

Как микротранзакции негативно влияют на видеоигры

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Аннотация

Микротранзакция - это платеж, произведенный за покупку приложений для мобильных телефонов или дополнительного контента в видеоиграх. Эти модели доходов продемонстрировали свою исключительную прибыльность, но также подвергались критике за участие в этически сомнительных практиках и ухудшение качества удовлетворения клиентов видеоиграми. В данной работе будут представлены главные негативные последствия использования микротранзакций и возможные способы их нивелировать. Результаты могут быть использованы видеоигровыми компаниями для создания более этических моделей прибыли и уменьшения негативного влияния микротранзакций.

Ключевые слова: видеоигры; микротранзакции; модель дохода; негативные эффекты.

How microtransactions adversely impact video games

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Abstract

Microtransaction is a payment made for the purchase of mobile phone apps or additional content in video games. These revenue models have demonstrated to be remarkably profitable, but furthermore these revenue models have been criticized for engaging in ethically questionable practices and degrading customer satisfaction with video games. This paper will present the main negative consequences of using microtransactions and possible ways to deal with them. The results can be used by video game companies to innovate more ethical profit models and reduce microtransactions' negative impact.

Keywords: video games; microtransactions; revenue model; negative effects.

1. Introduction

Video games are a part of our life as a way of entertainment. With the improvement of technologies and the development of computers, they are becoming more and more unconventional. Although, now, video games are not just some entertainment projects but a full-fledged business.

After the success of published initially games, the extension of the video game industry in the last two decades of the 20th century could be observed. As Nenad Tomić stated, every year, the number of published titles exceeded the previous year number. Moreover, the number of publishers and game developers was increasing as well [30].

The rapidly extending market was drawing more and more suppliers – more game titles were arising for personal computers (PCs), and unique gaming consoles intended primarily for playing emerged, continuing to develop to this day. Demand for various product (game) types was only growing over time. As a result, the variations of game genres and offerings progressed (appearing of high-cost game projects and Massively Multiplayer Online (MMO) games), and their creativity level was noticeably increased over the years. The tendency persists nowadays [35].

Video games have grown extensively from their modest beginnings as small-scope projects into a global phenomenon, a multi-billion-dollar industry [26] and a competitive spectator sport. However, this development has had another added effect – the way the video game industry makes money has likewise undergone significant changes.

David Zendle mentions in his work [37], referring to other authors, that the initial model, which was most common in the 1990s and early 2000s, was generating industry profits through the sale of game copies [19]. Copies could have taken the form of cartridges, DVD discs, or digital downloads. Following this model, individuals transferred money in exchange for either owning the complete product or for a license to use (play) that product for a potentially unlimited period of time [5].

According to Nenad Tomić, that was, in fact, the sale of the entire game to the customer at once, whereby the customer had to pay the full one-time price to receive a copy of the game (pay-to-play concept, selling at a premium price) [30].

However, with the development of the video game industry, the above-mentioned concept alone was lagging behind the needs of the industry. The change happened in the early 2000s. As Nenad Tomić declared [30] with reference to other published works, at that time, restructuring and afterwards the closure of several major publishing companies happened [10] [34]. Along with the overproduction of video games and the progression of market preferences, that fact caused game publishers to revise their approach towards the monetisation of video games.

They began to implement partial sales of their content, dividing game projects into so-called downloadable contents (DLCs), as well as sales of additional content inside the complete games. This approach implied making video games more attainable. Sometimes, even free (emergence of free-to-play concept games). Customers could choose what they want to be charged for after receiving initial game access since everything else was usually presented as additional content and optional extensions. Most of the purchases following after are called microtransactions.

Trend for microtransactions occurred in mobile applications and mobile games, further transferring to computer and console games as well. Today it is practically an inseparable part of the video game industry for several reasons.

This work is aimed at critically evaluating the feasibility of these profit-making models on the part of the buyer and from an ethical point of view by analysing the available historical information, as well as examples of specific video games. Despite the fact that this work confirms the necessity of the existence of these profit-making models in the modern conditions of the development of the video game industry, it also reveals the fact that most of the popular models used by major video game publishers are very close to such things as gambling, and therefore are strongly condemned for it. The main negative aspect of microtransactions is moving away from the original concept of video games as creative projects and turning them into “greedy machines for pumping money out of the buyer”.

2. Microtransactions as a significant part of contemporary video games

2.1. Why microtransactions became necessary

The growth of the video game industry is largely due to the development of alternative revenue models and the introduction of microtransactions that established continuous monetisation of video games.

Over the last decade, there were two contrasting trends of development in the games' creation process. According to Steve Theodore [29], the world of games divided into two fronts. On the one hand, the necessary budgets for large or more or less serious video game projects have increased significantly. On the other hand, the minimum budget required for creating games by independent studios has declined. The latter has led to the growth of independent studios (indie), and the games they create have now become "average". Real mid-size studios virtually vanished.

While a multibillion-dollar turnover of money absorbs one side, the other barely has enough money to make ends meet (Indie studios struggle to recoup their projects despite the reduced required budget) [29].

The fact causing the growth of bigger game studios' budgets is that today games are far more realistic and technologically advanced than they were in the previous decade. Each aspect of the game today can be made longer and harder, requiring, therefore, more people to work on it –

designers, programmers, animators, musicians. In order to meet the technological expectations of their customers, large studios have to hire more people. This is not to mention how much money is needed practically every year in the present business environment for proper marketing strategies. Publishers have to invest in traditional marketing, as well as digital and social marketing, various sponsorships to popularise the product they sell. Furthermore, existing of different platforms where the game can be distributed (Personal computers, Xbox, Sony PlayStation, Nintendo Switch) complicates the financial planning – individual optimisation is required for each system.

Thus, the costs of game projects are only climbing higher over time. The result of it nowadays are games with budgets almost as high as movie budgets (appendix, figure 1).

One can conclude that these budgets are too high to be fully financed with the traditional game selling system. Moreover, publishers taking loans are increasing their profitability thresholds.

For a long time, the video game standard price was kept at the \$ 60 mark [36], implying publishers to sell at least five million copies of their game at full price to cover all costs [31]. However, due to the rapidly increasing costs of video game development, publishing companies announced that it was no longer possible to keep such a price, and it has to be increased up to \$ 70 at least [14].

Nevertheless, this premium price is far from completely covering all the expenses arising today. Publishers are trying to overcome this boundary in any way and are experimenting with revenue models, starting from selling special editions, with collectable figures, limited artworks or costumes for characters in the game [14] And finishing with microtransactions being additional or the main revenue gaining principle.

Striving for generating revenues higher than the total video game project cost and making some profit is reasonably the most powerful motive for using microtransactions.

2.2. Concept of microtransactions in video games

Microtransactions originally designate a payment in order to purchase an application for a mobile phone or additional content for a video game [27]. In the video game industry, microtransactions are essentially identified by purpose, such as acquiring in-game items, advancements. In most cases, microtransactions fall under the definition of micropayments, which usually include all low-amount payments regardless of purpose [22]. However, microtransactions can be as low as few cents and as high as the cost of a complete game [28].

As mentioned earlier, microtransactions can be either additional or the main source of revenue.

In the beginning, microtransactions were commonly utilized by mobile applications, which revenue model is built purely around microtransaction. If an application to be sold at a one-time price, it is usually offered at a low price so as to penetrate the market and reach more users. Another

option is to offer an application for free and allow users to get access to the basic functions/content. Then developers could propose purchasing extensions – either a full version of the application with whole functionality or cosmetic changes. Other variant includes filling the application with third-party ads to justify it being free. Users are offered then to pay a certain amount in order to eliminate the ads [12].

The concept proved to be lucrative and then transferred to the video game sphere. It became most common in free-to-play games, either represented as mobile games or games on other platforms.

In gaming terminology, games that are basically given for free are known as free-to-play (F2P) games or freemium games [31]. Microtransactions are the main source of generating revenue through such video games projects. Even though criticised, the F2P model is proven to be vastly profitable and has become an increasingly popular revenue model in the video game industry [1].

Indie studios and major publishers further changed their business policies and started to rely much more on microtransactions as an additional source of revenue, introducing them even in those games initially purchased for full price.

Nowadays, microtransactions can be observed everywhere – from F2P mobile and computer video games to full-price games, from online to single-player games.

Microtransactions allow game players to purchase various additional contents, which depend on the genre of the video game. In most cases, that would be cosmetic changes to the original game design. Furthermore, the customer may bring additional content that was otherwise unavailable in a free version or simply complements the already existing full version. Microtransaction may improve a customer's in-game position under existing conditions, allow to buy time or subscribe to access certain game modes [31].

Moreover, further distinctions can be made regarding microtransactions in video games:

First, a microtransaction may result in a random or a fixed reward. If, in the latter case, customers know what exactly they are going to get and for what price, then in the former case, the situation is ambiguous. The price is clear, but the resulting reward is unknown (loot boxes). Microtransactions of such type are often related to as sort of gambling by various researchers.

Second, the nature of purchased items matters. As mentioned prior to this, the customer may purchase purely cosmetic items. These items affect the appearance of characters or surroundings, but not the actual gameplay. The Elder Scrolls: Online [2], for instance, allows a player to purchase in-game skins for their characters, elements of appearance, or even furniture and houses. These items, furthermore, unable to give any in-game advantage to the buyer. The opposite example is of more functional purchases: for several years, a player was allowed to purchase an effective item for

real money in Game of War: Fire Age [20] - a shield that would protect the player's city from attackers for a period of time.

Lastly, the difference emanates from the in-game availability of the purchased item. Most of the times, microtransactions simply allow to speed up the process of acquiring a certain item that otherwise would be obtained through the player's hard work and time spent. Designers of Middle-earth: Shadow of War declared that real money transactions were only offering a shortcut, and all of the items could be obtained without money spending but with patience [23]. However, in other cases, items are only available for real money and are unobtainable in any other way.

2.3. implementation of microtransactions in video games nowadays

Certain examples of how microtransaction are implemented in modern games include:

Virtual currency: games nowadays feature a special currency apart from in-game base currencies, which is only obtainable with real money transaction.

That can be widely witnessed in F2P games [1] and some of the full-price online games, such as The Elder Scrolls Online [2]. It is often utilisation of a so-called "double currency model", with basic in-game currency, obtainable via gameplay, and premium currency. Oftentimes, premium currency can be exchanged for basic game currency, but not vice versa. The purpose of premium currency is to provide access to exclusive store items, cosmetic upgrades, or speeding up processes that otherwise would require the player to wait.

Cosmetic upgrades: cosmetic upgrades are primarily represented as “skins” in most video games. They alter the appearance of game characters without changing the functionality and, therefore, not affecting the gameplay. In some other games, these upgrades may include additional personalities, emotes, or details of costumes. Skins are a quite popular reason for microtransaction in video games. During the past years, brands outside of the industry have shown interest in them, collaborating with video game developers in creating unique skins, such as Lionsgate and Louis Vuitton [17] [24].

Loot boxes: when it comes to microtransactions in video games, “loot box” is the term one cannot escape. Loot box, as defined by King and Delfabbro [15], is an in-game reward system obtained either through gameplay or, in most cases, by purchasing, often repeatedly, with real money (or virtual currency purchased with real money) to obtain a randomised selection of virtual items. These items are usually defined as random rewards. They can range from minor cosmetic upgrades (skins) to boosting consumables and items, giving a clear advantage within the game. Moreover, chances of receiving certain items vary – higher chances for minor, common rewards and minuscule chances for being rewarded with a rare item - and there is usually no guarantee for obtaining something worthy. Everything is based on a chance that developers are not required to disclose.

According to the research conducted by David Zendle and his colleagues [37], among popular desktop video games presented in Steam, a notable growth of cosmetic microtransactions and loot boxes presence could be observed from 2010 onwards. They appeared to be present in the majority of games within the researchers' sample.

Battle Pass: Battle Pass is a concept of rewarding players in-game upon completion of certain challenges and tasks, frequently through a system of tiers. However, to receive rewards, a player has to purchase this Battle Pass first. Battle Pass, unlike loot boxes, shows all the rewards in advance that a player is guaranteed to obtain upon fulfilling requirements, thus eliminating the element of chance. Sometimes, the first purchase grants the consecutive battle pass for free, but usually, upon release of the new season, the battle pass has to be purchased again.

DLC & season pass: aforementioned downloadable content or DLC was one of the earliest forms of microtransactions. However, if DLC originally used to be extra content for the base game, which could add new areas and quests (in story-based games), nowadays it evolved into so-called 'first-day DLC' – the same function, but practically base game content is cut into pieces, some of which are locked out behind a paywall and called DLC. The season pass is linked to both the original version of DLC and first-day DLC – for a one-time purchase, access to most or all future DLCs can be acquired, usually for a discounted price.

Microtransactions potentially bring game developers/publishers many profits. Notwithstanding, utilising microtransactions in a game project frequently is a much more complicated process than a simple "introducing purchasable items" that requires proper planning in order for it to become lucrative and not problematic at the same time.

In the next chapter, the negative consequences of microtransactions on video games are analysed, with an example from the author.

3. Negative implications of microtransactions in video games

The traditional payment methods for video games are generally less problematic from an ethical perspective than their modern counterparts, i.e. various microtransactions.

Free-to-Play games can be justified to use microtransactions as their only mean of receiving revenue. However, if some freemium games can be relatively "harmless", such as games which have a free demo version and allow the purchase of the full game or games implementing microtransactions system wisely [13], alternatively, other F2P games are making an impression of existing only to try to extract as much money as possible from the player. Business models of such games are under heavy criticism due to ethical issues, and practices often deemed predatory – gambling-like elements and aggressive marketing to players cause concerns.

On the other hand, even in the full-price game, microtransactions may have a negative effect. However, it is mostly a rare case since the need for microtransactions is lesser than that of F2P projects; thus, practices are less problematic.

3.1. Downsides of the microtransactions concepts

The issue with the virtual premium currency is that it tricks players. Premium currency is usually purchased in bundles (see appendix, figure 2), where the players receive bulk discounts if purchasing more, thus prompting spending more money. That, combined with the fact that premium currencies are often larger in terms of the real money-premium currency exchange rate (e.g. \$ 1 is equal to 1000 diamonds), has been criticised by King and Delfabbro [16] for potentially misleading the customers in terms of the true costs of transactions due to dissociation from the actual cost in real currency.

Cosmetic upgrades, even if perceived the least detrimental by players' community, are nevertheless causing some controversy. On the aftermarket of cosmetic items, especially those obtainable only through random reward boxes, people trade them for real money, and prices of especially rare items reaching as high as over \$ 61,000 [4]. The controversy arises from the actual real-world value of such items providing means for the appearance of casino-style gambling websites operating with in-game items as currency. That goes beyond the initial game developers scope of activity. This affects the game turning it into a money-making platform while bypassing the creators themselves (That was the case with the massively popular first-person shooter (FPS) Counter-Strike: Global Offensive [32] and the third-party skin gambling website CSGOLounge).

Loot boxes were always subject to discussion in recent years, both in media and on a political level [33], as well as a number of research papers were devoted to investigating this phenomenon, some of which were already mentioned in this paper. Most of these discussions and researches are uncovering the connection of loot boxes to the gambling phenomenon. Despite their financial success across the industry, there is a rather fine line between "acceptable" and "violation". Once crossed, it may result in repelling players from the game. That was the case of Star Wars: Battlefront 2 [6], which resulted in the company, EA, losses amounted to almost \$3 billion in stock value [3]. At the start, this game profoundly utilised the concept of microtransactions and loot boxes – most of the content was locked as "optional" purchases. According to calculations conducted by some community members, it would require the opening of 3,111 loot boxes, 4,528 hours of gameplay devoted to this, or spending \$2,100 [9]. Eventually, the company had to remove microtransactions temporarily, but a mass of players had already abandoned it completely [18].

Battle pass system is the most recent entrant to the world of video game microtransactions and has claimed its position as a lesser evil than its counterparts due to its transparency, less

frequent and aggressive approach. Nevertheless, some criticism for its psychological effect in the form of urgency, loss aversion and social standing among other players has emerged [13].

The original scheme of DLCs rarely seen as detrimental for players, while its contemporary version is usually criticised for cutting the game content and trying to sell parts as something complete. In multiplayer games, DLC, in general, is criticised for dividing the player base by ownership of the content.

First, adverse implications of various microtransactions in video games affect players, i.e. customers. Then, starting from game communities, by chain reaction, they further affect the product and publishers/developers themselves. As mentioned above, types of microtransactions may still be ethically less problematic if following certain restrictions. However, if obtaining through any of these microtransactions a functional item that changes the in-game position of a buyer and brings competitive advantage is possible, it turns into a microtransaction issue investigated further – Pay-to-Win microtransactions.

3.2. Turning games into pay-to-win platforms – the foremost issue

People often call Pay-to-Win (P2W) a situation or game-specific when purchasable items give players a decisive advantage in a game, i.e. P2W is competitive advantages through in-game purchases for real money. This form of microtransaction emerged with the development of F2P games and still persists. Furthermore, it is mostly recognised among free mobile games of the competitive online genre. As the research result of David Zendle confirms [37], P2W microtransactions tendency continue to be an uncommon feature of desktop video games. The usage trend of such microtransaction type, in comparison to loot boxes and cosmetic microtransaction, is decreasing (appendix, figure 3). Therefore, further analysis of the Pay-to-Win problem would be focused on Free-to-Play online mobile games.

In the developers pursue of commercial success, they are turning games into pure and simple businesses while depriving dedicated, skilful, and patient players of their expected in-game experience. As most of the advanced in-game assets are only available for real money, only the players with the deepest of pockets, i.e. “whales”, would win. From games that exist purely for entertainment, they become a competition of who can purchase more. The exploitation of commercial opportunities and the black market sale of in-game assets virtually destroy these games. Following the research of Ellen Evers [8], people using microtransaction to achieve functional advantage are negatively perceived by other players. The rest of the community either hopes that players who buy functional advantage would fail later in the game or leave attempts to compete with them, as well as the game itself.

An example of such a game from the author’s own experience is a mobile F2P game Dragon Village M: Dragon RPG [11]. The game is based on a competitive concept, where the player

gathers a team of dragons possessing different abilities to win in offline content and against other players. The beautifully designed game continues the concept of the two previous games from the same publisher. However, if the latter were completely based on achieving everything via the player's own efforts and only small in-game advertising, the mentioned game switched to a new way of making a profit — namely, introducing all kinds of paid services mentioned prior to this. Microtransactions vary from small-scale purchases of boosters (experience, auto-loot in expeditions) to high-scale purchases of special dragons, available via premium currency only. The highest microtransaction available at a time is equal to \$ 77,28. In order to be able to purchase at least one of these special dragons, a player has to make a minimum of four such transactions. Furthermore, these special dragons have abilities that are making them overpowered in comparison to commonly available dragons, meaning players possessing them to have a high competitive advantage over the rest of the player base (winning in offline content as well as in arenas over other players). The result of such a Pay-to-Win system is the following: players that try to play this game for its design and content soon find out they struggle to fight through without a strong team of dragons. More aggressively advertised content for real money drives them into frustration, and they either give up trying to achieve something in this game or make purchases. The majority of game users leave, so the only people who stay are those “whales”. Nevertheless, over time they get tired of such a game of money as well.

4. Conclusion

In the aforementioned game, the main adverse impact of microtransactions is the presence of a Pay-to-Win system – namely, selling of functional and strong in-game items (dragons) for real money and their unavailability through other options, that further causes the division of player base into those unwilling to pay unreasonably high sums for advantage in-game, and those who are ready to purchase any offered strong option and win in the game. The distribution is uneven, and there are much more people who are not ready to pay.

As the game belongs to Free-to-Play games, where microtransactions play the most significant role in funding the project expenses, it cannot eliminate the fact of microtransactions presence. However, the number of microtransactions presented in the Dragon Village M game is much more than the estimated initial budget of the game and the annual cost of maintaining and improving it. The game offers premium currency obtainable through real money transaction only to purchase exclusive dragons, various loot boxes systems, skins for dragons, even Battle Pass. Furthermore, all in-game base gameplay and processes can be affected by a purchase – either if the player wants to speed up the process, obtain boxes with supplies, or unlock the next level. For an average game player, overflow of microtransactions and the fact that the game is ready to offer almost playing for the player himself as long as he pays, proved to have only a repulsive effect. In

addition, single dragons for the price of several full-fledged PC games are, according to the players inside the game, the most significant reason to quit this game.

In order to keep the audience of their game from leaving and remedy the adverse impact of microtransactions, publishers would need to reconsider the necessity of most of the microtransactions in the game. Moreover, the high difference between expensive and simple offers should be reduced. Possible solutions are: removing all high-cost exclusive offers, i.e. premium currency dragons, that are adding imbalance between paying and non-paying player base. Alternatively, making them as affordable as other dragons (adding the possibility of them to be obtained via random rewards at least). Another option includes making the premium currency accessible via gameplay. Another suggestion that can be taken into account to help the game decrease the negative impact of microtransactions on the player base is reducing the number of the microtransactions offers presented overall. According to players' comments from the game, marketing of purchasable options is way too aggressive, and the amount of purchasable options crosses every line of decency.

To conclude, it can be said that microtransactions, when applied too excessively or thoughtlessly in video games, may cause a drop in the project's popularity and abandonment by most players disappointed in the game. To remedy such aftermath, developers' attempts to monetise the game should not create an impression of only extracting money from players. (see figure 1-3)

5. Appendix

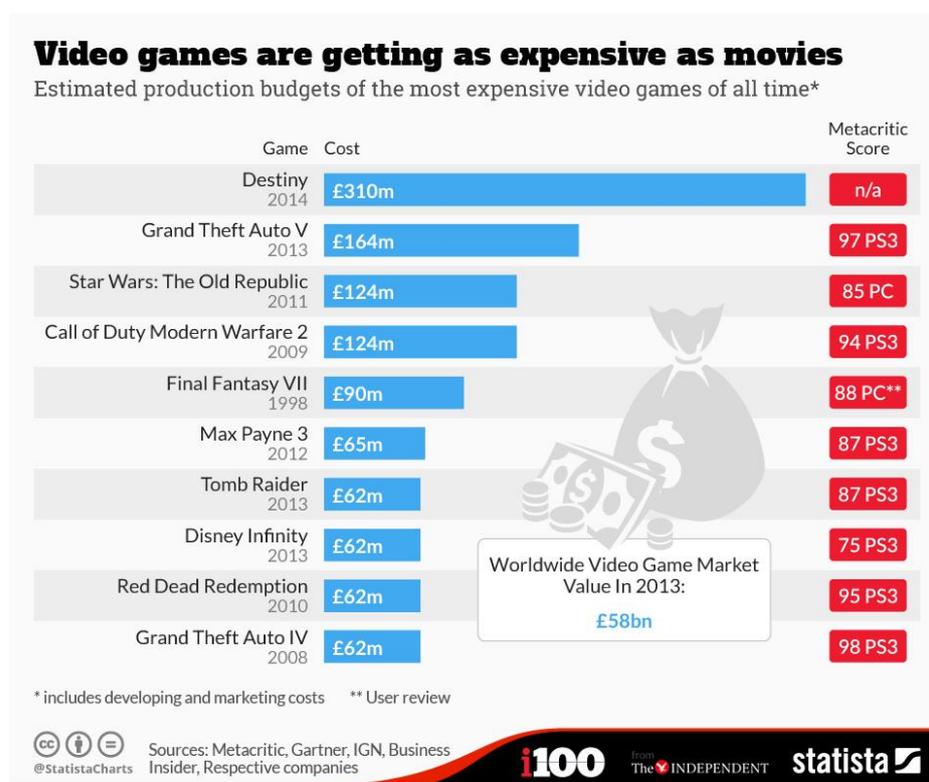


Figure 1. Developing and marketing costs of the most expensive video games of all time

[25].



Figure 2. Apex Legends internal currency shop [7].

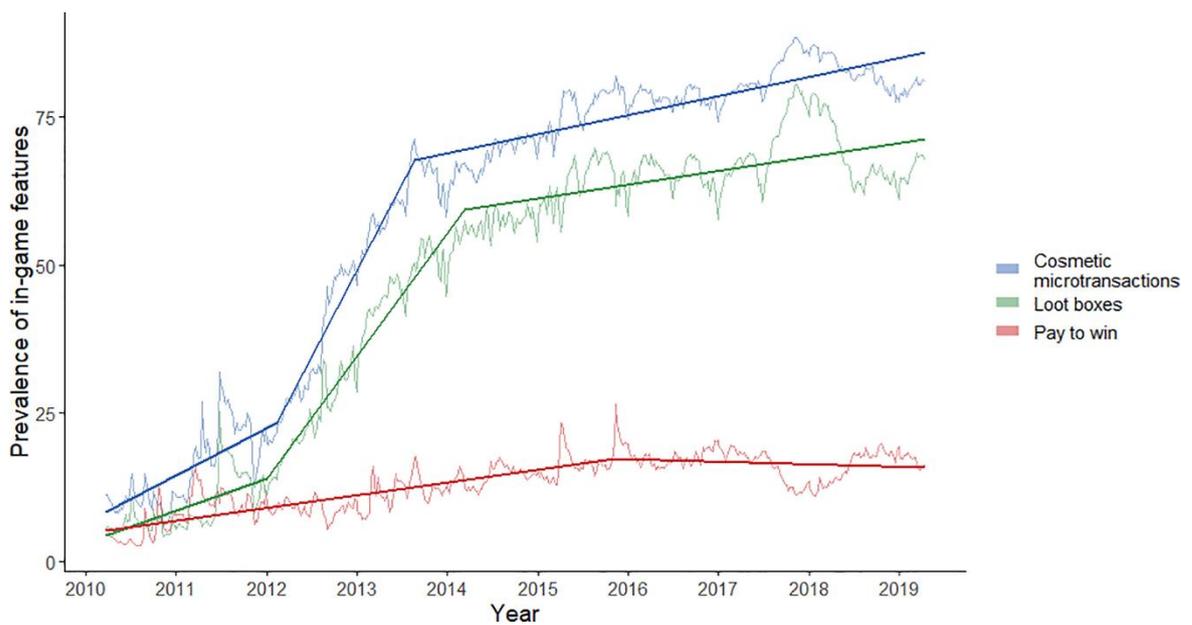


Figure 3. Time series graph showing the percent of the sample playing games with each relevant feature during the period under test [37].

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