

Virtual Marketing of the Entertainment Industry in the Information Age: Building and Promotion of IPs—A Case Study of Luo Tianyi

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Abstract. With the advent of the information age, innovations in digital technology have given virtual idols more possibilities in terms of form. As a cultural symbol, the content value of virtual idols has also been enriched. Compared to the saturated market of traditional live-action idols, virtual idols have become an alternative IP marketing strategy, and their commercial value is rising. How virtual idols can maintain lasting vitality on the road to commercialization and how they can help entertainment companies stimulate consumption in the entertainment market to become critical issues. This study adopts the process-tracing method in case studies to analyze the development path of the virtual idol Luo Tianyi as an example. It distills and outlines the general rule that virtual idols can be influential and flourish in the long run. This paper explores how to effectively build and promote a virtual idol IP eco-chain in the entertainment market and what may hinder the realization of commercial value over the chain. In this way, it aims to help entertainment companies increase the application value of virtual idols in practice and produce better effects during virtual marketing.

Keywords: Virtual Idol; Luo Tianyi; IP Landscape; Entertainment Industry.

1. Introduction

In the information age, virtual IP marketing, such as “virtual idols,” has become an emerging marketing tool. Thanks to advances in digital technology, virtual idols are taking on new forms and have the potential to attract different audiences and gain clout. Compared to real-life idols, virtual idols are highly idealized and perfected and are more controllable and secure for brands, with no restrictions on their work style and high output numbers. These features cater to the trend of diversification, quality, specialization, and segmentation in today’s entertainment market. Virtual idols have been studied from the perspectives of technology, culture, and application, but there is a lack of research on their relevance to entertainment marketing. In terms of commercializing virtual idols, what are the best ways to make them sustainable in an ever-changing entertainment market? With the primary audience in this field gradually having the ability to consume independently, young consumers will slowly dominate the future consumer market. It is worth exploring further how to create a lasting virtual idol from a “broken circle” to an “evergreen” one.

The research method used in this study is the process tracing method in case studies. This kind of method selects a typical case as the object of research. It explores and analyses the process of creating and developing the object of study by collecting, collating, and analyzing all information related to the object of study to form an in-depth and comprehensive understanding and conclusion of the relevant issues. Based on this, this study first reviews and evaluates the existing literature on virtual idols at home and abroad; then, it selects the virtual singer Luo Tianyi as a typical case of a virtual idol and restores the road to fame and the difficulties encountered in its development; afterward, it analyses the unique characteristics of Luo Tianyi’s carrier, the problem in realizing the realization and the dilemma of its creator and ecology; finally, based on the analysis and study of the case, it extracts the universal rules for shaping a virtual idol with lasting vitality. Based on a marketing perspective, this study provides a theoretical basis for developing virtual idols in the entertainment

market. It offers suggestions for creating “evergreen” virtual idols, which will help to promote further the commercial value of virtual idols in the entertainment market and help to activate the entertainment market and stimulate consumption, effectively promoting the commercial objectives of entertainment companies.

2. Literature Review

Case studies on business idols operating, ways to profit from them, and driving forces for paying for virtual idols have been done in China and beyond in the wake of the popularization of virtual idols. Today, more and more forms of virtual idol commercialization are emerging. Given what’s going on in the development of the virtual idol sector, some researchers emphasized technological “particularity” while analyzing virtual idols [1-4]. As the “shaper” and external driving force of this sector, digital technology (especially AI) should remain the focus of virtual idol studies, they argue. Some other researchers maintained that cultural consumption is the internal driving force behind the building of virtual idols [5]. In this sense, virtual idols, as consumer goods, must meet people’s cultural demands generated in the consumption process as long as their development no longer faces technological barriers. In the information age, specific strengths and potential of virtual idols that underpin their ongoing and future growth will continue to be studied. Virtual idols have been gradually put into use in the sphere of marketing. Professor Yu Guoming held that virtual idols represent a novel, relation-embedded communication medium and an extension of solid interpersonal ties. Their influence allows content and products to penetrate target audiences faster [6]. By studying the development of virtual idols from the perspective of the fan economy, Professor Guo Quanzhong claimed that the current idol that fans work together to create virtual idols is blazing a new path of marketing by keeping appreciating virtual idols [7]. Some other studies said that differentiated IPs must be developed from outward appearance to inner essence to sustain the vigor of virtual idols [8]. Many academics outside China discussed virtual humans who are active across social platforms to find an increase in their quantity, predicting that the rise will continue in the future [9].

Yet, a fact that fails to match the booming virtual idol market is that there were many gaps and insufficiencies in previous virtual idol studies. On the Web of Science, searching “virtual idol,” people will find 29 papers. Authors from Japan and South Korea contributed a majority of them. Previous Japanese studies, most of which were published before 2020, focused on Hatsune Miku, a native virtual idol of the country [10, 11]. Previous South Korean studies addressed game role-based virtual pop singers [12]. Besides, most previous studies sought to analyze psychological elements, geneses, or development trends, lacking discussions about the relevance of virtual idols to marketing in the entertainment industry. More should be done to study such relevance, given that virtual idols are increasingly active in marketing in the entertainment industry.

3. Case Restoration Based on Luo Tianyi: The Emergence and Development of a Virtual Idol

As the entertainment market continues to grow and develop, the demands of fans on idols and their aesthetic abilities are on the rise, leading to an escalation in the “standards” of idols. However, with the traditional idol market becoming saturated, it has become an essential issue for entertainment companies to open up new forms of idols to stimulate consumption and activate the entertainment market. Because of this, some companies are turning their attention to virtual idols. When it comes to virtual idols, one of the most well-known is the world-famous virtual singer-songwriter “Hatsune Miku.” As a top-tier IP, comics, hand-me-downs, and concerts, the empowering emergence and explosion of Hatsune Miku have shown Yamaha the infinite possibilities of virtual songstresses in the Chinese entertainment market. In December 2011, Shanghai Henian Information Technology Co., Ltd (“Shanghai Henian”) and Yamaha, a leading Japanese electronic music production company, jointly held a campaign named VOCALOID CHINA PROJECT(The “China Authentic

VOCALOID™ Character Collection” organized by VOCALOID™ CHINA) to raise funds for the image of the V family in China, which led to the prototype of Luo Tianyi.

Luo Tianyi combines the world's first VOCALOID(VOCALOID), a voice synthesis software for electronic music production developed by the Japanese musical instrument manufacturer Yamaha. By inputting tones and lyrics into the software, songs that are initially human voices can be synthesized.) Chinese voice library and avatar based on the VOCALOID speech synthesis engine. In addition, as a Chinese virtual singer, Luo Tianyi carries many elements of national style in her initial design. The name “Luo Tianyi” is taken from Lo shu, which says: “The water of Luo came out of the flood, and the songstress descended from the sky, and all things were dependent on each other.” She wears a blue and white cheongsam, jasper hair ornaments, and a Chinese knot at her waist. She is a gentle and elegant Chinese girl.

Luo Tianyi made her official debut as a Chinese virtual singer on July 12, 2012. In March 2015, a song called “Ordinary Disco,” hailed as the first Chinese VOCALOID mythology song, gave Luo Tianyi some popularity. Still, Luo Tianyi was mainly active in two-dimensional space in her early days. Her performance of the song “Flower Naji” with Yang Yuying on Hunan TV’s Spring Festival Night in February 2016 started to bring her into the public eye. As a result, she became the first virtual singer to appear on mainstream Chinese television. From this year onwards, Luo Tianyi started her journey to three-dimensional space. In June 2017, five years after her debut, Luo Tianyi held her first offline holographic concert. This is the first time a virtual singer has held a show in a venue of 10,000 people in China, and its first batch of 500 SVIP insider tickets sold out in three minutes, with a feverishness that was no less than that of a live idol's concert. Since then, Luo Tianyi has gone further and further down her “circle-breaking” path. She has been on CCTV for two consecutive years, and her audience group continues to grow. She was featured in the 2021 CCTV Spring Festival Gala and the 2022 CCTV Lantern Festival Gala. Luo Tianyi also appeared at the opening ceremony of the Olympic Cultural Festival and the 22nd Beijing International Arts Festival on CCTV’s Olympic Channel in the form of a holographic projection, singing the song “Time to Shine.” The play volume of this song has been soaring all the way, ranking at the top of all the Winter Olympics propaganda songs. From the Spring Festival to the Winter Olympics, Luo Tianyi is highly sought after by the central media.

However, Luo Tianyi’s road to fame has not been smooth.

Compared to her predecessor Hatsune Miku, Luo Tianyi has not been as successful as expected since her debut. At the same time, Ren Li(Initial Luo Tianyi Project Leader) and his team needed to realize that IP operation laws had changed. The importance of the UGC(The real name is User Generated Content, which refers to user-generated content.)idol to the development of Luo Tianyi, and they still adhered to the PGC(The real name is Professionally generated Content, which refers to experts-generated content.)content production routine. The project was in crisis for a while in 2014 when Luo Tianyi struggled to get off the ground, Ren Li left, and Yamaha pulled out of the project. Then, after a few twists and turns, Shanghai Henian bought the rights to Lo Tianyi from the Japanese company. However, it was a series of reforms by Ms. Cao Pu(General Director of Shanghai Henian. She is fully responsible for operating virtual idols such as Luo Tianyi in China.)that really brought Luo Tianyi out of her difficult situation and gradually became a popular idol: First, when Luo Tianyi was facing a financial crisis, she communicated with Ao Fei Animation, which was expanding into the two-dimensional field at that time, through her acquaintance Zhou Xingchi(A famous Hong Kong comedian), and obtained an A round of life-saving funds.

What's more, Cao Pu’s initiative to include the creations of the “P-masters”(Refers to people who upload video and audio files on video sites, forums, etc.)and provide them with official channels of promotion immediately boosted the enthusiasm of the whole electronic music creation, opening up an era of “Nationwide creation.” In addition, the aforementioned “Circle Breaker” stage was an opportunity for Cao Pu to get Luo Tianyi in front of the public. This series of measures has helped clarify the way forward for Luo Tianyi, allowing her audience to grow and her commercial value to increase.

4. Case Study: Marketing Mechanism in Luo Tianyi

4.1 Fan-created Idols

The creation of Luo Tianyi witnessed how fans got involved in the links, from calling for her images to designing her characters to varying degrees. Compared with real-world idols, Luo Tianyi, as a “carrier,” adds to fans’ sense of participation and cannot see her perfect reputation “collapse”—no “collapse” of importance is an advantage of virtual idols over real-world idols. Her songs also demonstrate fans’ active involvement. True, Vsinger, Luo Tianyi’s operator, provided many PGC resources for Luo Tianyi. An example is the Light song Chaser (Zhui Guang Shi Zhe), which Kevin Yi wrote, a top-ranking lyricist, and composed by Michael Lin, a designated arranger of great singer Jay Chou. However, most songs of Luo Tianyi’s are fan-fiction works (The English translation of the Japanese phrase refers to a derivative work developed through secondary creation based on original ACGNs, containing animations, comics, games, or novels.) created by internet users featuring more accessible styles. This is also why a constant stream of songs has been produced for her. The core content and development potential of Luo Tianyi lie in fans’ co-creation effort. And, fans’ support for the virtual idol is converted into non-virtual commercial value.

Luo Tianyi has attracted the attention of capitalists as she breaks the dimension wall by performing with real-world stars, holding vocal concerts, and attending enterprise-sponsored shows.

4.2 Way of Value Realization

Despite the facts above, it is challenging to realize the commercial value of the top-ranking virtual idol. For one thing, creating and operating a virtual idol is costly. While operating virtual idols, Vsinger’s team has to pay attention to how to implement all the technologies that serve virtual singers and their creators, such as AR/VR, 3D idolizing, and motion capture. The time and technological costs incurred by a virtual idol during its raising are much higher than those incurred by a real-world idol. For example, Luo Tianyi’s concert held in 2017 cost more than RMB 20 million. For another, the content of a virtual idol must be recognized by consumers before it enters the mass consumption market. Nowadays, the “second dimension” remains a non-mainstream culture in China. Following the market trend that the “second dimension” joins mainstream culture is essential to break the dimension wall. For instance, all of Luo Tianyi’s designs, from her name to her appearance, are characterized by elements of Chinese traditional culture. These Chinese-style elements are well positioned to facilitate emotional communication between the virtual idol and consumers quickly. This mirrors what Huang Huanmiao (Head of the Marketing Department of the team that operates Luo Tianyi.) said, “Emotional connectors between Luo Tianyi and youngsters are also connectors between Luo Tianyi and our brands.”

4.3 Plight of the Creator Ecosystem

Compared to Luo Tianyi and other virtual idols enjoying high popularity among audiences, the VOCALOID community is relatively enclosed and supported by limited audiences, as VOCALOID is not simple to use. The popularity of virtual idols fails to bring rewards to their creators but only lowers their creators’ “sense of existence.” As a result, the ecosystem of the Chinese VOCALOID community has bottlenecked and been stagnant in recent years. Meanwhile, virtual anchors are emerging after virtual singers as another trend. “Person inside” (The English translation of the Japanese phrase refers to a live streamer who works by operating VTubers in the background. In a broader sense, it refers to any worker who serves as a source of the voice.) makes virtual anchors more lively. No longer viewing VOCALOID as the only tool, they enjoy greater freedom amid creation. But it is noteworthy that virtual singers and their creators are in a relationship of mutual support and accomplishment. A virtual singer may be given considerable, excellent content only if it promptly fosters an environment favorable to the creation and brings a commercial return to its creator. Such content will increase the retail value of the virtual idol and improve the virtual idol-based business ecosystem. In turn, a good business ecosystem will continue to improve the creator

ecosystem and shape a virtuous cycle. Yet, any problem arising from inappropriate action in the above process may lead to a vicious cycle. Given that, the entertainment industry must work to avoid vicious cycles in the current plight.

5. The Shaping Path of Virtual Marketing in the Information Age

Through the analysis of the most representative domestic virtual idol, Luo Tianyi, the universal law of the industry is extracted. In the entertainment market, which has a breakneck update speed, efforts can be made to create an "evergreen" virtual idol in the following four aspects.

In terms of virtual technology, a successful virtual idol has an exquisite art image. More importantly, the virtual image has natural and realistic performance and interaction instead of acting stiffly, with inconsistent lip movement and vocalization. Whether the corresponding action is made in time and whether the steps are natural and smooth enough is an important issue that needs to be solved to make the virtual come into reality. Computer graphics technology promotes virtual idols to be three-dimensional and vivid, and 3D idolizing technology and holographic imaging technology all provide traditions for creating a dynamic and spirited virtual idol.

In terms of breaking the circle of propagation, in the propagation carrier, virtual idols need to combine the propagation characteristics of different receiving terminals, build the all-media matrix through platform linkage, and break the propagation barriers. Virtual idols need to conduct more cross-border cooperation with three-dimensional celebrities in content production, carry out UGC and PGC linkage, virtual and reality linkage, etc., to enhance interaction and broaden popularity. In cross-border marketing, virtual idols should deepen the cooperation with branch d through symbol value such as the characteristics of the persona, instead of simply combining virtual idols as a visual element in product packaging, and excavate the features among products, consumers and virtual idols to bring consumers a new experience, which can also get good results for virtual idols to break the circle.

In terms of commercial realization mode, virtual idols should use intellectual property derivative potential more. Among various forms of realization, intellectual property derivatives are the ultimate way for fan groups to consume and can most fully mobilize fans' passion and consumption enthusiasm. However, at present, the most direct way to monetize on fan groups is minimal and closed, which excludes fans who need to be equipped with professional songwriting ability, and there is no lack of solid sentiment and consumption impulse among these fans.

In terms of commercial value enhancement, excellent content output and sufficient exposure are essential for virtual idols to maintain vitality and generate colossal revenue. Content is the core competitiveness of each virtual idol, and ensuring a continuous stream of high-quality creation is a must to continue life. Starting from improving the creation ecology, provide services for creators to help them realize their commercial value, through which to promote a wave of creation and high-quality output. By allowing creators to earn more revenue to ignite their passion for design and ultimately obtain the higher-quality content output. These works created by young creators naturally have emotional links with today's youth, which are the reflection of their inner voices and emotions projected on the virtual idols, resonating with Generation Z, which leads to attracting more fans. Then more creators express their attitudes through virtual icons, thus forming a virtuous cycle. In addition, exposure is also a meaningful way to increase fan activity and enhance fan stickiness. For online, fan groups will spontaneously form community ritual behaviors in online interactions with virtual idols. Such ritualistic situations can easily stimulate emotional interactions, resulting in highly synergistic behaviors with the group and ultimately strengthening community ritual behaviors. In such an environment, the sense of identification with the idol and belonging to this circle layer are supported, creating a community atmosphere. For offline, let the virtual idol go into the third dimension; the significance of intellectual property marketing is more than profit. The holographic display of virtual idols is eye-catching enough to intersect with more potential target groups.

6. Conclusion

This paper analyzes the intellectual property shaping and promotion of virtual idols by taking Luo Tianyi as an example. Luo Tianyi combines VOCALOID Chinese voice bank and virtual images with elements of Chinese style. Based on this, the development of the music stage and other works is carried out. The content output is mainly based on UGC mode, supplemented by PGC mode. The core competitiveness is Luo Tianyi's inherent resonance with the inner voice of contemporary young people.

Break the circle into the third dimension from the Hunan TV New Year's Eve stage. The holding of an offline holographic concert showcased an incredible king visual experience and a fan's hot passion. Since then, Luo Tianyi even went on the China central media stage twice in a row. At the same time, the difficulties encountered in the development of Luo Tianyi are also analyzed. The failure of the intellectual property operation in the early stage made Luo Tianyi fall into a lengthy suspension.

The high threshold of VOCALOID makes one of the most direct ways of realizing a significant limitation. Finally, this paper distills the general rules and paths for shaping a virtual idol with lasting vitality, summarizing and proposing approaches from four aspects: virtual technology, breaking the circle of propagation, commercial realization mode, and commercial value enhancement. From the perspective of intellectual property marketing, it explores the development path of a virtual idol in the entertainment market. However, the bottlenecks encountered in developing virtual idols are not studied in depth in this paper. As users influence its UGC idol, the level of users' output becomes the leading factor determining its content output. Success also UGC, trapped UGC. The entertainment market is constantly changing, and the law of intellectual property operation is also changing, so the UGC mode is not a "foregone conclusion" (Need to pay attention to whether UGC will be replaced again) but ultimately relies on the influence of the fan ecology. At the same time, in the entertainment industry, compared with real idols, there is always a screen between virtual idols and fans. The sense of distance leads to a developmental constraint on the experience, so how to break through the bottleneck at this stage will require further research, thus helping virtual idols to release energy efficiently and achieve more significant breakthroughs.

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