Game Design for Global Services of Mobile Games
-Focusing on the Japanese service case of Lunosoft casual games-

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Abstract

In the case of casual games, where many small and medium developers are conducting global services, game services are becoming more advanced and competition is intensifying in major emerging game markets such as Japan, Taiwan, and Southeast Asia. Even if the company succeeds in attracting customers through high marketing costs, it is difficult for users to continue their game continuity with game contents that are not localized. It is very important to establish an in-game operating system to help users settle in the game, while judging by the current game marketing trend, where new game downloads are decreasing. In this study, we organized successful localization of casual games through overseas localization cases of mobile game Disney Wrong Picture Finding from Lunosoft and studied stable localization methods through empirical examples for successful global services of mobile games.

Keyword : Mobile Game, Game Service, Casual Game, Game Design, Lunosoft

1. Introduction

Recent rapid growth of the global mobile game market, most games are developed and operated based on global services, but small and medium-sized companies lack of know-how in game operations, and it is difficult to develop and update systems for localization by country after the live service of games. With the rapid growth of global mobile games, most of the games produced by domestic small and medium-sized developers are operating on a global service basis, but many game companies do not have operational know-how, which makes them less profitable than large size of companies [1].

Successful game services in the global market must involve stable localization for users in major game countries, and accessibility for local game users must be considered, many Korean games are served only in Korean language, making it difficult for users around the world to play in the early stages [2][3].

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In this study, we summarize the successful localization of casual games through analysis of overseas localization cases of Lunosoft's mobile game Disney's Finding Wrong Picture. After the successful service in Korea, Disney's Finding Wrong Picture has been successfully launched in collaboration with leading publishers from around the world, including Japan, and has been selected as a best example of global entry by the Korea Creative Content Agency [4].

2. Related research

With the growth of the mobile market, the demand and supply of game services based on mobile devices have also continued to rise, and the mobile game market has also rapidly grown as mobile devices are popularized and combined with the portability, accessibility, and convenience of mobile devices. Yoo Seung-ho and Hong Jin-hwan said that mobile games have low-temporal and spatial constraints [5][6], Jeong Su-yeon and Hong Jin-hwan defined that they have properties for killing time by combining to enjoy mobile games in their spare time. While Yoo Seung-ho and Jung Kyu-mandefined the existence of high continuity through easy accessibility of mobile games, Jeong Su-yeon's study also explained the relatively high rate of departure due to easy accessibility [5-8]. That is, mobile games on the user's side are easily accessible and have easy-to-play characteristics over the wireless Internet environment, and have a high rate of departure with easy accessibility, and require consideration of a wide range of user characteristics [9-11].

In this study, based on the need for localization tasks, which are both user and provider aspects summarized earlier, we studied and designed the core of localization elements that small and medium game developers should form through successful global service experience cases, and expanded to experientially based on Lunosoft's Disney's Finding Wrong Picture. Based on this research, it is expected that many small and medium-sized developers will continue their stable live services by establishing and preparing a systematic operating system after the release of the game and increasing the level of global operational response services.

3. Importance of localization for successful global services

Recent game marketing trends have quickly shifted from traditional ways to global User Acquisition (UA) campaigns, including offline promotions such as TVs, commercials, website banners, media, or outdoor billboards, which are managed by machine learning and AI-based advertising platforms that allow users to reach all aspects of YouTube and Facebook. It consists of charging states for marketing
expenses. Even if you secure a large number of game users through the execution of UA marketing costs, most users who download the game are immediately leave the game, and it is very important to collaborate with the famous IP (Intelligent Property) to upgrade the production of UA marketing materials based on localized game sets.

4. Detailed plan and milestones for localization

4.1 Preparation for collaboration with local publisher

Due to the presence of many unpredictable variables in local version development, many small and medium-sized developers provide as one-build global [12][13], and Google Appbundle solution [14] allows optimized configuration of game APK (Android Application Package). However, the global one-build configuration is difficult to cover the general user base of an absolute number of casual games in the region, and there are many failure factors that are easy for small and medium-sized developers to overlook. The factors of the lack of localization by country are shown in [Table 1].

[Table 1] Lack of localization by country

| Category       | Detail                                                                 |
|----------------|------------------------------------------------------------------------|
| Marketing      | Missing local partner                                                  |
|                | Lack of local promotions                                               |
|                | User does not have a download channel                                  |
|                | Relies solely on Google Features                                       |
| Information Error | User’s rejection of English                                           |
|                | Invalid game name selection                                            |
|                | Insufficient localization or error of App Store game introduction      |
|                | Unfriendly tutorial configuration                                      |
| CS             | Lack of review identification and analysis                             |
|                | Lack of FAQ configuration and community operations response            |
|                | Low user ratings                                                       |
|                | Absence of operational events, etc.                                   |
| Payment        | Missing Local Payment Module                                           |
|                | Wrong of in app purchase design for local users                        |
|                | Lack of management for high-charge users                               |
|                | Lack of response to black consumers                                   |

4.2 Considerations for local publisher collaboration

In order to successfully localizing, we need to develop high-quality games through prior cooperation with trusted local partners, and the necessary collaboration preparation with local publishers is as follows
with [Table 2]

| Table 2 | Preparations for successful localization |
|---------|-------------------------------------------|
| Category | Detail |
| In-Game | Localized Title |
|         | Correct game introduction |
|         | Tutorial Calibration |
|         | Introducing a local PP Card solution |
|         | Introducing a local payment solution |
|         | Support for translation based on local culture |
| Operation | Marketing with local partners |
|          | Promote with local partners |
|          | Access to your local partner platform |
|          | Fill in your local publisher information |
|          | Respond to local publisher reviews |
|          | Local Publisher Phone Response |

5. Define Japanese market localization configuration lists

Japan has a very high market value with a number of successful Korean games, but even if it is a successful well-made game in Korea, it is not easy to guarantee a successful service in Japan. Japan is an advanced market that requires a lot of investment and active efforts for localization, and Japanese users have a high understanding of games and difficult requirements, so full-scale localization work is needed to cope with the meticulousness of Japanese culture such as font selection, translation inspection, voice actor, and illustration. The Japanese version of Disney's Finding Wrong Picture is shown in [Table 3].

| Table 3 | Components for Japan version of Disney's Finding Wrong Picture |
|---------|---------------------------------------------------------------|
| Number  | Category                                                      |
| 1       | Add Japanese                                                 |
| 2       | Localizing UI/UX for Japanese users who are familiar with console games |
| 3       | Add and reconfigure font and illustration and costume items for Japan |
| 4       | Re-production of Intro Movie via Local Area                  |
| 5       | Re-production of Voice by casting local voice actors          |
| 6       | Reorganize the way content                                   |
| 7       | Lower Difficulty Level Reconfiguration for Japanese User Play Trends |
| 8       | Change the main concept: conventional sailing concept -> Disneyland adventure |
| 9       | Full modification of main content/system as concept changes   |
| 10      | Implementing the Japanese Gacha System and Reconfiguring the Business Model (BM) according to the Japan Online Game Association (JOGA) [15] Guide |
5.1 Japan Service Configuration

In the Japanese service version of Disney's Finding Wrong Picture the company redefines the world concept and story line and reconstructs Korea's linear stage-style flow in an IP-specific stage selection method according to the subsequent changed synopsis. The reconstruction of the Japanese version of Disney's Finding Wrong Picture is shown in [Table 4].

[Table 4] Rebuilds of Japanese version of Disney's Finding Wrong Picture

| Category               | Components                                      |
|------------------------|-------------------------------------------------|
| Story                  | Reorganize into Disney Stories for Japanese Users|
| Stage Configuration     | Each individual stage per existing IP -> Full modification to stage interval per IP |
| Disney characters       | BM Development to stimulate collection with pen-type Disney characters |
| Level Design           | Level balance tailored to Japanese user play patterns, tendencies, and difficulty. |

5.2 Change of the story

For the probability of the appearance of Mickey one of the most beloved characters in Japan, the synopsis will be reconstructed and even the intro movie will be reproduced in Japan based on this like [Fig. 1].

[Fig. 1] Intro Movie Change due to Synopsis Change

5.3 Change the Update Volume

At the first release of the service, the Korean version of the service is reduced to a less volume
without consulting with the local publishers to include all the updates completed, and then the developers and publishers can continue to maintain a stable balance and supplying content based on the content they already have.

5.4 Changes in game composition and progress

By reflecting Japanese user's preference for IP, the configuration is changed from the basic Korean version of the Liner linear stage listing method to immediately cancel the desired IP such as [Fig. 2], [Fig. 3], [Fig. 4]. The changed Korean and Japanese versions of Disney's Finding Wrong Picture are as shown in [Table 5].

[Fig. 2] Change the configuration of the Korean and Japanese versions of Disney's Finding Wrong Picture

[Fig. 3] Korea (left) / Japan (right) version of the game play structure change
[Fig. 4] Korean version ranking match (left), Japanese version of Weekly Cup (right)

[Table 5] Change the Korean and Japanese versions of Disney's Finding Wrong Picture

| Category       | Components                                                                 |
|----------------|-----------------------------------------------------------------------------|
| Korean Version | ① After playing the game, select a stage from the main map screen and play it.  
                  ② Buy and upgrade ships for sailing.                                       
                  ③ The weekly national ranking competition, Ranking Battle                 |
| Japanese Version| ① After start the game, select IP from the main map to play.                  
                  ② Check the assigned mission and use the character pen.                  
                  ③ Collect various Disney character pens specialized through Gacha.    
                  ④ Compete with other users by ranking battle of Weekly Cup.            |

5.5 Changes to In-Game Reward Methods

In the Korean version, it consists of continuously stimulating users' achievements, such as compensation for the number of friends invitations through Kakao Talk and Ruby compensation paid through the complete completion of puzzle pieces that can be collected after stage clearing in the game, while in the Japanese version, users can emphasize decorative elements and boast to other users. [Fig. 6] is a Korean version and [Fig. 6] is a Japanese version.
5.6 Change of game platform method

In the case of the Korean version, it is based on the platform link with Kakao Talk and logs in the Kakao Talk account at the first login and uses it in the game, but in the case of Japan, it consists of linking local SNS platforms as the basis.

5.7 Change the method of in-game competition

The Korean version directly compares its stage progress and acquisition scores on the detailed stage to stimulate user's competitiveness and stimulate user's desire to charge through differential purchase and exposure of the core billing element Ship, while the Japanese version designs users to admire or envy based on top user-centered score exposures and accessories. [Fig. 7] shows a comparison of the ranking screens of Korea and Japan.
5.8 Change of BM(Business Model)

In the case of Japan, the company strengthens the desire to collect characters through the composition of a draw product through the JOGA (Japan Online Game Association)'s Gacha guide, and for this purpose, it strengthens the design of character pens and configures the special capabilities of each pen separately so that users can feel the value of each IP-specific collection desire and synergies. [Fig. 8] is a comparison of the Korean and Japanese versions of the BM models.

![Fig. 8] BM change of Korean version (left) and Japanese version (right) of Find Disney Wrong Picture

5.9 Store localization and advanced local marketing

In order to elicit active downloads from local casual users, the details of the store are organized with local publishers and the local users are more favorable. In addition, local publisher's direct operation of SNS platforms can attract continued interest from local users, communicate with local users, and maintain game user's steady participation and interest in games through various events.

5.10 Localizing operational events

Through the steady process of user participation events, the event format and list-based summary will be shared with local publishers in advance, and local operations teams will set localized events on their operational tools, and events will be held according to the schedule of the region.
6. Conclusion

Based on the actual success stories of casual games that many small and medium-sized developers have recently conducted global services, important items that should be considered in global localization services are further summarized by empirical research. With game services becoming more sophisticated and competitive in major emerging game markets such as Japan, it is difficult to continue user's game continuity with game contents that are not ready for localization even though they have succeeded in attracting customers through high marketing costs. Therefore, stable localization, which is the foundation for users to settle for games is paramount. As many small and medium-sized game developers are complaining about localization and deployment after facing difficulties in operating at the service stage after development, we hope that this study, which proposed localization considerations and practical applications based on real world services, will be used to enhance the competitiveness of Korean games in the future.

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