

Research of popular success factors of game content <Genshin Impact>

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Abstract

Genshin Impact is an open-world action role-playing game launched by miHoYo in 2020 and has been released on multiple platforms. Due to the excellent character design, it has received widespread attention once it was released, and it has been ranked in the top 10 best-selling lists in several countries after a few weeks of launch. This article will first analyze the map design of the game's open world, and what elements are used on the game map to allow players to immerse themselves in it. Then, in the gameplay of the game, a rich and varied combat system is formed by using the relationship between the elements to restrain each other. There is also a card drawing system added to it, which makes the acquisition of characters full of randomness and allows more players to participate in it. It is concluded that the novel design and rich and varied play methods have made the game Genshin Impact high in popularity, occupying the forefront of the app download list for a long time.

Keywords: open world, Triangle rule, Elemental System, Card drawing

1. Introduction

1.1 Research Background

"Genshin Impact" is a fantasy-themed open-world action role-playing game launched by miHoYo in September 2020. The game is released on PC, Android, iOS, PlayStation 4 and PlayStation 5 platforms. "Genshin Impact" is popular in related media. Praise, comments praise the game's combat mechanism and the freedom of the open world. Since its launch, it has quickly become one of the most popular games in the world. It has achieved commercial success. It attracted 245 million U.S. dollars within 30 days of its launch. The total revenue exceeded 1 billion U.S. dollars within six months of release. It is now available in 175 countries and Services provided by the region. In the past year, "Genshin Impact" ranked No. 3 in the global mobile game bestseller list, second only to Tencent's "King of Glory" and "PUBG Mobile". In September 2021, "Genshin

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"Genshin Impact" broke the global mobile game monthly revenue record with 341 million U.S. dollars, breaking the original record of 300 million U.S. dollars set by Tencent's "PUBG Mobile" in March 2020. And topped the best-selling list in 43 countries and regions. Since its opening for a year, it has achieved quite good results, and attracting the love of players from all over the world is inseparable from the exquisite painting style and open world view of the characters in "Original God".



Figure 1. Genshin Impact

1.2 Research purpose and method

"Genshin Impact" first relies on the exquisite painting style and life-like characters to attract people at first sight and have the urge to play. In the game, an open world map is used. In addition to normal walking, players can explore various relics and terrains by climbing, swimming, and gliding. Players can also interact with many set interactive parts of the world in the world. New game characters can be obtained by completing tasks and drawing cards, and the characters to play can be switched at any time, so that players always have a sense of freshness. This article will analyze the reasons why "Genshin Impact" game has repeatedly broken records and remains popular in the market from the perspectives of the design of game characters, the composition of the open world, and the mutual restraint of the elements.

2. "Genshin Impact"'s Open World

The game takes place in a fantasy world called "Tivat" where the seven elements intersect. Here, those chosen by the gods will be awarded the "eyes of the gods" to guide the power of the elements. As the protagonist of the story, you drifted from outside the world and descended on the earth. In this vast world, you will travel freely, meet your companions, play the role of a traveler, travel through the seven countries in search of the seven gods who control the earthly elements, and find you only lost blood relative.

Generally speaking, the core driving force of a game can be roughly divided into four parts: challenge, explore, create, and community. Most games more or less contain these four driving forces, but its most important driving force determines its game audience. The core driving force of "Original God" is exploration. In this aspect of exploration, the game provides players with a lot of open play space. Here, the ground will really be ignited by the player's attack, the falling rain will also extinguish the flames, the magic of thundering towards the pond will conduct electricity to the small animals in the water, and the clouds in the sky will move and change with the wind. Players will encounter a variety of decryptions and mechanisms in the process of exploration, and they will be resolved one by one through thinking or skills, which brings a strong sense of joy to the players. This kind of exploration and reward for the unknown, walking in the beautiful scenery, brings the emotional fluctuations, which is very fascinating for users. In terms of open world map design, "Genshin Impact" has learned very well on the excellent design of the map design of Nintendo's first-party game "The Legend of Zelda: Breath of the Wild". Because Nintendo has also disclosed their design know-how when designing Zelda, they are very welcome to have a production team that can make excellent open world games.

2.1 Map Design

"Genshin Impact" proficiently uses the "triangle rule" of map design. Nintendo has designed the outlines of many scene objects in the game to be close to triangles, such as mountains, hills, boulders, stables, etc., so that their shapes are generally close to triangles. Then put them between the two gravitational points, so that the player's route must not be a straight line, but a curve. At the same time, these objects will also obscure the player's field of vision, making the player full of unknowns and expectations for the future scene. But when the player faces these triangular obstacles, such as hills, whether they choose to detour or jump directly, they will see the next gravitational point in the process, giving the player a sense of openness. Nintendo uses these triangular objects to match other shapes such as trees, houses, etc., to make the original mechanical map more natural and full of randomness.



Figure 2. "Triangle rule" of map design

2.2 Exploration guidance combined with maps

Induced by functional things, there are 7 idols in the original god world, and each idol has a beam of light, which can be seen from a distance equivalent to a long distance. At the same time, the map can be unlocked by using the tower. Similarly, the treasure chests and strongholds on the map also play a visual role in attracting players to explore. After unlocking the Seven Heavens Statue, for players with a little obsessive-compulsive disorder, the driving force for this is greater than other visual inducements. The daily life of the original gods, mining, dungeons, daily tasks, etc., all depend greatly on these transfer points. In order to accomplish this, you must unlock the nearest teleporter and go to unlock each teleport.

Task-based exploration, in the process of completing the main task, the player guides the player to other locations, thereby triggering the side task and unlocking the teleportation point. At the same time, daily tasks will be refreshed in various places, which also causes players to have to go to these places. Because this involves the most important reward of the original god-the original stone. As an ordinary player, regardless of whether he is interested in exploring the big map or not, whether he likes to decrypt or collect, he will explore most areas on the map for this reason.

Decrypted exploration, during the exploration mission of the original god world, explore spontaneously through visual induction, obviously there is a linear pseudo-open exploration like soul. Exploration is not free and can be carried out completely according to the player's wishes, but the player will be forced to explore in accordance with the official logic in many cases. The exploration route is relatively single, and the mission cannot continue unless the decryption is completed. It must be explored in accordance with the set linear route. Then after completing the simple decryption, unlock the copy and proceed to the next step.

3. Gameplay design

3.1 Elemental System

The element system is a very important part of Genshin Impact's many systems. All characters and content in the game are related to elements, and different element combinations will trigger different element reactions.

The element system in Genshin Impact is different from the simple mutual restraint in ordinary games, such as water overcomes fire and fire overcomes wood. It has a total of seven properties: wind, fire, thunder, water, ice, grass and rock, and the elements complement each other and cause different elemental reactions. Combinations of some elements can produce wonderful elemental reactions. For example, water and fire produce an evaporation reaction, and thunder and ice produce a superconducting reaction. When in contact with an element, the corresponding element will also be attached, and when the element is attached to the character, it will also have special effects. For example, after touching the elements of ice, fire, thunder, and water, the corresponding elements will be attached to the target for a period of time. The attachment of the ice type will reduce the movement speed, the attachment of the water type will produce a wet effect, and the unit will be attacked by the discharge of the nearby units.

3.2 Card drawing system

So far, there are nearly 50 characters that can be played in Genshin Impact. To get these characters, you need to draw cards. There is a card draw system in the game, which means that players can get expensive characters or items without spending money, but the difficulty of the way, the frequency of the cycle, the quantity and other conditions determine the relative importance of the player. How much game time is spent. But it is precisely this kind of randomness that allows more players to participate in it. Players who want to spend money can get the characters they want through krypton gold, and players who don't want to spend money can also rely on the accumulated lottery. Cards and coupons, and slowly draw your favorite characters. The most attractive thing about drawing cards is the uncertainty, but the completely random experience is very bad, because according to the normal distribution, as long as the probability is set and the data sample is large enough, there will be good luck and bad luck good player. Therefore, the concept of pseudo-random system is added to the current card drawing games, including the guaranteed card drawing probability, and the result of the card drawing is affected by the randomness of the previous card drawing results. Genshin Impact is also like this. True randomness and pseudo-random system coexist, forming a random distribution system. If the SSR cannot be drawn from the true randomness in the front, the pseudo-random system will be entered later.

4. Research result

After research, it is found that the reason why the game of Genshin Impact is so popular is that there is a very large market vacancy for games of this type. Genshin Impact is a two-dimensional open world role-playing game, which is relatively rare in the market. Now we see that the two-dimensional type of open world RPG games that are commonly seen in the market are more of a stand-alone or MMORPG type, but Genshin Impact is neither a stand-alone nor an MMO game, but a game between the two, the overall gameplay is more stand-alone, and it can support up to four people online. MMO is a server where many people are online, and some tasks need to be completed in cooperation with other players, while Genshin Impact can choose to complete the characters by himself or in collaboration, which is a boon for players of social fear, catering to some of the MMO and pure stand-alone players who are not too cold like, and the number of these players is very large.

5. Conclusion

There are many reasons why Genshin Impact is popular in the current market, including excellent game quality, rich gameplay, and innovative ways to promote the game. But I think the first thing that catches players' attention is the excellent game screen design. The game takes the continent of Tivat as a real world to design, and different regions have different cultural customs and scenery. In order to create the sense of immersion

required for the open-world experience, richer light and shadow details have been added to more realistically reflect the humanities and natural environment in "Genshin Impact". The rocks, buildings, and characters in the game have dynamic projections, and the light from the physical objects summoned by the skills will also be projected on the surrounding stone walls. Every scene in the game changes with the passage of time. With the blessing of 24-hour full dynamic light and shadow technology, the scene seen in each time period, the activities of the surrounding NPCs, and the appearance of monsters are different. The floating clouds in the sky are also the dynamic changes of the volume. Genshin Impact is not perfect, it also has many shortcomings and deficiencies, but it allows players to put down the burden of life, work or study pressure in a two-dimensional world and experience a unique world.

References

- [1] Sina News, 18 months after its launch, the global revenue of "Genshin Impact" has exceeded 2.7 billion U S dollars. http://k.sina.com.cn/article_1652484947_627eeb5302001cu63.html#/
- [2] 21jingji, Depth | Breaking mobile game records, how was "Genshin Impact" made? <http://www.21jingji.com/article/20211026/herald/538c26420d287081ea2907cec56eaa10.html>
- [3] Q. Q. Jiang. &J. H. Chung (2021). A case study on the promotional animation of the mobile game 'Honour of Kings'. Journal of Digital Convergence Vol.19 No.8 293-299 (2021)
DOI:<https://doi.org/10.14400/JDC.2021.19.8.293>
- [4] Zhihu, Genshin Impact Analysis Report. <https://zhuanlan.zhihu.com/p/493536170>
- [5] Zhihu. Genshin Impact Review and Personal Analysis. https://zhuanlan.zhihu.com/p/355243152?ivk_sa=1024320u
- [6] GameRes Hot Money Network, Analysis and suggestions of "Genshin Impact": An epoch-making ARPG mobile game. <https://baijiahao.baidu.com/s?id=1726697488931647307&wfr=spider&for=pc>
- [7] Sina News indienova, Thoughts on the Open World of Genshin Impact. https://k.sina.cn/article_3743149912_df1bef58019017z0x.html
- [8] Vgtime, Changes in the way games were developed created The Legend of Zelda: Breath of the Wild. <http://www.vgtime.com/topic/801487.jhtml?page=1>
- [9] CSDN. Probability and randomness and popular science of mobile game card drawing mechanism. <https://blog.csdn.net/ymk1998/article/details/123278259>
- [10] W.C. Jun(2020). A Study on Correlation Analysis of Smart Phone Addiction and Age Groups in Korea . International Journal of Advanced Smart Convergence Vol.9 No.4 106-114 (2020)
DOI:<http://dx.doi.org/10.7236/IJASC.2020.9.4.106>