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MOBILE GAME MONETIZATION

ABSTRACT

What are potential monetization models used by games on the Apple App Store? And what has to be considered while implementing a certain monetization strategy?

The aim of bachelor's thesis is to analyze what mobile games are and what Apple App Store is and then to present different monetization models used by games on Apple App Store. Different types of games are also discussed. Lastly things to consider while implementing a certain monetization strategy are discussed.

As the result of this thesis, a few potential different monetization methods are discussed. And it is made clear that the monetization method choice is dependent on the type of game. Different game types and monetization methods have different quality expectations.

Keywords: mobile game, monetization, App Store, business model, freemium, in-app advertisement, in-app purchases, paywall, paid apps, downloadable content, lite apps, free to play, premium apps, non-premium apps

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Mitä rahallistamis menetelmiä on olemassa mobiilipeleille? Entä mitä täytyy ottaa huomioon sovellettaessa tiettyä rahallistamis menetelmää tiettyyn pelityyppiin?

Tässä kandidaatintutkielmassa perehdytään siihen mitä mobiilipelit ovat, mikä on Apple App Store, millaisa eri pelityypepjä on, mitkä ovat eri rahallistamismenetelmät mobiilipeleille ja lopuksi rahallistamismenetelmiä käyttöönotettaessa huomioitavia asioita käsitellään luvun verran.

Tukimustuloksena esitellään muutama potenttiaalinen rahallistamismenetelmä. Sekä tehdään selväksi että rahallistamismenetelmän valinta on riippuvainen pelistä. Erilaisilla peleillä ja rahallistamismenetelmillä on eri laatuvaatimukset.

Avainsanat: mobiilipeli, rahallistaminen, App Store, liiketoimintamalli, freemium, pelinsisäinen mainostus, mikromaksu, maksumuuri, maksullinen sovellus, ladattava sisältö, lite applikaatiot, ilmainen peli, premium applikaatiot, non-premium applikaatiot

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1   INTRODUCTION

As mobile devices gaining popularity among business users and consumers (Chen & Nath, 2004) so are mobile games. This trend has been going on for a while. With more and more mobile games downloaded and played every day, the potential market is constantly growing. The development of the mobile game industry tends to move towards games which are free to download and play. Previously games were bought as physical retail copies. Today most of the mobile games are free to download but come with numerous different mechanics which generate revenue for the developers. These mechanics are different business models which transform seemingly free games to revenue-producing applications. This is called to monetize a game, therefore in this thesis such practices will be referred to as monetization methods. Fields (2014) describes monetization as ways the developers can get the users to pay them. In-app advertisement, freemium, in-app purchases, paid apps and paywalls/subscriptions are examples of different monetization models used by mobile game developers (Baker, Dane, McCann & Tyson, 2011). These monetization methods are divided into free to play and paid games. Alha, Koskinen, Paavilainen, Hamari and Kinnunen (2014) and Kuusisto (2014) claim that free to play is the most popular way to monetize games.

The focus of this thesis will be on games that are available on the Apple App Store, which is a Mobile App Store. Jansen and Bloemendal (2013) define an app store as

"An online curated marketplace that allows developers to sell and distribute their products to actors within one or more multi-sided software ecosystems".

Other notable app stores are Google Play[i], which is the main app store for the Android mobile operating system and Windows Phone Store[ii] which is the app store for the Windows Phone mobile operating system.

As the popularity for mobile games are rising so are the profits. High profits naturally attract more people trying to get their share of it. Munir (2014) wrote in

her blog post that 2% of all the app developers claim about 54% of all revenues. Which means 98% of the developers share the remaining 46% of app revenues. One explanation to this is that, when it comes to in-app purchases, 97% of all customers do not use any money on in-app purchases (Kuningaskuluttaja, 1.10.2015). Remaining 3% of the player base are therefore responsible for 100% of the revenue. Kauppalehti (2015, 22.10.2015) reported recently that it is rumored that one man has spent around one million dollars on the game Clash of Clans[iii] by Supercell[iv]. Clash of Clans is a free to play mobile game which contains in-app purchases. According to Talouselämä (2013, 17.5.2013) Supercell 1,8 million euros in revenue everyday with in-app purchases, in their games Clash of Clans, Hay Day[v] and Boom Beach[vi]. Furthermore, according to Kuningaskuluttaja (1.10.2015) 1000 impressions equals 5-15$ in revenue from in-game advertising. These number was collected from different advertisement networks aimed for mobile game/app developers. Best Fiends[vii], is a mobile puzzle game developed by Seriously[viii]. According to Kuningaskuluttaja (1.10.2015) this game has 2 000 000 impressions per day which equals 20 000$ per day in revenue. Both Supercell and Seriously are Finnish companies and therefore their tax information is publicly available. Supercells taxable income in 2014 was 871 163 837€ according to the information published by the Finnish Verohallinto (Taloussanomat, 1.11.2015). As Seriously Digital Entertainment Ltd is a rather new company their information was not yet available. As may be clear from the numbers the potential profits from mobile games are significant. Especially when taken into consideration that mobile game companies are rather small in comparison to traditional companies with as high revenues. Returning to Munirs claim that 2% of all the app developers claim about 54% of all revenues. According to Pierce (2012) in February 2012 there were over 15 billion downloads from the App Store and the developers had been paid over 2,5 billion USD.

While the profits are notable, successful games require a very big player base. The visibility of each game dictates how many people will find the game. A game staying on the top list of a given app store, are often good games which customers like. Therefore popularity brings more visibility and a larger player base. Which on the other hands equals bigger revenue. That is why the most popular games claim about 54% of all revenues.

The figure below is by Fields (2014) and describes how revenue generated via monetization can be reinvested in user acquisition to generate more users which leads to more revenue.
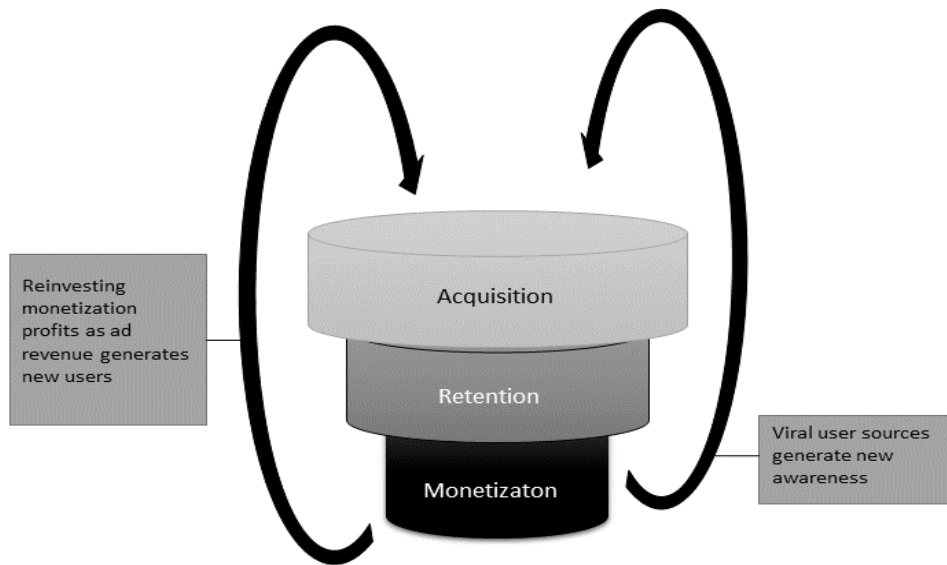
Figure 1. Reinvesting revenue generates more customers (Fields, 2014)

In their article for MIS Quarterly Garg and Telang (2013) did a study which proved that that an increase in the rank on the top-paid list of the app-store increases the rank on the top-grossing list as well. In Carares (2012) study it was made clear that the public bestseller status of top ranked apps is a very important determinant of demand, and that the willingness to pay that is attributable to bestseller status declines very steeply for the top 10 products. The downfall for products ranked between 11 and 50 is even steeper and the effect becomes negligible at higher ranks.

Therefore, user acquisition is important. Fields (2014) presents a few methods he describes as industry standards, which are: advertising, popup ads inside other games, review sites, iTunes and Google features[ix] and teaming up with a publisher or platform. By getting featured he refers to the practice when app store features an app, on their front page or other pages, which makes finding the app easier.

The aim of this Bachelor's Thesis is to explain what a mobile game is, what is Apple App Store, potential monetization methods and what to consider while implementing a certain monetization strategy? This will be based on studying different types of games and which strategies work best with them. The monetization methods discussed in this thesis are in-game advertising, in-app purchases, freemium, paid games and paywalls/subscriptions. Definitions for a mobile game and Apple App Store will be given by addressing to literature written about the subject.

The research questions are:

- What are potential monetization models used by games on the Apple App Store?
- What to consider while implementing a certain monetization strategy?

The research questions presented above will work as the framework for this thesis.

2   WHAT ARE MOBILE GAMES?

According to Unger and Novak (2012) Mobile Games are games that are played on mobile phones, palm computers and media devices such as iPod Touch and iPad. Mobile Games were long thought as a casual option for traditional games but past 10 years have proven that the gamers are beginning to see mobile games as equals to traditional games. Nowadays some mobile games are even considered hardcore, in other words games that are aimed at serious gamers who put a lot of effort in to it and play that game competitively (Unger & Novak, 2012). Recently the hardware of mobile devices have evolved tremendously, which has led to mobile games resembling traditional games. The difference graphic wise between mobile games and traditional games are smaller than ever before. Therefore people who never saw themselves as gamers have now become a part of the wider audience (Unger & Novak, 2012).

To understand what a mobile game is it is important to understand what a video game is. Wolf (2001) says that a video game consists of elements. These elements are: conflict against an opponent or circumstances, rules that determine what can or cannot be done, the use of some player ability, a valued income such as winning or losing, or getting the highest scores. The Oxford dictionary describes video game as:

"A game played by electronically manipulating images produced by a computer program on a monitor or other display."

A few well known mobile games featured on the Apple App Store are Clash of Clans, Hay Day and Boom Beach from the Finnish Developer Supercell, Rovio entertainments[x] Angry Birds series[xi], Candy Crush[xii] from King[xiii], Cut the rope[xiv] and Best Fiends to name a few. Many so called AAA developers have also adapted their older games to the mobile platform, for example some entries in the Final Fantasy series by Square Enix[xv], have been adapted to the iOS, Android and Windows Phone platforms.

According to Salo and Karjaluoto (2007) Mobile games can be roughly classified into single- and multiplayer games. They also provided a figure about different game types:
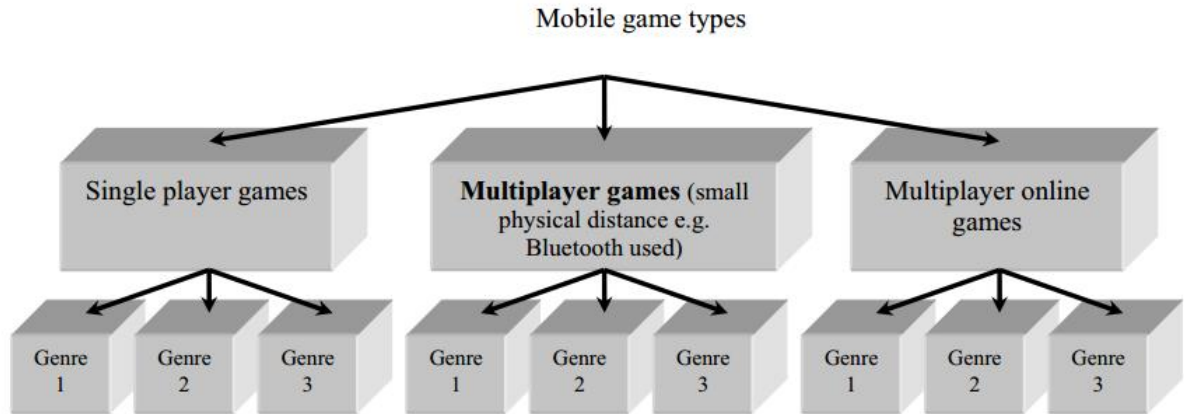
Figure 2. Mobile game types (Salo & Karjaluoto, 2007)

Even though only three genres are presented under every major class, there are plenty of different genres for games. Koivisto (2007) uses the term "snack game" in her paper mobile games 2010. Se defines snack game as a game that is played only for a short period of time when the user is bored or waiting for something else. According to her most of the mobile games in 2007 were so called snack games. She also says that snack games are here to stay. As the mobile phone is small and always with the user.

3 APPLE APP STORE

In the case of this thesis I am limiting myself to discussing the Apple App Store for mobile devices. App Store is also available for the OS X operating system, which is the OS MacBook and ordinary Macintosh computers use. Apple App Store is the mobile app store for the iOS mobile operating system developed by Apple. Jansen and Bloemendal (2013) define an app store as an online curated marketplace that allows developers to sell and distribute their products to actors within one or more multi-sided software ecosystems. The figure below describes the Conceptual Model of an App Store.

Figure 3. Conceptual Model of an App Store (Jansen and Bloemendal, 2013)

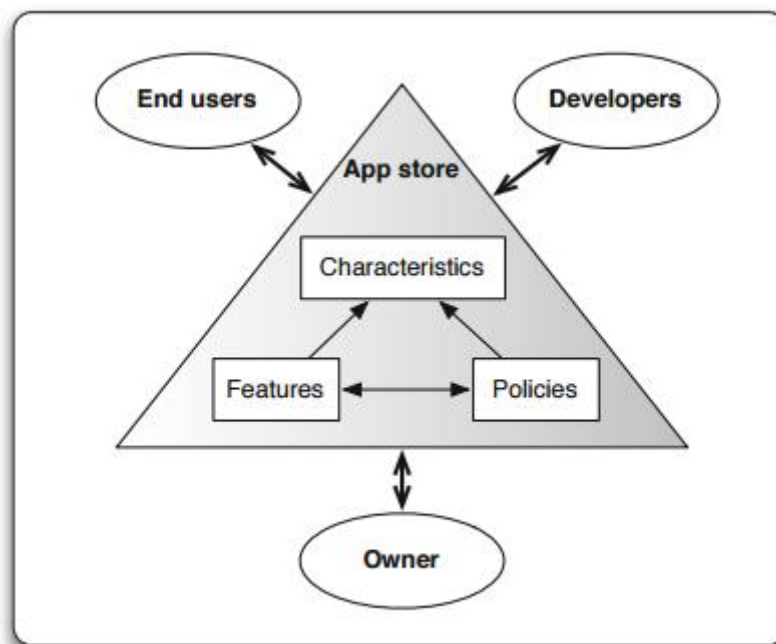The model describes how the owner (in this case Apple) sets certain characteristics, features and policies for their app store. Which then defines how the

developers (those who provide the apps) and the end users (customers) interact with each other.

The Apple App Store was released on July 11th, 2008. Back then it launched with only 550 apps for the first generation iPhone. In 2011 it had roughly over 500,000 apps (Baker, Dane, McCann & Tyson, 2011). Pierce (2012) on the other hands claims that in February 2012 there were over 300 000 apps on the App Store, with a growth rate of 13 000 – 15 000 apps a month. The amount of apps and games have been rising steadily since then. Apple App Stores main competitors are the Android App Stores Google Play and Amazon App Store. While they do not sell apps for iOS, they still can be seen as competitors since both iOS and Android try to attract the same customers.

Apple App Store offers apps for all devices using the iOS mobile operating system. These devices include iPhone, iPad and iPod touch (Baker, Dane, McCann & Tyson, 2011). As of lately Apple App Store also features app for Apples iWatch. Pierce (2012) claims that in 2012 there were over 200 million iOS devices owned by people all over the world. The App Store can be accessed straight from a mobile device or via a web browser. Most apps, especially games, are free to download but some apps require a purchase. To purchase apps or perform in-app purchases Apple App Store require the customer to enter his or her credit card information. According to Baker, Dane, McCann and Tyson (2011), monetization methods used on the Apple App Store are: micro transactions, downloadable content (DLC), free apps, freemium apps, in-app purchases, free-to-play apps (F2P), lite apps and Long Tail Strategies. Pierce (2012) on the other hand divides the monetization methods into pure app sales, advertising and in-app purchases, which includes all the other methods described by the two other writers. Fields (2014) lists retail purchase, in-game transaction, digital download, subscription model and indirect monetization as the major types of monetization. These are also synonyms for the methods mentioned earlier. Therefore, it is safe to say that the same monetization methods are recognized by everyone, but depending on the source, the name of each method may vary. Paid apps on the Apple App Store are divided into two types of apps, which are premium and non-premium (Baker, Dane, McCann & Tyson, 2011). Pierce (2012) calls these paid apps for pure app sales.

Even though there are success stories such as Angry Birds, they are quite unique. Still, the Apple App Store offers great opportunities to developers as it is an exponentially growing platform both measured in revenue and amount of apps. For example in 2011 there were 20,000 new apps per month (Baker, Dane, McCann & Tyson, 2011).

4 MONETIZATION METHODS

Terminology used while discussing new subjects such as mobile game monetization may differ from person to person. In this thesis the terminology will be the same as Baker, Dane, McCann and Dyson(2011), Fernandez (2012), Kuusisto (2014)Pierce (2012) and Fields(2014) used. According to Fields (2014, 21) a monetization method is a way with which the developer get the user to pay for their game. Kuusisto (2014) describes monetization as follows:

On a macro level monetization means the business model and logic behind a product and how it generates money. On a micro level it is all the methods and mechanics that make your users pay you.

In this thesis a closer look is taken at the following monetization methods: In-game advertising, freemium, In-app purchases and microtransactions, paid games, paywalls and subscriptions. Other monetization methods mentioned by the literature will also be briefly discussed.

According to Alha et al. (2014) Free to play is an increasingly popular revenue model for free to play games. As many of the monetization models are used with free to play games it is safe to say that free to play popularity is increasing. They also claim that free to play models are good for two reasons: it makes flexible pricing possible for users with different levels of willingness to pay for additional content and it also enables a wider audience for the game because of the initial download being free. To support the claim about free to play being the more popular solution Kuusisto (2014) provided the following figure by the Research Company Gartner:

	2012	2013	2014	2015	2016	2017
Free downloads	57,331	92,876	127,704	167,054	211,313	253,914
Paid-for Downloads	6,654	9,186	11,105	12,574	13,488	14,778
Total Downloads	**63,985**	**102,062**	**138,809**	**179,628**	**224,801**	**268,692**
Free Downloads %	89,6	91,0	92,0	93,0	94,0	94,5

Figure 4. Mobile App Store Downloads, Worldwide, 2010-2016 (Millions of Downloads) (Kuusisto, 2014)

The figure above had actual amounts of downloads until 2013 and thereafter estimates for 2014-2017. According to the estimates the amount of free games are consistently over 90% and rising.

As already discussed in the introduction monetization methods are a business models. Osterwalder and Pigneur (2010) claims in their book Business model generation: A handbook for visionaries, game changers, and challengers, that a business model consists of 9 elements: customer segmentation, value proposition, channels, customer relationships, revenue streams, key resources, key activities, key partnerships and cost structures. These elements are also present in the monetization methods discussed.

4.1 In-game advertising

In-game advertising refers to advertisements displayed within the game. Companies that provide advertisements for mobile games are for example Google[xvi] and their AdMob service[xvii]. AdMob offers banners, full screen ads and video ads, which the developers can implement in their game. The developers are paid per impression[xviii]. Games with in-game advertising are usually free Munir (2014). In-game ads are also relatively easy to implement and are one of the main ways a developer can make some additional revenue with their free or lite apps (Baker, Dane, McCann and Dyson, 2011).

As Clemons (2009) suggests in his article, advertising can have a negative impact on the customer. They can perceive the advertisement as an annoying thing, and stop using the game that uses in-game advertising. Clemons (2009) also claims that with the help of smart phones and mobile computing a new form of advertisement has been starting to get popular. This form of advertisement is called Contextual Mobile Advertising. It differs from so called traditional in-game advertising by showing targeted advertisements to the consumer. This is seen as a less annoying way.

Fields (2014) discusses several ways of ad placement in his book. Fo example offer walls fromwhich the user can pick a certain add which awards them something, video advertisements which awards the users in-game goods, if the

player watches that ad in question and advertiament, which is basically a game that works as an advertisement. Fields (2014) uses Burger King's XBOX line of games, Sneak King and Big Bumpin', as examples. Both of them have reportedly sold over 3 million copies.

4.2 Freemium

The term Freemium comes from combining Free and Premium. Fields (2014) defines a Freemium as model that allow users to play the game without cost and instead encourage them to pay for items or services in an a la carte in-game fashion. A freemium game is always free to download but if the player wants he can invest real life currency on premium content, subscriptions, microtransactions, features or other items (Baker, Dane, McCann and Dyson, 2011). Freemium is a relatively new term but the model itself has been around for a while (Baker, Dane, McCann and Dyson, 2011). Fields (2014) argues that the freemium model have rapidly become the standard for mobile games with much depth. He also includes other monetization methods discussed in this chapter, as parts of the freemium model. That is In-game advertising, In-app purchases and microtransactions, paywalls and subscriptions and lite/free games.

4.3 In-app purchases and mictrotransactions

In-app purchases and microtransactions are almost the same thing. According to Baker, Dane, McCann and Dyson(2011), the difference between a microtransaction and in-app purchase are that microtransactions are used when the player buys in-game goodies in exchange for real life currency while in-app purchases refers to all the purchases made in the app, whether they are in-game commodities or not. Commodities are in this case virtual goods such as clothes, items, currencies and tokens (Lehdonvirta, 2009). Fernandez (2012, 336) describes an ingame purchase as a method to collect payments in-app which lets the users unlock additional features and content in the game.

Microtransactions are usually a small amount of real life money users spend on an in-game commodity. These purchases does not tend to be critical in terms of success or enjoyment of the game, even though they can offer a lot of customization options and ways to accelerate and enchance gameplay (Baker, Dane, McCann & Dyson, 2011).

As microtransactions can be seen as a part of in-app purchases all in-app purchases are not microtransactions. In-app purchases are always made within the app, in this case within the game. Microtransactions require a method to pay for the purchases made, so does in-app purchases. This can be done by entering a Apple ID and its password, then the app charge the credit card which is connected to the players Apple ID (Baker, Dane, McCann & Dyson, 2011). When browsing games in the App Store, all games which contain in-app purchases or

microtransactions have a warning on their App Store page. In-app purchases can also be turned off in any i-device's settings (Baker, Dane, McCann & Dyson, 2011).

Fields (2014) gives a few examples of common in-app purchases. For example, the user has limited energy, which refreshes as time goes by, but if the user wants to speed this process up he can buy instant refill as an in-app purchase. A certain resource only drops or spawns once a day, which effectively gates the user's progress, the user can though buy this resource with in-app purchases. Some repetitive mission can be skipped with in-app purchases. Some rewards which take a long time to unlock can be unlocked instantly with in-app purchases. So called grinding, which means repeating the same task over and over again to reach a certain goal, can be speed up by buying boosters as an in-app purchase.

Alha, Koskinen, Paavilainen, Hamari and Kinnunen (2014) claim in their paper Free-to-Play Games: Professionals' Perspectives, that some games which feature in-app purchases offer both a soft currency and a hard currency. Hard currency is bought via real money transactions while soft currency can be earned in-game. Hard currency can also be exchanged for soft currency while this is not possible the other way around. Soft currency can be used to buy basic items related to gameplay while hard currency is used for premium content often exclusive to paying players only. According to Kyung and Min (2015) approximately 35% of mobile apps in the App Store are free apps, and around 80% of these free apps include in-app purchase option.

4.4 Paid games

Paid games or pure app sales are apps/games with a set price that are sold on the App Store (Pierce, 2012.) According to Baker, Dane, McCann and Dyson (2011) paid games can be divided in to two categories: premium and non-premium. What defines them are the price for which they are sold. Premium games are priced over a certain threshold while non-premium games are priced under that same price. This price threshold changes over time and depends on many variables, such as number of downloads or particular niche (Baker, Dane, McCann & Dyson, 2011). Paid apps do not rely on advertisements, are more polished and unique than free apps (does not necessary apply to freemium and games with in-game purchases) and tend to have a better and longer lasting support (Baker, Dane, McCann & Dyson, 2011)

Baker, Dane, McCann and Dyson (2011) claims in their book that paid apps have higher expectations from their users than free apps. They say that the users expect an app which has been polished and is almost perfect in terms of quality. Free apps do not have the same expectations.

4.5 Paywalls and subscriptions

Paywalls and subscriptions are similar to freemium, except that it does not limit features but content (Munir, 2014). According to Dane, McCann and Dyson (2011) different reasons the user have to pay for the subscription or removing the paywalls are: for simply using the app, for new updates, for propriety information, for continuous support, for technical help, for getting questions answered, for streaming services, for access to specific groups, for sharing, for communication, for networking and for accessing certain features. According to Fields (2014) subscriptions are more common with massive multiplayer online roleplaying games, which have significant back-end server components, mobile games with subscription plans are therefore rare.

4.6 Other methods

Other methods presented by the literature are: Downloadable content, purely free apps and lite apps (Baker, Dane, McCann & Dyson, 2011).

Downloadable content (DLC) are featured widely in games. Examples of various DLC packs are: extra levels, new content and new game modes (Baker, Dane, McCann & Dyson, 2011. DLC are very similar to in-app purchases, but while in-app purchases are done in-game and added straight to the game itself, DLC content can be standalone downloads, which may not be built in to the game (Baker, Dane, McCann & Dyson, 2011). Fields (2014) describes DLC as content which can be bought and is not a part of the gore game "package".

Purely free apps are as they sound, free apps with no strings attached. These games may though include attempts to cross-sell other items to the player. If the free apps contains for example microtransactions or DLC: s, that app is called Freemium (Baker, Dane, McCann & Dyson, 2011).

Lite apps refer to apps that are restricted versions of a full app (Baker, Dane, McCann & Dyson, 2011). These restrictions may be for example gated features. Traditionally the full game is downloaded from the app store, but recently the lite apps have had a chance to upgrade to the full version via an in-app purchase. An example of this new way of upgrading to full version would be Mahjong Towers Touch[xix] (Baker, Dane, McCann & Dyson, 2011).

5 DEVELOPMENT RECOMMENDATIONS

What is taken into consideration while monetizing free and paid games are discussed in this chapter. This chapter is divided into three sections: All games, free and paid games, as the starting point for a free and a paid game is different (Baker, Dane, McCann & Dyson, 2011). In this thesis free games include those games which uses in-app advertisement, freemium, in-app purchases, paywalls/subscriptions and lite apps, purely free app and downloadable content models as their monetization models. Paid app on the other hand include premium and non-premium apps.

5.1 Recommendations for mobile games

While without risk there is no reward, it is important for every app is to minimize the risk. Baker, Dane, McCann and Dyson (2011) offers there points which should be taken into consideration with every app.

- **Create a polished app**: As this may seem as a no-brainer but it is not always followed, usually because of lack of resources, knowledge or time.
- **Have a marketing plan**: A marketing plan should be thought of beforehand. Even if the marketing budget is small, developers should aim to have a as big exposure as possible in the smallest amount of time during the launch. This way the marketing campaign will have the biggest possible impact.
- **Have a plan B**: Consider many different methods of monetization. If the game have advertisements and it does not work out, be ready to try a second option.
- **Continuously build app awareness**: Even after the launch of the game, developers have to keep on promoting it on Facebook, Twitter, company webpage, different review channels.

5.2 Recommendations for free to play games

When creating free games many things have to be considered. Firstly how to create revenue, how other games made by the developer can promote the new game and what other elements turn a game into a revenue-generating device (Baker, Dane, McCann & Dyson, 2011).

The following things can be done to **engage customers**: adding buttons in-game to more games from the same developer, link to newsletter subscription, in-game achievements, implementing game center[xx] and add developer's website name to the games splash page. The icon for the game is also important. A few things to consider while planning the icon are: it has to be relevant to the

game, it has to be readable, It has to be highly polished even if the game is not and if a premium version of the game exists, the icons have to be different on both the free and paid version of the game. It has also been speculated that app ratings affect the games popularity, not only the amount of downloads. Therefore it is suggested to ask the users to rate the game (Baker, Dane, McCann & Dyson, 2011).

When **advertisements** are considered to be implemented into the game, it is important to consider things such as ad placement, when and where the game is going to be played, different ad networks and ad implementation. Clemons (2009) suggested in his article, advertising can have a negative impact on the customer. Despite this Baker, Dane, McCann and Dyson (2011) claims in their book that 2010 mashable.com released an article claiming that ad spending was $87 million and was expected to reach nearly $900 million in 2015. In the same article Rovio entertainment estimated that that they made $1 million a month in 2011 on the Android platform alone via in-game advertisement. Therefore it is important to consider ad placement, as it can be crucial for the game. Not only to maintain the usability but to also find the best engagement and most frequent hit spots without causing an interruption to the experience (Baker, Dane, McCann & Dyson, 2011). In the same book Baker, Dane, McCann and Dyson (2011, p 165) discussed that in July 2011, mobclix.com released research statistics on app usage and advertising patterns.

- The most time spent on apps for iOS and Android users occurs in the late afternoon (4 p.m. to 6p.m.) and evening (9 p.m. to 11 p.m.).
- The morning (8 a.m. to 11 a.m.) is the time most users are most engaged with ads.
- App usage is highest on the weekends, at 38 percent of overall time spent.
- Of the top 100 free apps, 82 used iAd[xxi] as one of their ad networks (Yes, it is possible to use more than one network to maximize fill rate)
- Of the top 100 free apps, 56 used analytics tools to help with campaigns.
- An amazing 67 of the top 100 free apps used a mediation solution provider such as Mobclix[xxii], AdMarvel, AdMeld[xxiii], and Neaxge[xxiv] (Mediation is where multiple ad networks are used at once to serve ads.)

Baker, Dane, McCann and Dyson (2011) also came up with a few things to consider while implementing ads to a game:

- Ad mediation tools should be used so that ad fill rates and priorities remain high
- High engagement is needed for the game. In other words returning users, so that the ads get served to generate revenue.

- It is recommended to use analytics tools to examine and if necessary to reorganize ad campaigns, to maximize the profits.
- If possible many mediation solutions should be used. So that should no ad be served, another network most likely will.
- Remember to target the ads to the medium. In other words, try to make use of different features, such as touch control or the GPS, to better engage the players.

According to Baker, Dane, McCann and Dyson (2011) **freemium** apps are one of the most profitable business models on the Apple App store. According to them when the company Flurry reported in January 2011, that of the top 100 games, 39% of the revenue came from freemium games and 61% of premium games. In six months the shares had shifted and now freemium games generated 65% of all the revenue. As discussed in chapter 4, the freemium model offers something for free, and then limits the content and features until the users pay for it (Baker, Dane, McCann & Dyson, 2011). Baker, Dane, McCann and Dyson (2011) compiled a list which described what kind of features and commodities were sold in freemium apps by the top 100 apps on the App Store. According to them Freemium apps with downloadable content (DLC) offered for example, new levels, modes, characters, theme packs, texture packs, sound packs, voice packs, animation packs and editing tools. They also gave examples of microtransactions: virtual currency (which were the most common example), removing ads, buying a full version, individual/packs of features, virtual goods (characters, clothing, in-game tools, weapons, items and so on), themes, customization options, game aids (such as the Mighty Eagle in "Angry Birds", which lets the player to skip levels), power-ups (health, boosts, and so on), achievements, new modes, gadgets, sounds, animations, donations to the developers and store savings (in other words discounts on actual or virtual goods). By virtual currency Baker, Dane, McCann and Dyson (2011) refer to a own currency system in-game. Real money can be exchanged into virtual currency, which is used to do purchases in-game. Baker, Dane, McCann and Dyson (2011) present a strategy they call Long Tail Strategy.
"In a Long Tail Strategy, more is earned from many unique goods as a whole than a few popular goods"

The Long Tail Strategy is featured in Figure 5.

Long Tail Strategy

The long tail area to the right can be greater than the popular area to the left

Sales

Most Popular

Least Popular
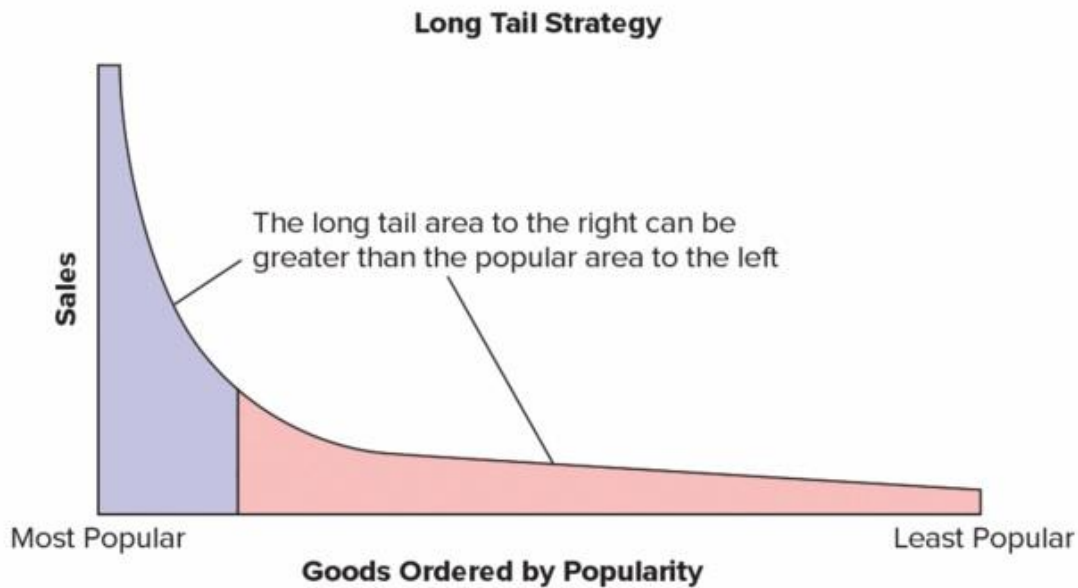
Goods Ordered by Popularity

Figure 5. Long Tail Strategy (Baker, Dane, McCann & Dyson, 2011)

In other words by having a broad selection of different virtual goods the potential sales are higher than just by concentrating on a few and popular goods. As the more popular goods have high sales but the less popular goods may bring in total even more revenue.

As already discussed din the introduction, according to the documentary show Kuningaskuluttaja(1.10.2015) only 3% of the users of a app, spend money on in-app purchases, therefore a wide user base is required. According to Lehdonvirta (2009) so called pay-to-win purchases are not welcomed by players. Therefore, it is important to consider what users are ready to pay for. Lehdonvirta (2009) claims that goods that improve and enhance the game experience do sell, while goods which lets the player win are not welcome.

5.3   Recommendations for paid games

Baker, Dane, McCann and Dyson (2011) divided paid apps into 2 categories, premium and non-premium, were the price was the defining thing. They also wrote a list of things to consider when creating premium of non-premium paid apps. For non-premium they argues these things are important to consider:

- **Higher budget**: Usually when developing a high-budget game, developers tend to make it paid. But it is recommended to considering freemium as a potential monetization method. Many of the highest-grossing games are nowadays free with in-app purchases.
- **Aspiration to generate immediate revenue**: Immediate revenue can sometimes be required, especially when dealing with investors. This is only possible with paid apps.

- **Supporting it with a lite version**: Especially if the lite version of the game contains in-game advertisement. Removing these ads can be a potential way to get users to buy the full version.
- **One or more unique features**: Having unique features which other games do not have, can partially justify the cost of a paid app.
- **Little to no competition in the chosen niche**: Having an idea that has not been done before, a new hybrid game genre, or perhaps there are only a few competitors. Regardless, it is recommended to support the game with a lite version.
- **Identify one or more in-app purchase possibilities**: In-app purchases are one of the best ways to long term revenue in today's App Store.
- **Other games that can feed visibility of the game**: When the developers already have some released games, it is easier to justify a paid one. These earlier games can be used to cross-promote the new game.
- **Potential to lower price when sales slow**: As prices slow down, one way to counter this is to lower the price of the game.
- **Stand out from free apps as being more valuable**: Paid apps can be perceived by users as more valuable than the increasing amount of free apps on the App Store.
- **There is less risk for a free app**: If it is not a certainty that he game has unique features, is a polished product, and have enough visibility etc. It may be a better idea to monetize the game via methods used in free to play games.
- **More complexity**: Especially for first timers, paid app with a lite app, can be more complex and cost more for than going straight away with a free app.
- **$0.99 apps along with lite or free version can do well**: For immediate revenue and perception as a high-quality product. A game with the price tag of $0,99 alongside a lite or a free version of the same game. May get the users engaged with the game, which may justify the $0,99 price tag.

They also did the following list for premium apps:

- **Having a uniquely marketable feature**: The number one reason for succeeding with a premium-priced app. This often requires a popular license, unique features or other similar niches.
- **Supporting apps on a different platform**: Developers who already have a popular game/games on a different platform. Can make the new game work seamlessly with the ones on a different platform, which may justify the price tag.
- **Delivering exceptional value**: The game should deliver exceptional value to the users. Baker, Dane, McCann and Dyson (2011) gives Smurfs' Village[xxv] as an example. In that game virtual currency can be bought as in-app purchases. The biggest in-app purchase is worth $99,99. Yet many users decide choose to pay for it.

- **Future price drops can stimulate sales**: As a last effort tactic, the developers can lower the price of their premium app.
- **iPad has great potential for premium apps**: iPad has less competition, more functionality and increasing popularity of tablets. Therefore there are huge opportunities in releasing premium apps for iPad.

To accompany these two lists by Baker, Dane, McCann and Dyson (2011) they also reminded that both non-premium and premium apps have their downsides. Non-premium apps will have less downloads than free games, which are usually countered by also offering a lite or freemium version of the same app. The immediate nature of non-premium apps revenues may cause spiky revenue, as revenue is only generated when a new users purchases the game. Non-premium games will also face more competition than premium games. They also claim that non-premium apps are priced $0,99 or under are considered to belong to the impulse-buy territory, therefore it is risky to price the game over that point.

According to them premium apps require original content and features which cannot be easily copied. This requires huge investments in the features. Premium games may also be created around trademarks and patents. That said, premium apps are expensive to develop. Which at the same time is their biggest risk.

Baker, Dane, McCann and Dyson (2011) claim that to succeed with a paid app, the following things are needed: unique features, increased support and post-release updates, more polished game than the competitors than the free apps in the same niche, they do not include in-game advertisements, lasting value, not being to expensive and knowing when to drop the price and having a plan for long-term revenue from the app.

6 RECOMMENDATIONS FOR MONETIZATION METHODS FOR DIFFERENT GAME TYPES

As already earlier discussed in this thesis there are different kinds of mobile games. Salo and Karjaluoto (2007) divided mobile games roughly into two categories: single- and multiplayer and Koivisto (2007) used the term snack games to describe small games which could be played for only a small amount of when needed. Earlier the quality requirement for games with different monetization methods was also discussed. Paid games such as premium and non-premium are required (by the customers) to have a higher quality than for example free to play games with in-game advertisement (Baker, Dane, McCann & Dyson, 2011). While the requirements for freemium games with in-app purchases vary, they may be seen as something between paid games and free games with in-game advertisement Fields (2014). It is still unclear whether this is the case in 2015 as the trend has been going towards paid games losing market share every year (Kuusisto, 2014). Free to play games are being more popular every year and it would be logical for them to also have to have bigger quality requirements as the competition gets harder. In this chapter things that influences the implementation of a certain monetization strategy are discussed, based on the classifications of mobile games and monetization models which are presented earlier in this thesis.

In chapter 5, things to consider while developing paid games were discussed. It was made clear that premium or non-premium games are expected to be of a very high quality and content wise they has to have no or very little competition in a specific niche/genre. It was also discussed what was needed to succeed with a paid games, this was done by: unique features, increased support and post-release updates, more polished game than the competitors than the free apps in the same niche, they do not include in-game advertisements, lasting value, not being too expensive and knowing when to drop the price and having a plan for long-term revenue from the app. As long as these criteria's are filled the recommended monetization would be to sell the game as a paid game. Whether the developers should go with a premium or non-premium game depends on the content and the overall quality, as discussed in the earlier chapters. Non-premium games should also be accompanied with a lite version of the same game, to lure in additional customers, who are not ready to spend money on a game without testing it out first.

In-game advertisement was also discussed in the earlier chapters. According to the literature, games with in-game advertisements does not have the same quality requirements than other mobile games have. Therefore they do not have to be very advanced content wise, particularly long and the overall quality does not have to be that high. That is why in-game advertisement are the right monetization strategy for slack games and other simple games. It can also be argued based on the low quality requirements that in-game advertisement may be the right choice for new developer who are monetizing their first game.

Monetization methods such as freemium, in-app purchase, DLC, paywalls and subscriptions are a little bit harder. As the amount of free to play games are steadily rising (as shown in chapter 4, figure 4.), it is safe to assume that the quality requirements by the customers are also rising. Free to play games also include lite version which are commonly used as a complement to non-premium games, some games are also using in-game advertising. In-game advertisement can also be found as a complementary methods in many freemium games, though not as the major model. AdVenture Capitalist[xxvi] is a mobile game which implements both microtransactions and in-game advertisement. This game is still considered freemium. Therefore, based on the literature the freemium, in-app purchases, DLC, paywalls and subscriptions are recommended to be used when the game does not fulfill all the criteria's for a premium/non-premium game, yet they are of high quality and have lot of content/potential for content. Many popular games use a strategy where they implement in-app purchases in all its forms and optional video ads. Games by Rovio, Seriously, Boomlagoon[xxvii] and Supercell are examples of such games.

7   SUMMARY

In this Bachelor's thesis Apples Mobile App Store was introduced, mobile games were defined and different monetization methods for mobile games featured on the App Store were discussed. Later on in the thesis things that are good to take in to consideration while developing a game with certain monetization methods in mind, were addressed. Lastly, connecting specific monetization strategies to specific types of games were discussed.

Unger and Novak (2012) defined Mobile Games as games that are played on mobile phones, palm computers and media devices such as iPod Touch and iPad. Apple App Store was defined as the mobile app store for the iOS mobile operating system developed by Apple. While "An online curated marketplace that allows developers to sell and distribute their products to actors within one or more multi-sided software ecosystems." was the definition Jansen and Bloemendal (2013) used to describe what an app store is. In-app advertisement, freemium, in-app purchases, paid apps, paywalls/subscriptions and lite apps, purely free app and downloadable content were seen as the potential monetization methods (Baker, Dane, McCann & Tyson, 2011) in this thesis.In the next chapter games were divided in free and paid games, and things to consider while developing a game with certain monetization methods in mind was discussed. The last chapter explained what monetization strategy to use with a certain type of a game.

As a conclusion it is possible to say that the monetization method developer should use it completely dependent on the type of game they are developing. Big budget games with already existent trademarks such as mobile versions of bigger AAA games can easily charge a higher price, while new lesser known games do need a lite or free version of the game with a possibility to buy the full version for a small price. Freemium games with in-app purchases are getting all the time more popular. Most of the highest-grossing games on app store are freemium games, which use in-app purchases to generate revenue to the developers. It is also important to remember that in-app purchases have to enhance the gameplay in some way, not function as so called pay-to-win methods, to be accepted by the players. Also, only 3% of the users use in-app purchases. In-game advertisement is the only method which provides certain revenue, apart from paid apps, which require the initial purchase. Ad driven games can also have a negative impact because of the ads which may drive the users away from the game. Targeted advertisement may not be a similar turn of though. It is also important to notice that paid apps tend to have less downloads than free apps and that the threshold to try a free game is lower than with a paid app. This is usually countered by offering a free or lite version of the paid app in question. Paid games do also need to be more polished and unique than free game. The pricier the game the more unique in every way it has to be. Free games or games with in-game advertisements are better solutions for developers operating on a low budget, as they do not have as high expectations from the users as freemium and paid apps have. It

is also worthy to point out that paid apps priced in the premium category are expensive to develop because of different variables that drive the development costs up.

It is worth to note that as some methods are more suitable for certain types of games, different monetization methods have different expected revenue generational opportunities. It is impossible to say which the best monetization method is, as the precentral amount of incomes depends on the customers. Paid apps bring immediate revenue for a limited time while free to play usually requires a lot of customers as the revenue generated to the developer is much smaller than with paid games, still one free to play customer can generate infinite times of revenue for the developer.

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[i] https://play.google.com/store

[ii] https://www.microsoft.com/en-us/store/apps/windows-phone

[iii] http://supercell.com/en/games/clashofclans/

[iv] http://supercell.com/en/

[v] http://supercell.com/en/games/hayday/

[vi] http://supercell.com/en/games/boombeach/

[vii] http://bestfiends.com/

[viii] http://www.seriously.com/

[ix] https://play.google.com/store/apps/developer?id=Featured+App

[x] http://www.rovio.com/

[xi] https://www.angrybirds.com/

[xii] http://candycrushsaga.com/

[xiii] https://king.com/fi/

[xiv] https://www.cuttherope.net/

[xv] http://www.square-enix.com/

[xvi] https://www.google.com/intl/fi_fi/about/company/

[xvii] https://www.google.com/admob/

[xviii] https://support.google.com/admob/answer/3269069?hl=en

[xix] https://itunes.apple.com/us/app/mahjong-towers-touch-hd/id414338750?mt=8

[xx] https://developer.apple.com/game-center/

[xxi] http://advertising.apple.com/

[xxii] http://axonix.com/

[xxiii] https://www.doubleclickbygoogle.com/

[xxiv] http://www.nexage.com/

[xxv] https://itunes.apple.com/us/app/smurfs-village/id399648212?mt=8

[xxvi] http://www.kongregate.com/games/hyperhippogames/adventure-capitalist

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