## SWOT Analysis of Game Science Company

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Abstract: Recently, a game titled Black Myth: Wukong has garnered significant global attention, achieving the highest number of simultaneous players on Steam shortly after its release. This surge in popularity has led to increased interest in Game Science, the company behind the game. This paper conducts a comprehensive SWOT analysis of Game Science, focusing on the reasons behind the tremendous success of Black Myth: Wukong in both the Chinese and international markets. It explores the company's strengths in technology and team experience, emphasizing its successful integration of traditional Chinese culture into game design. By innovatively adapting the classic Chinese novel Journey to the West, Game Science has gained wide cultural recognition domestically and considerable attention in international markets. However, the company also faces weaknesses such as financial constraints and reliance on a single product. This paper discusses opportunities arising from the growing popularity of Chinese cultural elements and government support for the cultural and creative industries. Additionally, it addresses challenges such as employee turnover, recruitment by competitors, and risks associated with equity sales that threaten the company's future development. The aim is to delve into Game Science's current industry position and prospects in the global gaming market through SWOT analysis.

**Keywords:** Black Myth: Wukong, Journey to the West, Game Science, Cultural Innovation.

#### 1. Introduction

In the context of the rapid development of the global gaming industry, game development requires not only high levels of technology and creativity but also a deep integration of culture and innovation. In recent years, the resurgence of Chinese cultural elements, coupled with an increasing global fascination with Chinese heritage, has led numerous Chinese gaming enterprises to integrate traditional culture into contemporary game development as a strategy for achieving international prominence. [1] As a hallmark of this trend, Game Science has introduced the eagerly awaited title Black Myth: Wukong. [2]. This game showcases advanced gaming technology and explores new narrative and expressive methods based on classical Chinese literature. The cultural innovation rooted in traditional themes has resonated widely with domestic players and garnered high acclaim in international markets. Through this project, Game Science has demonstrated the potential for Chinese game companies to emerge competitively on the global stage. This paper will conduct a SWOT analysis of Game Science, examining the company's strengths in technology, team, and cultural innovation while also analyzing its weaknesses and challenges in funding and subsequent product development. Employing the SWOT analysis framework, this paper will deliver an in-depth

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evaluation of Game Science's present circumstances and prospective growth avenues, while also examining the strategic modifications necessary for effective competition in both domestic and global markets.

## 2. Strengths

## 2.1. Technological Advantages and Team Experience

The development team at Game Science is comprised of experienced former Tencent employees. The company was founded by seven core developers from Tencent's Doubattle project, who left in 2014. The team boasts a robust technical background and an average of 13 years of experience in game production, with over ten years of collaborative experience, making it a core competitive advantage. For instance, the team's mastery of Unreal Engine is evident in Black Myth: Wukong, particularly in visual rendering, character animation, and combat system design. Moreover, the initiative aimed at engaging international stakeholders instead of merely concentrating on the Chinese market. The development team adeptly integrated Chinese cultural elements with a global gaming paradigm, highlighting its competitive advantage in global markets.. In the days following the game's release, Black Myth: Wukong attracted not only Chinese players but also received praise from numerous foreign streamers and gamers for its excellent production quality and gameplay.

#### 2.2. Innovation Based on Traditional Culture

Another significant advantage of Game Science is its ability to blend traditional Chinese culture with modern gaming technology. This cultural innovation enhances the depth and uniqueness of the game while promoting Chinese mythological stories globally through Black Myth: Wukong. The game draws inspiration from one of China's four classical novels, Journey to the West, incorporating notable characters and elements such as the ultimate antagonist, Erlang Shen, the celestial canine, concealed Easter eggs related to Zhu Bajie, and the remnants of the Monkey King. It also showcases legendary artifacts like the Ruyi Jingu Bang and the Banana Fan. [3] By modernizing the narrative and providing high-quality visuals, the game reinterprets these classics, offering players a refreshing cultural experience. This approach has sparked cultural recognition and resonance among Chinese players and garnered positive feedback from international audiences. Numerous international gamers have actively pursued the original manuscript of Journey to the West to enhance their comprehension of the game's context, thus effectively fostering the dissemination of Chinese cultural heritage.

#### 3. Weaknesses

## 3.1. Funding Issues

Despite its technological advantages, Game Science faces challenges due to its smaller size and funding limitations. At the outset, the organization comprised merely seven individuals, with insufficient financial and human capital to undertake extensive projects. The details regarding the initial capital are not publicly available; however, it is clear that the firm depended largely on the personal contributions of the founders and a select few external stakeholders. This financial constraint significantly extended the development timeline of Black Myth: Wukong. Although the company attracted some investment through trailers, funding remains a critical issue for the long-term development of a AAA title.

## 3.2. Reliance on a Single Product and Development Challenges

Currently, Game Science primarily relies on the success of Black Myth: Wukong. While this game has generated substantial attention and revenue, a long-term dependency on a single product poses risks. If subsequent projects fail to meet similar standards, the company could face significant financial pressure. Additionally, the prolonged development timelines hinder the capacity to promptly introduce supplementary high-quality products, thereby increasing the risk of competitors seizing market share. Until an equally exceptional game to Black Myth: Wukong is created, Game Science's primary strategy focuses on enhancing and updating Black Myth: Wukong to sustain player involvement. Currently, the game has six chapters and an overall playtime of approximately 50-80 hours, which includes various hidden challenges and side quests. However, the actual completion time may only require around 20 hours. Under these conditions, a substantial number of players may stop playing shortly after completing the game, leading to significant player attrition. This situation reflects a common issue in souls-like games, where engagement can wane. Black Myth: Wukong has seen a decline in daily active users from a peak of 2.41 million at launch to 960,000 on September 8. The development team has conveyed that additional levels and novel maps were originally in the pipeline but were ultimately discontinued owing to time and financial limitations. Consequently, it is plausible to conjecture that new maps and levels may be incorporated into forthcoming updates, likely accessible for acquisition as downloadable content (DLC).

## 4. Opportunities

## 4.1. Growing Popularity of Chinese Cultural Elements

In recent years, Chinese cultural elements have gained increasing attention and popularity, especially among younger demographics. For instance, in the highly popular game Honor of Kings, many characters feature skins based on ancient Chinese mythology, such as the 'Shan Hai Jing 'series, and include well-known mythological figures like Pangu and Nuwa. This growing interest in Chinese culture presents a significant market opportunity for Game Science. The company can further solidify its position in domestic and global markets by continuing to develop games that blend traditional culture with modern technology. Building on the success of Black Myth: Wukong, Game Science could explore new projects inspired by classic Chinese literature or folklore, integrating other traditional Chinese elements or myths into modern games to meet the demand for culturally rich gaming experiences. The achievement of Black Myth: Wukong is regarded as a pivotal element in the transformation of the Chinese gaming sector towards premium titles and global clientele. [4] Prior to the game's launch, Liang Qiwei, the director of Shadow Blade Zero, articulated a strong belief in its prospective triumph, highlighting that its success could serve as a catalyst for confidence in subsequent game titles. [5] Graduate student Zhao Jun from Lanzhou University of Technology observed that the game satisfies the psychological yearnings of mainland Chinese gamers for traditional culture, thereby amplifying its cultural importance and offering an engaging medium of entertainment that fosters the promotion of Chinese cultural heritage. [6]

#### 4.2. Government Support for Cultural and Creative Industries

In recent years, the Chinese government has intensified support for traditional culture through policies, funding, and international cultural promotion. The development of Black Myth: Wukong aligns with the government's promotion and societal interest, leading to significant success. Financial assistance from the government and fiscal incentives can enhance investment in game development and promote entry into global markets. Game Science can leverage these policy advantages to develop more culturally competitive creative products.

## 4.2.1. Policy Support

The Chinese government has actively endorsed the cultural and creative sectors, instituting policies that promote innovation and the exportation of cultural goods, including games and films, thereby offering substantial policy support for Game Science. For instance, the State Council and the Ministry of Culture have issued documents emphasizing that "cultural confidence" is essential for the rejuvenation of the Chinese nation. These policies encourage the integration of traditional culture with modern technology, promoting the revival and dissemination of traditional cultural forms such as opera, folklore, and calligraphy. The game background based on Journey to the West fits this framework.

#### 4.2.2. Financial Investment

To foster innovative growth within the cultural industry, the Chinese government has instituted dedicated funds and subsidies aimed at the production of content centered around traditional cultural themes, including film, television, and gaming. [7] Many projects based on classical Chinese literature have received government funding, which assists companies like Game Science that combine traditional culture with modern technology by providing resources for research development and marketing.

#### 4.2.3. International Cultural Promotion

Through initiatives like the Belt and Road Initiative and cultural exchange programs, China aims to promote traditional culture globally and enhance its cultural soft power. The government promotes the dissemination of Chinese culture through global initiatives such as the China Cultural Center and the Confucius Institutes. Game Science can take advantage of these platforms to promote its games, enhancing their visibility in global markets. By participating in international gaming expos and showcasing its unique cultural themes, Game Science can increase its global footprint and attract a broader audience.

#### 5. Threats

## 5.1. Employee Turnover and Recruitment by Competitors

As Black Myth: Wukong gains popularity, there is a rising risk of employee turnover. With the game's success attracting attention from other gaming companies, key members of Game Science may be lured away by competitors seeking to capitalize on their expertise. The video game sector is characterized by significant workforce fluidity, and the increasing number of job proposals from more prominent firms may result in talent deficits at Game Science, impeding its future advancement and growth prospects. It is crucial for Game Science to establish a competitive work environment that emphasizes employee retention, career development, and innovation to minimize this threat.

#### 5.2. Competition from Established Companies

As Game Science evolves its array of offerings, it will encounter significant rivalry from well-established enterprises in both local and global marketplaces. [8] Leading entities including Tencent, NetEase, and global institutions such as Activision and Ubisoft are significantly investing in the creation of premium video games while broadening their international footprint. [9] Game Science must establish its distinction through innovative practices and the distinctive incorporation of Chinese cultural elements into its gaming products. The competitive landscape is intense, and not sustaining

a competitive advantage could lead to a decline in market share and reduced prospects for growth. [10]

## 5.3. Risks Associated with Equity Sales

To secure funding, Game Science has sold equity in the company, which may lead to pressure from investors for quick returns. While this strategy can provide immediate financial relief, it may also affect decision-making and long-term strategy, particularly if investors prioritize short-term gains over sustainable growth. This could limit the company's ability to invest in future projects, conduct thorough R&D, or navigate market changes effectively. Game Science must balance its funding needs with maintaining control over its creative direction to avoid compromising its long-term vision.

#### 6. Conclusion

The SWOT analysis reveals that Game Science possesses significant strengths, including a skilled team, technological expertise, and a successful integration of traditional Chinese culture into its products. The success of Black Myth: Wukong serves as a testament to the potential for Chinese game developers to thrive in the global market. However, the company must address its weaknesses, such as financial constraints and reliance on a single product, while capitalizing on the growing interest in Chinese culture and government support for the creative industries. The threats of employee turnover, competition, and risks from equity sales necessitate strategic planning to ensure sustainable growth.

By harnessing its advantages, mitigating its shortcomings, and seizing opportunities, Game Science can bolster its competitive stance within the gaming sector and persist in developing culturally nuanced and groundbreaking games that resonate with audiences both domestically and internationally. Additionally, it is imperative for Game Science to invest in robust research and development initiatives that explore emerging technologies such as virtual reality, augmented reality, and artificial intelligence. By doing so, the company can create immersive experiences that push the boundaries of gameplay mechanics and storytelling. Moreover, fostering a collaborative environment that encourages cross-disciplinary partnerships can lead to innovative solutions that cater to diverse player demographics. Engaging in continuous market analysis will allow Game Science to adapt to ever-evolving consumer preferences, ensuring that their products not only entertain but also provoke thoughtful dialogue within the gaming community. Ultimately, this proactive approach will enhance their reputation as a leader in the industry, capable of delivering content that not only entertains but also elevates the cultural significance of gaming as a medium.

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