

GAME MONETIZATION: THE MOST IMPORTANT GAME SUCCESS PERFORMANCE INDICATORS

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The advantages of Life Time Value in comparison to Cost Per Install were considered and the most significant game metrics when starting the game application were defined. The cost of involvement of one user in a game for smartphones was analyzed. Forecasting of the first results of the advertising company were carried out. A set of actions for achievement the maximum indicators of Life Time Value were established.

Introduction. Someone starts to develop new game products to get new experience, someone likes the game industry and wants to realize himself as a successful game developer and someone pursues the aim to make a popular product and to earn on it primarily. However, as practice shows, participating in the development of such projects, regardless of the initial goals, everyone sooner or later faces the problem of monetizing their game software.

The purpose of the study is to identify the most important financial indicators of the designed game application.

Monetization of the game is a set of activities and game mechanisms aimed at generating revenue by selling within the game content to users.

Let's consider the most popular cases of game creation among beginners and we shall analyze the weakest points in this particular approach. Figure 1 shows schematically the development plan for a game application by a junior developer.



Fig. 1. Game development plan by a junior developer

It looks good, but in practice, such approach is absolutely not viable. In this case, the developer does not consider all risks associated with the monetization of the game, does not adjust the game mechanics itself to the possibility of its competent and successful monetization. The developer tries to inject into the already finished game elements that do not fit into the original game design. That is why most of the games by junior developers contain built-in advertisements instead of reliable and successfully working mechanisms, such as pumping characters, opening chests, using energy, special offers and other modern elements of the gameplay.

During the game development, it should be understood, that publishing the game in application stores, such as the App Store [2], Google Play [3], Amazon Store [4] and others, at best case makes nothing but 30-50 installations, which would be made by your friends. Support from the application store is an excellent push for the application, but these stores are the business project of their creators and they are working primarily to make a profit. To be featured on the main page in stores, as a rule, you need to provide Apple or Google statistics of your application and in case of good financial performance, the game can be supported by application stores to get the strongest push to positioning in the top in its category.

Let's analyze which kind of statistics and which indicators everyone is interested in. There are many different characteristics, but it all comes down to a single - payback. To calculate the payback of the application, there is a formula (1),

$$LTV > CPI \quad (1)$$

LTV (Life Time Value) – the average profit from the user;
CPI (Cost per Install) – cost per installation.

In plain language, the application becomes profitable from the moment when the cost of involving one player into the game is less than the average profit received from one player. If this ratio works, the developer

will have the opportunity to expand the game audience, attracting more and more players into the game, returning all the costs of their involvement. Having these indicators, any application stores and investors will be happy to provide you the opportunities to attract new users, because on the basis of calculations they can observe clearly that the investment is returning and they can not be afraid to invest into promotion.

LTV is a characteristic that depends fully on the efforts of the developer and his team. To achieve maximum performance, several important rules are required:

- monetize everything you can monetize;
- attract only relevant categories of users which are the target audience of this game and their LTV is maximum;
- analyze user's behavior and correct weaknesses pleases of the game;
- investigating the reasons players leaving the game and try to add new elements in those moments to the constant maintenance of interest;
- make A \ B testing [5] of all promotional material (icons, all images and advertising banners), icons and any ideas that the development team brings into the game;
- run only the most successful and working ideas in the global version;
- constantly update your application and add new game content.

According to these principles, you can achieve the good metrics. But what exact numbers need to be achieved? This information is not confidential and up-to-date data can be found quickly and easily on the sites of the services that sell advertising. Based on Chartboost's data, which is one of the market leaders, the cost of attracting one player to the US market is \$ 2.32 [5]. This means that for the successful promotion of the game on the US market, it is required to pawn about \$ 2.3 for each player. It sounds scary, because it means that out of four users at least one must buy something about \$ 10. For comparison, figure 2 presents a table with the cost of attracting one user to the game (CPI), i.e. one installation in different countries.

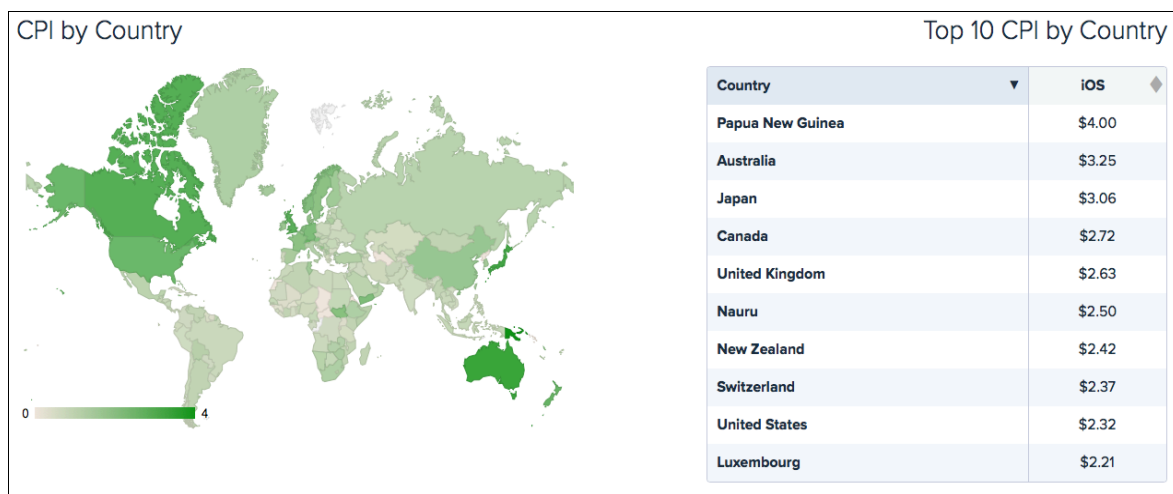


Fig. 2. The approximate cost of attracting one user to the game (CPI)

The cost of attracting a single user is high that is why you need to approach monetization issues with all responsibility. At first, select the way of game monetization, which, according to analysts' forecasts, will be relevant at the time the game is released. Then the idea of the game is adapted for the chosen way of monetization. If the game does not get worse after that, but on the contrary, the life cycle of the game increases, then you can proceed to further development.

But how to determine that your LTV is good enough to start investing into the game? After all, the process of the game can last for a long time, and money for attracting users are required in advance. There have already been a lot of research on this subject, based on what it is considered to be the 48th day as a reference point. If on the 48th day your daily profit covers the first day of expenses for attracting users, then the ratio represented in formula (1) is reached. Figure 3 shows a graph of the approximate income from one player for one year [1].

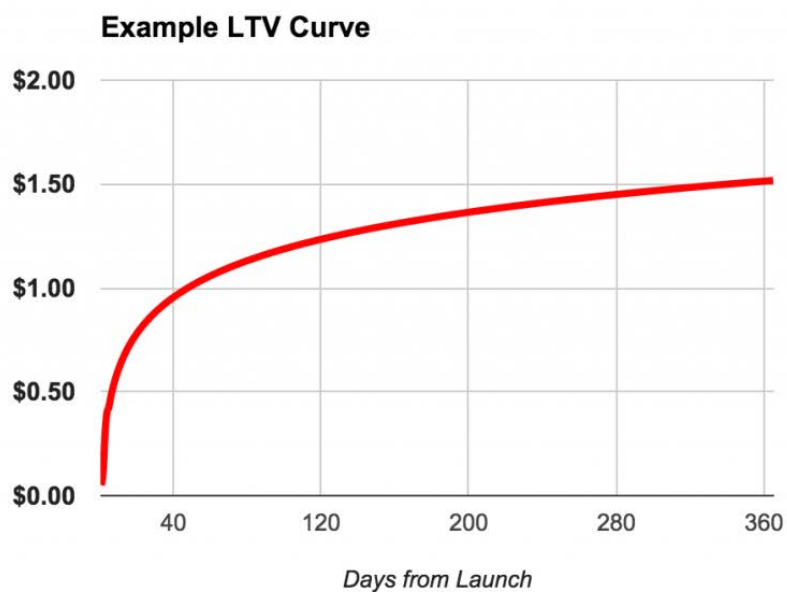


Fig. 3. Graph showing the annual LTV

The graph in Figure 3 shows that the income from one player is \$ 1.52 by the end of the year. And approximately 65% of the revenue comes during the first 40 days after the user installs the game, and the remaining 35% -- during the following year. Thus, on average, the first positive financial metrics appears only on the 50th day of the advertising campaign.

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