

The Integration Innovation and Market Analysis of Animation IP In Mobile Games and Electronic Games

Jiajia Yan

School of Business, Harbin Institute of Technology, Harbin, China

Abstract: With the vigorous evolution of the digital entertainment industry, the integration of animation intellectual property (IP) with mobile games and video games indicates a new business pattern. This paper aims to examine the innovative integration of animation IP in the game industry, and to carefully explore the market effect of this integration. First of all, through the overview of the development of animation IP licensed games at home and abroad, this paper summarizes the typical forms of animation IP in games, and through the analysis of successful cases, shows the important role of animation IP in improving the appeal of games, marketing strategies and income models. This study then delves into the possibilities of incorporating transmedia narratives into game construction, focusing on optimizing immersive experiences for players through cutting-edge technologies such as augmented reality (AR) and virtual reality (VR). The article goes on to explain a set of innovative game mechanic design ideas that can break traditional boundaries. At the same time, through the fine division of the target audience, we find the dynamic law of market evolution and competition pattern, and put forward targeted strategies and forward-looking suggestions to cope with the current industry challenges. Finally, through the detailed study of several typical successful cases, this paper summarizes the experience and lessons of animation IP in the gamification process, and looks forward to the future development direction. This study not only provides theoretical support for the integration and development of animation IP and game industry, but also provides practical guidance for relevant practitioners.

Keywords: Animation IP, Mobile Games, Video Games, Fusion Innovation, Market Analysis, Cross-media Storytelling, User experience, AR/VR technology, Case Studies.

1. Introduction

In recent years, with the rapid evolution of mobile Internet technology and the wide application of intelligent terminals, the field of mobile games and electronic games is experiencing an unprecedented period of prosperity. At the same time, the influence of animation, an artistic expression favored by the global audience, has quietly and deeply infiltrated all levels of the game industry [1-2]. Animation works with its rich storyline, vivid character image and unique cultural connotation attract a large number of fans, these fans often based on the same IP (intellectual property) development of the game products have a high acceptance and loyalty. Therefore, the combination of animation IP and games can not only expand the commercial value of animation brands, but also bring more user resources and market opportunities for game developers. The integration of animation IP and games is not only a simple copyright cooperation, but also a communication and collision of creative culture. This integration not only requires game developers to deeply understand the spiritual core of the original, but also requires bold innovations in game design to meet the needs of players for high-quality gaming experiences. In addition, the successful introduction of animation IP also contributes to the promotion and communication of game products on a global scale, especially in today's increasingly frequent cross-cultural communication, such integration is to promote the mutual understanding and recognition between players in different cultural backgrounds.

2. The Current Situation of the Integration of Animation IP and Game

Animation IP's first entry into the game field can be traced back to the late 1980s to the early 1990s, and one of the most representative works of this period is the "Disney" series of games, which has won a wide market response with its unique platform jumping gameplay and classic animated characters. In the early 21st century, with the development of Internet technology and the popularity of smart phones, animation IP licensed games have entered a period of rapid growth [3-4]. At present, the gamification of animation IP in the international market has reached a quite mature stage. Many large-scale animation IP, such as "Pokemon Go" is an epoch-making product, which perfectly combines AR technology with the game and creates a new game experience mode. Such games have not only made breakthroughs in technology and creativity, but also diversified in business models, in addition, with the progress of technology, more and more animated IP games have begun to use advanced graphics processing technology and interaction design, improving the immersion and playability of the game.

China's animation IP licensing games started relatively late, initially mainly introducing foreign animation IP for adaptation. The works of this period were mostly limited by the technical level and lack of creativity, and the market response was lackluster. In recent years, with the rapid development of the domestic game industry, animation IP licensed games have gradually begun to emerge. Domestic game developers began to pay attention to the development of original animation IP, such as Pleasant Goat and Big Big Wolf, Boonie Bears, etc. These games not only strive to

restore animation style visually, but also innovate in gameplay, adding more interactive and social elements [5]. In addition, with the popularity of mobile Internet, mobile games have become an important carrier of animation IP licensed games, and many works have obtained a huge user base through mobile terminals.

3. The Impact of Animation IP on the Game Industry

Animated IPs often already have a loyal fan base that is very familiar with and fond of the characters, stories, and worldviews of the anime, and when those IPs are adapted into games, fans often try the game because of their love for the original. For example, the Pokemon series of games has attracted a large number of original animation fans to become gamers. In addition, animation IP can also attract new users who are not familiar with the IP through its unique visual style and interesting character settings, such as Dragon Ball Warrior Z with its beautiful graphics and smooth combat system to attract a large number of new players who have not been exposed to the original game. The brand effect of the animation IP itself helps to save marketing costs, because the IP already has a high visibility, can quickly expand the influence of the game through the word of mouth of fans, for example, "Pokemon Go" at the beginning of the release of the fan spread quickly became popular around the world. Animation IP games also often cooperate with brands in other fields to expand their influence through joint promotion, such as Dragon Ball game and multiple brands to launch co-branded products. Social media platforms have become an important channel for promotion. Game developers can attract fans' attention by releasing trailers, development logs and other content, and enhance their visibility through cooperation with Internet celebrities and Kols. For example, the mobile game "The Legend of Qin" has been widely publicized on Weibo, Tiktok and other platforms. Animated IP games generate revenue by selling virtual goods related to the animation, which are often closely related to the characters and items in the animation, and can satisfy the desire of players to collect. Some games use membership systems to entice players to pay by offering privileged services, such as some versions of the Pokemon series. Animation IP games can bring additional revenue by embedding other brands in the form of advertising, and through cooperation with brands to promote on multiple platforms, expand the influence, such as the "Legend of Qin" mobile game with multiple brands for multi-channel advertising. Animated IP games help companies gain a competitive edge in the global market, and their adapted games can attract players worldwide, such as "One Piece" games in many countries and regions around the world have a wide user base.

4. The Concrete Practice of Integration and Innovation

4.1. Innovative Game Mechanic Design

Animated IP usually has a rich story setting and character setting, which can be well integrated into the main mission of the game. By smoothly weaving the anime narrative into the game mechanics, players can enjoy the essence of the original book in the virtual space. In order to increase the level of the game experience, designers can create a variety of story lines,

allowing the player's decisions to influence the direction of the game's plot. Such innovative design not only expands the interactivity of the game, but also transfers greater freedom to the player. In Dragon Ball Warrior Z, for example, the player's choices trigger unique story points that further change the overall trajectory of the game. The immersive experience of the game is enhanced by placing the player in the role of an anime character. They move the story forward through interactive ways, such as fulfilling their missions and defeating their opponents, as if they were experiencing the adventures of the animation's main characters. Pokemon Go is a clear example of this, where players take on the role of trainers, catching and developing Pokemon and demonstrating strategies in battle. In addition, in order to create a personalized game experience, developers can provide customization options for character appearance, skills, and various attributes. Such personalization not only deepens the player's identity with the game world, but also significantly enhances the game's replay appeal. The Legend of Qin mobile game allows players to choose characters according to their personal preferences, and create unique characters through equipment matching and skill upgrading.

4.2. The Use of Transmedia Narrative in Games

Embedding multimedia elements such as animated video and audio into the game can enhance the immersion of the game. By inserting animated clips or background music at key story points, the player can become more involved in the game world. For example, in Dragon Ball Warrior Z, the game enhances the player's sense of engagement by inserting animated segments to show key plot turning points. The linkage between the game and the official animation website, social media and other platforms can create a unified user experience. Gamers can access game information, participate in various activities, and interact with other users across multiple platforms. Pokemon Go's deep integration with social networks lets players showcase their in-game achievements and interact with peers. To maintain game and animation continuity, the developer must research the original work to ensure faithful reproduction of core elements like storyline and character setting, preserving IP integrity and providing an authentic player experience. For example, the One Piece series closely follows the original animation in its story design, ensuring that players can experience the familiar story. By supplementing the story details not shown by the animation, the game can provide the player with more complete background information. Developers can take advantage of the game's interactivity and fill in parts of the animation that aren't described in detail, giving the player a deeper understanding of the entire world view. For example, the Legend of Qin mobile game has added many plots not detailed in the original story design, enriching the story content of the game.

4.3. Application and Effect Evaluation of AR/VR Technology

The use of AR technology to bring animated characters into real life can enhance the interactive fun of players. Smartphone cameras integrate virtual characters into real environments, enabling new interaction modes. Pokemon Go, using augmented reality (AR), lets players capture fictional creatures in real life, boosting entertainment. AR in game promotion, like outdoor scavenger hunts, guides players to

find virtual treasures, enhancing game fun and social interaction (e.g., Harry Potter: Wizards Unite). Virtual reality (VR) creates immersive digital worlds, allowing deep interaction with virtual characters and scenes (e.g., Dragon Ball VR). Although VR technology still faces challenges in achieving complex game scenarios and popularizing hardware devices, its application prospects in the game industry are particularly bright as technology iterations and hardware costs fall. Taking Pokemon VR as an example, the project provides players with a more three-dimensional and unprecedented Pokemon exploration journey through the in-depth use of VR technology.

4.4. Data-driven Design and Optimization

Collecting user behavior data through in-game data tracking tools can provide valuable feedback for developers. These include the amount of time players spend playing, how quickly they complete tasks, and how often they buy virtual items. For example, The Legend of Qin mobile game uses built-in data tracking tools to record player behavior for subsequent analysis. By exploring empirical data on user behavior, developers can gain insight into the tendencies of game players and use this to improve game architecture. For example, if statistical analysis reveals that the probability of a player successfully overcoming a certain level is small, then the designer can adjust the challenge of the level, which can increase user satisfaction. Pokemon Go, for example, analyzes player data to continuously adjust the balance in the game and improve player satisfaction. The game development team can keep the game fresh by iterating quickly with updates based on user feedback. By constantly introducing new content and fixing known problems, developers can improve player retention. Dragon Ball Warrior Z, for example, has kept players interested by regularly updating with new characters and maps. After multiple updates, how to manage and maintain different versions of the game to ensure that the player experience is not affected is also an issue that developers need to consider. For example, the One Piece series of games uses version control tools to ensure compatibility between different versions, so that players can't play properly due to differences in versions.

4.5. Community Building and User Participation

Game officials can promote communication and interaction between players by establishing a community platform. These platforms can include official forums, social media accounts, etc., where players can share their experiences and exchange strategies. "The Legend of Qin" is a mobile game favored by players, and its official digital platforms such as Weibo and dedicated forums maintain dynamic interactive communication with users. User-generated content (UGC) serves as a catalyst for the gaming community to thrive, inspiring players to invest in innovation. Individual players are able to share their own ideas for character appearance customization, level construction ideas, and other creative outputs that greatly enrich the diversity of the game. For example, many players in the Pokemon Go community upload photos of rare Pokemon they capture, adding to the fun of the game. Plan a variety of online and offline interactive initiatives, such as competitive events, opinion polls, etc., which can increase user enthusiasm and immersion. Such initiatives not only enhance the communication dimension of the game, but also stimulate deep

communication and cooperation between the player community. Dragon Ball Warrior Z, for example, has attracted a large number of players by hosting online tournaments. Reasonable reward mechanism can motivate users to actively participate in community activities and enhance user stickiness. By setting up rewards, such as virtual currency, rare items, etc., you can increase the player's motivation. For example, the One Piece series encourages players to actively participate in various community activities through the use of ranking points and rewards.

5. Market Analysis

Animated IP games have a wide audience, from children to adults. Children and teens are the core audience, with a strong interest in animated characters and stories. For example, Pleasant Goat and Big Big Wolf and Boonie Bears appeal mainly to children and teenagers. Adults, on the other hand, showed a strong interest in classic animated IP such as Pokemon and Dragon Ball. User preferences include a preference for animation and a preference for game types. Animation fans want a game that is faithful to its characters and story, while game fans value gameplay, graphical quality, and social features. Pokemon Go, for example, uses AR technology to appeal to players who like to explore and collect; Dragon Ball Warrior Z is popular with fighting game fans because of its excellent fighting experience. User demands include diverse gameplay, rich social features, highly restored characters, and high-quality graphics. These factors directly affect user experience and satisfaction.

In the coming years, technologies such as 5G networks, cloud computing, and artificial intelligence will significantly impact the animated IP game. The introduction of fifth-generation mobile communications technology, with its superior transmission rates and latency advantages, is reshaping the outlook of the video game industry. At the same time, the rise of cloud computing has reduced the performance requirements of physical devices, reducing the reliance on local hardware through its distributed processing capabilities. The evolution of artificial intelligence gives game characters more complex intelligence, and the three work together to improve the dimension of game enjoyment. This wave of technological innovation heralds a revolution in the gaming experience. The 5G network ensures the fluency of multi-user synchronous online matchups and eliminates waiting time, cloud computing realizes the seamless switching of game states across a variety of game platforms, and the application of artificial intelligence significantly optimizes the non-linear character behavior, enhances the in-game character behavior performance, and deepens the interactive experience between players. The popularity of mobile payments has changed consumption habits, with users tending to pay small amounts for virtual goods or subscription services. The need for interactive communication has become increasingly prominent in the field of digital entertainment today, resulting from the desire of players to interact with other groups in the virtual world, and the vision of building electronic communities through ludic practices.

It is predicted that the future arena will witness fierce tussles between heavyweight game giants, such as Tencent and NetEase, and creative and dynamic independent producers. While these big game makers have maintained their presence in the industry with their R&D capabilities and marketing capital, a new trend is emerging, led by independent developers who have captured the hearts and

minds of many gamers with their unique design ideas.

6. Case Study

6.1. International Case Study

"Pokemon Go" is an innovative work created by Niantic and Pokemon Enterprises, which uses cutting-edge location-awareness enhancement technology (LBS-AR) to blend the virtual and the real. The game is based on the popular cartoon series "Pokemon", enabling players to capture, domesticate and trade virtual elves in a real geographical environment with the help of smart mobile devices, and further build an unprecedented interactive experience between virtual and reality.

Integration and innovation.

"Pokemon Go" cleverly blends the popular anime culture symbol Pokemon with advanced augmented reality technology to further create an unprecedented mode of play. With the help of the smartphone's built-in camera and GPS function, players can explore and capture virtual spirits in real geographical locations, breaking the boundary between fiction and reality. These avatars appear casually in the user's surroundings, adding a sense of adventure mystery and integration into the living space. At the same time, the core elements of the original anime such as coach duel and dojo challenge are also retained, so that players can revisit the familiar anime plot in the game, immersed in full of nostalgia and passion.

Market performance

Pokemon Go has already achieved significant commercial milestones around the world. Sensor Tower Store Intelligence reports the game quickly surpassed 500 million downloads and became popular shortly after launch. By 2024, it reached 1 billion downloads and \$1 billion in revenue, showcasing significant economic benefits. Its popularity also boosted demand for peripheral products, fostering a broader economic ecosystem.

User feedback

Users generally rated Pokemon Go highly, especially for its innovation and entertainment. Many players said the game made them feel the fun of childhood again, and by capturing the process of Pokemon, they were not only able to recall the classic plot in the animation, but also interact with others in real life, adding social features. A closer look reveals that the use of augmented reality (AR) technology in the game is seen as a highlight of the innovation, which makes the Pokemon appear to be truly integrated into the player's environment, a unique interactive experience that has won universal praise.

The brilliant success of Pokemon Go is not only due to its clever fusion of beloved animation intellectual property and cutting-edge AR technology, but more importantly, it creates an unprecedented way of interacting with the game, allowing players to immerse themselves in the real physical world. This case provides valuable experience for other animation IP gamification.

6.2. Domestic Case Study

Pleasant Goat and Big Big Wolf is a Chinese animation produced by Guangzhou Original Power Culture Communication Co., LTD. The animation tells a funny story between a group of smart and brave lambs and a cunning big bad Wolf. Based on this popular animation, a number of games in the Pleasant Goat and Big Big Wolf series have been launched, aiming to provide fun and interactive experiences

for children. These games are available on multiple platforms, including PC, mobile, and home consoles.

Fusion innovation

The Pleasant Goat and the Big Big Wolf games appeal to children by cleverly incorporating characters and storylines from the animated series. The game is designed with a variety of gameplay, such as action adventure, puzzle solving, etc., so that players can play as pleasant sheep and other lambs, fight against Big Wolf, and complete various tasks. The game not only retains the classic lines and scenes in the animation, but also increases the fun and challenge of the game through colorful tasks and level design. For example, in some games, the player needs to help Pleasant Goat evade the Big Big Wolf while collecting in-game items to complete the mission.

Market performance

"Pleasant Goat and Big Big Wolf" series of games in the domestic children's game market outstanding performance. According to relevant data, the downloads of these games in the major app stores continue to grow, especially during the holidays and winter and summer holidays, downloads and user activity increase significantly. The game's user growth rate is steady, and many of these players are big fans of the animation. In addition, the game has further expanded its influence through the linkage with TV programs, toys and other peripheral products, forming a complete industrial chain.

User feedback

User reviews of "Pleasant Goat and Big Big Wolf" games are generally positive, especially from parents. They approve of the games' content, saying they teach teamwork, problem-solving, and feature cute character designs and realistic stories, making them suitable for edutainment. The games are easy to operate and suitable for various ages. Some parents hope for more educational content and stronger time control.

From the above analysis, it can be seen that the success of the "Pleasant Goat and Big Big Wolf" series of games lies in its high restoration of animation IP and creative game design. The game not only allows children to relive the classic plot in the animation, but also wins the love of parents and children through diversified gameplay and edutainment content. This case provides useful experience and inspiration for other domestic animation IP gamification.

7. Conclusion

This paper summarizes the innovative practice in the integration of animation IP and game, including game mechanism design, cross-media narration, AR/VR technology application, etc. It reviews the impact of animated IP on various aspects of the game industry, such as user engagement, marketing strategies, and revenue models. This paper summarizes the main challenges encountered in the process of the integration of animation IP and game and its countermeasures. It also discusses the related theories of the integration of animation IP and game, which not only provides a new perspective for academic research. It also provides practical guidance and advice for game developers and animation IP holders to help them make better use of animation IP resources in practice.

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