

Design and Implementation of an Official History Mobile Game Solution based on 3D Technology

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Abstract

In the current era of digitization and intelligence, the inheritance and innovation of historical culture are facing unprecedented opportunities and challenges. This proposal aims to propose a mobile game plan that combines the Twenty Four Histories with 3D technology, aiming to present China's profound historical and cultural heritage to users in a new way through modern technology, and achieve the popularization and inheritance of historical and cultural heritage.

Keywords

Digitalization and Intelligence; Inheritance of Historical Culture; Twenty-four Histories; 3D Technology.

1. Introduction

Since ancient times, ancient people have used the successes and failures of history as a warning. History has always been a 'national treasure' from ancient times to the present day. It constantly discovers the true past, it is the inheritance, accumulation, and expansion of culture, and it is the trajectory of human civilization. Nowadays, most people, even some history enthusiasts, do not read official history and only wrongly view history and judge historical figures through movies, TV dramas, novels, and even unofficial history. Therefore, reading official history and promoting historical culture are particularly important.

At the same time, with the popularity of smartphones and technological innovation, various types of mobile games have sprung up like mushrooms after rain, with countless types such as combat and gunfights. However, there is a lack of mobile games that are based on official history and promote knowledge of Chinese history. Most people are addicted to fighting, gunfights, and other games, forgetting sleep and food, and have little understanding of official history. So, in response to this social phenomenon, our company combines "Twenty Four Histories" with contemporary 3D technology to create a historical mobile game that exudes the charm of China. The game designed by our company is different from the popular games on the market today. We do not attract players to immerse themselves in the virtual world with grandiose fights and flashy poster models. We don't consider entertainment as the core of this product, but rather use culture to impress the audience.

2. Project Opportunities

2.1. The Influence of the Internet era on Official History

2.1.1. The Impact of the Internet on the Way Official History is Spread

In the context of the Internet era, official history communication has undergone unprecedented changes. The rapid development of digital technology not only greatly facilitates the acquisition of official history, but also promotes a profound transformation in its dissemination methods. The emergence of digital resource platforms such as e-books, online databases, and academic

websites has provided researchers with rich and diverse channels for accessing resources, greatly promoting the widespread dissemination of official history and the popularization of historical and cultural knowledge. Short video software such as Tiktok and Kwai allows the public to easily understand the history.

The transformation of official history communication mode in the Internet era has brought new opportunities and challenges to the inheritance and development of historical culture. This change not only promotes the widespread dissemination of official history and the popularization of historical and cultural knowledge, but also enhances the audience's cognitive effect on historical events. Faced with massive amounts of information and the dissemination methods of new media, researchers need to continuously improve their own literacy and abilities to ensure the authenticity and accuracy of official history dissemination. Communicators also need to remain vigilant at all times to avoid distortion and misleading information. Only by doing so can we better promote the inheritance and development of historical and cultural heritage, and enable more people to understand and love our historical and cultural heritage.

We should also see that the transformation of official history communication in the Internet era also provides more opportunities for the public to understand and participate in history and culture. The public can learn and acquire knowledge of official history through digital platforms and social media platforms, and participate in the inheritance and development of historical and cultural heritage. This power of public participation can not only promote the popularization and development of official history dissemination, but also enhance national cohesion and cultural confidence.

2.1.2. Impact of the Internet on the Content of Official History Dissemination

Under the tide of the Internet era, the content, interpretation method and audience participation mode of official history communication have all ushered in significant changes. These changes not only demonstrate the progress of the times, but also promote the study of official history towards deeper and broader fields.

In terms of interpretation and interpretation, the advent of the Internet era provides researchers with more comprehensive and in-depth research tools and platforms. These tools can not only help researchers to interpret official history in more detail, but also uncover deeper historical connotations within it. The application of digital technology enables researchers to present the ins and outs of historical events in a more vivid and intuitive way, thereby helping audiences to understand history more deeply and accurately. With the interactivity of the Internet platform, researchers can also interact with the audience in real time and conduct in-depth discussions on historical issues. This interactive interpretation not only enhances the audience's sense of participation, but also improves the depth and breadth of historical research.

2.1.3. The Positive Influence of the Internet on the Cognition of Official History

The positive impact of the Internet era on the cognition of official history is multifaceted, especially in terms of expanding the scope of dissemination, enriching learning methods and providing massive data resources.

The Internet has broken the physical space and distribution channel restrictions of traditional media, enabling the official history to spread rapidly to all parts of the world. This change not only increases the audience for official history, but also provides more people with opportunities to access and understand it, injecting new vitality into the inheritance and development of official history. Through the Internet platform, the spread of official history has been greatly accelerated and its coverage has been wider, thus promoting the global understanding and exchange of history and culture.

2.1.4. The Negative Impact of the Internet on the Cognition of Official History

In the Internet era, the cognition of official history is facing unprecedented challenges. As the main channel of today's information dissemination, the Internet provides the public with a convenient way to acquire knowledge, but it also brings a series of negative effects, weakening people's correct understanding of official history.

Due to the openness and anonymity of the network environment, the authenticity of information on the Internet has been severely tested. A large amount of inaccurate or even false historical information is widely disseminated, often lacking authority and credibility, seriously interfering with the public's accurate understanding of official history. In addition, the influence of some movies, TV dramas, and novels, as well as the popularity of popular internet memes, have created stereotypes among people, which is not a good phenomenon.

2.2. The Impact of Mobile Games on Official History

2.2.1. Historical Cognitive Changes of Mobile Game Users

Mobile games, as a popular form of entertainment in contemporary society, are having a profound impact on the dissemination of history in their unique way. Among them, the historical cognitive changes of mobile game users are particularly noteworthy. These changes are not accidental, but the result of the gamification characteristics and rich content inherent in mobile games. From the perspective of historical dissemination, mobile games have successfully attracted a large number of players who were not originally interested in history through innovative gamification methods. This gamification approach not only provides players with an entertainment experience, but also cleverly incorporates historical elements into the game. For example, some historical themed mobile games allow players to personally participate in the historical process and experience the charm and value of history by restoring historical events and shaping historical character images. This way of combining education with entertainment allows players to enjoy the fun of the game while also being exposed to rich historical knowledge, thereby subtly increasing their interest in history.

More importantly, mobile games greatly expand players' historical perspectives by presenting game content from different historical periods and cultural backgrounds. These games not only cover a wide range of historical knowledge from ancient times to modern times, from the East to the West, but also allow players to understand the historical development and evolution in different cultural backgrounds through game content and storylines. This cross temporal knowledge transmission method not only enriches players' knowledge system, but also provides new perspectives and ideas for historical research. For example, some mobile games allow players to have a more comprehensive understanding of the evolution and development of human history by restoring ancient civilizations and showcasing historical events from different cultural backgrounds.

The role of mobile games in historical dissemination is not perfect. Due to the entertainment and commercial aspects of the game itself, some mobile games may have issues such as inaccurate historical knowledge and excessive commercialization. Therefore, when using mobile games for historical dissemination, we need to maintain a cautious and objective attitude, rigorously screen and verify historical knowledge, and ensure the authenticity and credibility of the game.

2.2.2. The Impact of Mobile Games on the Dissemination Channels of Official History

The impact of mobile games on the dissemination of official history has gradually become a hot topic in academia and industry. As an emerging form of entertainment, mobile games offer new possibilities for the popularization of historical knowledge due to their vast user base and extensive dissemination channels. Through mobile games, historical knowledge is no longer limited to traditional channels such as books and classrooms, but is presented to a wider range

of users in a more vivid and interesting way, thereby expanding the dissemination channels of official history and giving more people the opportunity to access this valuable knowledge resource.

Mobile games have innovated the way historical knowledge is disseminated. Traditional historical education methods often present historical knowledge in the form of text, images, etc., while mobile games integrate historical knowledge into game plots and tasks through gamification, allowing players to naturally encounter historical knowledge during the entertainment process. This innovative approach not only improves the dissemination of historical knowledge, but also stimulates players' interest and curiosity in history, thereby promoting in-depth learning and understanding of historical knowledge.

Mobile games deepen historical knowledge through rich game content and storyline. In mobile games, players can personally participate in the development process of historical events and feel the charm and value of history. This deeply ingrained dissemination method helps to enhance the effectiveness of historical knowledge dissemination, allowing players to not only gain entertainment experiences in the game, but also deeply understand and feel the depth and breadth of history.

At the same time, mobile games also have interactivity and sociality, providing users with a platform to communicate, share, and discuss with other players. Players can meet like-minded friends in the game, discuss historical issues together, and share learning experiences. This interactive and social process not only enhances players' sense of participation and belonging, but also promotes the dissemination and exchange of historical knowledge.

However, the impact of mobile games on the dissemination of official history is not entirely positive. In the pursuit of entertainment and commercial benefits, mobile games may adapt and simplify historical knowledge to a certain extent, and even have the risk of misleading players. When disseminating historical knowledge, it is necessary to maintain a cautious and prudent attitude to ensure the accuracy of the historical knowledge being disseminated and avoid adverse effects on history.

2.3. Changes in Historical Concepts of Mobile Game Users

When exploring the impact of mobile games on the recognition of official history, we should recognize that mobile games, as a new media platform, have gradually penetrated into the process of public historical cognition. With the continuous expansion of the mobile game market and the diversification of content, more and more players are unconsciously receiving and processing information related to history in their entertainment. Mobile games, with their unique narrative structure, interactive experience, and creative content design, provide users with a new path for historical learning.

The historical events and characters in mobile games often have complexity, requiring players to think and judge independently in the game. Players need to analyze the causes, processes, and outcomes of historical events, evaluate the behavior and decisions of historical figures, and form their own historical perspectives. This process of independent thinking and judgment helps cultivate players' critical thinking and independent thinking abilities. The historical content in mobile games often requires players to explore and solve puzzles, and this exploratory learning method also helps to improve players' historical literacy and cognitive level.

Mobile games, as a new type of historical narrative and learning tool, have a significant impact on public historical cognition. Through diverse perspectives, vivid plot and character settings, and the process of independent thinking and judgment, mobile games provide players with a new path for learning history. The historical content in mobile games is not entirely accurate and objective, and players need to remain vigilant and critical thinking to distinguish between truth and fiction. Game developers should also pay attention to the accuracy and objectivity of

historical content, respect historical facts, and promote the healthy development of public historical cognition.

Moreover, most of the current mobile games are based on the prototype of "Romance of the Three Kingdoms" and are not developed according to official history. They have significant limitations in terms of time, dynasty, and characters, and are only designed for excitement rather than allowing users to truly understand history and experience the charm of historical figures. Therefore, we want to develop a mobile game that solves these problems.

3. Industry Status

3.1. Industry Pain Points

3.1.1. Lack of Types based on Official History

The market size of mobile games is indeed showing explosive growth in terms of quantity. With the popularization of mobile Internet and the progress of technology, more and more mobile games have emerged, covering various types and styles, and meeting the needs of different players. Secondly, in terms of user scale, the user base of mobile games is also constantly expanding. Whether young, middle-aged or elderly, they can all find their favorite games on their mobile phones. The convenience and entertainment of mobile games have made them an indispensable part of people's daily lives.

The boom of mobile game market is mainly due to the popularity of mobile Internet, the popularity of smart phones and the change of consumer habits. Mobile games have become an indispensable part of people's daily lives due to their convenience, interactivity, and entertainment. Whether it's leisure entertainment, social interaction, or competitive challenges, mobile games can meet the diverse needs of users.

With the fast-paced development trend of society and the increasing pressure of survival, people urgently need to find an outlet to vent their life stress, and the emergence of mobile games provides an opportunity for young and middle-aged people to vent. In the game, there will be no financial difficulties or helplessness in life, nor will there be realistic blows. It will praise and please, and it is the bridge for me to briefly escape from reality. "This is a true portrayal of gamers playing the game. In today's society, mobile phones are indispensable in people's lives, which also leads to the important position of mobile games in modern life.

However, with the "explosive" development of the Internet, the mobile game market has also grown geometrically, so the mobile game market has flourished and serious mobile game flooding has also occurred. The proliferation of mobile games is not a trend towards multiple themes and diversification, but rather a simple repetition of "copying" that leads to a monotonous theme structure and narrow range of game themes in the mobile game market. Among them, mobile games with themes related to official history are more serious.

3.1.2. Cognitive Ambiguity

The mobile game community cannot distinguish between official history, unofficial history, and storytelling.

At the same time as the lack of "official history" themed games in the mobile game market, the problem of unclear distinction between "official history", "unofficial history", and "storytelling" among the mobile game community is becoming increasingly serious. This situation may be caused by various factors, including a lack of relevant knowledge, limited channels for obtaining information, and the game's simplification of historical themes.

Firstly, there is a clear difference in essence between official history, unofficial history, and storytelling. Official history is a revised historical record that emphasizes objectivity and authenticity; Wild history refers to historical stories passed down among the people, which may contain elements of legends and fiction; Storytelling, on the other hand, is an oral art form that

mainly tells historical stories, often with strong artistic processing and exaggeration elements. Due to the fact that most mobile game players may not have a deep historical knowledge background, it is difficult to accurately distinguish these different forms of historical expressions.

Secondly, the channels for obtaining information in modern society are becoming increasingly diverse, but not all channels can provide accurate and comprehensive historical knowledge. Some mobile games may simplify or add fictional elements to historical themes in order to attract players, such as "fictional history" or "weak history", which can also lead to players misunderstanding historical facts.

Due to various reasons, although historical themed mobile games mainly focus on history, they are more of a "gimmick" to occupy a place in the market, while the real game content is often expressed in the form of fiction or combined with role-playing. The uneven quality of historical mobile games has led to many malignant outcomes.

3.2. Industry Opportunities

Preface: The scale of China's mobile game market has been expanding year by year. According to relevant data, the revenue of China's mobile game market reached 210 billion yuan in 2019. Games with historical themes provide players with rich spiritual enjoyment due to their unique historical background and storyline. The application of 3D technology further enhances the visual impact of game graphics and improves the gaming experience. Industry opportunity analysis

3.2.1. Market Demand and Potential

With the rapid development of mobile Internet technology, mobile game market is gradually becoming an important pillar of the cultural industry. Players' demands for game content are becoming increasingly diversified, especially showing a strong interest in games with historical and cultural themes. Combine the Twenty Four Histories with 3D technology to create a 3D official history mobile game not only satisfies players' pursuit of game quality, but also meets the public's thirst for historical and cultural knowledge.

Currently, there is a lack of products in the market that truly integrate historical culture with gameplay, which provides a huge market gap for our 3D official history mobile game. By accurately targeting the target user group, we can tap into huge market demand and stand out in the fiercely competitive market.

3.2.2. Technological Innovation and Support

The continuous development of 3D technology has brought new visual experiences to the mobile gaming market. By utilizing advanced 3D rendering technology, we can present historical events, characters, and scenes from the Twenty Four Histories to players in a more realistic way, enhancing the immersion and immersion of the game.

Meanwhile, with the increasing maturity of VR/AR technology, we can combine 3D historical mobile games with these cutting-edge technologies to provide players with a richer interactive experience. This will further expand the application scenarios of the game and enhance its market competitiveness.

3.2.3. Policy Support and Cultural Inheritance

In recent years, the government has continuously increased its support for the development of the cultural industry and introduced a series of policy measures to promote innovative development of the cultural industry. Combining the traditional cultural treasure of the Twenty Four Histories with 3D technology not only conforms to national policy guidance, but also helps promote the digital transformation and upgrading of the cultural industry.

In addition, through games, a popular form of entertainment, we can better inherit and promote excellent traditional Chinese culture, enhance national cultural confidence and identity. This

will also win more social recognition and market support for our 3D official history mobile game.

3.2.4. Cross Border Cooperation and Resource Integration

In the mobile game market, cross-border cooperation has become an important means to promote product development. We can deepen cooperation with related industries such as film and television, animation, and literature to jointly create a series of cultural products with the theme of the Twenty Four Histories, forming a strong brand effect and market influence.

At the same time, by integrating resources from all parties, we can provide more materials and inspiration for game development, enrich game content, and improve game quality. This will help us maintain a leading position in the fierce market competition and achieve sustainable development.

In summary, combining the Twenty Four Histories with 3D technology to create a 3D official history mobile game faces enormous industry opportunities. We should seize favorable factors such as market demand, technological innovation, policy support, and cross-border cooperation, continuously innovate and improve products, and bring players a better gaming experience.

4. Market Analysis

4.1. Advantage Analysis

The rapid development of Internet information technology has changed the way people work and live to a large extent and brought many conveniences, which makes the development and popularization of games into the market become clear and considerable. Through relevant research and development, it has been found that the vast majority of people in modern times have insufficient understanding of official history, which provides a new opportunity for the development of games in our company.

Unique product positioning: A game company that understands official history focuses on developing games based on historical events, characters, and culture. This unique product positioning gives it a differentiated competitive advantage in the gaming market and attracts players interested in history.

Rich historical resources: The company may have abundant historical research resources and talent teams, which can accurately restore historical events and characters, provide a reliable historical foundation for the content of the game, and enhance the realism and credibility of the game.

High quality gaming experience: Game companies that understand official history may focus on the storytelling, playability, and artistic expression of games, committed to creating high-quality gaming experiences that attract more players' attention and love.

Attracting players of different age groups: Historical themed games often have cross age appeal, attracting both history enthusiasts and adult players, as well as providing educational gaming experiences for young players, expanding the game's audience.

Potential educational value: The game content of game companies that understand official history may have certain educational value, allowing players to understand historical knowledge and cultivate historical awareness through games, providing new choices and tools for the education market.

Cultural output and international influence: By developing games with Chinese historical and cultural characteristics, game companies that understand official history have the opportunity to export Chinese culture to the international market, enhance the international influence of China's gaming industry, and promote the improvement of China's cultural soft power.

Human resource advantages: Our company has a group of young entrepreneurial teams who are innovative and passionate. The members have a deep interest in history, are proactive, have strong organizational learning abilities, and have strong team cohesion.

Product advantages: Unlike typical gaming products on the market, our product system is more comprehensive and complete. In terms of product functions, it covers various functions such as learning, gaming, voice acting, translation, audio, social networking, entertainment, public welfare, etc., ensuring users' experience. At the same time, we strengthen customer service training, actively collect user feedback, continuously improve products, and establish a good brand image.

4.2. Feasibility Analysis

4.2.1. Policy Environment

Policy support for cultural industry: In recent years, the government has introduced policies to support the development of the cultural industry. The various tasks identified in the "Outline of the National Cultural Development Reform Plan for the 13th Five Year Plan Period" have been successfully completed, and new direct projects and innovative measures have been solidly promoted according to the situation. China's cultural construction has achieved historic achievements and undergone historic changes in the process of rectifying the root cause and adhering to innovation, implementing the new development concept, constructing a new development pattern, and promoting high-quality development. Culture is an important pivot, and it is necessary to further develop and strengthen the cultural industry, strengthen cultural empowerment, and fully play the role of culture in activating development momentum, improving development quality, and promoting economic structure optimization and upgrading. Encourage innovation and cultural output, which will provide policy support and development space for game projects that understand official history.

Cultural censorship and content regulation: The government may review and regulate game content, especially games involving historical themes, which need to comply with relevant regulations and ethical standards to avoid sensitive content and historical distortion.

Cultural exchange and cooperation: The government encourages international cultural exchange and cooperation, which provides opportunities for cross-border cooperation and market expansion for game projects that understand official history.

4.2.2. Economic Environment

Market demand: There is a certain demand for historical themed games in the market, especially among historical and cultural enthusiasts and educational institutions, but the demand may be affected by competition from other game genres.

Investment and Financing: Developing a game project that understands official history requires a significant amount of capital investment, including game development, marketing and promotion. It is necessary to seek investment and financing channels to ensure the smooth progress of the project.

Profit model: The profit model of a game may include game sales revenue, item sales, advertising revenue, etc. It is necessary to choose an appropriate profit model based on the actual situation to ensure the long-term profitability of the project.

4.2.3. Social Environment

Cultural identity and acceptance: The social recognition and acceptance of historical themed games will directly affect the market performance of the project. If society holds a positive attitude towards games that understand official history, it will be beneficial for the promotion and development of the project.

Educational significance and social responsibility: Games that understand official history have certain educational significance, as they can spread historical knowledge and culture, while also requiring social responsibility to ensure the accuracy and educational value of game content.

Cultural Inheritance and Innovation: The product of this project can promote the inheritance and innovation of official historical culture, allowing more people to understand history through games, while also avoiding distortion and misleading of history.

Co creating teaching services to meet the diverse needs of customers: With the development of the Internet era, economic growth, and the popularity of smart phones, people have become accustomed to the Internet. With the arrival of the epidemic, people are also accustomed to online learning. The co creating teaching model developed by our team is to use this as a model to attract local online bloggers to drive employment, or allow local netizens to apply for qualifications to settle in and share their views on the twenty-four official history, so as to meet the needs of users to learn historical and cultural knowledge without leaving home.

The public welfare nature of the project is conducive to enhancing social recognition: The APP developed by our team includes a public welfare module, with the core being the promotion of local history and culture by online bloggers, in order to promote urban and rural development and assist the cause of building a socialist strong country. This public welfare activity aims to serve society as the main purpose and is conducive to enhancing social recognition. Moreover, with the development of various public welfare activities in recent years, people are increasingly willing to participate in these activities, which is conducive to the acceptance and recognition of projects by society.

4.2.4. Technical Environment

Game engine and development tools: Choosing the right game engine and development tools is crucial for the success of a project, taking into account factors such as technological maturity, development efficiency, and game performance.

Cross platform and multi device adaptation: With the popularity of mobile devices and cloud gaming, our company ensures that games can run smoothly on different platforms and devices, meeting the needs of different player groups.

Network security and data protection: Game projects need to pay attention to network security and data protection, protect players' personal information and game data security, and avoid security vulnerabilities and data leaks.

4.2.5. Market Positioning

The software operated by our company is centered around the 24 official histories of China, and belongs to a combination of online and offline business models. Offline, we mainly promote dialect cultural and creative products. Firstly, we focus on our main business, and secondly, we create a huge influence to drive online operations. Online apps emphasize "co creation" and promote history, which cannot be achieved by one organization or government. It requires the joint efforts of enterprises, users, and governments. The APP module is divided into co creation teaching: enterprises will introduce local dialect bloggers to drive employment, and netizens can apply for qualifications to settle in and implement creator incentive plans; Entertainment sector; Social section; The public welfare section is driven by game bloggers and even lecturers to promote the game and enhance its reputation and production level.

4.3. Competitor Analysis

Today's enterprises are in a highly competitive environment, with new competitors constantly entering and industry integration intensifying. Therefore, effectively identifying competitors is particularly important for the future development of the company.

4.3.1. Industry Competitors

(1) Large game developers

1) Ubisoft. Ubisoft is one of the globally renowned game developers with extensive development experience and financial support. They may launch games with historical themes, and competitors need to compete with them in terms of game quality, market promotion, and brand awareness.

2) Activision Blizzard. Activision Blizzard has well-known game IPs such as Call of Duty and World of Warcraft, with a large player base and a strong development team. They may compete with their competitors by launching attractive historical themed games.

(2) Game developers focused on historical themes:

1) ParaDox Interactive. ParaDox Interactive focuses on historical simulation games such as Crusader King, Continental Storm, etc. They have rich experience and a loyal player base in the field of historical games, making them one of their competitors.

2) Creative Assembly. Creative Assembly is a well-known strategy game developer, such as the Total War series. They may launch games related to history and compete in the market.

(3) Educational game developers

1) Schell Games. Schell Games focuses on the development of educational games and may launch game projects with historical educational significance to compete with competitors in the education field.

2) Filament Games. Filament Games is also committed to developing educational games and may launch game projects related to history to compete with competitors in the education market.

4.3.2. Competitive Advantage Analysis

(1) Content quality and depth. Competitors may attract players by providing rich and in-depth historical content, so the project needs to ensure the accuracy and richness of game content to win players' trust and support.

(2) Technological innovation and gaming experience. Competitors may constantly introduce new technologies and innovative gameplay to enhance the gaming experience. Projects need to focus on technological innovation and gameplay design to attract and retain players.

(3) Market promotion and brand building. Competitors may attract players through large-scale market promotion and brand building. The project needs to develop effective market promotion strategies to enhance brand awareness and influence.

(4) Community building and interactive experience. Competitors may attract players by establishing active communities and providing rich interactive experiences. Projects need to focus on community building and player interaction to enhance user stickiness and loyalty.

4.3.3. Competitive Strategy

(1) Focusing on historical authenticity: It can differentiate itself from competitors and attract history enthusiasts and learners by providing authentic and accurate historical content.

(2) Innovative gameplay. By introducing innovative gameplay and experiences, players can differentiate themselves from their competitors and enhance the attractiveness and competitive advantage of the game.

(3) Outstanding educational value. It can highlight the educational value of games, cooperate with educational game developers, and expand the education market.

(4) Community building and user participation. We can attach importance to community building and user participation, create an active community platform, and enhance user stickiness and loyalty.

Understanding the strengths and weaknesses of competitors and developing corresponding competitive strategies is the key to the success of launching game projects that understand history. By continuously innovating, improving game quality, and enhancing user experience,

the project can stand out in a fiercely competitive market, winning more player support and market share.

4.3.4. Substitutes

The threat of substitutes refers to newly developed products or services that meet the needs of customers to the same or even higher extent compared to the existing ones. Customers generally prefer the new and dislike the old, and new products usually have higher cost-effectiveness, which is a fatal blow to existing products or services. Substitutes provide different products and services, but meet the same needs of customers, reducing their dependence on existing products and services, or even eliminating their need. This is a greater threat, similar to industry disruption and revolution, and therefore less likely. For example, taking feature phones as an example, traditional Nokia was the industry leader, and later Huawei, which provided information and communication technology, also began producing feature phones. Huawei was the new entrant, but we no longer have many people using feature phones because feature phones have been replaced by smartphones. Smartphones are a substitute for feature phones, and the threat of this substitute is huge, directly leading to the exit of feature phones from the historical stage.

For our gaming app, it provides online services to meet customers' needs of learning history through the internet and experiencing the thrill of gaming. Currently, although there are games that describe history, there is no substitute for historical games and educational apps. The threat of substitutes in this project is relatively small.

4.3.5. Potential Entry into Competitors

The so-called potential entrants may be a newly established enterprise or multiple enterprises that have adopted a diversified business strategy and are originally engaged in other industries. Potential entrants will bring new production capacity and demand a certain market share. The threat of potential entrants to this industry depends on the entry barriers of the industry and the strength of the existing enterprise's reaction after entering a new industry. Due to the small barriers to entry in this industry, our product urgently needs to build a well-known brand, retain our market share, and increase our market share in the face of a small number of competitors.

5. Operation Mode

5.1. Operation Process

This operation process book aims to clarify the operational goals, strategies, and specific implementation steps of the 3D official history mobile game, in order to ensure that the project can continue.

5.1.1. Operational Objectives

Enhance game awareness, establish user base, and attract more potential players. Improve user retention and activity, and promote long-term user engagement in the game. Through 3D technology, the Twenty Four Histories will be presented and interpreted in a brand new way, allowing users to learn about traditional Chinese cultural treasures and history in entertainment, while ensuring the authenticity of historical references and avoiding misleading players.

5.1.2. Game Operation Process

(1) Preliminary preparation. The operation team should choose relatively classic events in official history as the research content, and divide them into multiple groups to conduct research simultaneously based on the 24 biographies written throughout Chinese history included in the "Twenty Four Histories". The aim is to understand the level of understanding of

the Twenty Four Histories among different age groups, as well as their opinions and suggestions on the product. In the process of investigation, the investigators should focus on which official history of the Twenty Four Histories the participants have a weak understanding of, which are more profound, and which are more interested in, so as to determine the focus of subsequent attention on products.

(2) Mid term development, testing, and optimization. The operation team should divide team members into multiple groups based on the content development sections to test official histories such as "Records of the Grand Historian" and "Book of Later Han". After internal testing optimization, the operation team should invite some users to conduct testing and then optimize game content.

(3) Continuous monitoring and risk control in the later stage. After the game is launched, the operation team should focus on legal rights protection and other aspects of the game. The operation team must comply with relevant regulations, otherwise they may face legal proceedings or even fines. For example, the operation team should ensure that the game content does not violate relevant regulations such as trademark law and copyright law, and should also ensure that the advertising promotion of the game complies with the provisions of advertising law. They should also pay attention to preventing mobile games from being attacked, and strive to maintain the security of mobile games and protect the security of players' personal information.

5.2. Promotion Plan

5.2.1. Promotion Objectives

Enhance the visibility of various figures in official history and the public's understanding of historical culture, allowing the public to learn about the relevant content of the Twenty Four Histories through games. This not only passes the time through games, but also allows the public to understand historical culture, killing two birds with one stone. By providing truthful and comprehensive information, we establish public trust in our company and also generate confidence in the official history mobile game.

5.2.2. Target Audience

Most of the target audience are college students who are still in school. Due to the appeal of the game to them, they are also the target audience for the official history mobile game, which allows them to learn about history through the game and contributes to their learning of history. Furthermore, there is the group of people who are interested in the Twenty Four Histories. They may be tired of written texts and have not learned about the Twenty Four Histories, but the official history mobile game helps them solve this contradiction. The rich and interesting game content does not make them feel bored, and it also enhances their memory.

5.2.3. Promotional Content

(1) Company Introduction. Introduce the history, vision, and values of Fenggu Technology Co., Ltd.

(2) Product Introduction. Detailed introduction of the 3D official history mobile game "Taking History as a Mirror, You Can Know the Rise and Fall", including functions, advantages, usage purposes, suitable audience, etc.

(3) Technological Innovation. Showcasing our innovative achievements in the field of technology, different from other games about historical figures, we have added 3D functionality to allow people to immerse themselves in historical culture, making it vividly remembered. We have also applied for patents to make our research and development results public and transparent, in line with the core socialist values.

(4) Corporate culture. Showcase the positive, united and cooperative corporate culture of the company, and establish a good corporate image.

5.2.4. Promotion Channels

(1) Through small videos such as Tiktok, Kwai and Little Red Book. As the main source of entertainment for people in the past two years, small videos have an immeasurable amount of traffic. Therefore, if we can make good use of these platforms and create some attractive game videos, it will greatly enhance the promotion of our games.

(2) Through technology exhibitions. Participate in technology exhibitions, accurately target audiences, showcase company products and strengths, expand opportunities for business cooperation with other companies, jointly promote products and services, increase market share, and achieve mutual benefit.

(3) Hold a product launch event. Invite endorsement ambassadors to the press conference site to attract fans and achieve promotional effects through the traffic brought by celebrities. Invite partners, media, and potential customers to participate, set up game experience points, and allow the public to personally experience the charm of this game.

(4) Online advertising placement. Use search engine oriented (SEO) and social media advertising and other means to put a certain amount of advertising to improve the visibility of the game on the Internet. And establish cooperative relationships with some game bloggers to release partial experience videos of this game, accurately positioning and attracting customers, achieving twice the result with half the effort.

(5) Social media promotion. Through the establishment and maintenance of social media accounts of Fenggu Technology, such as WeChat official account, Weibo, Tiktok, regularly publish game information, technology trends, industry information and other content, provide technical support, customer service services, etc., enhance interaction and trust with customers, improve game exposure, and also facilitate the handling of various problems caused by subsequent games.

(6) Establish a knowledge competition. Regularly set up various knowledge quizzes about the Twenty Four Histories, and distribute corresponding prizes based on the number of correct answers, such as game skins or small prizes like diamonds and gold coins. You can also participate in offline knowledge PK and distribute some daily necessities based on the number of PK participants, which will attract a more practical audience.

(7) Public welfare and charity. Regularly hold charity fundraising and donation activities, conduct humane and caring fundraising to impoverished and remote areas, give back to society, and assume social responsibility. Helps to build an excellent image for the company and expand the popularity of 3D official history mobile games.

5.2.5. Promotion and Execution

(1) Team building. Establish a professional publicity team, including planners, designers, technicians, etc., to ensure the effective execution of promotional activities.

(2) Execution Plan. Develop a detailed publicity execution plan, including timetable, task allocation, resource allocation, etc., to ensure the smooth progress of the publicity activities.

Resource integration: Effectively integrate with various media, industry associations, partners and other resources to form a strong publicity force.

(3) Promotion. Promote the company's brand through various channels, including online advertising, social media, industry exhibitions, media coverage, etc., to enhance the company's brand awareness.

5.2.6. Cross Departmental Collaboration

Promotion work is not the responsibility of a single department, but requires the joint efforts of various departments within the company. We will strengthen communication and collaboration with departments such as R&D and production to ensure the smooth implementation of promotional activities. And regularly evaluate the effectiveness of publicity,

analyze data, collect feedback, in order to adjust publicity strategies and content in a timely manner. We believe that only continuous improvement can make our promotional plan more precise and effective.

5.3. Profit Model

With the rapid development of technology, the mobile gaming industry in China is showing a thriving trend. Among them, official history mobile games, as a unique category, have attracted numerous players with their rich historical elements and profound cultural heritage. Next, we will conduct an in-depth analysis of the profit model of the official history mobile game, in order to provide reference and inspiration for the development of the industry.

The official history mobile game market has received widespread attention in recent years, with its market size continuously expanding and its market share steadily increasing. According to relevant data, the market size of official history mobile games in China has reached billions of yuan in 2019, and it is expected to maintain high-speed growth in the coming years. The development of this market cannot be separated from the promotion of various profit models, including in app purchasing models, advertising revenue, paid downloads, and membership systems.

The profit models of official history mobile games are diverse and each has its own characteristics. The internal purchase model, as its main source of profit, mainly includes virtual props, game currency, character skins, etc. Through exquisite game graphics, captivating storylines, and rich character settings, official history mobile games can attract a large number of players, thereby achieving sustained growth in in app revenue. In addition, advertising revenue can also occupy a certain position in official history mobile games, mainly in the form of interstitial ads, banner ads, and other forms. In order to reduce the impact on player experience, official history mobile games usually choose appropriate positions and forms of advertisements to maximize advertising revenue.

The application of paid downloads and membership system in official history mobile games is also worth paying attention to. Part of the official history mobile game content can be downloaded for a fee, providing a complete gaming experience. In addition, membership production is an emerging profit model that can also be applied in official history mobile games. By providing exclusive content, priority experience rights, and other benefits, players can be attracted to become members, thereby achieving a stable source of income. However, there is still much room for optimization and innovation in the profit model of official history mobile games. For example, big data analysis can be combined to accurately push game content and improve in app conversion rates; For example, through cross-border cooperation, innovating advertising forms, and increasing advertising revenue; In addition, new charging methods such as subscription based and one-time purchase can also be tried to enrich the profit model and improve player satisfaction.

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