

Study on the Optimization of Bilibili's Business Model —— Based on the Business Model Canvas

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Abstract. With the booming development of the Internet industry and the comprehensive coverage of 4G and 5G networks, the Internet tide is gradually changing people's daily habits, and online video has been deeply integrated into people's daily life entertainment. Each major video website has its own characteristics and unique business model, and Bilibili has created a unique profit model in this field, constructed a unique community culture, and achieved wide recognition in the market. Bilibili, with its focus on PUGC (professional user-generated content) videos and a strong community atmosphere, is a unique video community. As a listed niche video website, Bilibili is popular among young people in terms of pan-ACG culture. Using the business model canvas as a framework, combined with SWOT analysis and Porter's Five Forces analysis, this paper explores Bilibili's business model with the aim of providing useful references for the healthy and sustainable development of China's digital content service industry, and promoting the industry's continuous innovation and progress. This is not only an in-depth study of Bilibili's business model, but also a deep reflection on the development trend of the whole industry, which will draw a richer and more sustainable development blueprint for the future digital entertainment era.

Keywords: Bilibili, the business model canvas, digital content services industry, SWOT analysis, Porter's five forces analysis.

1. Introduction

With the advancement of the times and technology, by 2023, the number of global internet users has reached 5.3 billion. In the era of the digital revolution, the landscape of content creation and dissemination is undergoing profound changes. Among them, the changes are particularly significant in the digital content service industry, which has experienced explosive growth in recent years. More and more people are using various online platforms for social entertainment. Among them, Bilibili, as a leading online video platform in China, has maintained double-digit growth in daily active users and surpassed 100 million, with an average daily usage time of 100 minutes [1]. Its unique business model and vast user base have made it a leader in the digital content service industry.

The significance of studying Bilibili's business model lies not only in understanding the driving force behind its commercial success, but also in gaining insight into the trends and opportunities in the digital content service industry. This exploration provides valuable references and inspiration for other companies seeking to navigate the digital economy. Additionally, it aids Bilibili in adapting to constantly changing policies and regulatory environments, expanding into international markets, and achieving sustainable development.

This study makes several contributions based on existing knowledge. Firstly, it provides a comprehensive analysis of an innovative business model of a well-known internet company, revealing the strategies and practices that have led to its success. Secondly, it offers an overview of current trends and potential opportunities in the digital content service industry, providing decision-making support for businesses and investors. Thirdly, this study enriches the theoretical understanding of business models and promotes the progress of academic research in this field based on an interdisciplinary theoretical system.

The research framework adopted in this study is systematic and diversified. It combines literature review, qualitative research, and interdisciplinary research methods to delve into the complexity of Bilibili's business model. This framework ensures a comprehensive and detailed understanding of the

subject, enabling us to put forward insights that are both theoretically grounded and practically significant.

In summary, the purpose of this study is to uncover the secrets of Bilibili's business model, showcasing its strengths, weaknesses, opportunities, and challenges. It aims to contribute to the discussion on the future of digital content services and provide strategic guidance for companies seeking to emulate Bilibili's success. The remainder of this paper is structured as follows: Section 2 is a literature review, Section 3 introduces the status of Bilibili and analyzes its competitive strategic environment, Section 4 analyzes Bilibili's business model using the Business Model Canvas, and Section 5 concludes the study.

2. Literature Review

Since the establishment of Bilibili, research on its business model has attracted significant attention and interest from both domestic and international communities. The academic community has conducted extensive and in-depth research on this issue from various perspectives, achieving numerous research outcomes.

Yuan et al. explored the key to Bilibili's success through the 4Ps and SWOT theories, attributing it to the rationality of its target customer selection, business strategy, and business model [2]. Scholar Liu et al. elaborated on the impact mechanism of corporate environmental scanning strategies on disruptive business model innovation from the perspective of environmental scanning strategies, providing insights for achieving disruptive innovations in business models [3]. Chen analyzed Bilibili's business model comprehensively from the perspective of value creation, utilizing a three-dimensional framework for value analysis. It was discovered that its greatest feature lies in the value creation and delivery process as well as the value capture process [4]. Liu explored how Bilibili gradually completed the transformation and iteration of its business model in the integration process with the community economy, revealing the process and reasons behind Bilibili's growth into a new content-based platform that integrates social, cultural, and commercial elements [5]. Zhou, starting from the perspective of the business model canvas theory, found that Bilibili has established a community for pan-ACG young users, providing content through methods such as PUGC, and building a platform to serve numerous content creators. The platform utilizes its traffic to obtain revenue mainly through games or live streaming [6].

With the continuous development of the digital content service industry, our understanding of Bilibili has deepened. Research on Bilibili's business model has gradually matured, but based on the current research findings, it is apparent that academic research on the operations and strategic analysis of internet companies is not conducted within a unified framework. There are still significant controversies regarding the applicability of research methods, mainly due to the complexity and diversity of business models. This article, drawing upon domestic and international research, adopts an interdisciplinary research approach, integrating Bilibili's business model with theories from other disciplines, thereby breaking through the limitations of previous research on optimizing Bilibili's business model.

3. Analysis of Current Situation and Competitive Strategic Environment

3.1. Current Situation

Bilibili is a video community and iconic brand for the younger generation in China, founded on June 26, 2009. It originally started as a video bullet screen website primarily focused on ACG content, and has gradually evolved into a comprehensive video community covering diverse cultural and interest-oriented content such as life, gaming, entertainment, animation, technology, and knowledge. Centered on PUGV, it includes OGV, live streaming, short videos, and other comprehensive scenarios.

Bilibili was listed on the NASDAQ in the United States on March 28, 2018, and had a secondary listing in Hong Kong on March 29, 2021. On September 29, 2022, the Hong Kong Stock Exchange's official website indicated that Bilibili has transformed from a secondary listing to a primary listing on the Hong Kong Stock Exchange, which officially took effect on October 3 [7].

In recent years, Bilibili has achieved a relatively successful commercial transformation. Beyond traditional advertising revenue, it has also diversified its earnings through e-commerce, premium memberships, game joint operations, and other methods. Furthermore, Bilibili has actively invested in multiple content production companies and IPs, further strengthening its content ecosystem. This has enabled Bilibili to successfully transform from a single ACG content sharing platform to a comprehensive video community, achieving remarkable results on its commercialization journey [8].

3.2. SWOT Analysis

3.2.1. Internal Advantages

As a unique digital entertainment platform, Bilibili boasts a vast content library and an active user community. Its features such as bullet screen comments, user-generated content, and social interactions have built a unique community ecosystem. It enjoys strong brand influence among young users and emphasizes original content and user experience, earning a good reputation from users.

3.2.2. Internal Disadvantages

Bilibili heavily relies on user-generated content, facing issues of inconsistent content quality and copyright issues. Additionally, its core business focuses on anime and original videos, while it lacks in movie and TV series resources [9]. Meanwhile, due to not inserting advertisements into videos, it sacrifices some advertising revenue.

3.2.3. External Opportunities

The growth of the digital entertainment market provides Bilibili with opportunities to expand its market share. Developing IP derivatives, expanding into global markets, and technological innovation can all help attract more users. Policy support, the rise of domestic anime, and the influx of official accounts also bring good development opportunities for Bilibili.

3.2.4. External Threats

Bilibili faces fierce competition in the short video market, risks of regulatory policy changes, the possibility of losing key creators, and security and technical vulnerabilities brought by technological advancements. These external threats require Bilibili's constant attention and response.

3.3. Porter's Five Forces Analysis

3.3.1. Rivalry among Existing Competitors

Bilibili faces intense competition in the digital content services sector from short video platforms and online live streaming platforms, such as Tiktok, Kuaishou, Douyu and Huya, which compete for market share through similar services and content.

3.3.2. Bargaining Power of Suppliers

Suppliers of Bilibili include content creators, game developers and IP holders. Some of the creators with high popularity and many fans, as well as suppliers who possess popular game copyrights or exclusive IP resources, have strong bargaining power in negotiations.

3.3.3. Bargaining Power of Buyers

Users, as buyers of digital content services, have higher demands for service quality and innovation, which affects Bilibili's bargaining power and forces it to provide higher quality, exclusive copyright content and better experience.

3.3.4. Threat of Substitute Products

Despite the existence of competitors, Bilibili's unique social interaction and bullet screen comment features occupy a special position in the market, making it difficult to be completely replaced by traditional video platforms.

3.3.5. Threat of New Entrants

Although there are certain thresholds for new entrants in the field of digital content services, with the growth of the market and increase in profits, new competitors may still enter the market and pose a threat to Bilibili.

4. Canvas Analysis of Business Models

4.1. Customer Base Development

Bilibili focuses on attracting and serving the "Generation Z" and "Z+ Generation" users. Through detailed customer segmentation and highly interactive customer relationship management, it has successfully built a vibrant community ecosystem centered around young users. This not only stably maintains a user retention rate of over 80%, but also witnesses a significant growth in the number of users learning on the platform, from 113 million in 2020 to 220 million in 2023 [10], earning it the nickname "Bilibili University." Bilibili constructs a diversified customer relationship network by providing content creators with production resources and tools, encouraging ordinary users to participate in interactions, establishing partnerships with various content providers, and managing commercial partners such as advertisers and online shop owners with precision. In addition, through various mechanisms, Bilibili screens out users with common cultural genes and encourages them to resonate emotionally and express themselves. The unique community culture and high interactivity of the platform not only enhance user stickiness and loyalty, but also provide a platform for content creators and other customers to showcase and communicate, further enhancing the platform's aggregation and differentiated experience, successfully attracting users from specific cultural groups.

4.2. Channel Development

With the core concept of "All videos that interest you are on Bilibili" [11], Bilibili effectively delivers content to users through various channels such as the official website, mobile apps, mini programs, and offline activities, while encouraging interaction and participation among users. These channels not only provide users with a diverse range of video content consumption scenarios, but also satisfy users' diversified interest needs through various forms such as PUGV, live streaming, and OGV. This diversified distribution strategy not only broadens user coverage but also enhances user engagement and loyalty, providing a solid foundation for the sustained development of the Bilibili community. Furthermore, the Bilibili community has become a popular venue for Chinese young people to exchange interests, as well as an important window for showcasing Chinese culture to the world.

4.3. Financial Analysis

Table 1 shows Bilibili's net revenue breakdown by income source over the past three years. In 2023, Bilibili's revenue was primarily derived from mobile games (19%), value-added services (44%), advertising (28%), and e-commerce and others (9%). Among these, mobile games and e-commerce and others saw significant declines compared to 2022, while revenue from value-added services and advertising increased.

Table 1. Bilibili's Net Turnover by Revenue

As of 31 December 2023 (RMB'000)

	2021	2022	2023
Mobile Games	5,090,926	5,021,290	4,021,137
Value-added Services	6,934,886	8,715,170	9,910,080
Advertising	4,523,421	5,066,212	6,412,040
IP derivatives and others (formerly known as E-commerce and others)	2,834,451	3,096,495	2,184,730
Total Net Revenues	19,383,684	21,899,167	22,527,987

Note: The data in the table is derived from the 2022, 2023 annual reports of Bilibili.

Table 2 depicts Bilibili's cost structure, with its operating costs primarily consisting of revenue-sharing costs, content costs, server and bandwidth service costs, IP derivatives, and others. Among these, the operating cost in 2023 was 17.3 billion yuan, representing a 3.89% decrease from 18 billion yuan in 2022. This reduction was primarily attributed to decreases in content costs, server and bandwidth service costs, and e-commerce and others. Conversely, in 2022, the cost increased by 17.7% from 15.3 billion yuan in 2021, primarily due to an increase in revenue-sharing costs and content costs. Specifically, the revenue-sharing cost was 9.1 billion yuan, representing a 17.9% increase from 7.7 billion yuan in 2021.

Table 2. Bilibili's Operating Costs

As of 31 December 2023 (RMB'000)

	2021	2022	2023
Revenue-sharing Costs	7,733,330	9,115,351	9,507,483
Content Costs	2,694,839	3,496,871	3,195,620
Server and Bandwidth Costs	1,565,923	1,752,878	1,477,116
IP derivatives and others (formerly known as E-commerce and others)	3,346,445	3,684,772	2,905,903
Total Cost of Revenues	15,340,537	18,049,872	17,086,122

Note: The data in the table is derived from the 2022, 2023 annual reports of Bilibili.

The indicators of Bilibili's solvency, as reflected in Table 3, show that while Bilibili's current liabilities have been increasing year by year, its current assets have been decreasing, resulting in a decline in its solvency. This indicates that its asset liquidity and short-term debt repayment ability are poor.

Table 3. Bilibili's Solvency Indicators

As of 31 December 2023

	2021	2022	2023
Liabilities-to-Assets	58.3%	63.6%	56.7%
Current Ratio	3.02	1.43	1.03
Quick Ratio	2.98	1.40	1.02
Cash Ratio	2.50	1.14	0.83

Note: The data in the table is derived from the 2022, 2023 annual reports of Bilibili.

Table 4 reflects Bilibili's operational capability indicators, showing a slight decline in efficiency and a decrease in resource utilization. Inventory turnover and asset turnover both experienced significant drops in 2022, but recovered to 2021 levels in 2023. Bilibili may be extending payment terms with suppliers, optimizing inventory management to reduce inventory holding time, and accelerating the collection of accounts receivable, leading to a gradual reduction in the cash conversion cycle. This helps Bilibili improve its capital utilization efficiency and reduce financing needs. However, it may also indicate certain risks, such as strained relations with suppliers or a decline in the quality of accounts receivable.

Table 4. Bilibili's Activity Indicators

As of 31 December 2023

	2021	2022	2023
Accounts Receivable Turnover	16.09	15.41	15.36
Inventory Turnover	50.16	38.55	53.86
Asset Turnover	0.52	0.44	0.59
Cash Conversion Cycle	-59.95	-61.67	-67.74

Note: The data in the table is derived from the 2022, 2023 annual reports of Bilibili.

Table 5 reflects Bilibili's profitability, which, though not ideal, indicates that Bilibili is working to improve its profitability. However, a negative ROC suggests that the return on investment earned by Bilibili does not match its cost of capital, indicating inefficient capital utilization within the company, and its value may decline as the company grows.

Table 5. Bilibili's Profitability Indicators

As of 31 December 2023 (%)

	2021	2022	2023
ROA	-18.03	-15.18	-12.69
ROE	-46.65	-38.45	-32.15
ROC	-43.57	-34.86	-19.52

Note: The data in the table is derived from the 2022, 2023 annual reports of Bilibili.

From a general financial perspective, Bilibili's financial status presents a complex scenario. While achieving net growth in total operating revenue, there has been a decline in revenue from mobile game and e-commerce segments, indicating a structural imbalance in its revenue. This growth has not immediately translated into significant improvements in profitability, as key profitability indicators such as ROA and ROE remain negative, albeit showing a trend of improvement year on year. Additionally, it's noteworthy that as the overall revenue scale increases, Bilibili's cash ratio has been declining year after year, suggesting a decrease in liquid assets and an increase in current liabilities. This is a negative factor for its ability to respond to uncertainty risks, which may lead to a further increase in Bilibili's future debt-to-asset ratio, thus increasing financial risks. Moreover, changes in asset turnover ratios also indicate that Bilibili has experienced some fluctuations in its operational management. Although it has eventually recovered to its original level, if the company cannot continuously improve its operational capabilities and effectively control costs, its future financial situation may face greater challenges. In summary, although Bilibili has achieved certain growth in the market, it still needs to make further efforts in financial management and operational efficiency. It should focus on cost control, debt structure optimization, and improvement in operational efficiency to enhance its overall financial situation and achieve sustained growth in profitability.

4.4. Key Resources

The core resource of Bilibili lies in the gathering of numerous content creators who can produce high-quality original content, as well as its unique bullet screen culture and otaku culture. These elements jointly attract many users and enhance their stickiness.

Bilibili's operational mechanism primarily revolves around content creators uploading videos, while viewers browse and provide feedback through comments, likes, coins, and bookmarks, thus motivating content creators to continue creating. The platform covers multiple content sections, with 70% of the content coming from user-generated or original videos. This vibrant community atmosphere attracts many video creators, where creativity constantly emerges, and the playback volume of original videos is also quite impressive. Content creators gain encouragement and support from the audience, which further leads to the production of more excellent works, forming a virtuous cycle [12].

As a major feature of Bilibili, the bullet screen culture, through the comment function that floats above the video, not only improves the viewing experience for users but also enables them to communicate with other viewers watching the same video in real-time, creating a unique viewing atmosphere.

4.5. Key Stakeholders

Centered around video community operations, Bilibili focuses on the production, moderation, distribution, and promotion of video content. From a customer perspective, Bilibili emphasizes building close relationships with users by providing rich interactive features to enhance their experience. Simultaneously, it collaborates with content creator, encouraging them to share quality content and fostering an active content creation ecosystem. From a financial perspective, Bilibili partners with key stakeholders such as advertisers and game developers, generating revenue through advertising income and game agency services, jointly driving the platform's development and innovation.

4.6. Construction of Bilibili's Business Model Canvas

Based on the previous sections, a business model canvas for Bilibili was constructed, as shown in Table 6. Bilibili's Business Model Canvas. Bilibili has a clear user positioning, providing precise content and services tailored to this user group. With its rich content ecosystem, it offers users a wide range of content options, satisfying their diverse needs. This has fostered a strong community atmosphere, enhancing user engagement and loyalty, ultimately achieving diversified revenue streams. However, this model also faces potential risks such as a homogeneous user age demographic, content regulation challenges, and pressure from technological investments. Bilibili needs to continuously innovate and improve to address market changes and evolving user demands, ensuring the sustainability and competitiveness of its business model.

Table 6. Bilibili's Business Model Canvas

Key Partners Content creators Users Advertisers Game developers	Key Activities Video community operations User relationship management Community building Interaction Advertisement distribution Peripheral sales Anime, manga and game agency business Live streaming agency Offline activities	Value Propositions All videos that interest you are on Bilibili	Customer Relationships Users are sustained by an online community that is highly sticky, interactive and aggregated. Maintain users with content creators.	Customer Segments The major user group is "Z+ Generation" in China.
	Key Resources Content creators Bullet screen culture Otaku culture		Distribution Channel Website APP Mini programs Interaction between users Offline Activities	
Cost Structure Revenue-sharing costs Content costs Server and bandwidth costs IP derivatives and others (formerly known as E-commerce and others)		Revenue Streams Mobile games Value-added services Advertising IP derivatives and others (formerly known as e-commerce and others)		

5. Conclusion

This article proposes a series of optimization suggestions targeting the issues in Bilibili's business model. Firstly, to ensure a balance between content quality and quantity, Bilibili should strengthen

its collaboration with renowned creators and IP holders, establish a graded management and incentive mechanism to solidify its competitive edge in the market. Secondly, strengthening copyright protection is crucial. By promoting copyright awareness, improving copyright management mechanisms, and utilizing technological means, Bilibili can effectively reduce infringement behaviors and maintain a healthy copyright environment.

In terms of business model innovation, Bilibili should actively explore integration with other businesses to create more revenue opportunities, and focus on expanding into international markets to broaden its user base and market share. Meanwhile, enhancing technological research and development, optimizing functionality and interface design, and improving user experience are keys to ensuring the platform's sustained leadership.

Moreover, in terms of profitability, Bilibili should strengthen its self-earning capabilities, enhance the efficiency of capital utilization, and improve its fund usage efficiency.

In conclusion, Bilibili should comprehensively consider various factors such as content, copyright, business models, and technological research and development to achieve the optimization and sustainable development of its business model. By strengthening content quality, enhancing copyright protection, promoting business model innovation, and strengthening technological research and development, Bilibili is expected to maintain its leading position in the digital content service sector and provide users with a more quality and diverse experience in the future. The implementation of these measures will lay a solid foundation for Bilibili's long-term development.

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