

Analysis of the Development Strategy of Bilibili in the Context of Artificial Intelligence

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Abstract. The purpose of this paper is to analyse in depth the development strategy of Bilibili in the context of artificial intelligence and to explore its practical significance in the field of social media, to explore the future application of AI technology in Bilibili and the development strategy of Bilibili, etc. This paper provides important references and suggestions to assist Bilibili's platform in maintaining its competitive edge in the context of AI and achieving sustainable development. The findings of this article have significant implications for other social media networks that use AI technology. Other social media platforms can achieve breakthroughs and development in the field of AI by learning from the successful experiences and strategies of the Bilibili Platform, improving user experience and platform competitiveness. At the same time, the research in this paper also helps to promote the development of AI technology in the field of social media to provide better services and experiences for users.

Keywords: Bilibili, artificial intelligence, development strategy.

1. Introduction

The rapid development of AI technology is expanding its application in various fields, and social media platforms, as an important link in people's daily lives, are naturally deeply affected by it. Bilibili, China's largest pop-up video platform, has attracted much attention for its application and development strategy of AI. Bilibili has attracted many young users and has become one of China's key social media platforms for the young generation due to its unique characteristics of users' pop-up comments and interactions. However, as AI technology advances, social media platforms face new difficulties and opportunities. How to employ AI technology to improve user experience and platform competitiveness has emerged as a critical challenge for the Bilibili platform. Therefore, this study chooses to take the title of "Analysis of Bilibili's Development Strategy in the Background of Artificial Intelligence", aiming to discuss in depth how the Bilibili platform formulates and implements its development strategy under the influence of AI technology, to provide useful references for the Bilibili platform, and help it to maintain its competitive advantage and achieve sustainable development in the background of AI.

2. Literature Review

The pop-up viewing in Bilibili is also very likely to develop conscious, unconscious, and subconscious disordered associations around the current theme. The open viewing experience and interactive communication of pop-ups have led to a shift from individual to group viewing, and film and television culture communication has entered the era of multiple interactions [1]. Bilibili's business is mostly associated with ACG and upstream and downstream sectors, developing a development model centred on the operation of video websites, with games, live streaming, and peripheral sales playing a significant role. In terms of infrastructure, the relevant community system ensures that the chain of interactive rituals functions well, and in comparison to other companies in the same industry, Bilibili has a greater level of user happiness, a cheaper cost of content, and consistent revenue development [2]. The successful development of Bilibili is based on the accurate positioning of the ACG culture and peripheral subculture network group market, through guiding

users, establishing a scaled community platform, fostering a private user exchange community, and transforming user traffic into a realizable business [3].

The group of personal subtitle producers on B station shows the characteristics of youthfulness and high quality, and its subtitle video dissemination is based on circle culture, while adopting various ways to broaden the dissemination channels and enhance audience stickiness [4]. Pop-up video websites should use big data technology to fully understand user attributes and user behaviour patterns on the basis of existing users, so as to achieve precise positioning of users. On the other hand, pop-up video websites should deeply understand their position in the hearts of users as a community platform that gathers a large number of cultural enthusiasts, continuously improve platform construction and strengthen selling points [5].

According to a review of the literature, research on Bilibili and social media primarily focuses on aspects such as pop-up culture, cultural communication, business model, and so on, with fewer studies on the overall development strategy of Bilibili or social media, and even fewer studies on the development strategy of social media in the context of the flourishing development of AI technology. This paper studies the development strategy of Bilibili in the context of artificial intelligence, which is rare and necessary to provide a theoretical basis and practical experience for the future development of social media and the use of artificial intelligence technology in it.

3. Problems Facing the Current Development of Bilibili in the Context of artificial intelligence

3.1. Difficulty of Content Auditing

Bilibili encourages users to make original and secondary creations, which also means that the platform needs to deal with a large amount of content uploaded by users. In this case, it is a major challenge to effectively conduct content auditing to prevent the spread of violations and undesirable information. Artificial intelligence can help with initial content screening, but due to the complexity of language and culture, relying entirely on AI for content auditing may result in misjudgments. Therefore, how to find the best way to combine artificial and AI to improve the efficiency and accuracy of content auditing is a problem that Bilibili needs to solve [6].

3.2. Data Privacy and Security Issues

As the number of users grows, Bilibili must process and store a considerable amount of user data, such as personal information, browsing histories, interaction records, and so on. Bilibili must address the issue of protecting users' data privacy and ensuring data security. To protect the confidentiality and integrity of user data throughout data processing and storage, Bilibili must implement secure technical measures such as encryption, access control, security auditing, and so on. Furthermore, the platform must have a solid privacy policy and user agreement to specify the scope of user data collection and usage, as well as carefully adhere to relevant laws and regulations to guarantee that user data is not abused or leaked. Bilibili also needs to strengthen the prevention of malicious attacks and data leakage [7]. This includes establishing a strong cybersecurity system to monitor and block potential attacks, as well as detecting and responding to data leaks in a timely manner. And strengthen security awareness training for employees to increase the importance of data security.

3.3. User Experience Issues

As mentioned above, Bilibili's pop-up interaction is one of its unique features, but it may also pose problems. Due to the real-time and massive nature of pop-ups, it may interfere with the viewing experience of some users [8]. In addition, if there are malicious messages or personal attacks in the pop-ups, etc., it will also have a negative impact on the user experience. Therefore, how to provide a good user experience while maintaining the interaction of pop-ups is a problem that Bilibili needs to face.

3.4. Infringement

As Bilibili encourages secondary creation, there may be cases of infringement of other people's copyrights. Although the platform has relevant copyright protection policies, in practice, it is a challenge to effectively protect the rights and interests of original creators and avoid infringement incidents.

3.5. Competitive Pressure

In the context of artificial intelligence, many other video-sharing platforms are also developing and innovating, such as Jittery and Shutterbug. These platforms may pose a threat to Bilibili's user base and market share, and it is worthwhile to pay attention to how to maintain our own advantages and characteristics in a fiercely competitive environment to attract and retain users.

3.6. Challenges of Personalised Recommendation

In the context of big data and artificial intelligence, there is an increasing demand for personalized content from users. Bilibili needs to recommend content that meets users' interests and needs through algorithms, but this also faces some challenges. On the one hand, it is a technical challenge to accurately understand and grasp users' needs and provide satisfactory recommendation results. On the other hand, excessive personalized recommendations may lead to an information cocoon effect, exposing users to only one viewpoint and information, which also needs to be avoided.

3.7. Ad Push Problem

In commercialized operations, it is also a challenge to make effective ad push while ensuring user experience. Excessive advertisements may trigger users' resentment, affecting the platform's reputation and user stickiness.

4. The Future Development Strategy of Bilibili in the Context of Artificial Intelligence

In the wave of global digitization, Artificial Intelligence (AI) is not only disrupting traditional industries but also bringing unprecedented opportunities to emerging industries such as streaming media platforms. In this context, Bilibili, as a leading video community in China, is also facing the challenge of continuous exploration in product innovation and technology development. In the context of AI, Bilibili should take the initiative to respond to AI changes and new challenges and adjust its product and technology development strategy in conjunction with AI.

4.1. A Revolution in Content Screening and Recommendation

Traditional recommendation algorithms rely on users' historical data and clear labels, but with the support of AI, Bilibili can build a more accurate user profile through deep learning and provide users with content more in line with their tastes in real-time. In addition, combined with NLP technology, it can better understand the user's emotions and needs in the comments or pop-ups, and further improve the recommendation system. Bilibili is able to properly grasp each user's tastes and wants by delving deep into their viewing history and behavioural data using AI technologies. This not only increases user retention and activity, but also guides them to discover new points of interest and video categories; personalised recommendations provide creators with increased exposure opportunities, particularly for outstanding creators who are not yet well-known to the general public, and their works can be seen by users who are truly interested in their content; Bilibili can continuously research and update the recommendation algorithm to adapt to changes in user behavior and content updates, ensuring that the recommendation system is always up to date and can be used to meet the needs of users. changes in user behavior and content updates to ensure that the recommended content is always fresh and relevant.

4.2. Intelligent Video Editing Tools

With the help of AI technology, Bilibili can provide content creators with intelligent video editing tools, such as automatic editing, intelligent background music matching, adding video effects based on emotional analysis, etc., which makes content creation easier and more efficient, and transforms the disadvantages of high production cost and long production cycle of long videos through the support of AI technology.

4.3. Intelligent Interactive Experience

Interaction is the core feature of Bilibili, and AI can further enhance this experience. The intelligent pop-up system can automatically identify and filter out negative or inappropriate pop-ups to ensure the viewing experience. It can also provide users with personalized pop-up recommendations through their interaction with the pop-ups, increasing user engagement. Bilibili's pop-up culture is deeply ingrained in people's hearts, and AI technology can make pop-ups smarter, such as adjusting the display based on context or providing real-time translation functions to improve communication between users; in addition to the traditional commenting function, AI technology can be introduced, such as automatically generating summaries, identifying and filtering harmful information, and recommending relevant comments based on user preferences.

Bilibili can develop AI-based speech recognition technology to provide auto-generated subtitles for video content, which not only helps deaf people watch but also opens up new markets for cross-language content creation. In addition, combined with voice conversion technology, it can also provide users with a variety of voice-over character options, enriching the diversity of content creation [9].

Bilibili can consider entering the VR and AR field to provide users with a more immersive viewing experience. For example, through AI technology, real-time interaction with animated characters can be realized, or users can be provided with a virtual viewing room where they can communicate with other viewers in real-time [10].

Combining NLP and image recognition technology, Bilibili can provide users with a more efficient search experience. Not only can it provide relevant content based on keywords, but it can also identify specific scenes or characters in the video, and even find the desired content quickly through voice search.

Bilibili can consider deep cooperation with other AI technology providers to jointly develop new products and functions. At the same time, it can consider opening up its own AI technology platform to provide tools and resources for more developers and creators and promote the progress of the whole industry. Bilibili can integrate video content with other forms of entertainment, such as recommending relevant games or peripheral products for users while watching anime, forming a complementary entertainment ecosystem; Bilibili can establish more in-depth co-operation with other platforms, such as film studios, game developers, etc., to create unique content and experiences; through AI technology, users can have a consistent and coherent experiences, such as integrating and interacting with characters seen in games and characters seen in videos.

5. Conclusion

In the wave of global digitization, Bilibili shall seize the opportunities brought by Artificial Intelligence (AI), and has carried out in-depth exploration and application in this field. The introduction of AI not only optimizes the user experience and enhances the accuracy and personalization of content recommendations, but also provides content creators with intelligent video editing tools, making content creation simpler and more efficient. In the future, Bilibili should further use AI technology to explore and innovate in content screening and recommendation, intelligent video editing, intelligent interactive experience, voice recognition and conversion, virtual reality and augmented reality experience, intelligent search function, and AI-driven learning and education modules. These measures will not only enhance user experience and user stickiness but also help

Bilibili maintain its competitive advantage in the fierce market competition and achieve sustainable development and growth. However, the application of AI technology also brings some challenges, such as the protection of data privacy, reliability and fairness of the technology. Therefore, Bilibili also needs to fully consider these factors in the process of developing and applying AI technology to ensure the rights and interests of users and the long-term development of the Company.

Looking ahead, with the continuous advancement and popularisation of AI technology, Bilibili is expected to further enhance its competitive position in the global market while providing richer and more personalized content and services. As an internet company with young people as its main user group, Bilibili has great potential for development and a broad market outlook.

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