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# MONETIZATION STRATEGIES IN FREE-TO-PLAY MOBILE GAMES

Case: From The Bench

LAHTI UNIVERSITY OF APPLIED SCIENCES LTD
Faculty of Business and Hospitality Management
Degree Programme in International Business
Bachelor's Thesis
Autumn 2017
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Degree Programme in International Business

GONCHAROVA, ELIZAVETA: Monetization Strategies in Free-To-Play Mobile Games
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Bachelor's Thesis in International Business, 71 pages, 9 pages of appendices

Autumn 2017

ABSTRACT

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Free-to-play mobile games are very popular amongst players because of their high accessibility. According to the Top Grossing chart in App Store, free-to-play mobile games dominate the chart of the most profitable mobile games in such regions as Russia, United States and Japan. Such statistics demonstrate that the free-to-play business model is very efficient in getting revenue. Therefore, it is an interesting subject to study. The aim of the thesis is to cover the topic of monetization strategies of free-to-play mobile games and find out how different mobile app monetization models affect each other in a free-to-play mobile game. The final goal is to provide improvement recommendation for the mobile game monetization strategy of the case company, From The Bench.

The author uses a deductive reasoning throughout the thesis and collects both quantitative and qualitative data. Secondary data is gathered from published materials, books, articles, previous studies and reliable Internet sources. Primary data is collected with an interview with the case company's representative and an online survey conducted among mobile game players in order to understand their opinions about in-game monetization methods. The thesis includes such theories as mobile application concept, monetization of mobile apps, free-to-play games and ARM Funnel. SWOT analysis was used in order to evaluate mobile game monetization strategy in the case company.

The research findings prove that different monetization models may conflict with each other in one free-to-play mobile game. Also, due to the specificity of the audience, the case company can focus on the in-app purchase monetization model and partially remove in-app advertising from the mobile games. Taking into consideration the empirical findings and the theoretical analysis, the recommendations to the case company are provided.

Key words: ARM Funnel, case study, free-to-play, game mechanics, mobile app monetization, mobile game, monetization model, monetization strategy, SWOT analysis

CONTENTS

# 1 INTRODUCTION

The aim of this chapter is to provide an introduction to the thesis. The reader is introduced to the background of the research, its objectives and methodology. The research questions and limitations are formulated, the theoretical framework is defined, and the thesis structure is provided.

## 1.1 Research Background

The mobile games industry is continuing to grow rapidly, and it will take a share of 42% of the whole game market by the end of 2017, generating 46.1 billion dollars (McDonald 2017). The market is dominated by two large players, distributors of mobile applications – Apple's App Store and Google's Play Market (Statista 2017c). The volume and the rapid growth of the market show the relevance of the research topic – mobile gaming apps.

Free-to-play is a business model in the mobile gaming industry, allowing users to play a mobile game without paying (Techopedia 2017a). Free-to-play games are very popular among players because of their high accessibility. According to the Top Grossing chart in App Store, free-to-play mobile games dominate the chart of the most profitable mobile games in such regions as Russia, United States and Japan (App Annie 2017). Such statistics demonstrate that the free-to-play business model is very efficient in getting revenue, therefore it is an interesting subject to study.

The author also has a personal interest in the topic. From The Bench, the case company of the thesis, is a Spanish mobile game producer, where the author worked as a marketing intern for five months. The gaming industry was very close to the author and generated a lot of questions. The most interesting ones were about mobile game monetization in this firm. Why is the company following the monetization strategy that they have? How do different monetization models work, together and independently? How does it affect the customer loyalty? As the questions were quite difficult to answer, the idea of the thesis appeared.

The main goal of the thesis is to provide better understanding about mobile game monetization, define its strategies and mechanics, and study how different monetization models work in the mobile games that use free-to-play strategy. The author also evaluates the mobile game monetization model in the case company and suggests ways for improvement. The case is also used in order to learn the phenomena deeper. It is necessary to note that the thesis is written without any confidential information provided by the case company, From The Bench.

## 1.2 Thesis Objectives, Research Questions and Limitations

The objectives of the research are to provide a deeper understanding of monetization methods and mechanics of mobile gaming applications, and to describe and evaluate current mobile game monetization model in the case company. The case company helps to understand how to choose mobile app monetization strategy and what monetization models are more effective. The last objective is to provide recommendations for improvement, based on the theory and the practical parts, for the case company.

It is very important to determine a clear research question in order to plan an efficient study. The aim of the research question is to identify the general purposes of doing the research and prompt a clear answer. The research question should be concise and simple enough to be answered. (Saunders, Lewis & Thornhill 2009, 33-34.) The research question of the thesis is more case-oriented, and it is defined as follows:

**How to improve mobile game monetization strategy in free-to-play mobile games in the case company?**

As the research question prompts a general answer, more focused questions are needed. Sub-questions are used to structure the research and help to answer the main question of the research. (Saunders et al. 2009, 33-34.) The sub-questions for the study are as follows:

1. What are the different monetization strategies suitable for mobile games?
2. What are the advantages and disadvantages of monetization strategy in the case company's free-to-play mobile games?
3. What do mobile game players think about different monetization models in free-to-play mobile games?

Limitations are a natural part of any research. Limitations allow to understand the weaknesses of the study, giving a framework to the research (Aguinis, Brutus & Wassmer 2013, 49). As for this study, there are several limitations as well. Firstly, the research is conducted on the base of the case company so the results may not be applicable to other cases. Secondly, the focus group of the questionnaire is formed by mobile game players who are not the customers of the case company. Thus, the survey provides more general results. From the theory point of view, the limitations concern the choice of the classification of the mobile app monetization models. As there are many different opinions of how to classify it, the author selects only the most structured one.

## 1.3 Theoretical Framework

The theoretical framework provides the key concepts of the research. The aim of the theoretical part is to help the reader to understand the phenomena and provide the background for the empirical research. (Saunders et al. 2009, 489.)

The theory is presented in two chapters. Chapter 2 provides general information about mobile applications and the app market with the focus on gaming apps. The concepts of a mobile application and a mobile game are provided for better understanding of the main topic that is presented in Chapter 3.

Chapter 3 provides information about the concept of mobile app monetization. The reader gets familiar with the different monetization models and strategies used in mobile applications. The chapter focuses on

the description of the business model of the free-to-play mobile games and explains its work in combination with other models. Different mobile game monetization mechanics are described as well. All in all, the two chapters form the theoretical framework of the thesis and prepare the knowledge base for the following practical part.

## 1.4 Research Methodology and Data Collection

There are two research approaches: deductive and inductive. The deductive method starts with broad theories, general ideas, and goes to the more specific subject, testing the theory. The inductive reasoning allows to generate a general theory by gathering specific data at first. (Saunders et al. 2009, 124.) Deductive approach is used for the thesis as the author tests the theory by using the example of the case company. The figure below shows the difference between inductive and deductive reasoning.

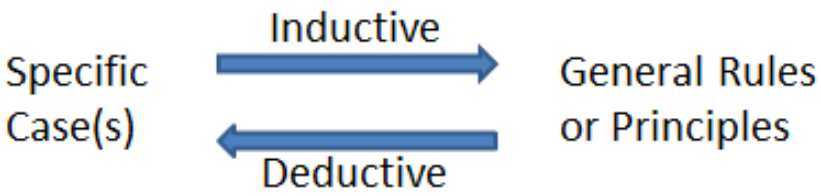


FIGURE 1. Deductive and inductive approaches (Adapted from Saunders, Lewis & Thornhill 2009, 127)

As for data, qualitative and quantitative data can be collected. A research is quantitative if it uses or generates numerical data. In this case data is gathered from the big number of cases and can be summarized. Qualitative research uses and creates non-numerical data and can be collected from the few cases. (Saunders et al. 2009, 151.) The author uses both qualitative and quantitative methods as she deems that by using both research methods it is possible to receive a deeper view on a subject from different perspectives. Qualitative approach is presented by case studying and an interview with the Chief Marketing Officer of the case company, conducted in order to learn more about the case company and its

monetization strategy. Quantitative data is gathered from an online survey conducted among the mobile game players in order to understand the case from the users' point of view.

Another data classification refers to primary and secondary sources. Primary data is generated by the author while conducting the research. Secondary data is collected from the different sources such as electronic, written, oral. (Saunders et al. 2009, 258.) Both types of data are used in the research. Thus, primary data is collected with an online survey that was conducted among mobile game players in order to understand their opinions about in-game monetization methods. Another source of primary data is an interview with the company's marketing director that was conducted via Skype call. Secondary data is gathered from published materials, books, articles, previous studies, internet sources and the case company. Figure 2 demonstrates research methodology and data collection of the thesis.

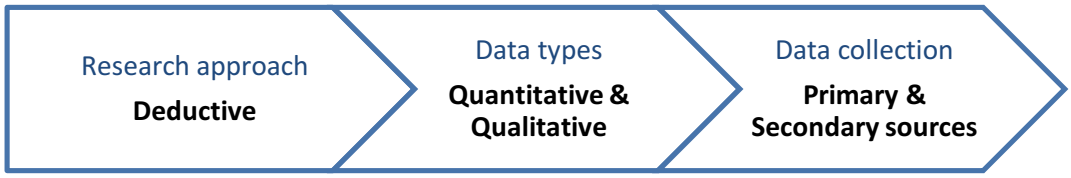


FIGURE 2. Research methodology and data collection

The research is based on a deductive reasoning. The data that is used in the thesis is both quantitative and qualitative. There are primary and secondary sources from which the data is collected for the research.

## 1.5 Thesis Structure

The figure below explains how the thesis is structured.

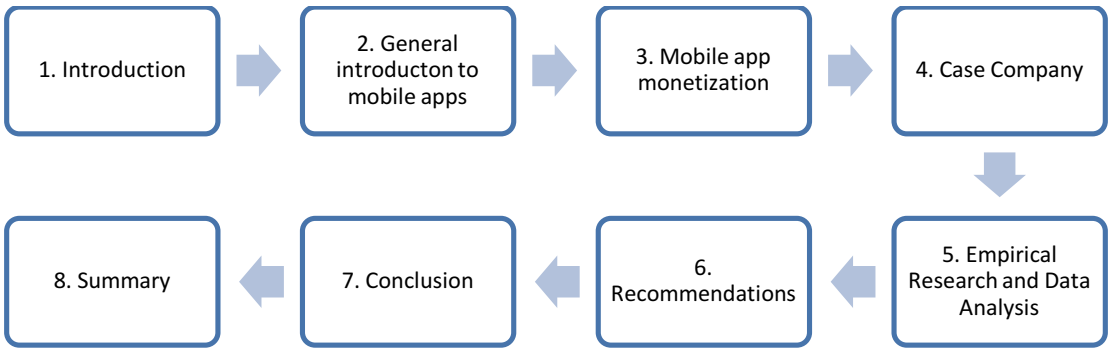


FIGURE 3. Thesis structure

The first chapter provides general information about the purpose of the thesis, its importance and objectives, as well as theoretical framework and applied research methods.

Chapter 2 and Chapter 3 present the theoretical part of the thesis. Chapter 2 gives a general idea of mobile applications and the app market. Chapter 3 explains the concept of free-to-play, the mobile app monetization and its strategies.

Chapter 4 provides information about the case company. The empirical part is introduced in Chapter 5. It presents data collection and analysis of the results. In Chapter 6 the author interprets the results of the research and provides improvement recommendations for the case company.

The conclusion chapter, Chapter 7, gives answers to the research questions and suggestions for further research. In the last chapter the whole thesis is summarized.

# 2 GENERAL INTRODUCTION TO MOBILE APPS

Due to the spread of so-called "smartphones" in the late 2000s, a mobile phone, and specifically its software started to play a very important role in our life. Developments in hardware led to the situation where a mobile phone naturally became a multifunctional device that can in some cases substitute personal computers. Mobile devices allow users not only to make calls and send text messages, but also complete many other tasks such as checking weather forecasts, emailing, following the news, and much more. All these functions became available for the mobile users due to the Internet connection that allows them to install mobile applications, or apps. Due to the fact that mobile apps can help users customize smartphones to their specific needs and often do not cost much or even nothing, their popularity has grown a lot. (Fields 2014, 2-3.) In 2016 the total time spent in Android apps reached nearly 900 billion hours, increasing by 25% in comparison with the previous year, and it demonstrates a rapid development of the market of mobile apps (App Annie 2017). In the following sub-chapters more information about mobile applications and the mobile app market is provided.

## 2.1 General Concept

A mobile app is the tool that provides functions in mobile devices such as playing audios, videos, and social networking. In order to make further analysis, it is necessary to give a definition of the term "mobile app". A mobile app, or mobile application, is a software program that runs on mobile devices, such as smartphones and tablets (TechTerms 2012). In comparison with a PC-based program, a mobile app is responsible for a more limited, specific number of functions such as navigation or mobile banking. What is more, an average mobile application costs much less than a computer program which makes it more affordable. According to statistics, mobile apps in the Apple App Store cost on average 1.02 dollars in July 2017 (Statista 2017a).

There are different categories of mobile apps. For instance, Google Play has 33 categories of mobile applications, including Games, Business, Lifestyle, Utilities and many more (Google Play 2017a). Each category involves similar apps that users need for realizing the specific purposes. Thus, the Education category offers different resources that help to acquire new knowledge or train skills. Lifestyle mobile applications can make the process of cooking easier or monitor the health. Gaming apps are developed to entertain the users. In fact, one application can relate to several categories. Thus, a user can meet a fitness app in the Lifestyle category and the Health category (Google Play 2017a). For this research, it is necessary to consider Games category in more detail.

## 2.2 Mobile Games

In order to have a clear picture about the subject of the thesis, it is necessary to provide a definition of a mobile game. A mobile game is a video game that is played on a mobile device such as a smartphone or a tablet (Techopedia 2017b).

Mobile games, or gaming apps, form one of the categories in an application store. According to Statista research, Games, by far, is the biggest category in Apple App Store, and it takes a quarter of all applications in this store (Statista 2017b). Moreover, this category dominates by the number of downloads, occupying more than half of the total app downloads in the USA in 2016 (Sonders 2016).

Games are divided into genres such as Action, Card, Puzzle, Strategy, Sports, Simulator, and many more. For example, Apple App Store has 18 genres of games in total. Like apps, one mobile game can also relate to several genres at the same time. For example, *Need for Speed: No Limits* game refers to both Racing and Simulator genres. (Apple App Store 2017.) The figure below shows the shares of different app categories in the Google and Apple app stores.

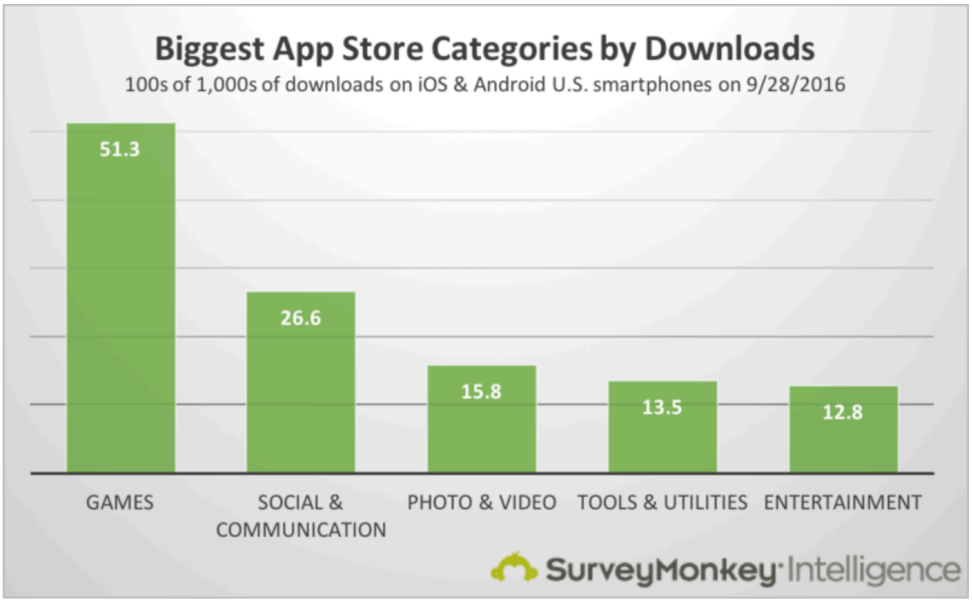


FIGURE 4. Biggest App Store Categories by Downloads (Sonders 2016)

Every mobile game has specific game mechanics. According to Sicart (2008), Associate Professor at the IT University of Copenhagen, game mechanics are methods of interaction between game and player. Each mechanics form a specific element of a game that defines a user's area of in-game actions and how the game looks (Sicart 2008). There are hundreds of different game mechanics that are used in mobile gaming apps. For instance, social game mechanics allow users to play with friends and compete with thousands of real users. Another example is daily tasks that forces players to come back to the game every day. Some mechanics help to retain users and monetize them. In Sub-chapter 3.4 the author gives more information about game mechanics that are designed for monetization.

## 2.3 Application Markets

Application market, or app store, is a distribution channel for mobile apps that provide apps to mobile devices. In other words, it is a place where a mobile user can find and download a mobile application, for free or as a purchase. Each application market has many categories of mobile apps

like games, travel, health, navigation, and many more, and the number of categories is decided by the store. Although there are numerous different application stores such as Windows Phone Apps, Amazon Appstore, Samsung Apps, and others, this research focuses on the two biggest application markets that the case company uses in their operations – Apple's App Store and Google's Play Market (Statista 2017c).

### 2.3.1 Google Play Market

Google Play Market is an official mobile application store for mobile devices with Android operating system, and it is developed by Google Inc. Besides mobile apps, the store also offers music, digital books, magazines, movies, and other digital goods and services. (Google Play 2017b.) Mobile users can download apps through Google Play that is a mobile application itself. The store offers 2.8 million apps that makes it a leader among other app markets (Statista 2017c). The statistics of the quantity of apps on the mobile application markets is provided below.

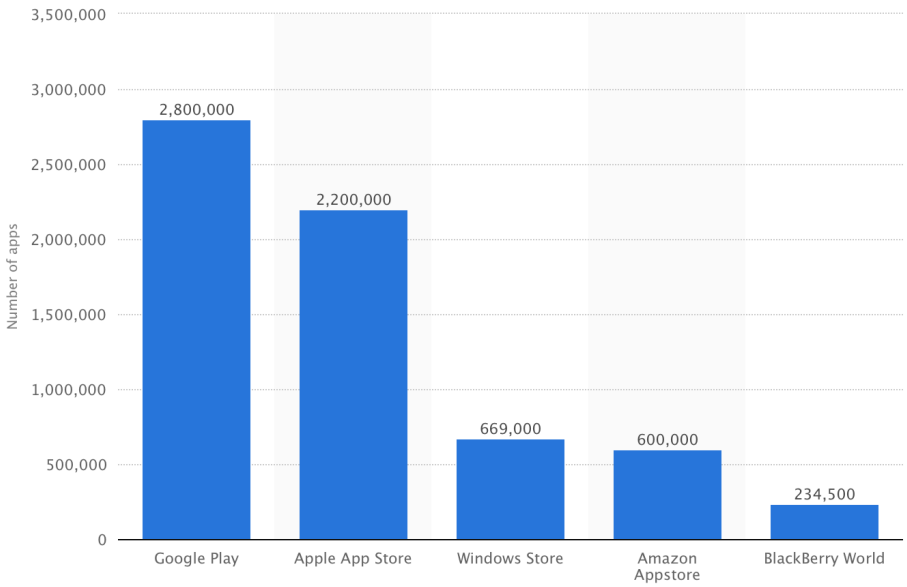


FIGURE 5. Number of apps available in leading app stores as of March 2017 (Statista 2017c)

Moreover, Google Play grows rapidly and drives the world growth of the whole industry: the researchers from App Annie (2016) forecast a triple number of apps' downloads in Google Play in 2020.

### 2.3.2 Apple App Store

App Store is an official market of mobile apps for mobile devices based on iOS operating system, and it is developed by Apple company. The store opened in 2008 with the initial range of 500 mobile apps (Ritchie 2013). As for 2017, there are 2.2 million applications available for iPhone and iPad users, and it is the second biggest app store in the world (Statista 2017c). However, this marketplace leads on the income side, and it is expected that App Store's revenue will double by 2020 in comparison with 2015, reaching 44.8 billion dollars (App Annie 2016). The figure below illustrates the forecast of annual revenues of different mobile application stores for 2020.

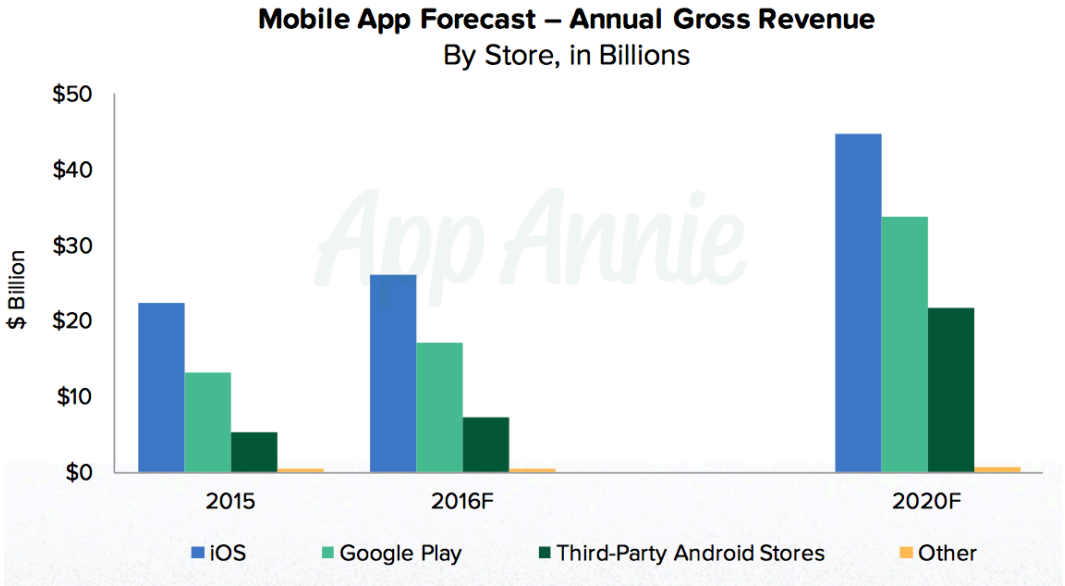


FIGURE 6. Mobile App Forecast – Annual Gross Revenue (App Annie 2016)

When running a mobile app business, it is important to consider carefully how to get revenue from the operations. The next chapter provides information about monetization of mobile apps and its strategies.

# 3 MOBILE APP MONETIZATION

Monetization is a process of converting something into money. As the thesis relates to mobile app industry, monetization methods of mobile applications is considered in this chapter. The choice of monetization strategy depends on the type of the game. For example, games can be paid for or free of charge.

Before starting to describe monetization models, it is necessary to understand the difference between the three terms: business model, revenue model and monetization model. Business model refers to a general plan of how business is organized and how all the parts of it work together in order to profit (Cambridge Dictionary 2017). According to Business Dictionary (2017), revenue model describes “how a business will earn income, produce profits and generate a higher than average return on investment”. As for monetization model, it defines a specific way of creating money in a project. However, the problem lies in the fact that in the mobile app industry these terms can mix with each other, so in specific cases the difference between them cannot be clear. In this research the way of how different mobile monetization models can work in one business model, particularly in the free-to-play model, is studied. Thus, it is logical to provide at first a concept of the free-to-play business model and then give an overview of the mobile monetization models as well as their possible combinations and mechanics.

## 3.1 Free-to-play Business Model

The case company of the thesis creates games based on the free-to-play strategy. Therefore, in this sub-chapter the free-to-play business model is considered in detail.

Free-to-play, or F2P, is a business model allowing users to play without paying. Such games are suitable to a wide audience because players can choose to pay or not. In this model, developers get revenue from micro-transactions, advertising or paywalls. (Techopedia 2017a.) The absence of

entry barriers is a competitive advantage of F2P games. This fact allows to attract huge audience and get a bigger user base in comparison with paid games. An extensive user base is necessary in free-to-play games because the number of users is directly proportional to revenue. Thus, free-to-play games seem more attractive as a business model. (Davidovici-Nora 2013, 31; Yakubenkov 2014.) In fact, many large companies such as Rovio, a Finnish developer of video games, stopped using the paid model and switched to F2P business model (Davidson 2016). ZeptoLab company, creator of Cut the Rope games, also released its latest mobile games only in F2P format (ZeptoLab Page in App Store 2017). What is more, according to the Top Grossing chart in App Store, all top grossing games are using free-to-play model in such regions as Russia, United States and Japan (App Annie 2017). Therefore, it is fair to claim that this business model is the most efficient in getting revenue.

For better understanding of how F2P games monetize, it is necessary to understand the concept of the ARM funnel. The ARM model is presented in the next section.

### 3.1.1 ARM Funnel

The ARM (Acquisition, Retention, Monetization) funnel is a revised version of a well-known theory of purchase funnel developed by E. St. Elmo Lewis in 1898. The Lewis' funnel is also called AIDA (Attention, Interest, Desire, Action) model and describes the lifecycle of customers from awareness to a purchase. The purchase funnel is needed to understand a preliminary percentage of customers on each stage of the cycle. As for ARM funnel, it plays a similar role but adds user virality and immediate reinvestment of money. (Fields 2014, 111-112.)

The ARM funnel was created by Kontagent Research group and stands for Acquisition, Retention, and Monetization, and this model describes a cycle of customers and money in free-to-play games. The "funnel" shows conversion of users into money and, vice versa, money into new users. In other words, the ARM model illustrates a process of creating a specific

cycle. It starts from acquiring an initial user base. Then, the goal is to retain users and make them pay repeatedly. After that money earned from monetization are reinvested in engagement of new users that expand an existing user base, and the cycle repeats. However, new customers can also be gained by “word of mouth”: some active users invite their friends through social networks and that helps to make a game viral and reduce acquisition costs. All in all, the aim of using the ARM model is to maximize user spending, prolong lifetime value, and minimize customer acquisition costs. (Williams 2012; Fields 2014, 113-114.) The figure below demonstrates the processes inside the ARM Funnel.

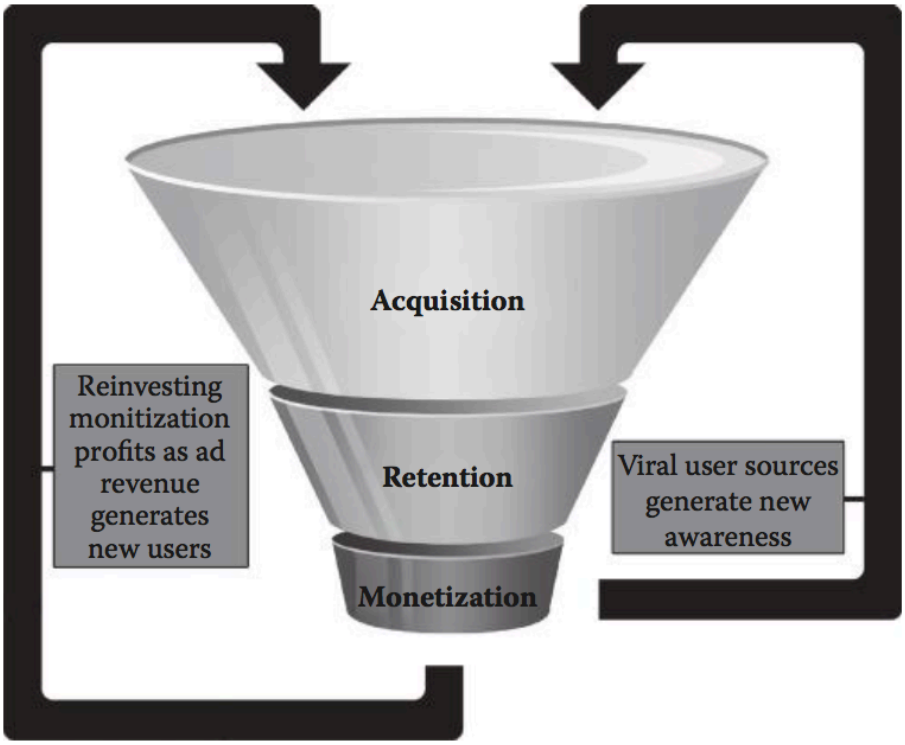


FIGURE 7. The ARM Funnel (Fields 2014)

In order to understand how the ARM funnel works, it is necessary to know its elements. Thus, the three stages of the monetization process are explained below.

**Acquisition**

Acquisition, here, means gaining new users for the game. At this stage it is crucial to get a solid user base because it affords an opportunity to monetize more players. To do so, it is necessary to drive awareness among potential players at the lowest cost. Depending on an acquisition channel, user sources can be non-viral or viral. Non-viral sources create costs for game developers – it includes ads, offerwalls and cross-promotions with other applications. Through viral sources the new users are generated by current players: users are given some incentives such as in-game currency and invite friends through social networking. Viral sources are more valuable for app developers because they help to reduce user acquisition costs. (Askelöf 2013, 40-41.)

There are some significant metrics that are used to evaluate acquisition. One of them is K-factor that is the key indicator of game virality. Thus, K-factor shows the amount of users that have joined the game through viral sources (Askelöf 2013, 41). As for non-viral sources, there are many advertising metrics that help to evaluate the effectiveness of advertising as an acquisition source. One of them is Cost per Install showing the amount of money spent when a user installs the game through an advertisement. (Fields 2014, 118.)

**Retention**

Retention, the second stage of ARM cycle, defines how often players return to the game. In order to profit, a company should think about how to keep paying players in a game as long as possible. Fields (2014, 121) deems that in a free-to-play mobile game with perfectly-designed mechanics, players return several times during a day. When users come back to a game regularly, the chances of monetizing them are enhanced. In order to strengthen retention, app developers can apply some incentives, for instance, rewards for coming back and doing some major actions; slight punishments for the long absence; special offers of in-game currency; leader boards. (Fields 2014, 121-123.)

Retention can be measured by user sessions. Thus, Askelöf (2013, 41) recommends to study average session length, or time that a user spends per one visit. Other important KPI's (Key Performance Indicators) for retention are average lifetime per user and figures of active user such as daily active users and monthly active users. Average lifetime per user shows the total time that an average user spends in the game. DAU (Daily Active Users) and MAU (Monthly Active Users) demonstrate how many users play the game at least once a day or once a month accordingly. (Fields 2014, 124.)

**Monetization**

Monetizing players is the main task of the use of ARM Funnel as it generates revenue in a free-to-play game. The goal of this stage is to convert non-spending players into paying users. The fact is that players that do not spend money prevail over premium users, or users who contribute money. Seufert (2014, 154), in his book dedicated to the freemium model, mentions the rule of 5%, where 5% are monetized players. The vast majority of players do not bring money, creating costs for business, and the aim is to reduce these costs by increasing the number of premium players. In order to enlarge user base, money is reinvested to attract new non-viral users. (Fields 2014, 124.)

There are three crucial metrics for measuring the effectiveness of monetization. The first one is Average Revenue per Daily Active User, or ARPDAU. This metric allows to track revenue fluctuations on a daily basis and provides quite precise data because it skips the users who abandon a game few minutes after an install. Another metric is Average Revenue per Paying User (ARPPU), and unlike ARPU, Average Revenue per User, it focuses only on players who made an in-game purchase. Last but not least, Average Revenue Per Download (ARPD) shows amount of money that game creator gets from every download in average. (Askelöf 2013, 41; Koekkoek, 2013.)

## 3.2 Monetization Models

Such research groups as Localytics (2017) and The App Solutions (2017), that work on mobile app analytics, distinguish six general monetization models: paid apps, in-app advertising, freemium, in-app purchases, paywalls (subscriptions), and sponsorship.

Paid apps is a monetization model when a developer gains money from every install. A user first pays money and then gets an app from an app store. The price is fixed and starts from $0.99 (The App Solutions 2017). The benefits of this model are that developers are guaranteed to gain profit and that users are more likely to return on a regular base that means good retention rate, but the problem is to organize a good marketing strategy in order to resist the tight competition on the market and persuade users to buy an application. It is a difficult task unless you a well-known game developer with already existed popular games. So, in order to use this monetization model, an app should provide unique value and be different from similar free games. (Localytics 2017.)

However, the popularity of paid apps is decreasing. According to Statista, the total share of annual revenues of paid application fell from 85.8% in 2011 to 37.8$ in 2017. (Statista 2017d.) The figure below shows the dynamics of paid app earnings from 2011 to 2017.

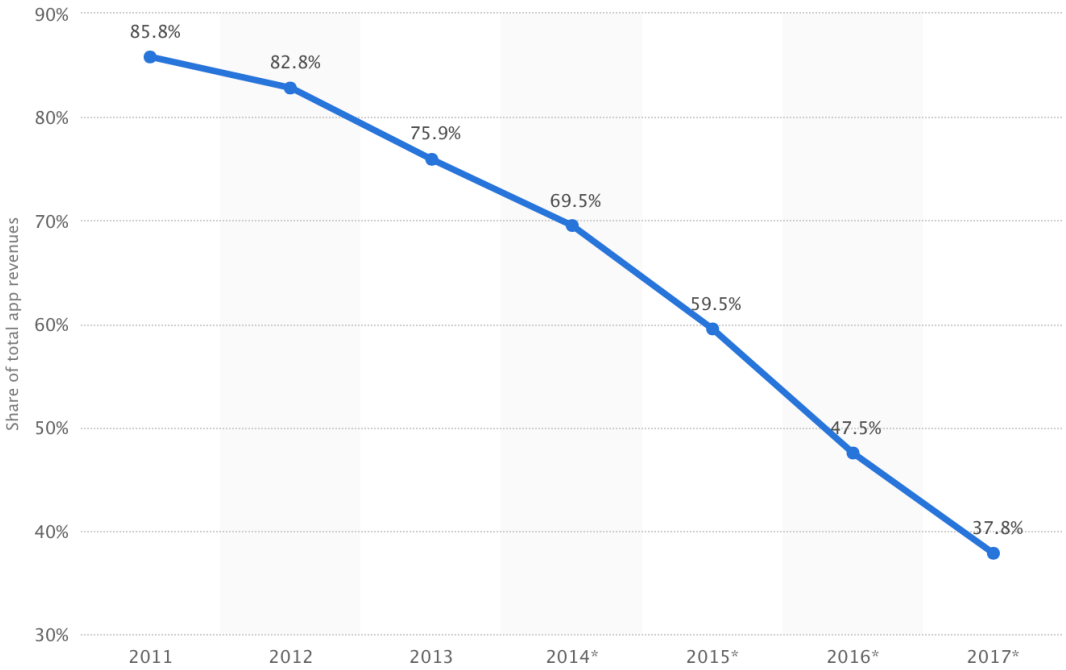


FIGURE 8. Percentage of paid app revenues worldwide from 2011 to 2017 (Statista 2017d)

In-app advertising is usually used in free games and apps. It may appear in different formats such as interstitials, banners, native ads, video ads, offerwalls, and other (Tapjoy 2017). Advertising brings money and allows developers to offer game for free that is a competitive advantage. What is more, mobile apps can easily collect data about their players that allows to provide only targeted advertisements. A huge disadvantage is that ads can irritate users in case of their overcrowding, and it reduces space. This model is the most popular one – almost 31% mobile apps use this monetization model. (The App Solutions 2017.) It is necessary to provide more information about some mobile advertising formats in order to do further research. Thus, there are some examples of mobile ad types:

- Banner is a narrow “stripe” of an advertising graphic image, usually placed at the top or at the bottom of the screen.
- Interstitial is a static or video full-screen ad that fills the whole screen space. It can be programmed to appear in different moments of a game, for instance, at launch or after the match winning.

- Offerwall is a type of advertising that provides a user with the list of ad offers to accept. By doing some tasks provided by ad publishers such as watching a video or installing side apps, a user can be rewarded with in-game currency after completing the task.
- Rewarded video is a video ad that offers users to get free in-game currency after watching. A player can decide to watch the video or not in contrast to video interstitials.

The freemium model offers gated features to user. In this case an app is free to download and use a basic version, but if a player wants to get a full, premium version, s/he has to pay. This model is very advantageous because users are attracted by the fact that an app is free and it can create a huge user base. After players try it, they may like an application and become loyal which then boosts the chances of monetizing them. Many popular mobile games such as *Angry Birds* and *Super Mario Run* chose the freemium model and succeed. (The App Solutions 2017.)

In-app purchases, or IAP, monetization model means that profit is gained from selling goods or services that are offered in an app. These goods or services can be physical if, for example, an application represents a real-world e-Commerce brand, or virtual that are used in the gaming app such as virtual currency, level and energy boosters, or skins for your in-game characters. An opportunity to buy virtual goods inside a mobile game increases retention rate that is a benefit of this monetization model. However, app stores take a share from in-app purchases that lowers the company's profit. (Localytics 2017.)

Subscriptions, or paywalls, resemble freemium model but it gates content instead of functionality. In apps with subscriptions users can see or listen some content for free, but if they want more, they can buy the full access or sign up for regular payments. In order to use paywalls, developers should make sure that the in-app content is high quality and regularly updated. This is a perfect monetization model for newspapers, news channels, lifestyle and music applications. (Localytics 2017.)

Sponsorship is a cutting-edge revenue model. The main idea lies in partnership with a company that wants to advertise its products. In order to get some benefits from an advertiser such as a discount or a voucher, an app user have to complete certain tasks in the app. Thus, an application gets money from an advertising company for promoting them in the app while a user is sponsored by that company. This monetization model is the most user-friendly as it does not irritate users like ads and does not ask for money like paid applications or in-app goods but treat them with some real gifts. However, this model has not been studied well yet and may show unpredictable results. Also there can be some difficulties with finding advertisers and further negotiations. (Localytics 2017.)

F2P mobile games can be monetized in different ways such as in-game purchases and advertising. In the next paragraph different combinations of monetization models in F2P mobile games are presented.

## 3.3 Combinations of Different Models

Earlier it was considered what types of monetization models of mobile applications exist in general. Now it is time to start the more specific topic – monetization models in free-to-play games. In reality it is possible that several models take place in one app. It is logical to assume that some models will work together perfectly, and other ones – conflict. For instance, it is obvious that in-app purchase model is aimed at long-term user involvement so it can be hardly combined with in-app advertising model due to the fact that users can be discouraged by noisy ads. Therefore, it can be seen that these two monetization models may conflict, and in order to use them together, some changes should be done.

Simon (2017), a mobile strategist, argues that it is crucial to use several monetization models in one game in order to maximize profit. The author also discusses different monetization models and claims that the problem of conflicts between different models may be solved by user segmentation and targeting. Thus, he offers to target differently users who buy in-app products regularly and those who never spend money in a game. For the

first group of players, Simon (2017) suggests to skip ads, and for others – show native advertisements.

The author also talks about complementary monetization strategies, or monetization models that perfectly work together. For example, in-app products and rewarded video can be a good pair. This model allows to monetize non-spending users by rewarding them with in-game currency if they watch a short advertising video. At the same time premium players buy virtual products and they are not bothered with ads. Another example is interstitial video ads and in-app purchase that allows to disable ads. Users can decide that full-screen ads are irritating and pay to stop them. (Simon, 2017.)

In order to make segmentation and targeting real, there are various Internet platforms for app monetization such as Chartboost, Tapjoy, AdMob, and many more (Dogtiev 2015). These networks deliver advertising to apps and optimize it. Monetization platform gives a tool set for targeting users, so that developers can create various group of users and monetize them differently. It helps to separate different monetization models and overcome conflict between them. (Chartboost 2017.)

## 3.4 Relation between Monetization and Game Mechanics

Many mobile researches insist that monetization of a financially successful game should be integrated to mobile game at the development stage. This method allows monetization to look native in a game and not to distract players from gameplay. For example, it is important to elaborate virtual goods beforehand in order to make sure that the game is balanced (Fields 2014, 175-176). What is more, game mechanics should interact with monetization in a way that increase its effectiveness (Yakubenkov 2014).

Leading analyst of ZeptoLab, Yakubenkov (2014) investigated top 100 grossing gaming apps in App Store and divided them into several groups with similar game mechanics. For each group he described how to increase the efficiency of monetization through various game mechanics. It

was noticed that the main monetization strategy used in all reviewed games was IAP model. Each group has similar mechanics that are used to increase the efficiency of monetization. The main concept of all reviewed gaming apps is the gradual deceleration of in-game progress. (Yakubenkov 2014.)

Yakubenkov (2014) insists that the ARM funnel should be taken into account when a game is designed. Thus, the first goal is to attract users and try to retain them. For that reason, at the beginning the speed of game progress is maximal in order to give an opportunity to play the game in its pure form. It helps to avoid a situation when a user faces some problems in the early stages of the game and deletes it. Thus, more customers continue to play. The next and the main goal is to monetize them. From that moment game progress starts to slow down, and players are offered to accelerate it with real money. The further game progress goes, the slower it becomes. Thus, developers artificially decelerate the game process and stimulate players to invest more and more money. (Yakubenkov 2014.)

There are several ways to slow down game progress and monetize players' desire to accelerate it, and it depends on the game type. Yakubenkov (2014) writes about several mechanics that are used in the most successful apps. The mechanics are described below.

**Energy** is one of the game resources that is consumed when a player makes some certain actions. In order to replenish energy, a user can wait until it is filled over real time or buy special virtual goods that allow to continue playing immediately. The key point is that the further a player goes through a game, the more difficult it becomes. As a result, players are incentivized to buy more energy. In puzzle games, for example, it can be a heart that gives a player one more try to complete current level. (Yakubenkov 2014.)

Due to the fact that the game progress is slowing down and different actions require more time to be completed, a game offers **shorcuts.** This

mechanic allows users to faster some certain in-game actions such as building, upgrades and trainings. Shortcuts can be usually bought with in-game currency which a user should buy with real money. (Yakubenkov 2014.)

**Player vs Player**, or PvP, is a powerful mechanic that helps to monetize users in strategy and card battler games. In such games the competition base is strong as users can see the progress of their rivals. However, as was mentioned before, the game becomes more and more difficult with progress, and a player faces more skilled and stronger users. Thus, players are stimulated to buy different power ups in order to deal with stronger opponents. (Yakubenkov 2014.)

Another mechanic that is used in card battler games is **random cards in boosters**. As a user wants to upgrade the deck, cards can be won or received from paid card packs or boosters. However, each pack contains a random set of cards. Due to the fact that it is not possible to buy a certain card, the process of getting a wished card and the whole progress slow down. Thus, a game creates a desire to buy more packs. (Yakubenkov 2014.)

# 4 CASE COMPANY

In this chapter the case company of the thesis is presented. Firstly, the general information about the company is provided. Secondly, the author gives an overview to the products of the case company. The following sub-chapter is dedicated to the mobile game monetization strategies used in the case company. Then, retention and conversion rates of the mobile games are presented. In the last part of this chapter the most important monetization mechanics used in the company's mobile games are mentioned. The data for this chapter is mostly retrieved from the interview with CMO of the case company, conducted during the research. The analysis of this data is shown in the empirical part of the thesis.

## 4.1 General Information

From The Bench is a technological company, based in Alicante, Spain since 2007. The company specializes in developing sports' video games, available on different platforms. Since the foundation, From The Bench has introduced several games for iPhone, Android, and Facebook onto the market. The most popular video games are available on mobile platforms such as iOS and Android. As for target audience, the company focuses on the mobile game players age of 18-35. (Cremades 2017; From The Bench Facebook Profile 2017.)

The firm works closely with many sports' clubs and has official licenses given by football clubs such as Real Madrid, FC Barcelona, Liverpool FC, as well as the official license of the NBA basketball league (From The Bench Facebook Profile 2017). These licenses form a competitive advantage of the company. Cremades (2017), CMO of From The Bench, mentions that successful partnership with those football clubs made the company one of the world's most important developer of sports manager mobile games.

## 4.2 Products

As was mentioned, From The Bench produces different sports' video games. However, only mobile games are considered in the research as it corresponds to the topic of the thesis. As of September 2017, the company has 32 mobile games in Google Play Market and 34 apps in Apple App Store (From The Bench App Store Account 2017; From The Bench Google Play Account 2017). Talking about the mobile platforms, revenue share is divided between Android and iOS into 38% and 62% respectively (Cremades 2017).

The company produces two main categories of mobile gaming apps. The first one is fantasy management games that refers to simulator and strategy genres. Fantasy manager is a simulation management game that allows users to choose an existing sports club or create their own one, manage the team and lead it to victory (Robinson 2016). The second category is formed by card mobile games, or card battlers. Such games allow players to collect cards, build a deck and use them in matches (Nations 2017). All games of the case company can be also placed to the sports genre. The gaming apps of From The Bench are consolidated in the table below.

TABLE 1. Classification of From The Bench games

| Games | Type | Genre |
|---|---|---|
| • *NBA General Manager*<br>• *Fantasy Manager Football*<br>• Club managers (*Real Madrid Fantasy Manager, Juventus Fantasy Manager*, etc.) | Fantasy management games | Simulator, Strategy, Sports |
| • *NBA Flip*<br>• *Flip Football*<br>• Club "flips" (*BVB Flip, FC Barcelona Flip*, and others)<br>• *Top Stars Football* | Card battlers | Card, Sports |

The most successful company's games are *NBA General Manager*, a game that officially uses the brand of NBA basketball league, and *Fantasy Manager Football* which is licensed to many football clubs. These mobile games relate to fantasy management category. The company also has many other fantasy management games that are based on specific football clubs such as *Real Madrid Fantasy Manager*, *Juventus Fantasy Manager*, *Liverpool FC Fantasy Manager*, *FC Barcelona Fantasy Manager*, and many more. (From The Bench Google Play Account 2017.) Cremades (2017) notes that official licenses allow to grow the user base easily because of the famous football clubs in the titles of the games.

As for card battlers, there are *NBA Flip*, *BVB Flip*, *FC Barcelona Flip*, and other games based on a specific football club. All games have official licenses. The most important game is *Flip Football.* It is also licensed to many different football clubs. The game shows good performance but has a problem with user acquisition (Cremades 2017). *Top Stars Football* is the latest product by From The Bench, launched in May 2017 (From The Bench Facebook Profile 2017). It is also a card game but with different game mechanics compared by *Flip Football*. The game is highly successful in terms of downloads, and recently it has been on the first places by the number of downloads in many countries. However, the monetization part is suffering and need to be developed. (Cremades 2017.)

## 4.3 Game Monetization Strategy

First of all, it is necessary to mention that all From The Bench mobile games are based on the free-to-play business model. It means that the case company offers to download their gaming applications for free. Thus, the monetization strategy of the From The Bench games was built in accordance with free-to-play business model.

As for monetization models, the case company uses both advertising and in-app purchase strategy. On average, the revenue ratio between these two strategies is 80%, coming from in-app sales, and 20% is formed by

ads. Advertising formats that are used by the company include banners, interstitials, offerwalls and rewarded videos. The ad formats and their combinations depend on a game, on a country, and other aspects. From The Bench has integrated ad monetization in different ways. (Cremades 2017.)

The choice of mobile game monetization strategy was based on testing, previous experience, expert's advices and visiting game conferences. The company constantly makes some changes in the monetization strategy. For example, new advertising networks are tried and new in-game placements for interstitial ads. The interviewee noted that it is important to take the offerwall button outside the store in order to drive users to the offerwall and increase monetization. (Cremades 2017.)

Talking about examples, *NBA General Manager* is one of the games that uses all the ad formats at the same time: banners, interstitials, offerwalls and rewarded videos (Cremades 2017). The mobile game also has a store that offers in-app products for the players such as coins, cash, energy, power ups, slots for players and the uniform for players. Image 1, below, demonstrates a screenshot of the *NBA General Manager* in-game store and its virtual products.

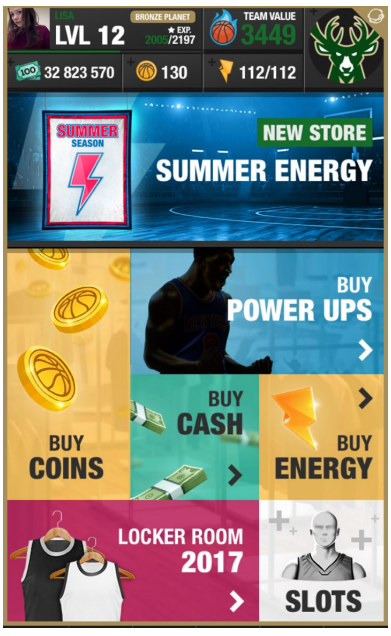


IMAGE 1. In-game store (From The Bench 2017)

In *Flip Football* both IAP model and ads are integrated, but only banners at the bottom of the screen and offerwall. In the in-game shop it is possible to buy card packs and coins. As for *Top Stars Football*, it has only offerwall and rewarded videos, as well as in-app purchase model. However, due to the low conversion rate, meaning that only few users are monetized, the company is going to integrate more ad formats to the game. (Cremades 2017.)

## 4.4 Retention and Conversion Rates of Mobile Games

As was said before, retention shows the share of players enter the game after a certain period of time since a game download. As a part of ARM funnel, good retention is a foundation of successful monetization. (Fields 2014, 121.) Thus, despite the fact that the subject of the study is monetization, retention should be considered as well. The table below shows the share of users that stay in the games of the case company on the first day, on the 7th day and on the 28th day since a download. As can be seen from Table 2, retention rate depends on the game and the mobile platform (iOS or Android).

TABLE 2. Retention rate: Day 1, Day 7 and Day 28 (Cremades 2017)

| | BOX | | NBA | | FLIP | | FLIP NBA | | TOP STARS | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Android | IOS | Android | IOS | Android | IOS | Android | IOS | Android | IOS |
| % Retention-1 | 17,64% | 26,56% | 22,33% | 30,01% | 32,47% | 29,63% | 19,69% | 28,29% | 29,85% | 27,95% |
| % Retention-7 | 3,03% | 6,82% | 6,01% | 10,37% | 12,00% | 11,65% | 7,54% | 9,29% | 6,09% | 7,79% |
| % Retention-28 | 0,73% | 2,29% | 2,69% | 4,81% | 4,83% | 4,69% | 3,88% | 4,21% | 1,18% | 1,88% |

As for conversion rate, it demonstrates the amount of users that make in-app purchases. Thus, conversion is a part of monetization. The table below shows the share of From The Bench's users that make a first in-app purchase immediately after download, on the 7th and the 28th days.

TABLE 3. Conversion rate: Day 0, Day 7 and Day 18 (Cremades 2017)

| Period | BOX | | NBA | | FLIP | | FLIP NBA | | TOP STARS | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Android | IOS | Android | IOS | Android | IOS | Android | IOS | Android | IOS |
| % Conversion day-0 | 0,113% | 0,590% | 0,474% | 1,583% | 0,398% | 0,914% | 0,591% | 1,544% | 0,166% | 0,375% |
| % Conversion day-7 | 0,188% | 0,958% | 0,816% | 2,543% | 0,879% | 1,956% | 1,061% | 2,778% | 0,347% | 0,785% |
| % Conversion day-28 | 0,208% | 1,053% | 0,924% | 2,818% | 1,058% | 2,261% | 1,228% | 3,164% | 0,407% | 0,917% |

Cremades (2017) noticed that in free-to-play mobile games it's important to to monetize as many users as possible, combining both types of monetization (advertising and IAP model) in the best way. However, it is not so easy as showing as many ads as possible as it leads to the decrease of retention and, as a result, conversion rate. (Cremades 2017.)

## 4.5 Monetization Mechanics

The best working monetization mechanics in fantasy management games of the case company is to show offers with the most important football or basketball players. In that case users spend most of the money when signing new players. Limited energy is a mechanism that is used in the all games. Another important mechanism is exclusive tournaments where users usually pay for taking a part in it in order to raise their level and ranking. (Cremades 2017.)

# 5 EMPIRICAL RESEARCH AND DATA ANALYSIS

This chapter intends to familiarise the reader with the empirical part of the research. The research is aimed to provide an answer to the research question of this thesis: *How to improve mobile game monetization strategy in free-to-play mobile games in the case company?* In order to answer the research question, primary data is collected and examined. The chapter starts with the description of the data gathering process. After that the collected data is analysed and the results are interpreted. In the end of the chapter SWOT analysis of the mobile monetization strategy in the case company is given.

## 5.1 Data Collection

Data collection is the first step of an empirical research. Talking about the definition, data collection is a systematic process of gathering and measuring data from various sources (Romney & Weller 1988, 7). The figure below demonstrates the data collection stages of the research.


FIGURE 9. The stages of data collection

In order to provide a clear and full answer to the research question, both of quantitative and qualitative types of primary data were collected. Quantitative primary data was collected with an online survey conducted among mobile game players. The purpose of the questionnaire was to understand users' opinions about mobile game monetization methods and to consider the topic from the customers' perspective. As for qualitative data, it was gathered from an interview with the case company's CMO conducted via a Skype call. The interview was aimed to gather data about the case company and its monetization strategy as well as get an expert view on mobile game monetization. The questionnaire and questions from the interview can be found in the appendices. In the next two sub-chapters the stages of data collection for the survey and for the interview are described.

### 5.1.1 Questionnaire

The data collection process of the thesis started with an online questionnaire conducted among mobile game players. A questionnaire is a data collection technique in which each participant is offered to answer to the same list of questions. Such data collection method allows to reach a big number of participants in a fast and cost-efficient way. In order to get meaningful results, a sample size should be big enough. A questionnaire usually helps to get quantitative data. There are different ways of how questionnaires can be conducted: by phone, by e-mail, by post, by organization's intranet, or by the Internet. (Saunders et al. 2009, 360-363.) Questions also can take different forms. Thus, questions in a questionnaire can be open-ended, ranking scales, two-way, checklist and multiple-choice (Phillips & Stawarski 2008, 1-2).

The online questionnaire was conducted among mobile game players in order to get users' opinions about different mobile game monetization methods and find the answer to the one of the sub-questions from the player's perspective: *What do mobile game players think about different monetization models in free-to-play mobile games?* The survey was

launched by using Google Forms at the beginning of August 2017, and the last response was collected by the end of the month. It was decided to hold the survey both in English and in Russian in order to get a bigger audience. After receiving the results, two versions were put together.

The survey consisted of twelve questions. The majority of questions had multiple-choice format, offering to choose one option. Question 3 had a checklist form where a participant is asked to choose one or several options from the list. Questions 5 to 12 had answer options with a five-point scale from “Very positive” to “Very negative”, showing a participant’s attitude towards each monetization method separately.

All in all, 161 responses were received, putting together Russian and English versions. It was decided that such amount of answers was enough to start analysing the results. The data analysis of the survey can be found in sub-chapter 5.2.1.

### 5.1.2 Interview

The second part of the data collection process is formed by an individual interview conducted with the case company’s representative. An interview is one of the qualitative data collection methods that implies the involvement of two or more people in a purposeful discussion. This research method allows to assemble valid and reliable data. Research interviews can be categorised as structured, semi-structured and unstructured. Structured interviews are the most formalised and imply a predefined list of questions, and an interviewer strictly follows the list. Semi-structured research interviews are also based on a pre-formulated set of topics and questions but some questions may be changed and additional ones may emerge during an interview. Unstructured interviews are informal and do not suppose a prepared question list. In this case a conversation is formed within the research topic, and an interviewer defines its flow and boundaries. (Saunders et al. 2009, 318-321.)

During the research it became clear that it was hard to determine all the questions beforehand due to their case-oriented nature. Thus, it was decided to choose a semi-structured format of interview. The most of questions were written beforehand and additional questions have appeared during the interview. The set of topics and preliminary questions allowed the author to feel confident during the interview while additional questions helped to get full and elaborate descriptive answers. The list of predefined questions can be found in the APPENDIX 1.

The interview was conducted with the chief marketing officer in the case company, From The Bench, on 5 September 2017. The interview was aimed to get a description of the case company and its monetization strategy. As the interviewee is in charge of the monetization part of the company, the purpose was also to get an expert view on mobile game monetization.

In order to conduct a semi-structured interview and have a possibility to ask the additional questions, live communication is needed. It was decided to hold the interview in Skype and make the audio recording of it by using a computer software called QuickTime Player. After that, the interview was transcribed from word to word and analysed. All the data collected from the interview is descriptive by its nature and can be found in Chapter 4, describing the case company. The qualitative data is analysed by means of SWOT analysis that can be found in sub-chapter 5.2.2.

## 5.2 Data Analysis

Data analysis is a process of converting collected data into statements that help to answer the research questions (Hair Jr., Celsi, Money, Samouel & Page 2011, 32). As both quantitative and qualitative types of data were collected, the author decided to analyse them separately and then combine the results.

### 5.2.1 Quantitative Data: Analysis of the Questionnaire

Quantitative analysis is used for numerical data. In order to make such data visual and useful, it can be presented in graphs and tables. (Saunders et al. 2009, 414.) The aim of this part is to present and describe graphs and find the links and trends within the collected data. It is important to mention that the analysis of the survey is done with the case orientation.

As mentioned previously, 161 responses were received. In the process of analysis some part of the irrelevant answers was removed in order to improve the representativeness of the whole research. The process is described below.

The first question in the conducted questionnaire was about the age of the respondents. As the company's target audience is presented by mobile game players age of 18-35, the author focuses on this age group in the questionnaire. It also explains the choice of age categories in the survey. Thus, as can be seen from the figure below, the questionnaire reached the target audience that is 97% of the total amount of respondents. It allows not to eliminate other 3% from the further analysis as such a small share of people cannot affect the results of the research. Despite the fact that there is an imbalance in favor of age 18-24, the questionnaire is still relevant and representative, because the age groups 18-24 and 25-35 can be considered as an integral unit. The reason of such consolidation is that the only age restriction provided by the case company was people within the age group 18-35. Figure 10, below, demonstrates age distribution of the respondents.

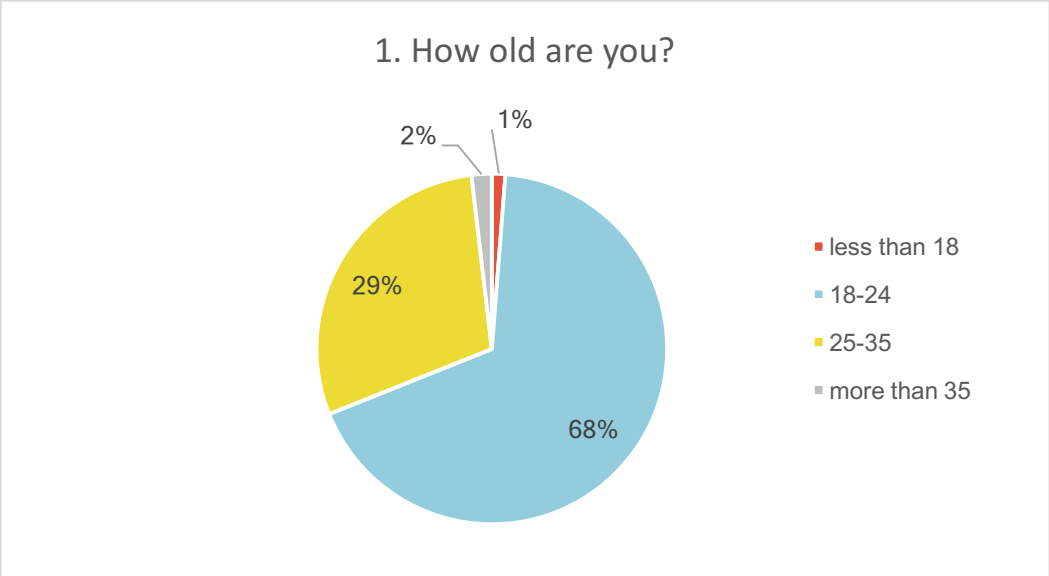


FIGURE 10. Age of the respondents

The second question concerned the time that the respondents usually spend in mobile games. The question allowed to eliminate the respondent group that has never played mobile games and, obviously, is not a target group of the research. Thus, the following pie charts were built without taking into account this group of people, so the sample were reduced by 24% (users that never played mobile games). As a result, only 122 responses were left from the initial 161. The elimination of the irrelevant answers allowed to enhance the representativeness of the questionnaire. It could be noticed that the questionnaire has covered all the user categories chosen for this question.

It is interesting to note that there is a certain stratification among the mobile users. For example, from the figure below let us eliminate all the other user categories except the two user groups that play mobile games every day, forming 20% of the responses, and see how often do they pay in mobile games. Thus, it can be noticed that much more people (42%), playing every day, made an in-app purchase at least a couple of times compared with an average user (27%). The figure “27%” can be found in the Figure 13 by addition of answers "Yes, and I do it quite often" and "Yes, a couple of times". It can be supposed that the chosen group of

people can be more attractive audience, however, in order to get a full picture, all the user categories should be analysed. What is more, in reality people who play mobile games only a few times a week or less are larger in size, forming 56% of the respondents. All the data concerning amount of time spent in mobile games can be seen from the pie chart below.

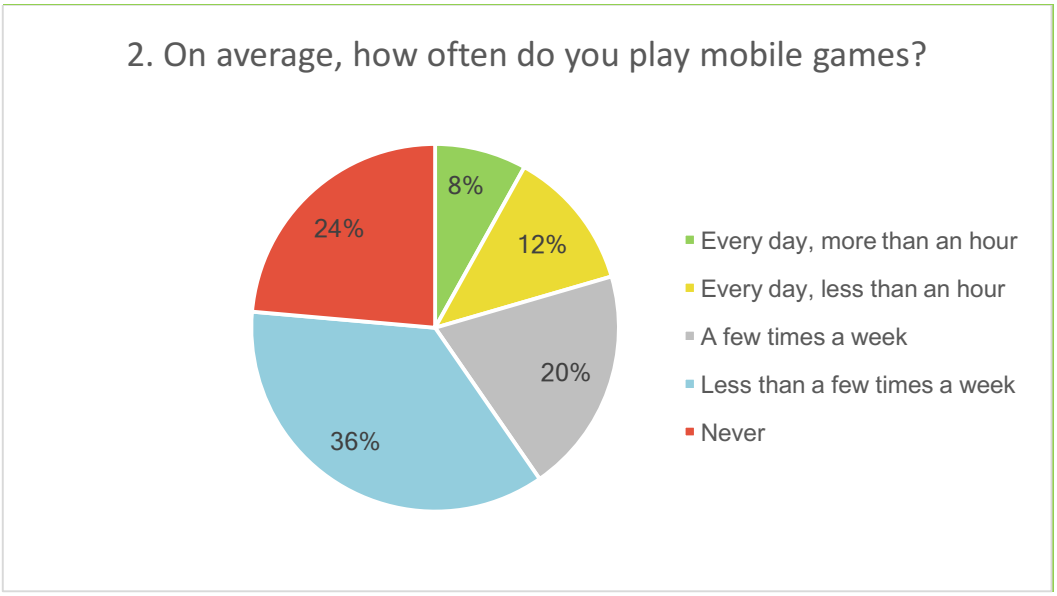


FIGURE 11. Amount of time spent in mobile games

The third question was asking about genre preferences of the respondents. Each person could choose one or several options. As the mobile games of the case company can be included to Card, Simulation, Strategy and Sports genres, these game categories should be considered The four genres are marked green on the graph below. The third question was conducted in order to understand how popular are the genres of the case company's games among the respondents. As can be seen from Figure 12, Sports, that is the main genre of the From The Bench's games, is quite a specific genre which was chosen only by 7% of the respondents. Thus, the case company is right when creating cross-genre games because it can attract more users. As the users are the basis of monetization, the more users were attracted to the game, the more of

them can be monetized. The graph below shows the popularity of mobile game genres among the respondents.

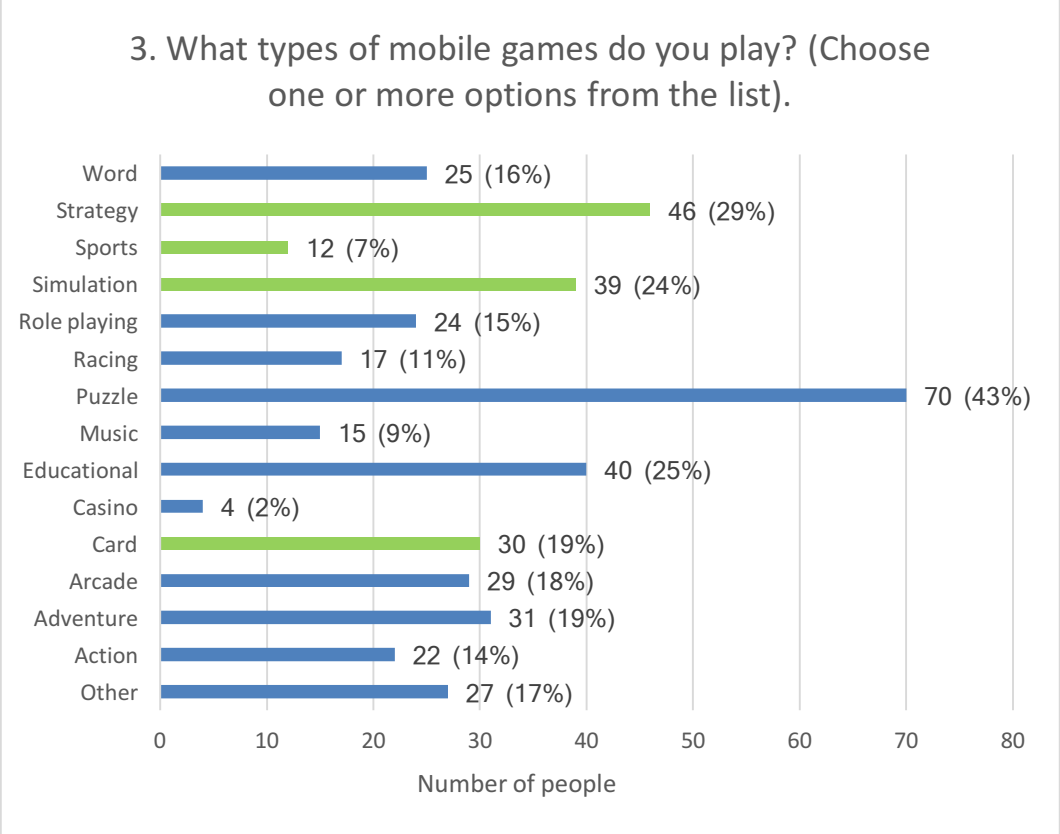


FIGURE 12. Game genre preferences of the respondents

The aim of the fourth question is to know if respondents have ever spent money in a free-to-play mobile game, and if yes, how often. As can be seen from the Figure 13, 66% of survey respondents have never spent money in mobile games and have negative attitude towards it. Only 27% of the respondents have spent money in mobile games at least once. Despite the fact that the answer “no, it is not for me” takes a significant share from the pie chart, paying user group is analysed separately in some following questions. According to the interview (2017), paying players are the main source of income in the case company, because in-app sales generate 80% of revenue. This fact means that it is not correct to ignore paying group of the respondents in the following analysis. The pie chart

below demonstrates what the respondents think about payments in a free mobile game.

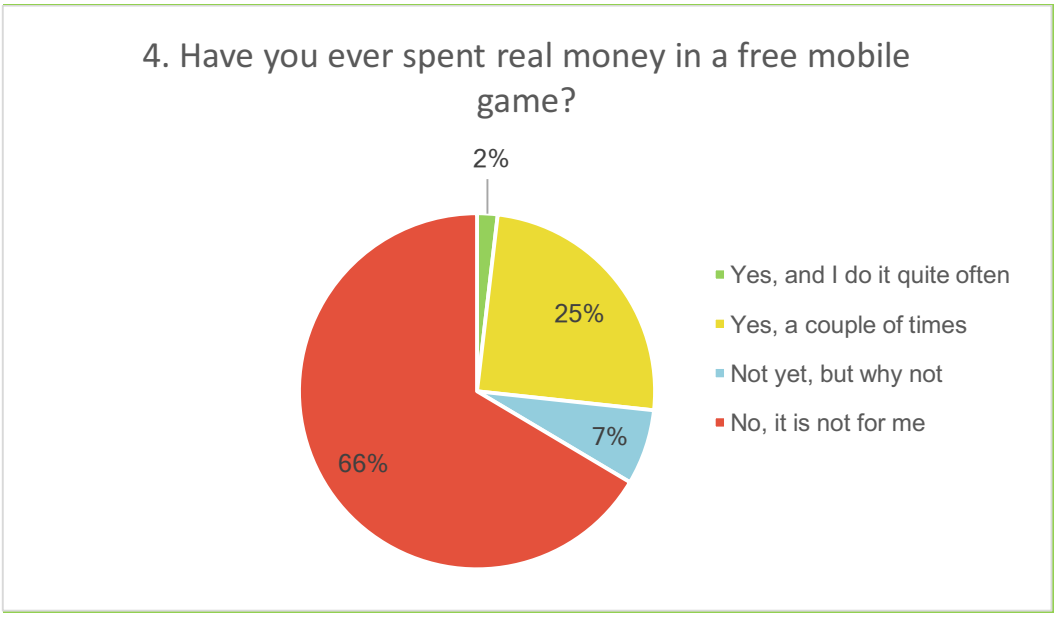


FIGURE 13. Respondents' attitudes towards in-app payments

Each question from 5 to 12 focuses on peoples' attitudes towards one of the monetization strategy of free-to-play mobile games. Thus, in Question 5 the respondents are asked about the freemium model. Questions 6 and 7 focus on in-app purchase, functional and decorative accordingly. In Questions 8, 9 and 10 users' opinions about different advertising types are presented (banners, full-screen ads, and offerwalls including rewarded videos respectively). The eleventh question concerns subscription model, and the twelfth question represents players' attitudes towards sponsorship model.

Firstly, pie charts with Questions 5, 6 and 7 are analysed. Despite the fact that Question 5 is about freemium monetization strategy, and Questions 6-7 concern in-app purchase model, it seems logical to consider them together. The reason of this decision is that in all three cases users pay

real money: in freemium model user buy additional levels or modes while in in-app purchase model the in-game goods are purchased.

As can be seen from the Figures 14, 15, and 16, mobile users have more positive attitudes towards purchase of decorative virtual goods than towards buying new levels or in-app goods that make the game process easier (functional virtual goods). Thus, the pie chart with question 7 shows that 17% of respondents are positive about the possibility to buy decorative in-game virtual goods while 5% of users chose “Very positive” option. The frequency of choosing positive options is much lower in questions 5 and 6, 10% and 11% respectively. Such pattern can be explained by the fact that people do not like when a game proccess is restricted like it happens in case of purchase of functional goods or purchase of levels in freemium games. Such restriction sets the rule: if a user wants to play further with comfort pace, s/he has to pay money. Decorative virtual goods, in their turn, are a matter of choice and do not restrict a game process. The figure below demonstrates what the respondents think about freemium model in mobile games.

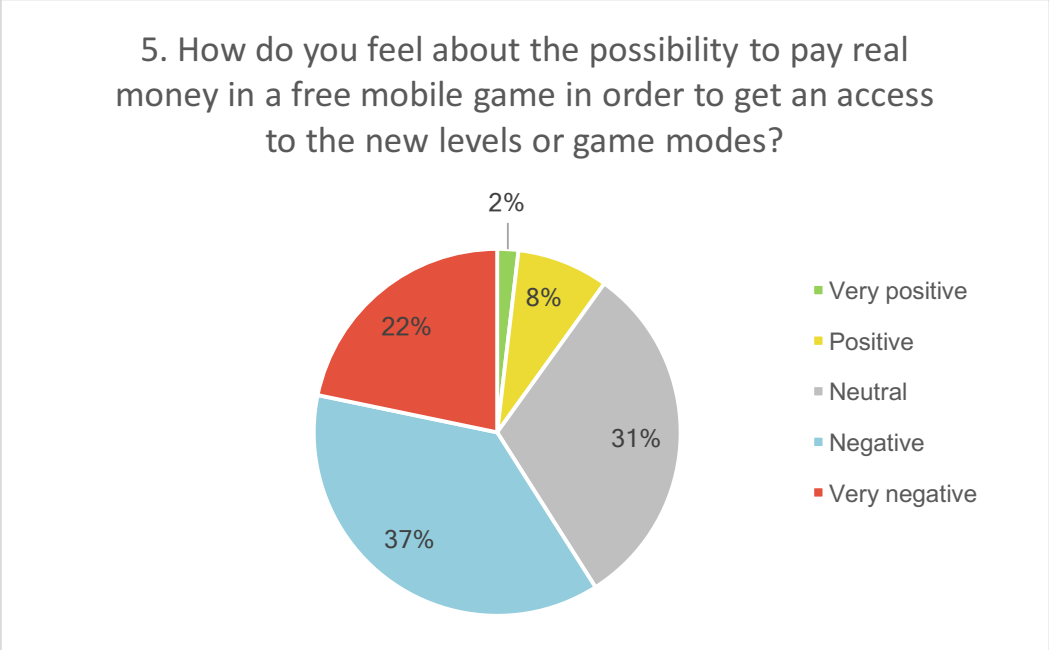


FIGURE 14. Users' attitudes towards freemium monetization model

It is also important to note that some people reject all forms of in-game purchases. Thus, the share of people answered “Very negative” in questions 5, 6, 7 is quite the same: 22%, 24%, 29% respectively. Combining “Negative” and “Very negative” options, it can be seen that in questions 5 and 6 it is shown 59% of such responses, and question 7 has 51% negative answers. Such figures are not surprising as in question 4 it was 66% of people that do not want to spend money in mobile games, choosing option “No, it is not for me”. The difference is that in questions 5,6 and 7 they were asked about their level of tolerance towards different monetization strategies while question 4 supposes a real purchase experience. Despite the fact that the possibility to buy in-game decorative virtual goods is the most popular IAP monetization option among the respondents, the difference is not so significant, especially if considering the share of negative answers. Thus, it seems not effective to reject the link between monetization and gameplay reached by selling functional in-app goods as it increases the conversion rate in the short term. Figure 15 demonstrates how respondents react to functional IAP.

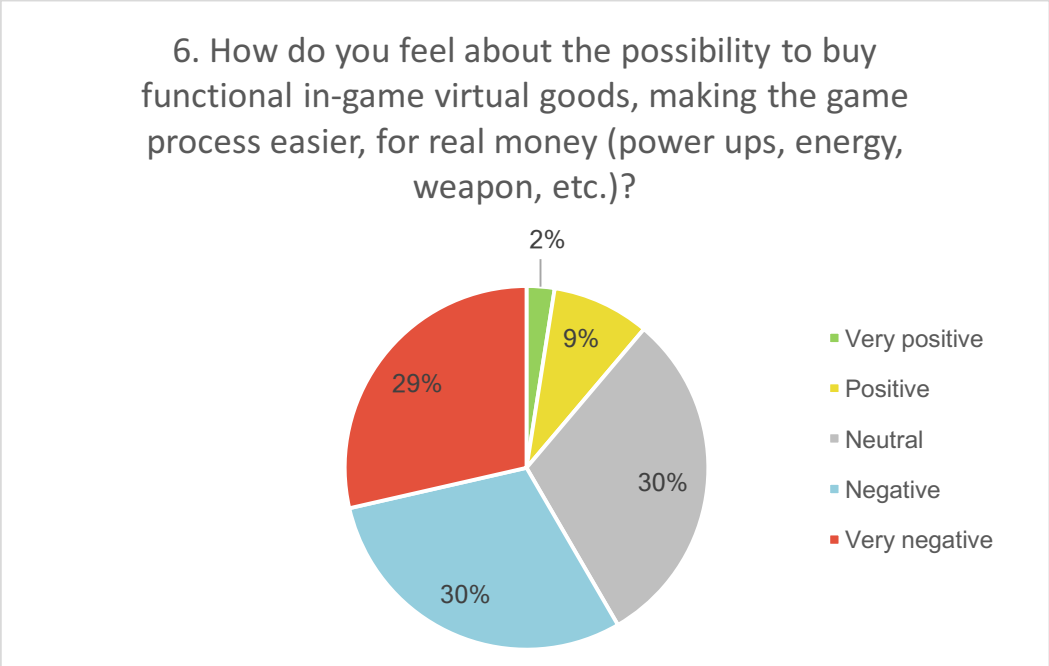


FIGURE 15. Users' attitudes towards functional in-app purchases

In the longer term it seems more rational to choose less user restricting monetization method such as decorative IAP, because it is less intrusive and, as a result, can increase the retention rate. Thus, the choice of monetization strategy should be based on for how long it is planned to retain an average user. It is also important to note that the users that have negative attitude towards IAP can avoid app download, as they can see a special "Offers In-App Purchases" marking on the app's page in App Store. Such sign warns players of IAP presence. At the same time, such caution is missed in the case of in-app advertising in App Store, so the users that are negative to ads become unprotected from downloading apps, containing promotional content. However, Android users are more protected in terms of advertising presence because apps in Google Play have "Contains ads" marking, besides a sign about IAP. The pie chart below shows players' opinions about decorative in-app goods.

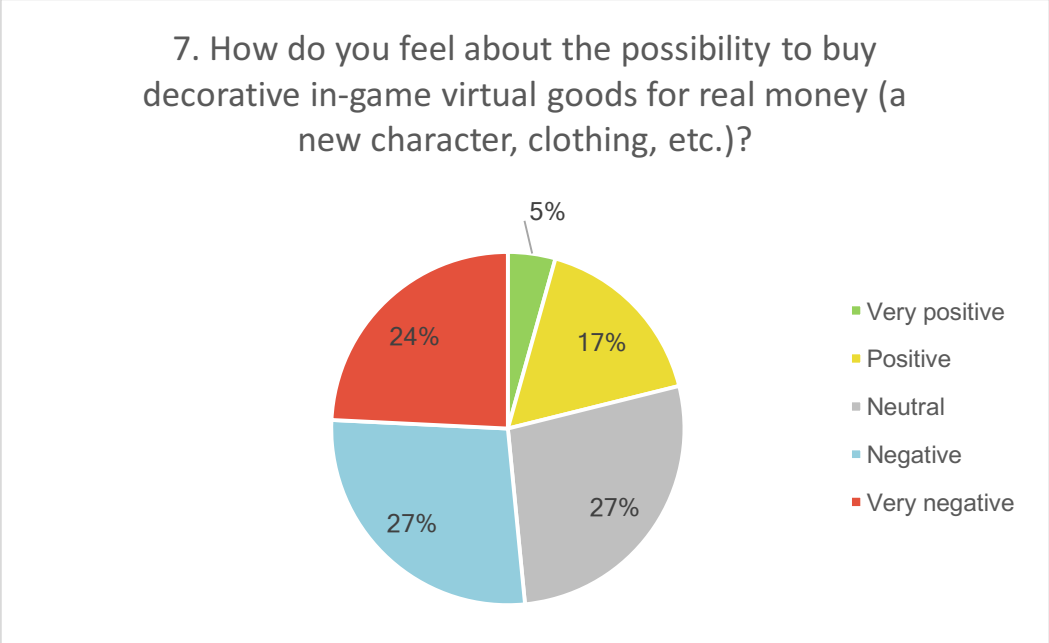


FIGURE 16. Users' attitudes towards decorative in-app purchases

Questions 8, 9, 10 are analysed in the next three paragraphs and show the respondents' opinions about different advertising types (banners, full-

screen ads, and offerwalls including rewarded videos). It can be noticed that there are two pie charts for each question. Graphs marked with “a” represents all the responses of the questionnaire, while the pie charts indicated by “b” exclude group of people answered “no, it is not for me” about in-app purchases in the 4th question. It was done in order to find out if there is a difference in attitude towards advertising among average users and users from the selected group. It was supposed that people that are not against in-app purchases can react more negatively to advertising that an average user. However, as can be seen from the graphs, the difference between figures of these two groups is minor, varying from 3% to 6% for each question. The following analysis is based on all responses, because in general the attitude of average user towards advertising coincides with the attitude of the selected group. The figure below shows opinions of all respondents about banners in a mobile game.

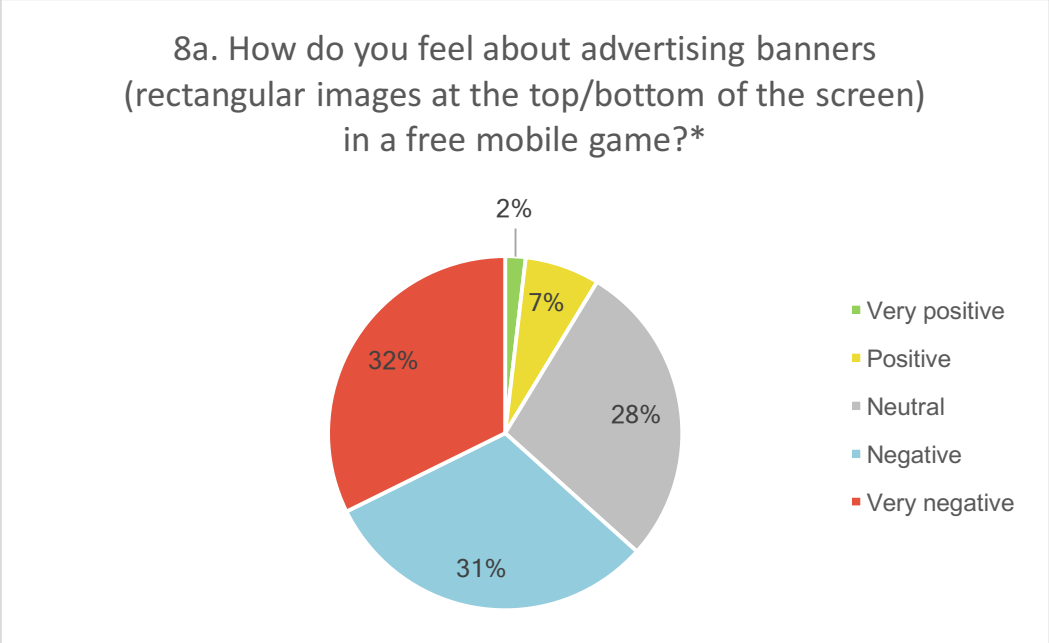


FIGURE 17. Users' attitudes towards mobile banners (*including all responses)

The pie chart below also showing users' attitudes towards banners. Unlike the previous graph, Figure 18 presents the opinions of all respondents excluding people with negative attitudes towards IAP.

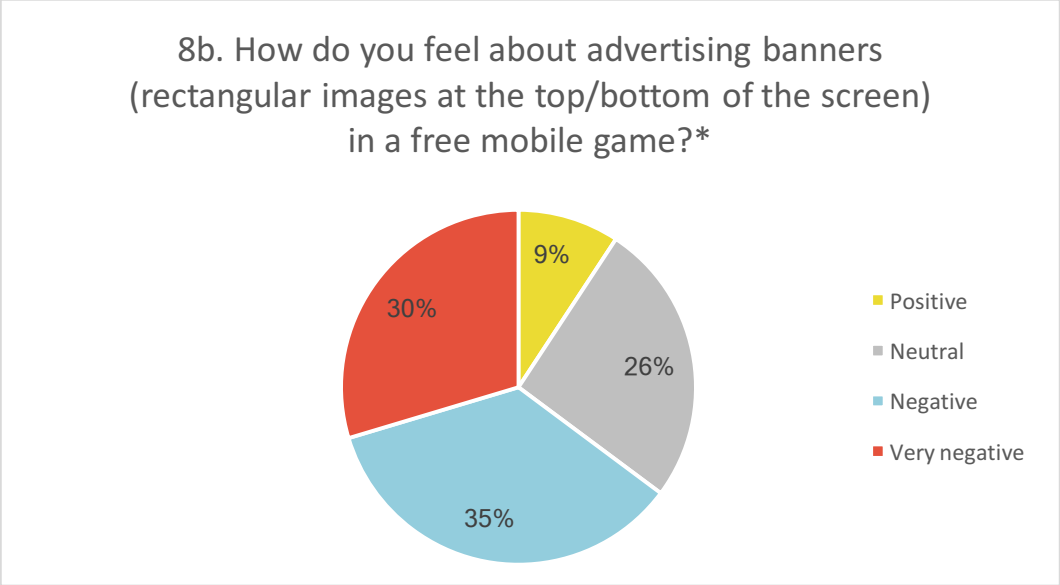


FIGURE 18. Users' attitudes towards mobile banners (*excluding people with negative attitudes towards in-game payments)

According to questions 8, 9 and 10, the most negative attitude was expressed towards full-screen ads. Thus, Figure 19 shows that 81% of users have negative or very negative attitude. Mobile banners are perceived by mobile game players less negatively: 63% of cumulative negative responses can be seen from Figure 17. The most satisfactory types of advertising for the players were offerwalls and rewarded videos. Thus, Figure 21 demonstrates only 29% of negative answers, 31% of positive and 10% of very positive responses. For comparison, the total amount of positive answers in questions 8 and 9 did not exceed 9% (Figures 17, 19). Thus, it is obvious that the most intrusive type of mobile advertising is interstitials, or full-screen ads, because they distract users

from playing and force players to skip it manually. Less irritation is caused by mobile banners that, however, still not very popular among the respondents. It is supposed that the reason of quite big amount of negative responses is that banners occupy some part of the screen and distract attention by bright colors. The most user-friendly types of mobile advertising are offerwalls and rewarded videos as they usually offer an in-game reward after doing a task as well as allow users to choose: take the offer or not. The figure below provides information about users' attitudes towards full-screen ads, or interstitials.

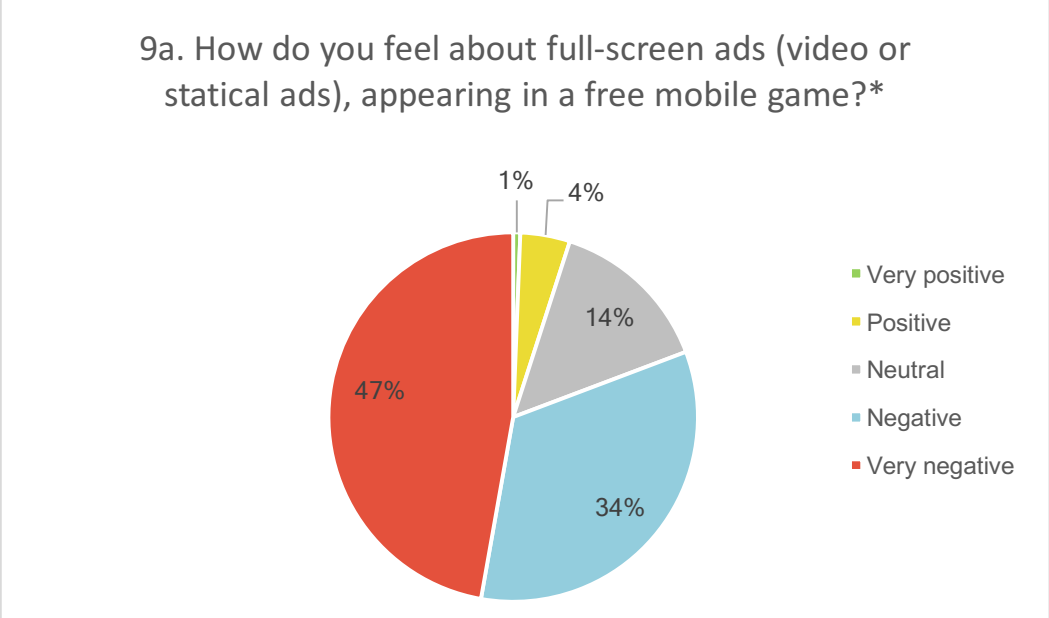


FIGURE 19. Users' attitudes towards mobile interstitial ads (*including all responses)

Like Figure 19, Figure 20 is also aimed to show what the respondents of the questionnaire think about interstitial ads. However, in this case the answers of people with negative attitudes towards in-game payments are excluded from the pie chart.

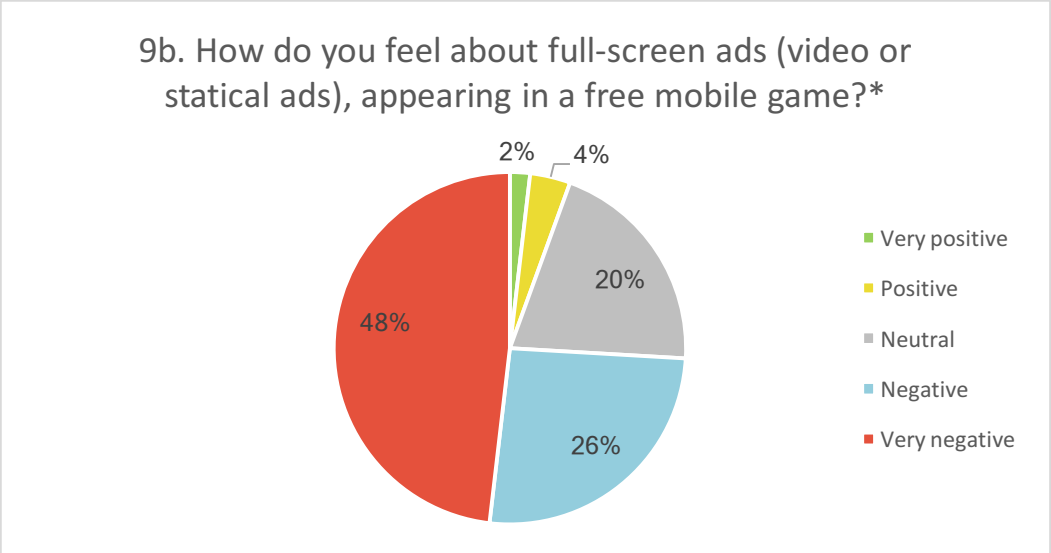


FIGURE 20. Users' attitudes towards mobile interstitial ads (*excluding people with negative attitudes towards in-game payments)

All in all, there is a certain dilemma facing mobile game developers. It is obvious that full-screen ads are more aggressive and allow to increase the number of clicks made on it. The more clicks on an advert, the more money company gets. At the same time, this type of advertising is the most irritating, according to the respondents. Thus, like in the case of functional IAP, full-screen ads are good only for the mobile games with short retention. As for the games that are aimed to retain users as much as possible, rewarded videos and offerwalls seemed to be a good option. Such advertising method are less irritating and invite users to spend more time in a mobile game. The figure below shows the reaction of the online survey respondents to offerwalls and rewarded videos in a free-to-play mobile game.

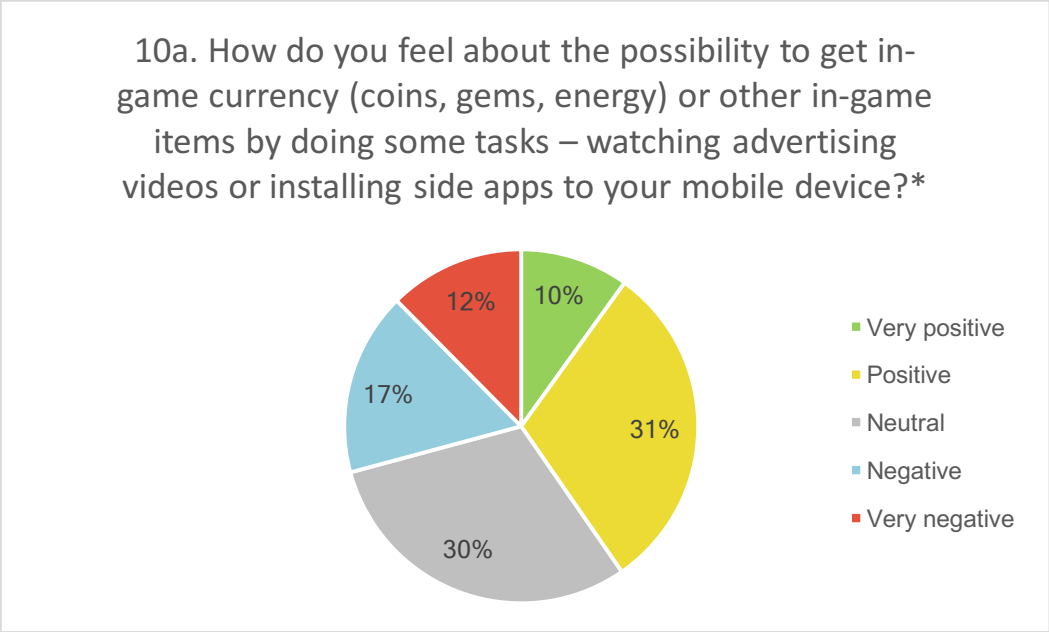


FIGURE 21. Users' attitudes towards mobile advertising offerwalls and rewarded videos (*including all responses)

The pie chart below shows users' attitudes towards mobile advertising offerwalls and rewarded videos. Unlike the previous graph, Figure 22 presents the opinions of all respondents excluding people with negative attitudes towards IAP.

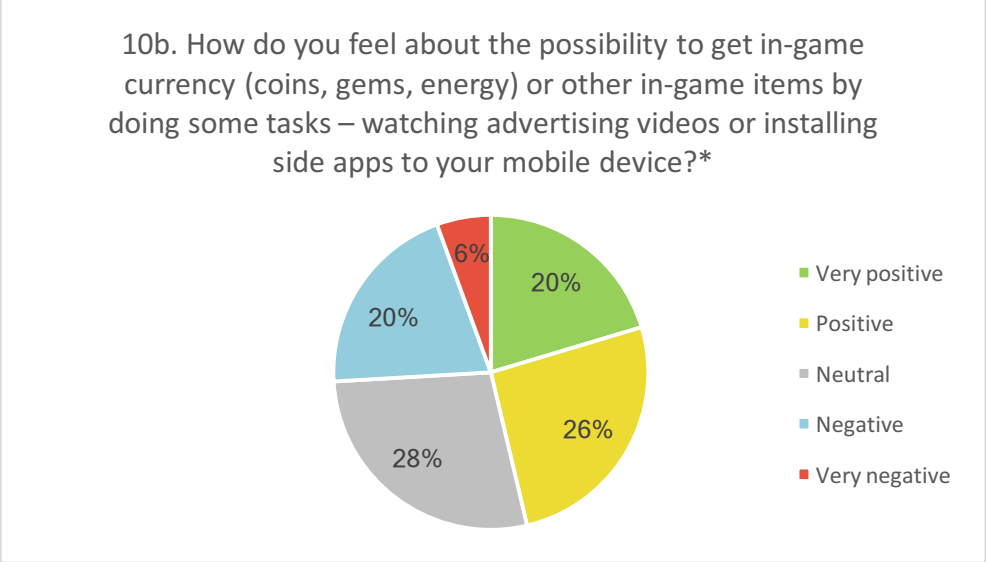


FIGURE 22. Users' attitudes towards mobile advertising offerwalls and rewarded videos (*excluding people with negative attitudes towards in-game payments)

Question 11 is aimed to get users' opinions about subscription monetization model. As subscription model is related to spending real money, it is therefore logical to compare it with the questions 5, 6 and 7, because the models described in these questions are also tied to spending money. As can be seen from Figure 23, subscription model can be compared with decorative IAP by the amount of positive responses. Thus, the share of positive and very positive responses in question 11 was 21%, while in question 7 the share of similar answers took 23%. As for negative answers, it was 19% in question 11 and 24% in a question about decorative IAP. All in all, subscription model is also one of the least intrusive monetization model for mobile users as well as one of the best model for a long-term user engagement. It can be supposed that such model is popular among mobile users because it offers more defined products than functional IAP. For example, when user buys a functional virtual good such as weapon, it's effectiveness and usefulness cannot be estimated before the purchase. As for subscription model, if the user pays to get an ad-free version, it is obvious that such subscription turns off advertising. The results of the question 11 about players' attitudes towards subscription monetization model are presented in the figure below.

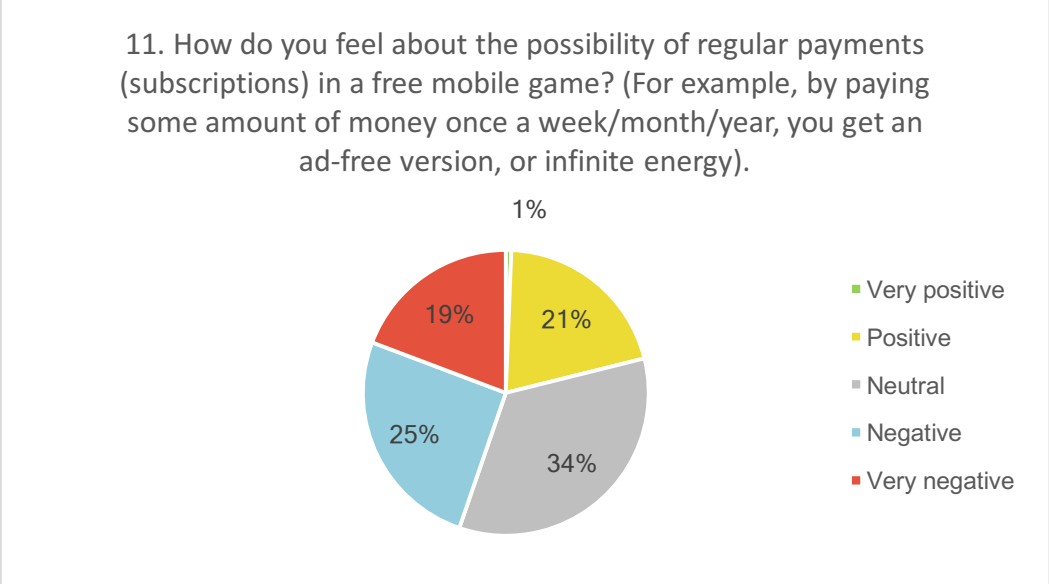


FIGURE 23. Users' attitudes towards subscription monetization model

The last question in the conducted questionnaire was about users' opinions about sponsorship monetization model. As can be seen from the figure 24, below, this monetization model had the biggest number of positive answers, comparing to other monetization strategies. Thus, more than half of the respondents have positive attitude towards this monetization model, and 15% of people chose "Very positive" option. 23% of the users are neutral towards sponsorship model. Negative answers took only 8% from the pie chart. Thus, it may seem that it is a perfect model for monetizing users. However, due to the fact that subscription model is quite new, it has not elaborated enough to be widespread, and its effectiveness is hard to be predict. The pie chart below shows the results of the 12th question.

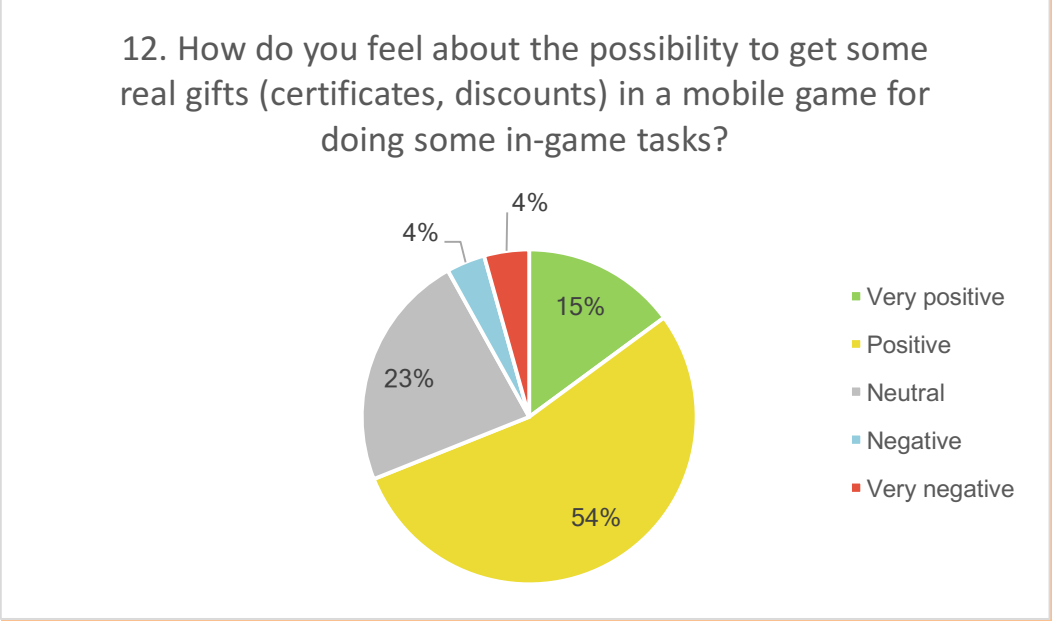


FIGURE 24. Users' attitudes towards sponsorship monetization model

As a result of analysis of the questionnaire, mobile game users of the target age 18-35 were questioned, and it was defined to what extent different monetization strategies irritate users. First of all, the two main groups of monetization strategies were identified: advertising and

IAP/freemium. Comparing these two groups, it is important to note that people have more negative attitude towards mobile advertising than towards in-app purchases. However, in each group there are the least annoying types of monetization that can be identified. Thus, the least intrusive advertising models are offerwalls and rewarded videos, while decorative in-app purchases are the least irritating among all IAP. As for subscriptions, people have quite positive attitude towards it as well. Sponsorship model showed the most positive results. However, this monetization model is still not widespread, so an average mobile user maybe has not met it in a real life, so the results concerning sponsorship model may be irrelevant to some extent.

The most intrusive among monetization models are full-screen ads, then banners, functional in-game purchases and freemium model go after. It is obvious that these monetization strategies are more aggressive towards a user. It's assumed that such aggressive mode of monetization makes retention rate lower, at the same time increasing a share of monetized users. However, the author does not fully agree with that point of view. Looking at the ARM funnel, considered in the theory part of the thesis, it is obvious that the lower retention rate, the smaller monetization part. Thus, in this case the growth of the share of monetized users with decrease of retention does not necessarily mean an increase in number of total monetized users and, moreover, an increase in profits. Moreover, the use of such irritating monetization strategies discourages mobile users from an app that decreases the long-term retention.

The data gathered during the analysis of the questionnaire is used when giving recommendations for the case company. Recommendations can be found in Chapter 6.

### 5.2.2 Qualitative Data: SWOT Analysis Based on Interview.

Qualitative analysis is used for non-numerical data, or data that has not been quantified. To be useful such data needs to be analysed and conceptualised. (Saunders et al. 2009, 480.)

In order to bring the previous research aspects together and be able to provide improvement recommendations for the case company, SWOT analysis of the monetization strategy of From The Bench's games is provided. SWOT analysis is a marketing tool used for analysing of external and internal factors affecting a company or a project and stands for Strengths, Weaknesses, Opportunities and Threats. Strengths and weaknesses form internal factors while opportunities and threats demonstrate external factors. (Armstrong & Kotler 2012, 53-54.) The figure below presents the SWOT matrix.

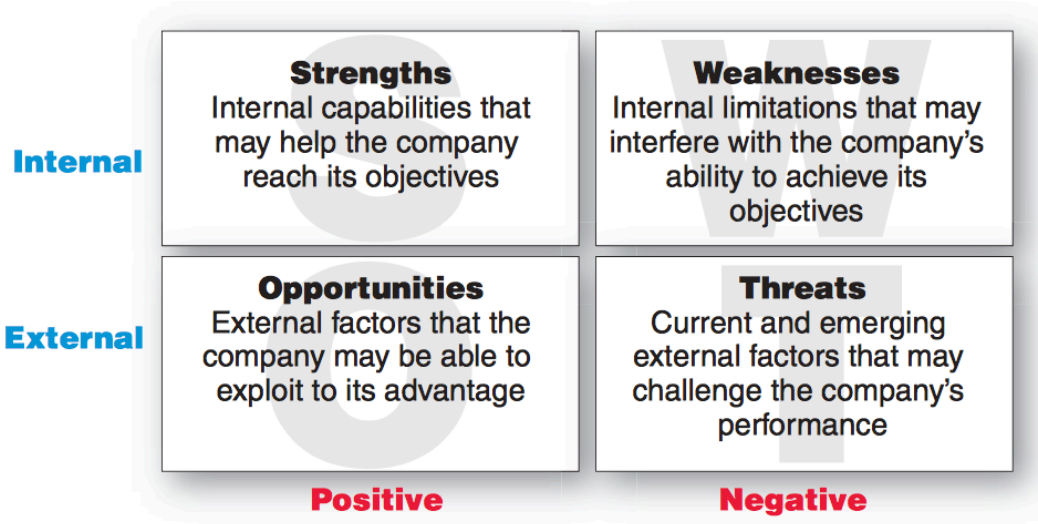


FIGURE 25. SWOT analysis (Armstrong & Kotler 2012, 54)

Strengths show advantages of a project, its internal resources and capabilities. Weaknesses are formed by internal limitations of a project such as lack of resources or capabilities. Opportunities are possible advantages that could be used by a company. Last but not least, threats are the elements of the external environment that show possible challenges in a project. (Armstrong & Kotler 2012, 53-54.) The key findings from the SWOT analysis of the case company's mobile game monetization strategy are summarized in the figure below.

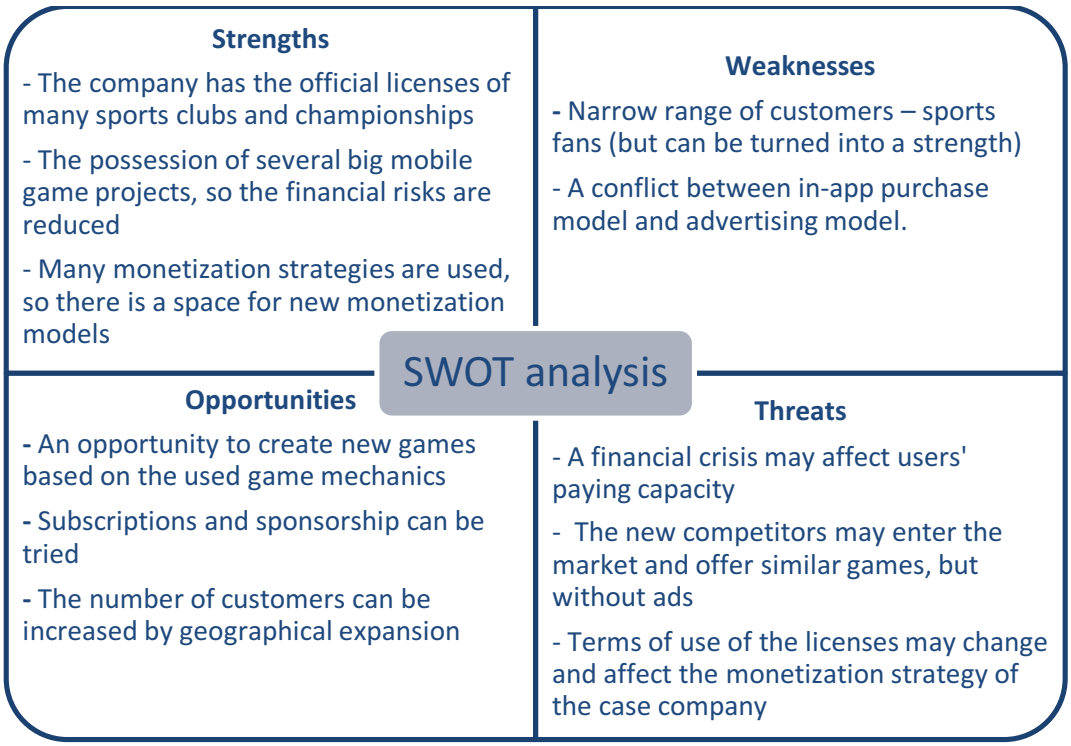


FIGURE 26. SWOT analysis of the mobile game monetization strategy of From The Bench

**Strengths**

One of the main strengths of From The Bench that affects the company's monetization strategy is the possession of the official licenses of many sports clubs and championships. The fact is that having such licenses is a competitive advantage in the field of sports video games. As the majority of From The Bench's customers are sports fans, they would like to play a mobile game that has the images of their sports heroes and team names. Thus, it makes football or basketball simulation more realistic and increases the user's engagement in the process. The example of the importance of licenses in the field of sports video games can be the rivalry between PES and FIFA, the two biggest series of football simulation video games. Thus, unlike FIFA, PES has lack of licenses of many football competitions such as Champions League and Premier League. Many game experts pointed out that the greater success of FIFA in comparison with PES is closely related to the fact that FIFA possesses all the essential

licenses, despite the fact that PES has certain gameplay advantages. (Grice 2015; Harvey 2017; Mazique 2017.) As for mobile games of the case company, it means that a user prefers to buy a favorite sports player from real life neither than an abstract player. Thus, besides the fact that official licenses generate a lot of organic downloads, it also increases the number of paying users, or conversion rate.

Another strength is that the case company has several equally important big game projects, such as Fantasy Manager Football and NBA General Manager, with different monetization models. Such diversification allows to reduce the risk of serious financial losses in case of the failure of one of the monetization strategies. It also creates possibilities of experiments with monetization strategies without any major risk.

The last strength revealed by the author is that From The Bench already uses many monetization strategies such as functional and decorative IAP, full-screen ads, banners, offerwalls, and others. As was mentioned in the theory part, monetization of successful game should be integrated to mobile game at the development stage. Thus, as the company's mobile games already have the space for various monetization models, it allows to change freely the monetization models and their combinations.

**Weaknesses**

Due to the specific sports theme, the company focuses on the narrow range of customers – sports fans. Thus, it is hard to reach a large audience and get into the list of the top grossing games. However, it is important to note that this weakness can be turned into a strength. Due to the narrow focus of the games, they attract only those people that are really passionate about sports and, as a result, are more likely to pay money for their passion. Thus, despite the fact that a narrow focus reduces the audience significantly, it also works with the specific audience that are passionate about the topic.

Another weakness of the monetization strategy of the case company's games is a conflict between in-app purchase model and advertising. It is

obvious that in order to increase profit from IAP, the company should try to increase retention rate, keeping the users in a game as long as possible. Thus, such intrusive monetization models such as full-screen ads and banners may discourage the potential paying users from a purchase, given that 80% of the company's revenue come from in-app sales.

**Opportunities**

First of all, the company has an opportunity to create new games based on the mechanics that are already used in From The Bench's mobile games. Moving away from sports theme, the company has an opportunity to extend the size of target audience and, as a result, improve monetization. Then, From The Bench can try new monetization models such as subscriptions and sponsorship as well as change the existing ones. New monetization strategies may open new ways of getting revenue. Another opportunity is to increase the number of customers by geographical expansion, adding new languages. It can attract new users as well as solve the problem with the audience size caused by the narrow sports focus.

**Threats**

First of all, a financial crisis may affect the mobile game industry. As a result, it may cause that people will spend less money in mobile games. In case of revenue share's change, the company might have to focus on advertising monetization model, changing their strategy. Then, new competitors may enter the market. What is more, in case of rivals offer the similar projects but without advertising, it may be a significant threat for the company. Another threat is that the terms of use of the licenses may change. It may affect significantly the monetization model and even business model of the company.

# 6 RECOMMENDATIONS

The chapter provides some recommendations of how monetization of the free-to-play mobile games created by the case company can be improved. Recommendations are based on the data gathered from the theoretical part, conducted questionnaire, interview with the case company's CMO as well as SWOT analysis of the monetization strategy of From The Bench. The summary of recommendations is presented in the table in the end of this chapter.

As was mentioned in the SWOT analysis, the theme of the case company's mobile games, limited to sports, leads to the decrease in audience coverage as well as revenue from monetization. On the other hand, such narrow focus means that the audience of the games is composed of sports' fans, so these people have a certain predisposition to the case company's mobile games from the beginning. Thus, when the inflow of customers is limited and the audience is highly interested in the products, it seems logical to focus on the involvement in the in-game process, trying to minimize factors that may irritate users, such as mobile advertising. As the examples of successful work with an audience, interested in a certain subject, can be such well-known free-to-play mobile games as *Fallout Shelter* (for the fans of *Fallout* series of video games), *Super Mario Run* (for the fans of series of video games about Mario), *FIFA Mobile Football* (for football and FIFA fans), *Clash Royale* (for the fans of *Clash* series of mobile games). The mentioned mobile games have a focus on the in-app purchase model, while advertising is not used. (Bethesda Softworks 2017; Electronic Arts 2017; Nintendo 2017; Supercell 2017.)

The current monetization strategy of the free-to-play mobile games of From The Bench focuses on both IAP and advertising. However, as the conducted questionnaire showed, there is a certain conflict between these two monetization models. As the group of users that were not against in-game payments was selected, it allowed to understand their attitude towards various monetization models. Thus, 30% of users from this group

have a very negative attitude towards banners, while 48% of mobile game players are very negative towards full-screen ads. The author decided to present the statistics of very negative feedbacks as it shows the extreme irritation of users concerning different types of advertising, so the users might leave an app in case of advertising presence. It is obvious that monetization networks such as Tapjoy or Chartboost, that were mentioned in the theoretical part of the thesis, allow to segment the audience, grouping paying and non-paying users. However, it is not possible to define the users that have not pay yet but potentially are ready to make a purchase, so the effectiveness of such platforms is questionable.

As can be seen from the games, monetization strategy of the case company was developed, taking into account the possible conflicts between monetization strategies that were discussed before. Thus, full-screen ads are shown only after several days after the download, and banners are hide in the last section of the main menu. However, even though the certain steps towards reduction of audience losses have been taken, the conflict between monetization models is not resolved completely. As 80% of company's revenue come from IAP and 20% is received from in-game advertising, and the average advertising revenue on the mobile game market is 38%, the current monetization strategy seems to be not very effective (DeltaDNA 2015; Cremades 2017). So, in order to cover costs incurred by potential refusal of advertising, the revenue from IAP should be increased only by 25%. Taking into account that users in general have negative attitudes towards banners and full-screen advertising, such increase is seemed to be achievable. Thus, the case company should take additional steps towards reduction of audience losses caused by monetization models' conflict in order to bring it to a logical conclusion.

In order to provide a more concrete example, it was decided to choose one of the case company's free-to-play mobile games – *NBA General Manager*, as it presents the most of monetization models: banners, full-screen ads, an offerwall, rewarded videos, and IAP. According to the interview, the retention rate, showing the share of players enter the game

after a certain period of time, is 30% on the first day, 10% on the 7th day, and 4.81% on 28th day after the game download (Table 2). As interstitials are shown only after several days after download, it seems logical to focus on the period from Day 7 to Day 28, when advertising is shown more actively. As the loss of users for this period is more than half of the audience, it can be supposed that some part of them has left because of advertising. With the 80/20 ratio of IAP and advertising revenue, it is enough to save 1.25% of the audience in order to cover costs caused by refusal from advertising, provided that retention rate and IAP revenue are in direct proportion. Moreover, as for conversion rate, there is no significant increase in the share of paying users for the selected period: from 2.5% on the 7th day to 2.8% on the 28th day. It is supposed abandoning of advertising should increase the conversion rate, because, obviously, users are more willing to pay money in an ad-free mobile application where nothing irritates them. Thus, abandoning of advertising should be effective enough to increase IAP revenue by 25%, but it can be verified only by experimental means.

However, there are less dramatic steps that do not require the full abandoning of advertising. These steps are needed to be done in order to try the effectiveness of the offered approach without the risk of financial loss. As the case company has several mobile games, the strategy can be tested on the one of them, and then the results should be analysed. For example, already mentioned *NBA General Manager* can be taken.

First of all, the case company should stop using full-screen ads in the mobile games. This type of advertising is the most unpopular among potential paying users: 74% of negative and very negative feedbacks against 6% of cumulative positive answers in the conducted survey (Figure 20). Then, banners should be also removed. Firstly, banners are hidden in the games of the case company, for example, *in NBA General Manager*, so they do not work effectively anyway. Secondly, this type of advertising is also unpopular among users that are not against in-app payments. As can be seen from Figure 18, 65% of the mobile users have negative and very negative attitudes towards banners, while only 9% of the respondents

chose a “Positive” option. Alternatively, rewarded videos and offerwalls can substitute other types of advertising as they showed one of the best results in the questionnaire in terms of people’s attitudes: 26% of cumulative negative and 46% of cumulative positive feedbacks (Figure 22). Thus, such a positive attitude towards these monetization models reduce significantly the conflict between IAP model and advertising. As From The Bench already has rewarded videos and offerwalls in the games, the author suggests to focus on these types of advertising, providing more in-game in-game hints and information concerning available offers. As was noted in the interview, the case company has already started the work in that direction, made the offerwall more visible for the users. Thus, it seems logical to continue this strategy. Moreover, according to DeltaDNA report (2015), mobile game companies are twice as likely to choose rewarded videos than banners in their games.

Such strategy allows to save a certain revenue share, coming from advertising, but also helps to increase retention and conversion rate by removing such irritating factors as full-screen advertising and banners. After trying the strategy on one of the games, the case company should analyze the results and decide if it would be effective to use it in other games. If yes, then a full refusal to use advertising can be tried.

As for IAP, this part of monetization should remain the same, including functional and decorative in-app goods. Even though people have a negative attitude towards functional IAP in general, the refusal of such aggressive monetization approach means the decrease of IAP revenue as functional goods will become useless for the customers. As it was decided to focus on IAP monetization strategy, both functional and decorative in-app goods should be used by the case company.

Last but not least, the case company can try to integrate sponsorship model to the games. According to the conducted questionnaire, this monetization model seems very attractive to players, showing only 8% of cumulative negative feedbacks (Figure 24). Moreover, it is a very promising area for creating new partnerships. However, the company

already uses some elements of sponsorship: in the in-game fantasy tournament a user can win a real prize, sponsored by one of the football clubs. Thus, From The Bench can try to turn it into the monetization model without any major risk.

TABLE 4. Recommended steps to improve the mobile game monetization strategy in the case company

| | |
|---|---|
| **Step One** | Stop using full-screen ads and advertising banners and focus on rewarded videos and offerwalls in one of the games of the case company, for example, *NBA General Manager.* It should help to overcome the conflict between IAP model and advertising and increase the involvement of players in the in-game process. Such strategy allows to save a certain revenue share, coming from advertising, but also helps to increase conversion rate by removing such irritating for the users factors as full-screen advertising and banners. |
| **Step Two** | After the implementation of the offered strategy in one of the games, the results should be analyzed. If the strategy had a positive influence on retention and conversion rates, the company can try to use it in the other mobile games. |
| **Step Three** | If the results are very positive, it should be decided if it makes sense to remove advertising from the games completely. |
| **Step Four** | Sponsorship model can be tried, as the case company already has a space for it in several mobile games. It is a very promising area for creating new partnerships. |

As recommendations for the case company are provided, the main objective of the research is met. The conclusion of the thesis is presented in the next chapter.

# 7 CONCLUSION

The chapter summarises the data and findings gathered from the theoretical and the empirical parts of the thesis. The main objective of this chapter is to provide answers to the main research questions. Validity and reliability of the study as well as suggestions on further research are also included.

## 7.1 Answers to Research Questions

The main aim of the research was to find ways to improve monetization strategy of the free-to-play mobile games of the case company, From The Bench. Due to the complexity of the topic, it was divided into several parts. Thus, in order to provide answer to the main research question, the sub-questions should be answered first. The sub-questions of the research are:

- *What are the different monetization strategies suitable for mobile games?*

This question aimed at covering the topic of mobile game monetization and its strategies. First of all, monetization strategy of a mobile game is one or several monetization models that are used by a mobile game company. Thus, there are six main monetization models: paid apps, in-app advertising, freemium, in-app purchases, or IAP, paywalls (subscriptions), and sponsorship. Different combinations of these models form a monetization strategy of a mobile game. Paid apps model is usually used independently, while free-to-play mobile games can include other monetization models. One of the most popular monetization strategy for a free-to-play game is IAP model, supported by in-app advertising. However, in this case it is important to choose the type of advertising carefully in order to overcome a possible conflict between these two monetization models. Monetization models and strategies are described more thoroughly in Chapter 3.

- *What are the advantages and disadvantages of monetization strategy in the case company's free-to-play mobile games?*

In order to provide answer to this question, SWOT analysis of the monetization strategy of the case company's free-to-play mobile games was done.

Thus, the main advantage of From The Bench, affecting the company's monetization strategy, is the possession of the official licenses of many sports clubs and championships. It allows the company to use the names and the images of famous sports clubs and players that attract the target audience – sports fans. The licenses help to generate a lot of organic downloads and increase the number of paying users, or conversion rate. Another advantage of current monetization strategy is a big amount of game projects. It allows the company to experiment with monetization strategies in different mobile games without any major financial risk. Last but not least, as From The Bench has initially integrated many monetization models into the games, it allows to change freely the monetization models and their combinations as there is already space for that.

As for disadvantages, the company focuses on the narrow range of customers – sports fans. Thus, the audience of the games is relatively small. As a result, there is little space for monetization. However, this weakness can be turned into a strength. Such a narrow focus allows to get a highly passionate about sports audience, that is more likely to pay money for the passion. Another weakness of the monetization strategy is that the company uses both IAP model and in-app advertising. Such combination, as it has been found, creates a certain conflict in the monetization strategy. SWOT analysis can be found in the empirical part of the thesis.

- *What do mobile game players think about different monetization models in free-to-play mobile games?*

In order to answer this question, the questionnaire among mobile game users was conducted. The respondents were asked about their attitudes towards different monetization models in free-to-play mobile games. Thus, people in general have more negative attitude towards in-app advertising than towards in-app purchases. The least intrusive advertising types are offerwalls and rewarded videos, while decorative in-app purchases are the least irritating among all IAP. As for subscriptions, people have quite positive attitude towards it as well. Sponsorship model showed the most positive results. However, this monetization model is still not widespread, so an average mobile user maybe has not met it in a real life, so the results concerning sponsorship model may be irrelevant to some extent. The most intrusive among monetization models are full-screen ads, then banners, functional in-game purchases and freemium model go after. More detailed results of the questionnaire can be found in the empirical part of the research.

After the sub-questions of the research are answered, the answer to the main research question can be provided. Thus, the main research question is:

> ***How to improve mobile game monetization strategy in free-to-play mobile games in the case company?***

After evaluation of the mobile game monetization strategy in the case company, examination of the theories and analysis of the questionnaire, improvement recommendations for From The Bench were given. More detailed recommendations are presented in Chapter 6.

First of all, the author offers to stop using full-screen ads and advertising banners and focus on rewarded videos and offerwalls in one of the games of the case company. As *NBA General Manager* has been already analyzed in the research, it seems reasonable to test the offered strategy in this mobile game. Such decision was taken in order to overcome the conflict between IAP model and advertising in a free-to-play mobile game, caused by the users' general negative attitude towards interstitials and

banners. Thus, the author assumes that it can help to increase the involvement of players in the in-game process. As a result, mobile users will spend more time in a game, meaning that the retention rate will growth. Such strategy allows to save a certain revenue share, coming from advertising, but also helps to increase conversion rate by removing such irritating for the users factors as full-screen advertising and banners.

After the implementation of the offered strategy in *NBA General Manager*, the author suggests to analyze the results after some time and see if the strategy had a positive influence on retention and conversion rates. If so, the company can try to use it in the other mobile games. If the results are very positive, it should be decided if it makes sense to remove advertising from the games completely.

The last recommendation that can be made by the author is to try to integrate sponsorship model, as the case company already has a space for it in several mobile games. According to the conducted questionnaire, this monetization model seems very attractive among mobile game players. Moreover, it is a very promising area for creating new partnerships.

## 7.2 Validity and Reliability

Validity is a concept needed to measure the extent to which research findings meet the research objectives (Saunders et al. 2009, 157). Secondary data of the research was collected through academic and semi-academic books, scientific journals, previous researches, related to the topic, and reports of research groups, providing recent statistics from the mobile app industry. As for online sources, only credible and up-to-date websites were preferred. Primary data was collected through a semi-structured interview and an online questionnaire. Data collection and interpretation were done properly. Moreover, the use of both quantitative and qualitative data adds more validity to the research. The sample size is big enough (161 responses) to consider the questionnaire as valid. Thus, it can be stated that the research is valid.

Reliability is a concept used to measure the extent to which the research is consistent and the results are repeatable in a similar research (Saunders et al. 2009, 156). The interview was audio recorded and carefully transcribed. Thus, it eliminates human errors. In order to avoid misunderstanding, the interview was conducted in Skype in order to have the possibility to ask additional questions after the interview. As for the questionnaire, each question had a short description of a monetization model, so it also helped to avoid misunderstanding. The findings of the research are highly reliable for this period of time in Europe. In case of similar research, the result may vary due to the rapid change of technologies. Also, as the research is case-oriented, the results can be different if another case company is studied. Taking into account all the mentioned factors, the research can be considered as reliable.

## 7.3 Suggestions on Further Research

As was mentioned in the recommendations' part, in order to suggest further improvements for the case company's monetization strategy, a new analysis is needed. Also, the conflict of different monetization models can be studied, taking into consideration the functionalities of mobile monetization platforms.

# 8 SUMMARY

The thesis aimed to provide a better understanding about mobile game monetization and its strategies, and study how different monetization models work in free-to-play mobile games. Mobile games monetization strategy of the case company, From The Bench, was reviewed as an example, and the main goal was to provide improvement recommendations for it.

The research started with the general introduction to mobile applications and the app market, focusing on gaming apps. The next chapter was dedicated to the concept of mobile app monetization, its strategies and models. The focus was on the description of the business model of the free-to-play mobile games and explains its work in combination with other models. Different mobile game monetization mechanics were described as well. The case company, its products and mobile game monetization strategy were presented after the theoretical research.

The empirical research was aimed to evaluate current monetization strategy of the case company and to find out how the mobile users feel about different monetization strategies in free-to-play mobile games. The primary data was collected through an interview with the case company's representative and an online questionnaire among mobile game players.

Chapter 6 was aimed to present improvement recommendations for the mobile game monetization strategy of the case company. Recommendations were based on the theories and the empirical analysis.

The research showed that different monetization models may conflict in a free-to-play mobile game. It was also revealed that due to the specificity of the audience, the case company can focus on the in-app purchase monetization model and partially remove in-app advertising from the mobile games. Validity and reliability of the thesis are proven. The suggestions for further research on mobile game monetization are provided.

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APPENDICES

APPENDIX 1. Interview

- Tell freely about yourself
- Tell freely about the company
- What products do you have? How do you group them?
- What is the age of your target audience?
- Do you use free-to-play model for all your games? Why did you choose this business model?
- What monetization models do you use in your games? Does it vary in different games and how?
- How was your monetization strategy formed?
- How does your revenue split between IAP model and ads?
- Have you ever changed your monetization strategy? How did it affect your revenue?
- Apart from game monetization, what other revenue channels do you have?
- What is the retention rate in your games?
- How many users are monetized? What is your conversion rate?
- How does the revenue split between iOS and Android?
- What game mechanics do you use in order to monetize users?

APPENDIX 2. Questionnaire (in English)

1. How old are you? *

- ○ less than 18
- ○ 18-24
- ○ 25-35
- ○ more than 35

2. On average, how often do you play mobile games? *

- ○ Every day, more than an hour
- ○ Every day, less than an hour
- ○ A few times a week
- ○ Less than a few times a week
- ○ Never

3. What types of mobile games do you play? (Choose one or more options from the list). *

- ☐ Puzzle
- ☐ Strategy
- ☐ Casino
- ☐ Card
- ☐ Music
- ☐ Sports
- ☐ Racing
- ☐ Simulation
- ☐ Role playing
- ☐ Word
- ☐ Educational
- ☐ Arcade
- ☐ Adventure
- ☐ Action
- ☐ Other

4. Have you ever spent real money in a free mobile game? *

- ◯ Yes, and I do it quite often
- ◯ Yes, a couple of times
- ◯ Not yet, but why not
- ◯ No, it is not for me

5. How do you feel about the possibility to pay real money in a free mobile game in order to get an access to the new levels or game modes? *

- ◯ Very positive
- ◯ Positive
- ◯ Neutral
- ◯ Negative
- ◯ Very negative

6. How do you feel about the possibility to buy functional in-game virtual goods, making the game process easier, for real money (power ups, energy, weapon, etc.)? *

- ◯ Very positive
- ◯ Positive
- ◯ Neutral
- ◯ Negative
- ◯ Very negative

7. How do you feel about the possibility to buy decorative in-game virtual goods for real money (a new character, clothing, etc.)? *

- ◯ Very positive
- ◯ Positive
- ◯ Neutral
- ◯ Negative
- ◯ Very negative

8. How do you feel about advertising banners (rectangular images at the top/bottom of the screen) in a free mobile game? *

- ◯ Very positive
- ◯ Positive
- ◯ Neutral
- ◯ Negative
- ◯ Very negative

9. How do you feel about full-screen ads (video or statical ads), appearing in a free mobile game? *

- ◯ Very positive
- ◯ Positive
- ◯ Neutral
- ◯ Negative
- ◯ Very negative

10. How do you feel about the possibility to get in-game currency (coins, gems, energy) or other in-game items by doing some tasks – watching advertising videos or installing side apps to your mobile device? *

- ◯ Very positive
- ◯ Positive
- ◯ Neutral
- ◯ Negative
- ◯ Very negative

11. How do you feel about the possibility of regular payments (subscriptions) in a free mobile game? (For example, by paying some amount of money once a week/month/year, you get an ad-free version, or infinite energy). *

- ◯ Very positive
- ◯ Positive
- ◯ Neutral
- ◯ Negative
- ◯ Very negative

12. How do you feel about the possibility to get some real gifts (certificates, discounts) in a mobile game for doing some in-game tasks? *

- ○ Very positive
- ○ Positive
- ○ Neutral
- ○ Negative
- ○ Very negative

APPENDIX 3. Questionnaire (in Russian)

1. Сколько Вам лет? *

- ◯ Меньше 18
- ◯ 18-24
- ◯ 25-35
- ◯ Более 35

2. Как часто Вы играете в мобильные игры? *

- ◯ Каждый день более часа
- ◯ Каждый день менее часа
- ◯ Несколько раз в неделю
- ◯ Реже, чем несколько раз в неделю
- ◯ Не играю в мобильные игры

3. Какие виды мобильных игр Вы предпочитаете? (Выберите один или несколько вариантов). *

- ☐ Головоломки (Puzzle)
- ☐ Стратегии (Strategy)
- ☐ Казино (Casino)
- ☐ Карточные (Card)
- ☐ Музыкальные (Music)
- ☐ Спорт (Sports)
- ☐ Гонки (Racing)
- ☐ Симуляторы (Simulation)
- ☐ Ролевые игры (Role playing)
- ☐ Словесные (Word)
- ☐ Обучающие (Educational)
- ☐ Аркады (Arcade)
- ☐ Приключения (Adventure)
- ☐ Экшн (Action)
- ☐ Другое

4. Тратили ли Вы когда-нибудь реальные деньги в бесплатной мобильной игре? *

- ◯ Да, часто трачу деньги в мобильных играх
- ◯ Да, пару раз закидывал(а) деньги
- ◯ Ещё не тратил(а), но почему бы и нет
- ◯ Нет, и не собираюсь

5. Как вы относитесь к возможности покупки доступа к новым уровням или новым игровым режимам за реальные деньги в бесплатной мобильной игре? *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно

6. Как вы относитесь к возможности приобретения внутриигровых предметов за реальные деньги, которые позволяют упростить/ускорить игровой процесс (усиления, оружие, энергия, и тд)? *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно

7. Как вы относитесь к возможности приобретения косметических улучшений в игре (новый персонаж, предметы одежды) за реальные деньги? *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно

8. Как вы относитесь к баннерам (полоски рекламы внизу либо вверху экрана мобильного устройства) в бесплатной мобильной игре? *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно

9. Как вы относитесь к полноэкранной рекламе (рекламные ролики либо статичная реклама во весь экран) в бесплатных мобильных играх? *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно

10. Как вы относитесь к возможности получения внутриигровой валюты (монеты, кристаллы, энергия) посредством выполнения определённых заданий – просмотра рекламных видеороликов и установки сторонних приложений на своё устройство? *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно

11. Как вы относитесь к возможности регулярных платежей (подписок) в бесплатной мобильной игре? (Например, вы можете получить версию без рекламы либо неограниченные запасы энергии, если приобретете недельную/месячную подписку) *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно

12. Как вы относитесь к возможности получать какие-либо реальные подарки (например, сертификаты, скидки) от компаний за выполнение каких-либо действий в игре? *

- ◯ Крайне положительно
- ◯ Положительно
- ◯ Нейтрально
- ◯ Отрицательно
- ◯ Крайне отрицательно