impossible second level, compelling players to watch embedded ads for extra chances. These ad views translated into revenue for the developers.

This unconventional success story marked a turning point for platform operators like ByteDance's Douyin and Tencent's WeChat, as well as casual game developers, who recognized the untapped potential of in-app gaming.

In early 2023, Unity, a prominent game engine provider, provided updates enhancing the performance of mini-games on platforms like WeChat and Douyin. Subsequently, Douyin integrated its mini-games into the "Douyin Open Platform," offering developers streamlined access to the platform's resources and its 600 million daily active users (Luo, 2023)[4]. Tencent's 2023 Q2 report²¹ highlighted WeChat mini-games for the first time, underlining their burgeoning contribution to

²⁰ <https://pandaily.com/matching-mini-game-sheep-a-sheep-hits-it-off-in-china-arouses-controversy/>

²¹ <https://www.tencent.com/en-us/investors/quarter-result.html>

Tencent's revenue streams.

At the China Joy event in 2023, Douyin's operations manager showcased the remarkable growth of the platform's mini-games. The Daily Active Users (DAU) of these games surged from a 43% increase in 2022 to an impressive 150% in 2023 (Luo, 2023)[4]. Douyin's sophisticated algorithm, adept at ad distribution, now empowers mini-game developers with tailored advertising resources, significantly enhancing their games' visibility to the target audience. This strategic approach has substantially reduced promotional costs for developers by 30%-40% compared to traditional app stores, a notable contrast to the 10-50% increase in promotional expenses reported by developers in Tencent's 2023 gaming advertisement report (Luo, 2023)[4].

By leveraging its platform and algorithms to assist developers in reducing promotion costs and increasing exposure, Douyin is poised to attract more developers to its platform, thereby expanding its revenue stream and solidifying its position in the mini-game market.

4.4.1. ByteDance's Use of Douyin Traffic for Third-Party Mini-Games

1) Platform as a Service:

- i. Douyin provides a platform for third-party developers to showcase and promote their mini-games to its user base.
- ii. Developers gain access to a large, engaged audience, while ByteDance monetizes the platform through advertising and revenue-sharing models.

2) Revenue Sharing Model:

- i. ByteDance likely operates on a revenue-sharing model with third-party developers, earning a percentage of in-game purchases or ad revenues.
- ii. This model creates a symbiotic relationship, incentivizing both ByteDance and developers to maximize the game's success.

3) Diverse Game Portfolio:

- i. Hosting third-party mini-games allows Douyin to offer its users a wide variety of gaming experiences, enhancing platform stickiness.
- ii. This diversity can attract a broader user demographic, increasing overall

platform engagement.

4) Community Building:

- i. Third-party games contribute to building a vibrant gaming community within Douyin.
- ii. Community features such as leaderboards, user reviews, and social sharing can drive engagement and retention.

5) Marketplace Dynamics:

- i. Douyin acts as a marketplace where the success of third-party games depends on user preferences and market trends.
- ii. ByteDance can benefit from the collective success of these games without bearing the high risk of game development.

Section 5. ANALYSIS OF IN-HOUSE DEVELOPED GAME CoA VERSUS THIRD-PARTY MINI-GAMES THROUGH THE BUSINESS MODEL CANVAS

Figure 5: Business Model Canvas **Crystal of Atlan**

Key Partners <ul style="list-style-type: none"> • Game development teams of Nuverse • Content creators and KOLs • Marketing and advertising agencies, mainly Douyin and Bilibili 	Key Activities <ul style="list-style-type: none"> • Game development • Marketing • Continuous updates & maintenance 	Value Propositions <ul style="list-style-type: none"> • DNF-like gaming experience with high-quality graphics and intense gameplay 	Customer Relationships <ul style="list-style-type: none"> • Gaming community • Customer support and feedback channels • Social media engagement 	Customer Segments <ul style="list-style-type: none"> • Hardcore gamers seeking quality experiences • Douyin users interested in gaming • Younger demographics attracted to anime-style games
	Key Resources <ul style="list-style-type: none"> • Development staff • Financial resources for development and marketing 		Channels <ul style="list-style-type: none"> • Douyin platform • other social media/gaming platforms and stores 	
Cost Structure <ul style="list-style-type: none"> • Game development and maintenance costs • Marketing and advertising expenses • Content creation and update costs 			Revenue Streams <ul style="list-style-type: none"> • In-app purchases and microtransactions 	

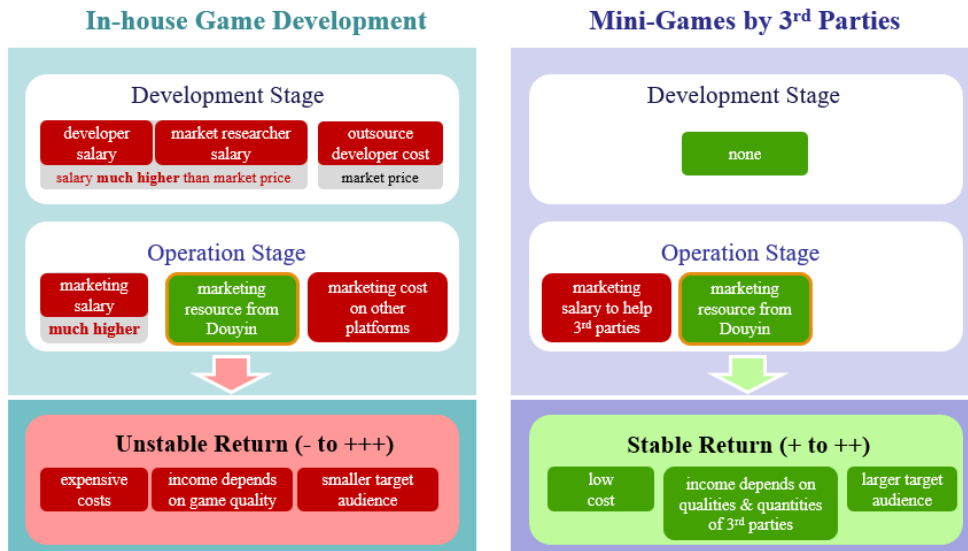
Source: authors elaboration

Figure 6: Business Model Canvas Third Part Mini-Games

Key Partners <ul style="list-style-type: none"> • Third-party game developers • Advertisers and sponsors • Technology service providers 	Key Activities <ul style="list-style-type: none"> • Platform hosting • Developer support • Advertising activities 	Value Propositions <ul style="list-style-type: none"> • Wide reach and access to a large user base for developers • Diverse range of games for users • Integrated social and gaming experience 	Customer Relationships <ul style="list-style-type: none"> • Developer support • User engagement through the Douyin • Community building 	Customer Segments <ul style="list-style-type: none"> • Game developers looking for platform exposure • Douyin users seeking entertainment • Advertisers targeting a young, engaged audience
	Key Resources <ul style="list-style-type: none"> • Douyin's technological infrastructure • Large user base and data analytics capabilities • Marketing and promotional channels 		Channels <ul style="list-style-type: none"> • Douyin app and ecosystem • Developer portals and support services • Online and social media marketing 	
Cost Structure <ul style="list-style-type: none"> • Platform development and maintenance • Developer support and resources • Marketing and promotional expenses 			Revenue Streams <ul style="list-style-type: none"> • Revenue sharing from in-game purchases • Advertising revenue from within the app • Potential fees for premium developer services 	

Source: authors elaboration

Figure 7: Simplified Comparison of Monetization Approaches of Douyin’s Game-related Resources



Source: authors elaboration

The strategic pivot of ByteDance away from internal game development, as illustrated by the two business model canvases (Figure 5&6) and the comparison of monetization of Douyin’s resources (Figure 7), reflects a calculated move to optimize resource allocation. The four-year tenure

marked by substantial investment in game development, culminating in a game with moderate reception like *Crystal of Atlan*, underscores the high risks and unpredictable nature of the gaming industry. ByteDance's decision to capitalize on Douyin's expansive user traffic and the burgeoning mini-game market represents a shift towards a more sustainable and lower-risk strategy. This adjustment leverages existing platform strengths and aligns with market trends favoring rapid, casual gaming experiences, which may offer more consistent returns and growth opportunities.

CHAPTER 5. DISCUSSION

Section 1. INTRODUCTION OF DISCUSSION

5.1.1. Background and Study Overview

ByteDance, primarily recognized for its social media triumph with Douyin, embarked on a notable but tumultuous journey in the gaming industry. This section aims to discuss the findings from the detailed analysis presented earlier in the thesis, focusing on ByteDance's initial venture into gaming, its significant milestones, and its strategic decision to scale back its gaming division in favor of mini-games on Douyin.

5.1.2. Summary of Key Conclusions

Our exploration began with ByteDance's ambitious entry into the gaming market in 2019, marked by the establishment of Nuverse. We delved into major initiatives such as the aggressive expansion symbolized by the acquisition of Moonton Technology and the noteworthy development and launch of their internally developed game, "Crystal of Atlan". Despite initial successes, ByteDance faced significant challenges in sustaining momentum, particularly with CoA's performance and community reception.

Simultaneously, ByteDance's Moonton acquisition, while giving a foothold in the Southeast Asian market, did not achieve the global impact anticipated, with profitability plateauing post-acquisition. This was contrasted by the rise of mini-games on Douyin, which presented a low-cost, high-engagement model more aligned with ByteDance's core competencies in social media and content creation.

Section 2. INTERPRETATION OF THE FINDINGS

5.2.1. ByteDance's Strategic Business Approach in Gaming

- 1) Performance of "Crystal of Atlan": The introduction of CoA was a significant move by ByteDance to establish a footprint in the hardcore gaming landscape. CoA initially

garnered substantial revenue and attention, showcasing ByteDance's capability to publish high-quality games. However, the momentum waned significantly post-launch. This decline, as identified in the analysis, was not solely due to the game's monetization strategy or gameplay mechanics but also due to a mismatch in audience expectations and game design. CoA's high-risk upgrade mechanics and the polarized community response to its thematic approach highlight the volatile nature of hardcore gaming and the challenges in aligning game design with player preferences.

2) Moonton Acquisition and Its Outcomes: The acquisition of Moonton represented a bold move into the mobile gaming arena, mainly targeting the Southeast Asian market. "Mobile Legends: Bang Bang" (MLBB) was a strategic asset in this endeavor. However, Moonton's success remained regional, with limited impact in Western markets. The plateauing profitability post-acquisition and ByteDance's reported contemplation of selling Moonton signal the challenges in scaling regional successes to a global level. This case exemplifies the complexities involved in international market penetration and the unpredictable nature of gaming trends across different regions.

5.2.2. Emergence and Success of Mini-Games on Douyin

1) Aligning with Core Competencies: The success of mini-games on Douyin illustrates a strategic alignment with ByteDance's strengths in social media and content distribution. Unlike the high-investment, high-risk ventures in the hardcore gaming space, mini-games offer a low-cost, flexible, and highly engaging platform that synergizes with ByteDance's established user base on Douyin. The pivot towards leveraging Douyin's massive traffic for gaming content signifies an adaptive strategy, focusing on areas with proven success and potential for growth.

2) Mini-Games as a more Sustainable and Integrated Approach: The mini-games model represents a sustainable approach, contrasting sharply with the challenges faced in major gaming projects. With their low development costs and high user engagement, these games showcase a business model that can better integrate into ByteDance's existing

ecosystem. It highlights ByteDance's agility in adapting to changing market dynamics and focusing on areas of established success.

3) Impact on Revenue and User Engagement: While the major gaming ventures like CoA and the acquisition of Moonton involved substantial financial risks and did not significantly contribute to ByteDance's overall revenue, the mini-games on Douyin provided a more consistent and scalable revenue stream. These games, harnessing ByteDance's expertise in algorithm-driven content distribution, have proven to be more effective in driving user engagement and monetization within the app ecosystem.

Section 3. STRATEGIC IMPLICATIONS

5.3.1. Realigning with Broader Business Objectives

ByteDance's decision to pivot away from large-scale gaming ventures towards Douyin's mini-games reflects a strategic realignment with its broader business objectives. This shift is indicative of the company's focus on leveraging its established strengths in social media and content distribution, areas where it has already achieved significant success and market recognition. Unlike the hardcore gaming sector, which demands heavy investments and faces fierce competition, mini-games on Douyin offer a more synergistic and less capital-intensive approach, aligning closely with ByteDance's existing business model and user base.

The pivot also demonstrates ByteDance's agility in adapting to changing market dynamics. The gaming industry, particularly mobile gaming, has seen a significant shift towards casual and social gaming experiences. ByteDance's focus on mini-games taps into this trend, leveraging the vast user base of Douyin to offer gaming experiences that are accessible, engaging, and socially integrated. This move is not just about reducing risks but also about capturing new opportunities in a rapidly evolving gaming landscape.

5.3.2. Implications for the Gaming Industry

ByteDance's strategic shift could influence the broader gaming industry, particularly in how

games are developed and distributed. The success of Douyin's mini-games highlights the potential of social media platforms as viable channels for game distribution and monetization. This could encourage other companies to explore similar models, leveraging their user bases to integrate gaming more directly into their platforms.

The gaming industry could see a broader shift in revenue models, moving away from traditional approaches to more integrated and platform-based monetization strategies. ByteDance's use of its algorithm-driven platform to promote and monetize mini-games suggests a model where the lines between social media content and gaming blur, creating new avenues for revenue generation and user engagement.

5.3.3. Challenges and Opportunities

While ByteDance's pivot offers several strategic advantages, it also presents challenges. Ensuring that the mini-games remain innovative and engaging over time while aligning with user expectations on Douyin will be crucial. The company will need to continually balance the need for fresh content with the preferences of its diverse user base.

The success of mini-games on Douyin opens up opportunities for ByteDance to explore new markets and audience segments. However, this expansion requires a nuanced understanding of different cultural preferences and gaming habits. Tailoring gaming experiences to suit varied audiences while maintaining the platform's core appeal will be key to ByteDance's continued success in this sector.

Section 4. CONCLUDING REMARKS

ByteDance's journey in the gaming industry, culminating in its strategic pivot towards mini-games on Douyin, provides a compelling case study of a company navigating the complex and rapidly evolving landscape of digital entertainment. This thesis has dissected and analyzed ByteDance's ventures, from its ambitious entry into hardcore gaming with "Crystal of Atlan" and the significant acquisition of Moonton to its eventual realignment with the emerging trend of mini-games. The findings underscore several key insights and implications for ByteDance and the

broader gaming industry.

Firstly, ByteDance's experience in hardcore gaming, particularly with CoA, illustrated the challenges inherent in high-stakes game development and market dynamics. Despite the initial success, sustaining momentum proved difficult, highlighting the unpredictable nature of the gaming market and the importance of aligning game design with player preferences and expectations.

The acquisition of Moonton, while providing a solid foothold in the Southeast Asian market, also encountered limitations in global scalability. This aspect of ByteDance's strategy illuminated the challenges of international market penetration and the complexities of regional gaming preferences.

The shift towards mini-games on Douyin marked a strategic realignment with ByteDance's core competencies in social media and content distribution. This move leveraged the company's existing strengths and user base, showcasing a more sustainable and integrated approach to gaming within ByteDance's ecosystem. The success of these mini-games not only reflects a strategic adaptation but also highlights a broader industry trend towards casual, accessible gaming experiences.

ByteDance's pivot in its gaming strategy also has broader implications for the industry. It suggests a potential shift in game development and distribution models, with social media platforms emerging as significant channels for game promotion and monetization. Furthermore, it underscores the importance of agility and adaptability in a sector characterized by rapid technological advancements and changing consumer preferences.

In conclusion, ByteDance's strategic journey in the gaming sector—from ambitious ventures in hardcore gaming to a focused approach to mini-games—illustrates the company's adaptability and strategic foresight. It offers valuable insights into the dynamics of the gaming industry and the importance of aligning business strategies with market trends and core strengths. This case study not only contributes to our understanding of ByteDance's corporate strategies but also provides lessons on navigating the complexities and opportunities within the global gaming market.

CHAPTER 6. CONCLUSION

ByteDance's strategic journey within the gaming industry, culminating in its pivot towards mini-games on Douyin, encapsulates a narrative of adaptation, innovation, and strategic foresight. This paper has meticulously explored ByteDance's initial foray into gaming with ambitious projects like "Crystal of Atlan" and significant acquisitions, notably Moonton, and contrasted these with the company's subsequent shift to focus on the burgeoning mini-games sector within Douyin. The conclusion synthesizes the key findings, implications, and lessons drawn from ByteDance's gaming venture.

6.1.1. Summaries of Key Findings

ByteDance's entry into the gaming industry with high-profile projects and acquisitions was marked by significant initial success. However, challenges soon emerged, particularly in sustaining the momentum of games like "Crystal of Atlan" and leveraging the Moonton acquisition on a global scale. These challenges were amplified by the inherent risks and competitive nature of the hardcore gaming market.

The subsequent pivot to focus on mini-games within Douyin demonstrated ByteDance's adaptability. This strategic realignment capitalized on the company's core competencies in social media, content distribution, and algorithm-driven user engagement. It underscored a shift towards a more sustainable, low-cost, and integrated gaming approach that better aligns with the company's broader business model and market trends.

6.1.2. Implications and Lessons Learned

ByteDance's experience in the gaming sector highlights the importance of adaptability in a rapidly evolving market. The company's ability to pivot its strategy in response to market feedback and internal performance metrics serves as a critical lesson for businesses operating in dynamic industries.

The case of ByteDance emphasizes the significance of aligning business strategies with a

company's core strengths. By shifting focus to mini-games on Douyin, ByteDance leveraged its existing user base and technological prowess, steering towards a model that offers more synergy with its established business areas.

The transition from hardcore gaming to mini-games also reflects ByteDance's keen understanding of market trends and consumer preferences. The rise of casual and social gaming experiences, especially within the context of social media platforms, points to a broader industry trend that ByteDance successfully capitalized on.

6.1.3. Future Outlook and Considerations

While the mini-game model aligns well with ByteDance's strengths, its long-term sustainability and potential for growth remain areas for further exploration. The company will need to continually innovate and adapt to maintain user engagement and monetization efficiency.

ByteDance's pivot could potentially influence broader industry trends, with other companies exploring similar integrated gaming and social media models. This could lead to a shift in how games are developed, distributed, and monetized in the future.

6.1.4. Reflections on Corporate Strategy and Industry Dynamics

ByteDance's approach in the gaming industry reflects a broader strategic principle vital for modern corporations: flexibility. The ability to pivot from a high-stakes, competitive market like hardcore gaming to the more synergistic domain of mini-games within Douyin illustrates the importance of abilities for firms to reassess and redirect corporate strategies in response to market realities and internal capabilities.

ByteDance's success with Douyin's mini-games also highlights a shift in consumer engagement models. The integration of gaming into social media platforms represents a new frontier in digital entertainment, where the boundaries between different forms of media consumption become increasingly blurred. This trend will likely continue as companies seek to maximize user engagement across their platforms.

6.1.5. Broader Industry Implications and Future Trends

The case of ByteDance could presage broader shifts in the gaming industry, with other companies potentially following suit by integrating gaming more closely with social media and other digital platforms. This could reshape the industry landscape, leading to new forms of gaming experiences and business models.

ByteDance's journey underscores the need for continuous innovation and market responsiveness. As consumer preferences and technological capabilities evolve, companies must remain agile and open to exploring new avenues and approaches to remain competitive and relevant.

6.1.6. Final Reflections and Future Directions

ByteDance's strategic pivot underscores a growing trend where gaming is not an isolated venture but an integrated component of broader digital ecosystems. This integration offers opportunities for cross-platform engagement and innovative monetization strategies, a trend that is

The lessons from ByteDance's gaming strategy are not confined to the gaming industry alone. They resonate with broader themes in digital business strategy, particularly the importance of agility, market alignment, and leveraging core competencies. Other industries can draw insights from ByteDance's experience, especially in terms of adapting business models in response to evolving market conditions and consumer preferences.

As companies like ByteDance continue to explore the integration of gaming and social media, ethical and social considerations will become increasingly important. Issues such as user data privacy, responsible gaming, and content moderation will require careful attention to ensure that these evolving digital platforms remain safe and positive spaces for users.

The ByteDance case invites further research into the evolving nature of digital entertainment, particularly the intersection of gaming, social media, and other digital content forms. Future studies could explore the long-term sustainability of integrated gaming models, the impact on user behavior and social interactions, and the broader implications for digital media consumption patterns.

6.1.7. Concluding Thoughts

In closing, ByteDance's journey through the gaming industry landscape serves as a microcosm of the broader dynamics shaping the digital world today. It is a story of adaptation, innovation, and strategic agility in the face of a rapidly evolving market environment. As the digital landscape continues to change, the insights gleaned from ByteDance's experience will remain relevant, offering valuable lessons for businesses navigating the complex interplay of technology, market trends, and consumer behavior in the digital age.

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APPENDIX

Appendix 1: Distribution of Distribution Channels of CoA over 7 days



Appendix 2: High Frequency Phrases in Commercials of CoA over 30 days

