

FREE-TO-PLAY GAMES: PROFESSIONALS' PER- CEPTIONS

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Free-to-play (F2P) is a relatively new way for the game developers to get revenue from their games. The game client is given to the players free of charge and they can play it for free for as long as they want. The revenue is created by selling virtual goods inside the game for real money.

Some of the F2P companies have managed to make huge profits. Unfortunately the revenue model creates some potential problems with ethics and game design. These two sides of the phenomenon make F2P an interesting and important subject to study.

F2P has been researched a lot in the recent years, but game industry professionals' perceptions on the subject have not yet received much attention. This thesis analyzes 69 articles and blog posts from 40 game industry professionals in order to get a high level overview of their perceptions on F2P phenomenon and its effect on game design.

The results of the study seem to indicate that these chosen professionals feel F2P games should be designed ethically and concentrating on providing fun and meaningful experiences to players. Designing F2P games just as quick revenue vehicles is seen as short sighted. Maximizing short term profits is believed to be harmful for developers and for the game industry as a whole.

On a higher level the results indicate that F2P game designers have to continuously balance business interests with their own vision, game experience design, and ethics.

Keywords: Games, Video Games, Game Industry, Game Developers, Game Design, Revenue Model, Free-to-play, Monetization, Micropayments, Virtual goods

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1 INTRODUCTION

Free-to-play (F2P) is a relatively new way for the game developers to get revenue from their games. The game client is given to the players free of charge and they can play it for free for as long as they want. The revenue is created by selling virtual goods inside the game for real money. Most players never use real money in these games, while some players may spend significant amounts.

Free-to-play (F2P) games have been steadily making larger and larger profits for a few years now. According to Superdataresearch.com (2014), free-to-play online games made \$1,991 million in sales in 2012 and \$2,893 million in 2013. At the moment most of the top 100 games in AppleStore are using F2P model (AppAnnie.com, 2014). 60 percent of social network games get their revenue from virtual goods sales (Superdataresearch.com, 2012). Facebook has dominated the social network games market. However, according to Superdataresearch.com (2012) Facebook's portion of the market will drop as developers seek less competitive markets and other social networks start to offer more games.

The huge revenues, generated by the top grossing F2P games, have made F2P extremely interesting choice for the developers. At the same time it raises some serious questions about the model's effect on game design, game experience and the game designer's role. There have also been some ethical concerns about some enthusiasts spending huge amounts of money on these games. Another ethical problem concerns children spending money in games accidentally or without really understanding what they are doing.

There has been quite a lot of research done on F2P. Legal issues of F2P have been studied quite extensively (See for example Lastowka & Hunter, 2004). Oh & Ryu (2007) identified some design methods used in Korean F2P games at the time and gave some suggestions of how to design virtual items. How F2P works and what kind of attributes affect players' purchasing decisions have been studied a lot in recent years (For example Lehdonvirta, 2008; Hamari & Lehdonvirta, 2010; Guo & Barnes, 2012). Lehdonvirta (2005), Lin & Sun (2011) and Paavilainen et.al. (2013) have studied players' perceptions on F2P.

Earlier research lacks studies mapping out the perceptions of game designers and other game industry professionals. Fortunately, many of the industry professionals are active-

ly discussing the subject online, so there is a lot of material available for study. The purpose of this thesis is to gather and analyze some of that material to get a general high level view of several industry professionals' perceptions on F2P.

The research questions that this study attempts to answer are: 1) What kind of free-to-play related issues or themes game designers and other game industry professionals find important enough to write about, and 2) do those issues suggest any higher level problems that game designers might face when designing F2P games. To find the answer to those questions 69 articles and blog postings from 40 game industry professionals were gathered and analyzed using qualitative content analysis.

Chapter 2 provides the necessary background data. The chapter introduces some definitions of relevant terms and provides a short history of F2P. The chapter also discusses how F2P works, and takes a look at some earlier research on F2P from the gamer's point of view. Chapter 3 explains the research methods used in this study and introduces the analyzed data.

Chapter 4 reports the results of the data analysis. First the found themes are introduced, and the chosen professionals' general attitudes towards F2P are identified. Then the themes are analyzed more deeply by identifying three contradictions designers have to balance when designing F2P. In chapter 4.5 the found perceptions are summarized, divided in themes. Chapter 5 discusses the results and limitations of this study, and chapter 6 gives a summary of this thesis.

2 BACKGROUND

This chapter gives the necessary background information about F2P. Subchapter 2.1 gives a description of traditional retail model and subscription model in comparison to F2P, and a short introduction to the history and development of F2P. Chapter 2.2 takes a look at how F2P model works. Chapter 2.3 introduces some earlier research on gamers' perceptions on F2P.

2.1 Introduction to Free-to-Play

In traditional retail model game developer makes a deal with a publisher. The publisher then takes care of marketing and distributing the game, and the customer either buys a physical copy of the game disc in a retail store, or purchases and downloads a digital copy online. In both cases the customer pays a fixed sum for the game. The customer makes a purchase decision based on commercials, reviews in game magazines, word-of-mouth, and so on. For some games there is additional content available as expansion disks, which are sold the same way as the original game. Small patch files can often be downloaded online to fix errors in the game or to make small changes to gameplay. (Fields & Cotton, 2012).

As online game developers need to pay for server maintenance, they started to move to subscription based business model. In this model the customer pays a subscription fee each month to get access to game server. In some cases the customer also needs to buy a physical game disc to install the game. Since these games are constantly connected to a server, error fixes can be loaded and installed automatically. Additional content can also be added to the server at any time, but larger content additions are often sold as separate expansions, either on a disc or as a digital download.

In the early days of massively multiplayer online games (MMO) the server costs were relatively high and the number of players relatively small. Therefore the subscription fees charged from the players were very high compared to today's standards. Neverwinter Nights for America Online for example charged \$6 an hour to play. Later MMOs such as Meridian 59 and Ultima Online started to charge a monthly fee and allowing unlimited play time for that single fee. The amount of players rose to hundreds of thou-

sands, and even to millions, in games such as Everquest and World of Warcraft. The quality requirements and production costs rose very high, which made it extremely difficult for new games to compete against the successful games. Having paid for a subscription in one game the players were financially committed to that game. Even when the player's subscription ended they were again more likely to renew their subscription in the game they had invested their time into, than try a new game. (Fields & Cotton, 2012).

In 1999 players of subscription based online games such as Everquest and Ultima Online started to sell their game items at the internet auction site eBay. The publisher of Ultima Online didn't see this as a problem and even encouraged it, while Everquest's publisher banned all selling of their game's assets. (Lehdonvirta, 2008).

In Asia high piracy rates, rarity of home computers and the flourishing internet café culture led developers to seek different methods to monetize their games. Some developers started to give the game client away for free and began to sell virtual items in their games. (Fields & Cotton, 2012). One of the first successful users of this new model was Nexon's online quiz game called "Quiz Quiz" (Oh & Ryu, 2007).

In 2007 onwards Zynga made huge profits with F2P games on Facebook with such games as FarmVille and Zynga Poker. Other companies followed and in 2009 Facebook Credits was introduced, making it possible for the Facebook users to use the same virtual currency in different companies' games, and later making sure Facebook got its share of the virtual goods sales. Facebook now offers developers easy-to-use application programming interfaces, and for the users a secure and easy to use way to purchase in-game items. (Fields & Cotton, 2012).

Around 2010 the amount of mobile game applications in app-stores started to rise rapidly and the competition forced developers to lower the price of their games, until it was difficult to cover development costs with the sales. F2P model started to gain success, and at the moment most of the top 50 games in AppleStore are using F2P model.

2.2 How F2P works

In F2P model the customer gets the game client for free and pays no subscription fees, so playing the game is completely free, at least up to a point. The developer collects

revenue by selling virtual goods inside the game. The real money transactions that the player does to obtain virtual goods are called in-app purchases (IAP) or microtransactions. (Luton, 2013). Only a small percentage of players, about 3-5% on most games according to Fields & Cotton (2012), actually use real money in these games. When there is enough players however, that small percentage will bring in enough money to compensate for the non-paying players, while the large number of non-paying players keep the game active and hopefully bring in new players. Traditional retail and subscription models only have one price point. Every player pays the same amount. Any customer who is not willing to pay that price, but who might be willing to pay a smaller price, is lost. In addition any customer, who would be willing to pay more, will nevertheless pay the same fixed price. In F2P there are several price points, which makes it more efficient than retail or subscription. (Hamari & Järvinen, 2011). Smaller transactions are not lost and whales are able to spend as much money on the game as they want. Whales are players who use disproportionate amounts of real money in the game compared to an average player (Fields & Cotton, 2012).

Some games allow a player to play the game for free for a while, and then requires him to pay a small sum to continue. This may be repeated later, so that the player has to pay several times that small sum in order to play the whole game through. These artificial barriers, that player can bypass only by using real money, are called paywalls. These paywalls can be created for example by giving the player a finite amount of some in-game resource that he needs in order to progress in the game, and making that resource only obtainable by real money. When the resource is used, the player must purchase more resources before he can continue. Another way is to sell game levels for example. When the player has played a set amount of levels, he is required to pay a small sum in order to get access to the next few levels.

An alternative strategy allows the player to play for free for as long as he wants. Instead of forcing the player to pay, the game attempts to persuade him to buy some virtual goods. One of the most often used virtual goods sold for real money is virtual currency, which can then be used to buy other virtual goods inside the game (Hamari & Lehdonvirta, 2010). Most F2P games use either a single currency or a dual currency system. Dual currency system includes a hard currency, which can only be acquired by purchasing it with real money, and a soft currency, which can be earned through gameplay, or purchased. (Luton, 2013). Hard currency can sometimes be offered for players through

gameplay as a part of a special marketing campaign for example. It is naturally possible to use all kinds of variations and combinations of these currency systems. One way to encourage purchases is for example to restrict availability of some highly desirable items by requiring players to use hard currency to get them.

Luton (2013) divides virtual goods (in addition to currency) into content, convenience, competitive advantages, and customization. Content includes new levels, maps, characters or other things that make the game world bigger or give players a possibility to do new things in that world. Convenience items allow player to bypass some parts of the game or to get faster through them. In the data analysis chapter of this study the bypass type convenience items are called pay-to-skip items and the possibilities to advance faster with money are called paid speed-ups. Competitive advantages, as the name implies, are purchased virtual goods, which give a distinctive advantage for the player either against the game or against other players. Competitive advantages are later in this study divided into two groups. Pay-to-win items give so big an advantage that non-paying players can't compete against the paying players. An example of an extreme pay-to-win item would be a genocide spell that kills all other players instantly in a competitive game with wizards. Pay-for-depth items are advantages that give players new strategic or tactical possibilities, but the advantages are not so big that a skillful non-paying player couldn't compete. One example of pay-for-depth goods would be weapons that do more damage but lose accuracy or rate of fire. Customization items allow players to express themselves by personalizing the look of their avatar, vehicle, equipment, and so on. (Luton, 2013).

Hamari & Lehdonvirta (2010) identifies two categories of mechanics that help creating demand for virtual goods in games. The first category includes mechanics that divide the virtual goods into separate segments, and creating demand that way. These mechanics are:

1. Stratified content
 - a. In online role playing games player's character usually starts from level one and reaches higher levels by going through game content. Virtual items can then be designed so that they appeal to different level characters.
2. Status restricted items

- a. Virtual items can be designed so that they cannot be used if the player's character's level is too high or too low..
3. Increasingly challenging content
 - a. When the player confronts more and more challenging content, they need better equipment to maintain their relative performance level.
4. Multidimensional gameplay
 - a. By offering different ways of playing the game, the developer can create different needs. For example a player who concentrates on competition elements of the game needs different items than a player who concentrates on social aspects of the game.
5. Avatar types.
 - a. Different avatar types can be offered different things. For example avatar's profession determines which items are useful for him.

(Hamari & Lehdonvirta, 2010).

Another category includes mechanics that create demand and encourage repeated purchases. These include item degradation, inconvenient gameplay elements, currency as medium, inventory mechanics, special occasions, artificial scarcity, and alterations to existing content. (Hamari & Lehdonvirta, 2010).

Oh & Ryu (2007) divides virtual goods into functional items and decorative items. Lehdonvirta (2009) has taken a more detailed look at the virtual items' attributes that affect players' purchase decisions. He divides functional attributes further into performance and functionality, and the decorative items into hedonic and social attributes, such as visual appearance and sounds, background fiction, provenance, customizability, cultural reference, branding and rarity.

F2P games are usually not released as complete products. New content is added gradually and the game is constantly updated during its lifetime. Players' activities and game's performance are continuously monitored and changes are made reacting to these gathered metrics. Games need to be designed to be flexible to facilitate these continuous additions and changes (Fields & Cotton, 2012). Games need to be designed as services instead of single products. The relationship between the developer and the customer changes. It is not enough to make the game attractive enough to make a single sale. Instead the game has to keep the customers interested continuously and for a long period.

As a result the game design necessarily includes marketing design, and the role of the game designer changes accordingly. (Hamari & Järvinen, 2011; Hamari & Lehdonvirta, 2010; see also Stenros & Sotamaa, 2009)

2.3 The Gamers

An important aspect of any design work is to know the target audience. Gamers are often divided into casual gamers and hardcore gamers (Kuittinen et.al., 2007). These terms are often defined loosely and used as opposites of each other. Hardcore gamers are usually defined as game hobbyists, who spend a lot of time playing games, play competitively or are otherwise trying to ‘beat’ the game. They are often willing to use a lot of time learning and mastering certain games, and are interested in gaming culture beyond the games they play. A casual gamer is sometimes defined just as an opposite of a hardcore gamer. Kuittinen et.al. (2007) provides a detailed analysis of casual games and casual gamers. Their definition of a casual gamer is “A person who plays games in a casual manner, not necessarily casual games, (casual playing) or who has a casual attitude towards gaming (casual gaming).” (Kuittinen, et.al., 2007).

Lin & Sun (2011) have studied gamers’ opinions of F2P, basing their analysis mainly on comments collected from two popular Taiwanese game forums. Their results divided the opinions of F2P advocates and the players against F2P into six groups introduced below.

1. Fairness. In subscription based games every player have equal status. In F2P the players can be divided to those who buy virtual items and to those who pay for nothing. Players against F2P see this as a possible source of unfairness. People can buy their success instead of investing time to the game. The most powerful items can often be achieved only buy buying them with real money. Advocators say that F2P brings fairness to those who don’t have money to pay monthly fees and to those who have money but don’t have a lot of time.
2. Fun. Players against F2P think that the companies intentionally design games to be less fun for a non-paying players. On the other hand the paying players might lose the sense of fun, because they have not earned their equipment inside the game. Advocators say that the diversity of players in free games makes games more fun.

3. Order and quality. Players against F2P think that there are more griefers in free games than there are in subscription based games. Advocators say that there are griefers in all games. Griefers are players who get their fun by spoiling other players' fun for example.
4. Maintaining the magic circle. Free game players need to consider real money related problems during play, which might disrupt immersion and break the magic circle.
5. Free market issues. Both the advocators of F2P and the players against F2P seemed to agree, that game companies are entitled to make money with their creations in one way or another. Although players against F2P accused the companies of misleading the customers in their advertising.
6. Gameplay balance. Both sides usually agreed that all players should have equal possibilities to survive in the game and to enjoy the game. Non-paying players should not feel that they are in disadvantage, but at the same time the players who spend money should feel they are getting value for their money.

(Lin & Sun, 2011.)

An earlier model proposed by Lehdonvirta (2005) has a different perspective on player opinions. He's formed a model of ten groups of players and their possible perception on real-money trade of virtual goods. His study is based on earlier research, such as Yee's (2005) model of player motivations, and some case studies. His results are shown in table 1 below.

Table 1. Ten different user perceptions on RMT (Real Money Trade). From Lehdonvirta (2005).

Achievement	Social	Immersion
<p>Advancement</p> <p>If RMT enables status to be bought, it violates the achievement hierarchy</p>	<p>Socialising</p> <p>RMT allows players to express themselves through their buying behaviour</p>	<p>Discovery</p> <p>RMT breaks the magic circle, but gives more choice over which content to experience</p>
<p>Mechanics</p> <p>RMT makes it easier to obtain different asset configurations to examine</p>	<p>Relationship</p> <p>RMT allows those with less time to catch up and play together with their friends</p>	<p>Role-Playing</p> <p>RMT allows players to obtain the props that are needed for their chosen fantasy</p>
<p>Competition</p> <p>RMT is cheating if it can be used to obtain competitive advantages</p>	<p>Teamwork</p> <p>RMT provides objectives for teamwork and motivation for effective organisation</p>	<p>Customisation</p> <p>RMT makes it easier to obtain a set of assets that correspond to the player's taste</p>
		<p>Escapism</p> <p>RMT breaks the magic circle, introducing real-life worries into the virtual world</p>

Paavilainen et.al. (2013) studied, players' perspectives on social games, and players' opinions on using real money in social games. Their interviewees felt that social games did not offer enough value to make them pay for those games. They were also concerned that they might get addicted to those games, which made them reluctant to use money in them. Players further thought that buying in-game items with real money would unfairly imbalance the game, breaking the difficulty and ruining the game experience. Transaction processes were also considered unreliable and inconvenient to use. (Paavilainen et.al., 2013).

3 METHOD AND DATA

The aim of this study was to find out, how game designers and other game industry professionals perceive F2P and its effects on game design. After considering different possibilities, it was decided that studying internet articles and blog posts, written by designers and indie developers, would be both efficient and suitable way to gather these perceptions. This chapter will introduce the used methods and the gathered research data.

According to Crookall (2000), most of the phenomena studied academically are by nature multidisciplinary, and dividing them into strict disciplines is somewhat artificial. Game studies, as a relatively new research field, is certainly a multidisciplinary field. Each researcher brings his own tool set to this field, depending on their background and the subject of the study they are working on. Research analyzing individual games is often done using methodologies from humanities. When studying players and their behavior, social science methodologies are often used. When studying game design and development, a researcher has many methodologies to choose from, for example those from computer science or art and design studies. (Mäyrä, 2008, p.156). In this thesis the object of the study was opinions of individuals, so it was natural to approach the problem using methods and approaches from the social sciences.

Gamasutra.com was selected as a main source for the data of this study. Gamasutra.com is a website that has a vast amount of game industry related information, including feature articles and blog entries written by industry professionals. Anyone can start to write a blog on the site, as long as the subject of every blog entry is somehow related to game industry. There is however a separate section for expert bloggers, and the blogs in that section were concentrated on here.

The data search was started by going through Gamasutra.com to find game industry professionals that have written feature articles or blog entries during 2013. From these the ones relevant to this study were selected. Another search was made via Gamasutra's internal search, looking for feature articles and blog posts that include keywords 'free-to-play', 'freemium', or 'F2P'. Additional articles were searched by going through the links on the chosen professionals' Gamasutra profiles, and by doing a Google search to find their articles and blog posts outside Gamasutra.com. The chosen professionals include 19 game designers, two game design consultants and 11 indie developers. Indie

developers were included, because they usually have several roles in development, including game design, so they can be seen as game designers. In addition to these there was also five journalists, one public relations manager, one professor of law and one economist. These last eight writers were included in the study to bring in a slightly different view point.

The method used to analyze the data was qualitative content analysis. Tuomi & Sarajärvi (2009) presents three different approaches to content analysis. Inductive data analysis starts from the data and works towards a new theory. Deductive data analysis starts from a theory and tries to fit the data into that theory. The third type is content analysis guided by theory, where data analysis is started inductively, but the final abstraction levels are ‘forced’ to fit some existing theory. (Tuomi & Sarajärvi, 2009.) This thesis starts from the data but doesn’t really reach any new theory.

The gathered material was read through to get a general overview of the material. The articles were then read again more carefully, and relevant text passages was marked for closer examination. At the same time a main subject of each article was identified for an article level analysis. Some of the articles included more than one clearly separate subjects, but most of them had only one. These main subjects were then analyzed to find common themes between them. At this point the writers’ general attitude towards free-to-play was also determined.

In the next phase the marked passages in each article were examined once more, this time looking for words, expressions and sentences which expressed an opinion, a suggestion, observation, and so on. Later in this thesis these are all referred to as perceptions. These perceptions were copied into a separate text file as a numbered hierarchical list, so that each perception could be easily traced to the source. For example the number 5.2.15 in front of a perception would mean that the perception in question was from the chosen professional number 5 and it’s the 15th perception presented in his second article. At the same time the perceptions were also marked as being positive, negative, or neutral. Unlike in the article level analysis, this positivity or negativity wasn’t regarded as an opinion about free-to-play as a whole, but as an opinion concerning the particular issue or feature of free-to-play designs.

The perceptions were then analyzed to find common themes among them. An affinity wall was created from the perceptions to help the analysis. A complete description of

the affinity wall method can be found for example in Beyer & Holtzblatt (1998). In this study the method was not strictly followed. The perceptions were considered one by one and divided into groups. If a perception fitted into more than one group, it was copied into each one and marked as a duplicate, so that they could be reconsidered later if necessary. Each group was given a short description of the content or meaning of the group. Groups were then examined once more and divided into themes. These themes were considered as results for the first research question: What kind of free-to-play related issues or themes game designers and other game industry professionals find important enough to write about?

The analysis suggested the following themes:

1. For & Against
2. Ethics
3. There is no “Free”
4. Business & Production
5. Impact on the Industry
6. Game Design
7. Monetization
8. Other

The results were then considered from the view point of the second research question: Do those issues suggest any higher level problems that game designers might face when designing F2P games? As a result of the final analysis most of the identified issues were found to fit into one of three contradiction pairs: 1) business vs. artistic freedom, 2) business vs. game experience, and 3) business vs. ethics.

4 RESULTS

This chapter reports the results of the data analysis. Chapter 4.1. reports the determined general attitudes of the chosen professionals towards F2P, and an overview of the identified themes. Chapter 4.2 – 4.4 divide the identified issues into three categories according to different contradiction problems designers need to balance when designing F2P games. Chapter 4.5 gives a summary of the found perceptions, divided into identified themes.

4.1 Overview

Table 2 shows the themes found in the chosen articles and their distribution among the chosen professionals. The table also includes each professional's general attitude towards F2P. In the table the chosen professionals have been divided into groups according to the job title. The number above each name is a reference to the list of chosen professionals, which can be found in appendix 1.

Some of the chosen professionals wrote about same themes in more than one article. The number of those articles was disregarded in these tables. Some articles on the other hand included two clearly separate main subjects that might as well have been written as separate articles. These articles have been marked as belonging into both of those subject groups in table 2.

Table 2. Results of the content analysis of articles.

	Role		Game Designers																			Indie Developers										Consultant/Journalists					Other													
	ID	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40								
General Attitudes		Amount	-	N	N	-	N	N	N	+	+	+	N	-	+	N	N	+	+	+	-	-	N	N	N	+	-	-	-	+	+	+	+	+	N	+	+	+	+	-	+	N								
For & Against	10				0																	0																												
For F2P	7		X		X																		X																											
Against F2P	8							X																																										
Ethics	8							0																																										
Ethics	14							X																																										
There is no "Free"	2		0																																															
There is no "Free"	6		X				X																																											
Business & Production	7				0																																													
Production Advice	9								X																																									
Revenue models	6		X	X	X																																													
Marketing	9		X		X																																													
Impact on the Industry	4				0																																													
State of the Market	5					X																																												
Designer's Role	5					X																																												
Games as Service	6		X																																															
Metrics	6							X																																										
Game Design	15		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Game mechanics	12		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Quality	8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Game Experience	9		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
General Design Advice	15		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
"Games Should be..."	18		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X			
Monetization	15							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
General Advice	21		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
Monetization types	11		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
Virtual Items	13		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X		X	
Other	5																																																	
Other	8							X																																										

X = Has written about this theme; 0 = as a main subject of an article; + Positive attitude; - Negative attitude; N Neutral attitude.

4.1.1 General Attitudes

The chosen professionals' general attitude towards free-to-play was determined by studying the nature of their main subjects and the tone of their writing. In some cases this was very easy, as the writers explicitly expressed their opinion, but mostly the attitude needed to be implicitly deduced. There were also some writers that like to use a sarcastic writing style, which made it difficult to determine the writer's true attitude. Out of all 40 chosen professionals 13 were determined to have a neutral attitude, 10 were clearly negative, and 17 seemed to have a positive attitude.

Negativity was easy to spot. When the chosen professionals were strictly against free-to-play, they usually articulated it very clearly. Although Blumental, for example, has a sarcastic writing style, and his attitude was not evident at first.

Blumental: This doesn't mean I don't like freemium games, many of them are actually pretty good. Well, maybe not many, but some. OK, just a few. (1.2.)

The reason for the negativity varied. Most common reason was hatred for whale hunting, but there was also the feeling that microtransactions affect game experience. Adams was concerned about the moral example that some free-to-play games give.

Adams: Is this what game design has come to? Creating things to sell players that enable them to be cruel to each other? Looking for opportunities to make money out of emotional instability? Bullying is not a joke, and it is not make-believe. It causes misery and pain and it can and does drive people to suicide. And I'm revolted at the idea that a game designer would promote it for profit. (4.1.)

Positivity was the most common attitude group, including 17 of the chosen professionals. These included some articles that were first determined as neutral, but after consideration were changed to be positive. These were articles that didn't have an explicit expression of attitude, but since their main subject was advice on how to design good free-to-play games, it seemed clear that they advocated free-to-play. Another positive group included defensive articles, written to be answers to negative criticism. The defenses included everything from "free-to-play is just a tool" to "Players have voted with their wallets". There was also a large group of articles that concentrated on how lucrative this business model is for the industry.

Neutral articles include two kinds of articles. One group includes articles that are written in a very neutral tone, as if the writer deliberately keeps himself neutral and wants to use a scientific style when writing. The other group consists of articles that mention both good and bad sides of free-to-play. Some of these articles express distinct recommendations or wishes for free-to-play developers to stay away from the evil design methods and stick to the good ones.

The relatively small percentage of clearly negative articles seems to indicate that, at least among the professionals in this study, the F2P model is seen as an acceptable way to finance games, as long as designers keep away from unethical monetization methods, and try to offer the players great and fun experiences. This is somewhat in line with the gamers' attitudes identified by Lin & Sun (2011), as they found that gamers understand the developers' need to make money with games, and that the gamers against F2P were often concerned about F2P's effect on things like immersion, fun, and fairness.

4.1.2 Themes Overview

Ten of the chosen professionals had complete articles written to defend or attack F2P as a whole. Five of them were advocating F2P and the other five were against F2P. In addition to those another five articles, with different main subjects, included clear sentences that attacked or defended F2P. The amount of these articles, and the even distribution of different sides of opinions, can perhaps be seen as an indication of how controversial this subject is.

Ethics was one of the three most common themes in these articles. 14 professionals wrote directly about ethics in their articles, eight of them as a main subject. They discussed mainly ethical implications of taking advantage of whales and monetization of children. However, in case of ethics, it would be a mistake to only consider those articles which explicitly consider ethics, since ethics was often an important implicit part of other themes, especially game design and monetization. Therefore this theme seems to be much more important to the chosen professionals than table 2 might suggest.

Six of the chosen professionals wrote about the cost of free games. Blumental and Doucet had dedicated whole articles for this subject. The idea is that, even though the players do not have to pay money to play the game, they often end up paying in other ways. These implicit costs include such things as player's time, lowered quality, inter-

ruptions, and the fact that they can never fully own the game. This subject, like ethics, is often implicitly present in game design and monetization related subjects. The chosen professionals' attitudes within this theme seem to be divided equally. Two of them approach the theme neutrally, trying to formalize the relationship between money and other ways of paying. Two professionals claim that if the player wants to play for free, the game experience suffers. Last two have a positive attitude, saying that F2P offers players a possibility to pay with the resource they have, using either time or money.

Business and production related decisions often need to be made just once at the beginning of the project, but can have wide and lasting effects. Seven professionals had written articles with this major theme as their main subject, and another eight professionals touched these matters in their articles. This theme was further divided into three sub-themes: Production advice, revenue models, and marketing. Production advice in these articles was mostly general notions from the importance of continuous testing and iteration to the importance of creativity and love for your project. The choice of the right revenue model for the game was written about by six professionals, and is naturally a very important question. Marketing within business and production subject includes player acquisition and marketing your game outside the game.

One of the recurring themes in the chosen articles was the impact the emergence of F2P has had on the game industry and on the designer's traditional role in game projects. 14 professionals wrote about this theme, and four of them had this as a main subject of their articles. F2P games have to be designed with the revenue model in mind. This has changed the traditional role of game designer. It is no longer enough for the designers to concentrate on gameplay and game experience. They need to also take into account the financial factors and design the games to work as services, and use metrics to guide their creativity.

Game design advice and monetization advice were the most common subjects in these articles, and since they are so closely dependent of each other in free-to-play games, it was sometimes difficult to decide which group an article or a single remark belonged to. If an article looked at the field more from game design view point, and monetization was seen as something that affected game design, then that article was assigned to game design category.

There was 15 articles with game design as main subject, and another 13 articles discussed game design as part of their main subject. Most of these articles included general design advice in the form of lists of good and bad practices. Some articles had the same list structure, but concentrated on a particular area of game design, like how to retain the acquired players, or how to keep a game fair and balanced. A few of the articles concentrated on one small area, like tutorial design, whereas a couple of them introduced high level models, like Nicholas Lovell's pyramid of free-to-play game design.

An article was assigned to monetization category, if its main concern seemed to be how to make money, and game design was considered as one of the things affecting monetization. 15 articles concentrated on monetization as their main subject and 9 additional articles had some points on the subject.

Similarly to game design articles, many of these were general monetization advice, presented as a list of good and bad practices. What was considered good or bad seemed to depend on the view point of the writer. Some of the chosen professionals concentrated on how lucrative different methods are compared to each other. In their opinion a good method makes money and a bad method does not. Other professionals looked at the different methods from a game experience view point. They think that good monetization methods retain game balance, fairness and fun, as well as make money. Yet another popular way to look at this was an ethical view point. These professionals rooted for honesty and openness in monetization.

In addition to general advice there were many articles concentrating on one specific monetizing technique, such as seasonally themed virtual goods, monetizing communities, or monetizing player-to-player trade.

The last category includes single articles with subjects that were more or less isolated from the other categories. They are not relevant to this study, but for the sake of completeness, they are briefly mentioned here.

Hyman, a reporter, has written reports about a virtual credit system, which allows gamers to buy virtual items on credit without a credit card. He has also written about big licensed intellectual properties coming to free-to-play games, and suggested openness in reporting the revenues of the game companies.

Rose in one of his articles suggests a free-to-play game jam, to shake things up and bring more creativity into F2P designs. Lastowka, a professor of law, talks about legal ownership of virtual items, and Shokrizade, in one of his many articles, has made an effort to define some of the common terms used in relation to free-to-play.

4.2 Business vs. Artistic Freedom

Designing F2P games differs from traditional game design in many ways. In F2P game design the designers need to think, among other things, about acquisition and monetization of players when designing gameplay and the overall game experience. This difference has changed the traditional role of the designers, which some of the chosen professionals see as a bad thing, while others see it just different. Financial aspects have always affected game design, but in F2P games designers need to build the whole game around the business model.

In F2P games monetization design is an important part of game design, and in some cases it seems to be almost the other way around, so that game design is just a part of monetization. According to some of the chosen professionals, in traditional games designers were able to concentrate on making the games fun and entertaining. Adams, for example, thinks it is problematic that a designer needs to constantly take into account the financial effect of every feature.

Adams: The designer of a retail game thinks about whether features will be popular or not, but he is free to take a holistic approach to it. He doesn't have to measure moneymaking potential feature-by-feature.

The F2P business model seems a bit weird to me – it distorts what I think of as the designer's main role – but it's not wrong in and of itself, just different. (4.1.)

Schneider: As a designer on a paid game, you're thinking about how to increase the player's enjoyment of the game, not how to get more money out of them. (27.1.)

Schneider's opinion is that F2P completely corrupts game design and diminishes the fun for both the players and the designer.

Schneider: Free-To-Play corrupts the design and enjoyment of your game, it corrupts your soul as a designer, and it takes away time and effort from other things that would make the game better. (27.1.)

Pruett, on the other hand, says that this need to compromise between business side and art is nothing new. All commercial games need to make money, and traditional games are no different from F2P in that respect. It's just that in traditional development the marketing department was usually separated from the game design department, which gave both departments an opportunity to blame each other, if something went wrong.

Pruett: First, the basic premise of the "f2p corrupts game design" argument is that paid games are different. It assumes that traditional games do not include elements that have no purpose other than increasing the developer's bottom line. This is, of course, completely false. Why do so many console games feature women in skimpy armor? (29.1.)

Free-to-play model just sets new constraints for game design, and the designers need to know and understand those constraints when designing for F2P.

Järvinen: The bottom line is that one cannot really design games in the free to play context without taking the particular business model into account – free to play affects everything, more or less. (8.4.)

F2P games are always connected to a server and this connectedness brings with it some benefits, but it also introduces new restrictions and potential problems for designers. Being always connected makes it possible to deliver updates and additional content to games quickly, easily and cheaply. The commonness of fast internet connections has led even many traditional digital games to drift from being isolated standalone products into working more like services. In free-to-play this games as service mentality is an integral part of the concept, and as a result, their design needs to be flexible and support constant improvements and additions.

Luban: Well-thought freemium games are designed as services, not stand-alone products. They have, engraved in their genes, the need to constantly upgrade themselves. (10.3.)

Connectedness also makes it possible for the developer to gather real time information about how the players interact with their game, which features they seem to like or dislike, and which virtual goods they buy. Analyzing these metrics and reacting to them correctly can be a very powerful tool.

Luban: One of the secrets of success of a F2P game is the implementation of a powerful system of statistical analysis. Game data provides clues as to the users' behavior and preferences.

By using this data and by carefully listening to the players' remarks, developers can correct the flaws and build upon the strong points of the game. (10.1.)

To keep improving their revenues the developers need to gradually add new content and new virtual goods to the game. They need to keep the players interested and happy, constantly making changes and monitoring the players' reactions to those changes.

Lovell: A game is never done. The hardest part of making a free-to-play game is finding an engaged audience for your experience. Once you have got those customers, keep offering them more. Use metrics, creative leaps, intuition and good old-fashioned listening to keep them playing, sharing and spending. (31.2.)

Some of the chosen professionals feel that the use of metrics takes away their creative freedom and lowers the quality of games by changing games into mere revenue generating machines. Certainly it's been seen that metrics driven design tends to steer games into one mold and as a result there are a lot of almost identical games on the market.

Alessi: As a whole, the game industry is too obsessed with metrics. Games have been called "the cinema of math" but that doesn't give us the right to rule absolutely by the numbers. Games are still art, and as such, we should recognize the qualitative aspects of the medium instead of bowing down to quantitative aspects at every turn. By relying so heavily on metrics, we have begun to remove the art from games. (20.1.)

In contrast some professionals, like Perry for example, think of the extra constraints as an opportunity to improve one's skills and designs.

Perry: It's an interesting challenge to use metrics and yet not be controlled by them... often you kind of lose your design wiggle room. It forces you to confront slop. (13.1.)

Running a game as a service can be costly, since it requires always-on servers, people to maintain those servers, and people to manage customer relations, gather and interpret metrics, constantly create new content, and so on. Levy dedicated a whole article to a discussion on when you should give up on your F2P game and move on. If the game is not making enough money to cover the administration costs, it might be better to start fresh than to try and fix the problems. Sometimes fixing the game would take too much time and money to be worthwhile, and it is uncertain if the audience, alienated by earlier bad decisions, would come back anyway.

Some professionals are concerned about how F2P and digital distribution affect games as art. Since online games are terminated if they don't make enough profits, the games are not durable. Gamers might not be able to go back to playing a game they liked a few years ago, because that game probably doesn't exist anymore. Most online games will never have a nostalgia value like many standalone games do. Alessi believes that the quality of games will suffer overall, because they are designed to be mere revenue sources.

Alessi: If a game is rigged with F2P features, then it fails as a work of art, because it is not timeless. Worse, it fails as a game because it is not fun, immersive, or entertaining to make spending decisions right in the middle of a gameplay session. (20.1.)

The competition in F2P market is tough and it is getting even tougher all the time. Video game consoles are now also starting to join the F2P competition. How this will affect the market situation is yet to be seen. For a couple of years now the media has been reporting F2P companies making huge profits, and wondering how long this can go on. According to some of the professionals chosen for this study, the market of F2P games is starting to get saturated with products that are too similar to each other. Appella, for example, notes that F2P games, and specifically social network games, have been too similar to each other. He says that designers should try to be more original, or the gamers will get tired and move away. To be successful the companies need to start developing games targeted for smaller audiences.

Luban: However, we have already seen that there is a premium in the market for games offering a genuine novelty, or which are built around a new theme. That's the key to success in the F2P or social game market: be creative, and don't be afraid to go for a niche audience. (10.2.)

New markets are opening up all the time and the developers only need to find them. It is vital that game developers choose their general market strategies wisely. Do they want to compete with the big names of the industry or try to find their own, perhaps a bit smaller market corner?

Järvinen: Should we aim for the Zynga-led masses, or niches that are big enough to bring revenues in. Both paths involve risks of course: the first one requires marketing investments in a saturated selection of genres against players who can always out-market you, the second one requires something special in terms of gameplay that guarantees long-term retention. (8.4.)

Many of the chosen professionals seem to believe that F2P isn't suitable for all genres, especially for the more creative ones such as narrative driven genres. This belief is possibly one of the things that have led into the saturation of the market. There are however a lot of professionals who think that there are no such genre restrictions, even if it might seem that way at the moment.

Luton: Anything with a virtual currency already is easy to work with. However, I think most games can use the model, just we haven't work out how yet for some. (3.3.)

Luban: Freemium is not a game genre, but a business model that can actually be applied to most game designs, including hardcore titles.

In fact a lot of hardcore titles are already successfully using free-to-play model. Despite the above quote, Luton has in another article expressed his concerns about the design limitations presented by F2P.

Luton: Whilst I believe that these challenges make F2P the most exciting place to be as a game designer right now, it is also a hindrance. Not only does the model limit genre decision, but also it increases production time by complicating design and necessitating features. (3.1.)

Blumental, on the other hand, has a very strict view on these genre limitations. He believes IAP only works in specific genres, and if you try to use it in other genres you inevitably end up with an awful product.

Blumental: Some game genres fit with the model, but most don't. So if you go with the freemium/ cheapium model, relying on income from in app purchases, you either limit yourself to specific game genres that work, or you're going to eviscerate a beloved game genre and shove the bloodied parts into the freemium mold. (1.2.)

Another genre related restriction set by the way the F2P model works is, that F2P games should preferably be designed to be never ending. Only a very small percentage of F2P games' players use real money in the game, and most of the players who do use money, only use small amounts at a time. On the other hand the players who like to use a lot of money in a game usually like that game enough to play and pay for it for a long time. That's why it is important to create a long term relationship with the player, and to do that it is advisable to design the game so that the player can never finish it. This is yet another reason why narrative driven genres are not well suited for F2P.

San Filippo: And remember that of those users who do invest -- the most valuable are those who come back and make repeat payments.

If your app has a fixed amount of content -- for example, a puzzle game with 30 levels -- then you're essentially cutting off your most valuable users, and your LTV will suffer. (26.1.)

In all game design it is important to know the target audience. In F2P design this is perhaps even more important than in traditional game design. The audience of F2P has largely consisted of casual gamers and new gamers that may have lower quality expectations than core gamers would have. This is however changing rapidly. F2P is used more and more in games targeted at core gamers and as the casual gamers are getting to know what they can expect, the production value requirements are rising. The target audience affects how the game should be designed and monetized and if the F2P really is the correct business model for that audience.

Pruett: I think that some traditional game developers and hardcore gamers haven't figured out that there's a new audience for games yet. An audience that doesn't share their tastes and has a wholly different idea of what games are worth. An audience that the traditional game industry has repeatedly failed to reach for thirty years. An audience that likes to be able to try things out for free and then make their own judgements about whether or not potential purchases are worth it. (29.1.)

In all game design there are some design elements and game mechanics that are known to work, and some that are known not to work. According to Luton there are some mechanics which should be included in all F2P games to be successful.

Luton: The current wisdom dictates that a free-to-play title must have a checklist of mechanics, including recursive infinite gameplay, a scarce limited resource that can be indefinitely bought and social interactions that drive demand for the resource. How then do you reconcile those criteria with, for example, a classic third-person action adventure? You simply can't. (3.1.)

Having such a checklist of mechanics may hinder creativity and deciding whether to deviate from that list or not, possibly in the expense of monetization, is another balancing decision designers need to make.

The loop structure of games gets quite a lot of attention in these articles. These chosen professionals seem to agree that a good way to keep players playing and paying is to have a nested loop structure with a short core loop incased in other longer loops.

Lovell: The Core Loop is the beating heart of your game. It is what many people think of when you ask them about “the gameplay”. It might be a one-minute play of Bejewelled Blitz. It might be a plant-harvest-plant cycle in a game like Hay Day. It might be a single death match in Team Fortress 2 or clearing a level in Candy Crush Saga. (31.1.)

Offering the players a chance to play frequent but short sessions is seen to be essential to a game’s success, but designers should not concentrate too much on polishing the core loop only.

Lovell: Polish in free-to-play games is increasingly important, but endlessly polishing the core game is a path of diminishing returns. It is no good making the most perfectly polished gameplay loop if, after someone has put down their phone or tablet or mouse or controller they don’t remember to come back. (31.1.)

Retention mechanics are all those mechanics that keep the player interested and provide substance to the core loop. Some of these mechanics are used very effectively in traditional games as well as in F2P games. They include things like scores and leaderboards to create competition, and missions, achievements and levels to add variety to game sessions and to reward player’s progression.

F2P games also use some appointment mechanics and other mechanics tied to real time, which are more or less specific to them, and are meant to support monetization. Appointment mechanics include things like rewarding players for coming back often, or threatening them with punishment if they do not come back often enough.

Some of these mechanics are designed to control the player’s speed of progression. The number of actions player can perform can be limited for example by giving him a fixed amount of some resource he needs. When the resource runs out the player has to wait for it to replenish before he can continue the game. This mechanic is used in many casual social network games. A slightly different way to achieve the same effect is to design key actions to take a mandatory time to finish. This technique is well suited for casual building games and long term strategy games. Grinding is a mechanic where the player has to play for a long time to get access to certain equipment or game features. All of these mechanics slow down player’s progression and can be easily monetized by selling items that speed up the process.

Paywalls are generally frowned upon among these chosen professionals. They are not seen as unethical, as long as players are told in advance that they need to pay to be able

to access the whole game. The problem is that the players that reach the paywall are often the ones who like your game, and in a way you are punishing them for it by demanding them to pay.

Lovell: The strange thing is how many people who make games still insist on slamming down a paywall at some later stage. To my mind, the Acquisition/Retention/Monetization funnel is all about finding players, keeping players and make money from players. Chucking them out at an arbitrary moment in time seems like a strange decision. (31.2.)

Shokrizade calls these techniques progress gates and divides them into hard gates and soft gates. Hard gates completely prevents player from continuing unless he pays. Soft gates stop player's progress for a certain time, and he can continue earlier if he pays. General view seems to be that players should be able to get a complete experience for free.

Matchmaking, i.e. matching players against each other in such a way that the matches are well balanced, is often done in traditional games by comparing players' experience. In free-to-play games however it is better to compare the equipment the players have. This can decrease or even remove the feeling of unfairness produced by paid advantages especially in skill based competitive games. However in competitive team based games this kind of matchmaking can sometimes create friction between team mates, since it means that inexperienced players can end up in a team of much more experienced players and their lack of skill can affect team's performance.

Selling time in some form, is one of the most frequent and effective methods of monetizing F2P games.

Appella: Based on that, the most effective policy to monetize a game is selling time. And I would like to go beyond the Speed-Up button to accelerate building time of a city building game and beyond monetary figures to justify my thoughts. (5.2.)

Luban calls these paid speed-ups frustration-alleviating items. The name comes from the idea that these games are designed to create frustration in players, so that they will want pay for speeding up their progress.

Luban: Frustration-alleviating items. These are big -- we find these in nearly all freemium games, but in vastly different forms. The idea is to sell the player items that will temporarily speed up his game progression: It could be XP (for leveling), money earned in game (to buy or repair equipment), or

time (to more quickly complete the construction of a building or a unit, research, or the harvesting of a resource). (10.3.)

According to Luban F2P games probably can't work without frustration. Frustration is what drives the players to spend money. Done right frustration creating methods fit well into the design of the game and the players might not even notice that they are purposefully designed as such.

Different players value different things, so to monetize your game effectively you should have a wide selection of items in various price ranges, so that as many players as possible find something they would be willing to spend real money on.

Sipe: Stereotypically speaking your game should have hundreds or thousands of virtual items in order to create a freemium success. (16.2.)

At the same time you should make sure that you don't overwhelm the player. Shokrizade suggests that you should never show the player more than nine items at the same time. A leveling tree is a good way to organize the goods, and at the same time it works as a retention mechanic, as Luban says.

Luban: A leveling tree is the key feature that will drive the players to play longer. It rewards their progression. It gives them short, medium and long-term objectives. It participates to the renewal of the player's experience by introducing novelties. It greatly expands the game's lifespan by allowing the player to experiment and develop new strategies. (10.3.)

Luban, among others, says that the selection of virtual goods should grow constantly, but the new added objects should be carefully designed, so that they don't lower the value of players' earlier permanent purchases too much.

Luban: A good rule to keep in mind is that you should design your game in such a way that you have a lot of room for new items. You want players to keep coming back, and a good way to achieve that objective is to introduce new stuff. (10.2.)

Adding the ability to give paid items as a gift to other players can be a great way to increase sales. Most of the players never buy anything in-game, but since many players play with their friends, there is always a possibility that paying customers buy gifts for non-paying ones. And when a non-paying customer gets a present and finds out how fun the paid content can be, they might convert to a paying player themselves.

4.3 Business vs. Game Experience

Choosing the used revenue model is obviously a very important decision and, according to professionals chosen for this study, that decision should be made as early as possible. Some of them mention that changing the revenue model after the game is launched often gets a negative reaction from players. They also note that changing the revenue model creates design problems and makes monetization less effective. If the decision to use IAP as a revenue source is made early, the games design can better take that into account improving both game experience and monetization. Once the decision to use F2P is made, the designers frequently need to balance monetization against the game experience offered to the players.

Monetization is well executed when it creates profits. At least if it is judged purely from monetization perspective. There is however a lot of different opinions on what exactly constitutes a good game experience. Lovell writes that the designers should not concentrate too much on polishing things like graphics, gameplay and core loops. Instead they should be offering players emotional experiences. Ludgate says it's important to offer the players a lot of different kinds of challenges to choose from. Miller on the other hand suggests that challenges are often completely unnecessary.

Miller, A: I have come to feel that not only does the challenge in many games often feel contrived, it is entirely unnecessary to a satisfying game-play experience. In many cases, developers would be served by understanding "game" as "interactive media," rather than as necessitating some sort of challenge. (35.1.)

Many of the chosen professionals are calling for more creativity in F2P design. There are too many games just cloning each other, and the audience is getting tired. Designers should stop designing purely to maximize profits and start to concentrate on offering meaningful, emotional and fun experiences for the players. The profits will come from the players who enjoy the game.

Rose: What we really need is a free-to-play game jam. An avenue by which inspirational and creative individuals can attempt to tackle the free-to-play space, and hopefully show the average gamer how free-to-play can universally be done in a respectful and entertaining way. (37.1.)

Though some professionals still wonder if gamers really accept F2P, Järvinen and some others argue that gamers actually are starting to expect new games to be free. Paul John-

son points out that there are more and more F2P games on top of the charts, and sees this as a sign of most gamers accepting the model. Blumental says basically the same thing, but using a bit darker tone.

Blumental: As long as players pay for IAP they are ultimately responsible for the success of that revenue model. (1.2.)

One often mentioned drawback of F2P was that IAP disturbs immersion and may break game features and mechanics. Most of the articles suggested ways to avoid those problems through careful design. Some professionals however seemed quite adamant with their opinion, that F2P is just evil.

Saltsman: The integration of in-app purchases feels like a brutal violation of the sacred circle; it is allowing the real world, and my real money, to intrude on and influence my performance. (25.1.)

F2P games make their money by selling virtual items, but these items can have a profound effect on game experience, so once again the designers need to balance these two aspects of design. Some items, which might sell very well at first, can destroy the game experience completely, which in time will lead to players deserting the game.

One fundamental choice designers need to make is, whether the sold items should affect gameplay or not. Asian games are often designed to be shamelessly pay-to-win, and the players there are quite used to it according to some of the chosen professionals. They stated however, that in western markets it is advisable to design virtual goods so that they don't give too much advantage.

Gameplay neutral items are an easy way to monetize your game. They are not as lucrative as gameplay impacting items, but they also don't create problems with game's balance and fairness.

Decorative items, that allow players to change the look of their avatar, vehicle, or equipment, are an often used category of these neutral items. They allow players to express themselves or announce their allegiance to a clan or guild in the game. They can also work as status symbols, especially if access to them is restricted, for example, by player's level or experience or by the amount of items available. Collectibles that have no other value, except their rarity and decorative value can also be sold.

Ludgate: Status symbols are valuable specifically because they are difficult to obtain. If you could go online and buy a knighthood for \$15, the title "Sir" would no longer be a status symbol. (34.1.)

Customizing the look and feel of the user interface is another example of these items. Luban however warns not to sell items that players think should be free. Possibility to change the keyboard mappings for example should probably be included by default.

There are a lot of other possibilities from changing player's avatar name to renting a dedicated server for player's private use. Possibilities are endless, and it is difficult to know what someone might be willing to pay for.

Gameplay impacting items are tricky to design. To be desirable the items need to give a noticeable advantage, but the advantage should not be so big that it breaks the game's balance and fairness. As long as these advantages are not too distinct, they are considered by most of the chosen professionals to be acceptable, although some of them are against all sold advantages. If the advantages are too big, making a single player game too easy or giving a paying player in a multiplayer game an advantage that non-paying players can't compete against, the game is essentially a pay-to-win game. Most of these professionals think that pay-to-win mechanics should not be used. They break the games difficulty and make them unfair.

Blumental: With players being able to buy consumable power ups and permanent boosts the whole difficulty curve turns into a difficulty knot. It's especially true for unique super boosts that can be bought only for cash (pay to win) and seem to be designed purely to break the game by giving you the upper hand, upper torso and upper leg. (1.2.)

Luban: There is no doubt that anything that could improve a player's performance in a competitive game will sell well. The real issue is how not to upset the players that don't buy such items. (10.3.)

A good way to conserve game balance is to design the game so that skill of the player means more than his equipment. Other ways are for example basing matchmaking to players' equipment instead of experience, or to design paid items to have both good and bad side effects.

Gameplay impacting items include for example paid speed-ups that help player's progress, and pay-to-skip items that allow player to skip mandatory tasks in the game. Most of these professionals feel that paid advantages are acceptable as long as the advantage is not game breaking. Pay-to-win items should be avoided. The items that speed up

player's progress seem to be the most acceptable item type among these professionals. Some of them, Luban for example, actually list them as gameplay neutral items, but mostly they are considered to affect gameplay, although the affect can at best be very subtle.

Extreme examples of gameplay impacting goods are what Shokrizade calls supremacy goods.

Shokrizade: A supremacy good is a good or service that reduces the value of all other linked goods and services in its space, including itself. Supremacy goods can initially appear to monetize very high, but over time consumers become adept at identifying any monetization model that contains them. This causes the advantages of the introduction of supremacy goods to self-extinguish. (32.1.)

For example if in a competitive game a player could buy a weapon that instantly killed all other players in the match, then that would be a supremacy good. There would be no point in any player to buy any other equipment, and very soon the players would abandon the game.

Järvinen points out, that virtual items in games can have real value to the players. According to Serviss they may even have a sort of a historical value that comes from the player's experiences connected to those virtual objects, but to create that value you need to attach persistence or social value to objects, in order to convince players of their value.

Lovell: The point is that no gamer thinks about how much something cost to build when considering whether to buy it or how much to pay. They are considering how much it is worth to them. Whether they will enjoy it. How it will make them feel. (31.2.)

So the value of a virtual item does not necessarily come from the cost of creating that item, but instead from the value the players associate with the item. Shokrizade also notes that the value of most virtual items change over time.

Six of the chosen professionals wrote about the idea that games are not free, even when they cost no money. Blumental and Doucet each had this as the main subject in one their articles.

Blumental: If there's anything we can learn from freemium games is that there is more than one form of currency: there's cash, coins, diamonds, do-

nuts, pearls, snoopy dollars, gems and what have you. Just because you're not paying money doesn't mean you're not paying. (1.2.)

Blumental gives several examples of how a player pays for a free game. These include for example player's time, lowered quality, interruptions, and the fact that you can never fully own the game.

Doucet tries to formalize this idea by introducing four psychological currencies, as he calls them. These currencies are money dollars, time dollars, pain-in-the-butt dollars and integrity dollars.

Doucet: Purchases don't just cost money; they also cost different amounts of time, pain-in-the butt, and (sometimes) moral integrity. (28.1)

The idea is that free-to-play games cost no money to a player, if he doesn't buy virtual items. However, most of these games are designed so that progress of free players is very slow, in which case they pay with time. In some games free players have to endure game experience degrading inconveniences that add to the cost as pain. On the other hand a player doesn't lose integrity, as he might do with pirated software.

Appella takes a similar approach to the above. He says that the players can pay with money, or by keeping the game active, or by helping with the user acquisition, recommending the game to their friends. Adams points out that these games are only free if you have a lot of time. If you want to advance in a reasonable pace, you'll have to pay. He also points out that players can buy advantages with real money, which he deems to be unfair. Luban and Ludgate have a bit more positive view of the same principle, saying that this is actually fair, since some people have more money and some people have more time.

Ludgate: In general, the amount of time and money people have to spend on entertainment are inversely proportionate. That is to say, that the more money you have to spend on games, the less time you have to play them. (34.3)

Since only a small percentage of players actually use money in F2P, it is very important to get a lot of players to play your game. In social network games this is often accomplished by asking, or forcing with progress gates, the players to invite their friends to the game, and when talking about social features these techniques are what some of the chosen professionals seem to mean.

Luban: The game must encourage the player to draw his friends' attention by inviting them to join him. But this "virality" has a two-way function. Not only are friends invited to play the game, but it is them who remind the player later and motivate him to continue playing. (10.1.)

This technique was so popular and overused in early social network games, that it interfered with player's game experience and annoyed those friends that were constantly bombarded with numerous game invitations. As a result many of the chosen professionals consider it to be a bad technique that should be avoided.

Sipe: I know this was a popular tactic in Facebook games, but stop gating content based on the number of "friends" one has in the game! Things like "friending" or "making an in app purchase" (or IAP) should complement the experience and not be required. (16.1.)

Other professionals consider instead social features to mean techniques and mechanics that encourage players to co-operate and form communities in the game. Many of them seem to believe it is better to design games that require co-operation without forcing players to annoy their friends. F2P games can be successful whether they are single player games or multiplayer games, but being a multiplayer game has some advantages in player acquisition, retention and monetization. Co-operative gameplay can boost player acquisition simply because it's always more fun to play with friends than it is to play with complete strangers.

Luban: You can always play with strangers but it is way more fun, and effective, to play with pals. Therefore, the game concept gives you a very strong incentive to rally your friends. (10.1.)

Guilds in many MMORPG games and the ability to form teams with one's own friends in competitive co-operation games offer some often overlooked opportunities for monetization.

Winkler: [...] we have found that players are significantly more willing to pay a few dollars to help out a friend than they are to pay the same amount to "kill" a complete stranger. Instead of monetizing "revenge," we monetize "community," and we owe our success almost entirely to the way we bring gamers together rather than tearing them apart. (19.1.)

Playing with friends also gives the player one more reason to come back to the game and social pressure from friends can even get them to turn to paying players. Even if a player will never buy anything in the game himself, another player may decide to buy something for him as a gift. Cross-marketing other games is another good way to get

players. This also should be designed so that it doesn't interfere with game experience and annoy players.

Advertising as an additional revenue source in a F2P game, does not find a lot of interest among the chosen professionals. Luban says it is easy to set up, and the players expect it easily, but according to him advertising only adds a marginal share to games revenues. He also notes that advertising should be designed so that it does not spoil the game experience. Blumental only sees advertisements as a nuisance.

Blumental: I don't like ad banners and I don't like pop up ads: especially the type of pop up ads that ninja sneak on you and appear just as you're about to tap something else and you end up being sent to the app store or another website. It's like a free secret mini-game! (1.2.)

Quality of game's design, execution and the whole production can have a huge impact on game experience. Quality however is not cheap, and the budget problems were a reality for traditional game designers as well. F2P developers have sometimes been accused of deliberately flooding the market with inferior products, which use psychological tricks to keep players playing and spending money. Some of those accusations are perhaps based on comparing the quality/profit ratio of traditional games to the quality/profit ratio of some of the successful F2P games. Some early F2P games did make huge profits very quickly with comparatively low production values. Blumental for example says that although game quality is important, it is by no means necessary.

Blumental: But don't despair even if your game is terrible. Quality is not necessary. Farmville offers practically no gameplay beyond mindless clicking, but it has done a fantastic job hooking players. A bit like a crack-cocaine addiction, only it carries a more devastating social stigma. (1.1.)

Most of the chosen professionals however stress the importance of quality. Although casual gamers have not been very demanding before, the tough competition on the market forces game companies to raise their production values, and as the new players get used to better quality, they'll learn to expect more than just mindless clicking.

Alessi: In the end, quality does matter. The difference comes when the audience grows tired of being inundated with bad software. Eventually, they'll just do something else. At least the old platform holders had a vested interest in making sure your products reach a certain level of quality. (20.1.)

In order to monetize your game effectively you need a lot of players to try your game, you need to get those players interested, and you need to get them to come back to your

game again and again. Some companies have made a lot of money with poor quality games, but according to many professionals, that won't work for much longer.

Luton: You need to make a good game that a player enjoys firstly; then you need to offer them something that they have an emotional bond with, that they'll want to spend money on. (3.3.)

Most of these professionals mention the importance of player enjoyment and fun. If the player doesn't enjoy the game, he will find another game. If the game is free, the players usually leave a dull game quite quickly. What the players consider fun depends on the player, but many of these professionals seem to believe that if players enjoy the game they are more likely to spend money in the game.

Lovell: The first rule of free-to-play is make the game fun. It shouldn't need to be stated, but it does. (31.2.)

Järvinen: Fun + Virtual goods = Revenue (8.4.)

F2P games have a bad reputation of being just a way to get huge profits fast with inferior products. Some of the successful F2P games have been accused of using psychological trickery to get players addicted without offering any real fun.

Lovell: It is entirely possible to make a game that doesn't focus on the fun and make it a successful free-to-play game. Some of the criticisms levied at the free-to-play industry – that it uses operant conditioning, that its games are nothing more than Skinner boxes, that psychological tricks are not enough to make a game – are tied up with this idea that the games aren't fun. (31.2.)

As designers have learned more about how the F2P model really works, they have started to realize that the best way to make profits in the long run is to concentrate on creating fun experiences.

Levy: In free-to-play, a long term relationship with the player is key to monetization. [...] If you have low engagement numbers despite a number of updates to improve them, it is unlikely to turn around. This is a sign that your game is not fun enough for the audience of organic players you are attracting and it is time to move on. (9.3.)

Fairness is considered to be very important to a F2P game's success. If a player in a single player game pays to progress faster or to skip a difficult part of the game, it doesn't affect other players and is therefore seen as fair. Whether it is fair to the player

to design games that players rather pay than play, is another matter. In multiplayer games, especially in competitive ones, fairness is more essential.

Ludgate: Fairness comes into play with multiplayer games. Cheating suddenly becomes frowned upon when in competition with other players. But only if some players don't agree with the cheating. When everyone agrees to a specific "cheat", it's not really cheating anymore, is it? It's changing the rules. (34.1.)

Fairness in F2P games is closely linked to monetization. Most of these professionals seem to think that pay-to-win mechanics are unfair, but pay-to-progress divides opinions more. Pay-to-progress mechanics are basically selling time, and some professionals feel that to be just as unfair as selling pay-to-win items. Non-paying gamers need to spend a lot of time to get the same advantages as paying players get right away with money. On the other hand, since some players have more money and some players have more time, the pay-to-progress mechanics can be seen as making games fairer to 'money-poor' players. Regardless of the differences, most of the professionals believe that if the game is unfair, the players will leave. Some games manage to make big short term profits with pay-to-win items before losing players, but eventually the players get wise.

Appella: For someone more experienced in the industry it is a clear short-term goal to boost revenue and on the opposite of a long-term goal for retention and user engagement. Sooner or later users will realize the game doesn't deliver a Fair Play and they will quit, thus you will need to spend more in user acquisition to compensate users being churned out. (5.2.)

Many professionals stress the importance of the player's first experience with the game. The first 10 to 15 minutes need to convince the player that he's going to enjoy the game. When a player buys a retail game he's usually willing to spend some time to learn it, and give the game some time to get fun. Since the player has already paid for the game, he won't give up on it very quickly and move on to another game. Free-to-play games however are different. The game is free, so it is easy for a player to try it, but it is also easy for him to give up and try another free game, if he doesn't like it.

Fradera: That's why, especially with coin-op and F2P games, player's first experience needs to be absolutely great. It can't be confusing, annoying or frustrating. It has to be perfect at all costs, because if not, the player will quit the game -- the most catastrophic result. (7.1.)

There are several different elements that affect the player's first experience. Installing and starting the game should be as easy and fast as possible. The games targeting core

gamers are often huge and require lengthy downloads and installs, but core gamers are used to that and tolerate it. Casual gamers however want to get started quickly without any unnecessary steps. The key here, again, is to know the target audience and their preferences.

User interface and the way the game is introduced to the player, are very important in creating the player's first impression of the game. Most of these professionals agree that the user interface should be easy to use and easy to understand, which perhaps should be self-evident. Opinions on tutorials however varied. Järvinen, whose main interest is the social games, has written about tutorial design quite extensively, whereas Luban warns that core gamers might be annoyed by too heavy handed tutorials, and Lovell thinks that tutorials are just a nuisance.

Lovell: In those first few minutes, you have to convince me, body and soul, that this is game is worth investing my precious time in. You get one shot at it. Make it a good shot. Kill the tutorial. (31.2.)

Due to the way F2P works, the shopping experience is an inevitable part of the game experience. Most of the F2P games' players never use real money in the game. However after their first purchase they are more likely to use money again. That's why it's very important to make sure that players can find the store easily, and that the store is easy to use and understand. It is also very important to make the first purchase options cheap and very valuable to the player.

Lovell: For a player, the decision to spend for the first time is a momentous one. The game they are playing will move from being a free game to being a paid-for game. You need to think hard about what will motivate a player to spend that all important first dollar. (31.2.)

Social networks and other communication methods today make it possible for anyone's opinion to spread extremely fast around the world. As a result it is increasingly important for a game to have good word-of-mouth. If the players enjoy the game, they are will probably tell their friends about it. On the other hand, if the players don't like the game they will probably tell their friends about that too.

Blumental: The longer players play your game, the more likely they are to tell others about the game, recruit other players for in-game rewards, blog or tweet about it. (1.1.)

4.4 Business vs. Ethics

All commercial games need to make profit, and F2P is just one way to do it. According to Luton, F2P is an inevitable step of digital distribution, that he calls a renegotiation of the deal with players. Some developers have elected to use psychological trickery and coercive monetization methods in their games, but those methods are not required or recommended.

Luton: However, F2P is not about tricking players in to spending money or eroding gaming, but a currently clumsy, yet ever more refined, renegotiation of the deal we as game makers offer to our players owing to the changes digital delivery brings. (3.1.)

Aggressive monetization strategies are not working as well as they used to. Gamers are getting tired of being constantly harassed into paying for something that has no value to them at all. One of the main themes in monetization strategy advice in these articles was that developers should move away from aggressive and abusive monetization methods. Although those methods can produce large revenues quickly, they are short sighted and will eventually backfire by driving players away. Instead these professionals suggest generosity in monetization. Being generous will make the players enjoy the game more, and when they enjoy themselves, they will spend money more often.

Luban: First, the game must offer genuine gameplay depth and be generous. If players feel that the game is asking for real money very early on or is offering its full features only to players that have paid, they'll quit (10.3.)

Many of the chosen professionals advice that players should not be harassed with purchase decisions during gameplay. If the player has to make real money decisions and gameplay decisions at the same time, he might not be able to evaluate those decisions correctly, and his enjoyment of the game suffers. A good way is to offer the player a possibility to go to the in-game store between game's main loops, and allow the player to concentrate on the actual game during the gameplay loop.

Virtual goods are usually not bought directly with real money. Instead there is one or more different kinds of virtual currencies in between. Often there is a soft currency that can be earned in-game, and a hard currency that can only be obtained using real money. The number of different layers in the currency system can be used to make it more difficult for the player to evaluate his purchase decisions. When the player gets confused

enough he might use more money than he meant to use. Deliberately confusing a customer is of course a questionable tactic. The professionals in this study recommend using as few different currencies as possible, and to keep the conversion rates straight forward and easy to understand.

Shokrizade: Research has shown that putting even one intermediate currency between the consumer and real money, such as a “game gem” (premium currency), makes the consumer much less adept at assessing the value of the transaction. Additional intermediary objects, what I call “layering”, makes it even harder for the brain to accurately assess the situation, especially if there is some additional stress applied. (32.6.)

One controversial property of F2P is that, while most of the players never pay for these games, there are some players who use huge amounts of money in them. F2P games are often accused of taking advantage of these whales, as they are sometimes called. The viewpoints on this subject varied quite a bit among these professionals. Some professionals here believe that games should have a cap on the maximum amount players can spend, while others feel that it is essential that people can spend as much as they want. Lovell calls whales the ‘superfans’. His view is that the players who spend a lot of money in a game obviously enjoy the game.

Lovell: They have started the transition from your service being a game and towards it being a hobby. That is when they start being comfortable spending more money on their enjoyment. (31.1.)

When a player starts to enjoy a game enough, it turns from ‘just a game’ into a hobby. A few other professionals also compare whales to other hobbyists. Ederly for example talks about two F2P games and says:

Ederly: Neither contain systems that encourage insane levels of spending, though large monthly expenditures are possible. Nothing beyond the level of what an enthusiast might spend on a favorite real-world hobby like RC cars, golf, gardening, etc. (21.2.)

Rose, a journalist, has written a whole article about whale hunting. He has interviewed some whales he’s found and gives a couple of cautionary tales as an example. The article gives a very grim view of free-to-play, although Rose does mention that his examples of addicted players are just a small portion of the players.

Rose: But it could be argued that to focus on the ratio of exploited to non-exploited customers is to completely miss the point -- that a business model where even the smallest portion of players can find themselves losing con-

trol and essentially ruining their lives, is a model that must surely face scrutiny, whether on a industry or governmental level. (37.2.)

Monetizing children is naturally a hot topic and there has been some reported cases of children accidentally spending large amounts of money in F2P games. The opinions in this matter are quite clearly divided in two camps. Some of the chosen professionals feel that IAP just isn't suitable for games marketed for children.

Shokrizade: I don't think in app purchases (IAPs) belong anywhere in games marketed to minors. If your response is "oh that is going to make it a lot harder to sell microtransactions", then I'm going to suspect this is an admission that you know children are more vulnerable to suspect monetization methodologies. (32.5.)

The other view is that children's games should be developed so that they are safer. Carla Engelbrecht Fisher points out many of the problems regarding this issue and presents some possible methods of making the games safer for children. She says it's uncertain whether it is possible to make a child safe F2P game, and that most certainly these safer methods will lower the revenues.

Levy introduces UK's Office of Fair Trade's report that gives 8 principles for games targeted at children (OFT, 2013). The report identifies some problems with children's online games and gives suggestions on how they could be resolved. Levy gives a couple of examples of these principles, concerning for example user interface design, clear non-exploitative copy, and avoidance of emotional appeals.

Levy: I see no way that following these principles restricts my creativity as a designer or earnings potential as a business.

What the OFT has done is set clear guidelines for those practices that are not only distasteful, but potentially exploitive and illegal. [...]

Free-to-play games will be better thanks to these principles. (9.1.)

As mentioned earlier, many F2P games are based on the idea of frustration. Games are designed to be fun enough that the player wants to play it, but at the same time to include frustration creating elements, which the player can avert by using real money. If frustration methods are designed well, they blend into the game's design and are hardly noticeable. If they are used too aggressively they are considered by many of the chosen professionals to be evil.

Shokrizade: This additional stress is often in the form of what Roger Dickey from Zynga calls “fun pain”.[...] This involves putting the consumer in a very uncomfortable or undesirable position in the game and then offering to remove this “pain” in return for spending money.(32.6.)

One of the most often used methods to create frustration is to make player’s progress slow enough that he’s willing to pay for speed-ups. In effect this means selling time to the player. Saltsman thinks selling time is slightly unethical. Shokrizade gives examples of soft time gates, which he considers to be effective, but coercive if not done transparently. Most of these professionals however feel that selling time is one of the best ways to monetize F2P games.

Selling time is also linked with the idea that some people have more money and some people have more time. According to this idea selling time makes games fair for both money-rich players and time-rich players.

Ludgate: This model is based on the very model I've been describing here, that money and time are scarce resources, and people tend to have one or the other. In the convenience model, you can play to progress, pay to progress, or any mix in between. (34.3.)

When the player leaves the game, F2P games use different methods to lure him back. Two opposite methods to do this are positive reinforcement, where the player is rewarded when he comes back, and negative reinforcement, where the player is punished if he doesn’t come back quickly enough. Negative reinforcement has produced big revenues in some games, but it is considered to be unethical and not so effective in the long run.

Blumental: Why lure players back with the promise of rewards when you can do it with the threat of punishment? If the player doesn't log in regularly their crop will wither, their pets will die an agonizing death, their wife will leave them and take the kids, their fortress will be invaded and burnt to the ground and all the toilet paper will be used up. (1.1.)

One example of negative reinforcement methods are sometimes used with mandatory tasks that demand player’s attention every day. If he ignores those tasks, he may lose some of his earlier accomplishments. The player is then told that he can skip these tasks without consequences if he pays for it. A more questionable tactic used by some games is to make the game more and more unpleasant for the player until he pays to skip the unpleasant part of the game. Both of these methods are seen as unethical and an indication of bad game design, since the idea is that the player rather pays than plays the game.

Ludgate: The convenience model tells game designers: design a game that is as inconvenient as possible so that we can sell convenience to players. Actually, make a game that is horrendously addictive so people have to play it, but make it as unpleasant as possible so people are willing to pay money to avoid having to actually play the game. (34.3.)

4.5 Summary

Table 3 presents a summary of the findings of this study. The perceptions of the chosen professionals are divided here by their themes instead of the three contradiction categories in chapters 4.2 – 4.4. The purpose of this alternate division is to give another view into the results as an answer to the first research question of this thesis.

Table 3: A summary of the results, divided into themes.

Theme	Perceptions
For & Against	<ul style="list-style-type: none"> • F2P is just a tool, and can be used well or badly. • F2P is just evil. • F2P model has problems, but they can be solved with good design. • All commercial games need to make profit. F2P is just one way to do it. • F2P is an inevitable step of digital distribution. It is a renegotiation of the deal with the players. • Number of games on top of charts indicates that players have accepted F2P. • F2P games are too similar to each other. More creativity is needed. • F2P is not suitable for all genres. Creative genres like narrative genres are specifically difficult. • IAPs disturb immersion and may break game features and mechanics. • F2P corrupts design and game experience. • Price qualifies product. Developer of a free game apparently does not believe in his product. • Traditional model with high piracy rate is better than F2P. • F2P will bubble and fade.
Ethics	<ul style="list-style-type: none"> • Whales are super fans who enjoy the game enough to use significant amounts of money in the game. • When a player enjoys the game enough, it turns into a hobby. People use huge amounts of money for other hobbies too. • Some people get addicted and can't control their spending. • Business model where even smallest portion of players lose control, should face scrutiny. • There are reported cases where children have spent large sums accidentally or not really understanding what they did. F2P is not suitable for children's games. • F2P should be designed to be 'child-safe'. Safe designs lower revenues.

	<ul style="list-style-type: none"> • UK's office of fair trade has given some principles for the design of F2P children's games. It would be a good idea to follow those principles. More similar guidelines might be beneficial for the industry. • Ernest Adams thinks that selling ability to revenge and encouraging cyber bullying is unethical.
There is no "Free"	<ul style="list-style-type: none"> • Games are not really free even when they cost no money. • Players pay for a free game with: <ul style="list-style-type: none"> ○ Player's time. ○ Lowered quality in games. ○ Interruptions. ○ Never fully owning the game. ○ Lowered game enjoyment. ○ Keeping the game active. ○ Inviting friends. • The more money you have to spend on games, the less time you usually have to play them.
Business & Production	<ul style="list-style-type: none"> • Things that the chosen professionals deem important: <ul style="list-style-type: none"> ○ Creativeness ○ Continuous testing and experimenting ○ Understanding the revenue model ○ Knowing the target audience ○ Allocating developer's resources correctly ○ Loving what you do • If the game is not making enough money to cover maintenance costs, it is sometimes best to abandon it and move on. • The revenue model choice should be done as early as possible. • Changing revenue model after game launch is difficult and risky. • Selling advertisement space only adds a marginal share to revenue. • Advertising should be designed so that it doesn't interfere with gameplay. • Advertisements in games are a nuisance. • Forcing the players to invite friends can annoy players and destroy game experience. • Cross marketing other games should be designed so that it doesn't interfere with game experience. • Good word-of-mouth is increasingly important in social networks era. • Paying for user acquisition by advertising or getting a publisher is one way of getting more players. • Paid customers are often not as lucrative as naturally gained customers. • Competition on F2P market is tough and getting even tougher. • Developers should choose their general market strategies wisely. • Smaller audiences and new markets can be lucrative too. Revenues might be smaller but the competition is not as tough.
Impact on the Industry	<ul style="list-style-type: none"> • Some developers have made extremely large profits very quickly with F2P. • F2P market is getting saturated with products that are too similar to each other. • Most of the top grossing games are F2P. • Players apparently accept F2P.

	<ul style="list-style-type: none"> • Players are even starting to expect games to be free. • F2P and digital distribution may have negative impact on games as art, because they are abandoned if they do not make enough profits. • The role of game designers has changed to include marketing aspects. • Monetization design is an important part of F2P game design. • In traditional games designers didn't need to concern themselves with marketing. • Marketing has always affected game design. Why else would there be so many women in skimpy armor in games. • F2P corrupts game design and diminishes the fun for both the players and the designers. • In F2P designer needs to constantly take into account the financial effect of every feature, which is problematic. • F2P sets new constraints for game design, and designers need to understand those constraints. • F2P games should be designed as services. • Games need to be updated and new content needs to be added constantly. • F2P games are never complete. • Metrics can be powerful tools if used correctly. • Concentrating too much on metrics tends to steer games into a single mold. • Metrics can prevent sloppy design.
<p>Game Design – General Design Advice</p>	<ul style="list-style-type: none"> • Your target audience affects how F2P game should be designed and monetized. • Production value and quality requirements of games are rising. • F2P is not suitable for all genres, especially not for more creative genres like narrative driven games. • F2P does not restrict genres. Designers just haven't figured out how to fit it to some genres yet. • F2P complicates design, limits genre choices, increases production time and necessitates features. • Designers should not concentrate too much on polishing things like graphics, gameplay and core loops. Instead they should be offering players emotional experiences. • Offering players different kinds of challenges is important. • Games can offer great experiences without challenges. • More creativity is needed in F2P. • Designers should stop designing purely to maximize profits and start to concentrate on offering meaningful, emotional and fun experiences for the players. • The profits will come from the players who enjoy the game. • User interface should be easy to use and easy to understand. • Social network games and casual games require good tutorials. • In core games too heavy tutorials may annoy players. • Some designers think all tutorials are just a nuisance.
<p>Game Design – Quality</p>	<ul style="list-style-type: none"> • Quality is important but not necessary for success. • Quality is essential. • Quality requirements are rising.
<p>Game Design – First Experience</p>	<ul style="list-style-type: none"> • Player's first experience of the game is crucial.

	<ul style="list-style-type: none"> • When a player buys a game he's usually willing to spend some time to learn it, and give the game some time to get fun. • When the game is free it is easy for a player to try it, but it is also easy for him to give up and try another free game, if he doesn't like it. • Installing and starting the game should be as quick and easy as possible. • Core gamers are used to longer download times so they are more willing to do a little work to get a game installed. Casual gamers however want to get started quickly without any unnecessary steps.
Game Design – Games should be	<ul style="list-style-type: none"> • Some qualities that the chosen professionals think are important for a game to be successful: <ul style="list-style-type: none"> ○ Games should be fair to both paying and non-paying players. ○ Games should offer fun and meaningful experiences to players. ○ Games should offer real social experiences. ○ F2P games should be multiplayer games. ○ F2P games should be designed to be never-ending.
Game Design – Game mechanics	<ul style="list-style-type: none"> • A good structure for a F2P game is a nested loop structure with a short core loop incased in longer loops. • Retention mechanics, such as scores, leaderboards, missions, achievements, levels etc., keep the player interested and provide substance to the core loop. • Narrative mechanics are difficult to use in F2P effectively. • F2P games often use appointment mechanics tied to real time in order to lure players back and to support monetization. • Appointment mechanics can include for example rewarding player for coming back or punishing him if he does not come back often enough. • Positive reinforcement works better in the long run and is more ethical than negative reinforcement. • Player's speed of progression is usually controlled by some mechanics like energy systems or giving the players a fixed amount of resources for a given time. • Progression speed is easy to monetize by selling players paid speed-ups. • Matchmaking is best based on player's equipment instead of his experience in order to keep matches fairer to nonpaying players.
Monetization – General monetization advice	<ul style="list-style-type: none"> • Aggressive monetization doesn't work as well as it used to. • Developers should move away from aggressive and abusive monetization methods. • Being generous will make the players enjoy the game more, and when they enjoy themselves they will spend money more often. • F2P games probably can't work without frustration. Frustration is what drives the players to spend money. • Well-designed frustration creation blends in with the rest of the game's design. • Too aggressive frustration creation can be unethical and often drives away the players. • Coercive and intrusive monetization methods are generally considered short sighted and bad design. • Players should not be harassed with real money decisions during gameplay (main loop). • Players are more likely to make purchases after their first purchase. • First purchase should be easy, cheap and of great value to the player.

	<ul style="list-style-type: none"> • After the first purchase it is important to make it possible for the players to spend as much money as they want to. • Some designers believe that games should have a cap on the maximum amount players can spend.
Monetization – Monetization types	<ul style="list-style-type: none"> • Paywalls are not a good monetization technique. Best way to monetize players is to keep them playing, not throwing them out if they do not pay. • Recurring mandatory tasks that player can skip by paying are bad design. Their idea is that players rather pay than play. • Making the game more and more unpleasant until player pays is bad design, short sighted and unethical. • Paid advantages are fine as long as they don't give paying players too big advantage against nonpaying players. • Pay-to-win mechanics should be avoided. • Paid speed-ups or selling time in some form is one of the most frequent and most effective monetization methods. • Paid speed-ups can also be seen as frustration alleviating items. • Some people have more money and some people have more time. Selling time makes games fair for both money-rich players and for time-rich players.
Monetization – Virtual Goods	<ul style="list-style-type: none"> • Virtual currency system should have as few layers as possible. Currency conversions should be easy to understand and calculate, so that players can make informed decisions. • Virtual items can have real value to players. Virtual items can even have a kind of historical value for players. • Item's value for the player comes from experiences player associates that item with. • In order to convince players of items' value, they need to have persistence or social value. • Different players value different things. Games should have a lot of different types of items in various price ranges. • It is important to have a lot of choices but it is also important not to overwhelm the player. • A leveling tree is a good way to organize the goods, and at the same time it works as a retention mechanic. • Selection of virtual goods should grow constantly, but the new added objects should be carefully designed so that they don't lower the value of players' earlier permanent purchases too much. • Gameplay neutral items are an easy way to monetize your game. They are not as lucrative as gameplay impacting items, but they don't create problems with game's balance and fairness. • Types of gameplay neutral items: decorative items, allegiance items, collectibles, customization possibilities. • Items can turn into status symbols if access to them is restricted somehow. • Do not to sell items that players think should be free like keyboard mappings for example. • Ability to give paid items as a gift to other players can be a great way to increase sales. Paying customers buy gifts for non-paying ones. And when a non-paying customer gets a present and finds out how fun the paid content can be, he might convert into a paying player himself.

	<ul style="list-style-type: none"> • Gameplay impacting items are tricky to design. To be desirable the items need to give a noticeable advantage, but the advantage should not be so big that it breaks the game's balance and fairness. • Skill should be the most important factor in competitive games. • Matchmaking should be based on equipment. That makes the game fair for nonpaying players. • Pay to win items should be avoided. • Supremacy goods, which instantly lower the value of all other items, should be avoided.
Other topics	<ul style="list-style-type: none"> • Some companies have started virtual credit systems that allow players to buy virtual items on credit without credit card. • Big licensed IPs are coming to F2P. This can have a big impact on F2P games. • New game consoles will make it possible to use F2P on console games. This will create new markets for F2P games. • F2P game jam might be a way to increase creativity in F2P. • Legal ownership of virtual goods is not always clear.

All in all the chosen professionals seem to think that F2P games should be designed to be entertaining and fun. They state that games should be fair and offer great experiences to non-paying players as well as paying players. The methods used should be ethical, non-coercive and generous. Many of the chosen professionals recommended concentrating on long term revenues by making games that players will enjoy playing for a long time.

5 DISCUSSION

The chosen professionals' general attitude towards free-to-play was determined by studying the nature of their main subjects and the tone of their writing. Among these 40 professionals ten had a clearly negative attitude, 17 had a clearly positive attitude, and 13 wrote in a neutral tone. The neutral attitude here means that the article didn't express a clear attitude. Most of them stated that there are good and bad ways to design F2P games and included advice on how to design them without using questionable methods. So among this sample the professionals with a negative attitude towards F2P are in a minority, but there are still 25% of them. Compared to the players' attitudes studied by Lin & Sun (2010), there is a big difference. Their sample of players had only 34% of players with a positive attitude, and 64% with negative attitude towards F2P. Some of the chosen professionals still wonder if gamers really accept F2P, and Lin & Sun's result seems to indicate they don't. However, some of the chosen professionals argue that gamers actually are starting to expect new games to be free, and the large percentage of F2P games on top of the charts seems to support that. Lin & Sun's result, and the amount of negative attitudes in this study, can perhaps be seen as an indication that there are still some big unsolved problems with the model. On the other hand, the amount of neutral attitudes in this study seems to indicate willingness to discuss those problems and to look for solutions. This is further supported by the fact that many of the chosen professionals, with a neutral or positive attitude, also identified some techniques that they felt should be avoided.

The competition in F2P market is tough and it is getting even tougher all the time. The chosen professionals suggest that game companies should try to target smaller audiences instead of competing over the same markets. Targeting smaller audiences is risky because the general understanding is that F2P needs a lot of players in order to work. The developers would perhaps have to be able to find an audience with higher percentage of paying players. They would also need to be able to cut costs and be content with smaller profits. It might however be beneficial, for a smaller company for example, to try and find new audiences that have stayed unnoticed by big companies.

The importance of knowing and understanding the target audience was stressed in many of the analyzed articles. Demands and preferences of casual players are very different

from the demands of core players. Casual players usually like to play short games quickly, whenever they have a couple of minutes to spend, while the core gamers usually like to play long sessions, so the session length in core games should not be limited. Core gamers are used to playing games that have high production values. Casual gamers are not as demanding, but according to some of the chosen professionals this is starting to change, as even the casual gamers are getting tired of poor quality games. Although some of these professionals feel that quality is of no importance in F2P, others think that it is essential for success. The tough competition on the market forces game companies to raise their production values, and as the players get used to better quality, they'll learn to expect more than just mindless clicking.

Choosing the revenue model to use is obviously a very important decision. According to some of the chosen professionals that decision should be made as early as possible. They state that changing the revenue model after the game is launched often gets a negative reaction from players. They also feel that it creates design problems and makes monetization less effective. If the decision to use IAP as a revenue source is made early, the game's design can better take that into account. That in turn improves both game experience and monetization according to the chosen professionals.

Many of the chosen professionals feel that F2P as a business model sets a lot more restrictions to design than the other more traditional business models do. This is perhaps true, since the designer in F2P often needs to balance his own vision with monetization on feature level. Designer's role in a F2P project is different than in a traditional game project. Designers need to understand how F2P works and take monetization issues into account while designing the game. Some of the chosen professionals see this as a problematic balancing act. If the designer concentrates too much on metrics and monetization, the gameplay experience might suffer. On the other hand, if the designer doesn't think enough about monetization, the game might not make enough money to cover the costs. This is not however completely new, as some professionals noted. It is just different. Most designers, perhaps with the exception of some independent developers, have always needed to compromise with the specifications given by the publisher or by marketing department. In a way the designers should perhaps see this as an opportunity instead of an obstacle. In traditional game project most designers had no chance of affecting financial decisions, but in F2P they do. This of course also adds to their responsibility.

Whether F2P is suitable for all game genres or not, divided opinions among the chosen professionals. Some of them claim that F2P can only be used in a few genres. Others think that there are no strict restrictions. They state that designers just don't know yet how to apply F2P into all genres. Narrative driven genres are seen as particularly difficult. Luton (2013) states that a compelling story must have an end, and when the player reaches the end he is less likely to come back to the game to play and to spend money. It is however noteworthy that some of the earlier internet articles from 2009 and 2010 in this material claimed that F2P is not suitable for hardcore games. This has already been disproved since there are many successful hardcore titles, such as World of Tanks and Team Fortress 2 for example, in the F2P market. So perhaps someone will eventually figure out how to use F2P in a narrative genre as well.

The importance of designing F2P games as services was stated by several of the chosen professionals. The game can be launched with a small portion of the content, and content can and should be added gradually. Adding new content regularly keeps the players interested and devalues some of the old content, which makes new content more desirable for the player. To facilitate these content additions, and possible adjustments to game rules and the environment necessitated by the new content, the base design of the game needs to be very flexible. (Hamari & Lehdonvirta, 2010). It is possible to make small changes to an F2P game often, and get feedback on the change almost immediately by tracking the metrics and reading players' responses on game community's discussion forums. This makes trying different designs a lot easier than in traditional retail games or even in subscription based online games. According to Oh & Ryu (2007) this is one of the factors which makes F2P more desirable for the developer than subscription based model. They say that the developers of subscription based games are often reluctant to make quick changes to their games, because they are afraid of losing their subscribers.

Running a game as a service can be costly, since it requires always-on servers, people to maintain those servers, and people to manage customer relations, gather and interpret metrics, constantly create new content, and so on. This means that if the game does not create enough revenue to cover those costs, and if there isn't any identifiable problem that could be fixed, the game is often terminated. As a result not many F2P games will ever get nostalgia value like many of the old retail games have. Some of the chosen professionals feel that this diminishes the value of games as an art form. Crawford (2003)

says that creative expression results in art only if its primary goal is to create beauty. As soon as the motivator is money, the result is not art but entertainment. Crawford's definition was used just as a part of a definition of games, and Crawford himself admits it to be a crude definition, but it does raise a question about how important it really is for the games to be considered art.

The fact that F2P games are always connected to a server, makes it possible for the developer to gather real time information about how the players interact with their game, which features they seem to like or dislike, and which virtual goods they buy. Analyzing these metrics and reacting to them correctly can be a very powerful tool. Some of the chosen professionals feel that the use of metrics takes away their creative freedom and lowers the quality of games by changing games into mere revenue generating machines. Others however see them as great tools that offer an opportunity to improve one's skills and designs. Traditional retail game designers had very little information about their players and how they played their games. Quick feedback makes it possible to address players' wishes and needs quickly and precisely. (Stenros & Sotamaa, 2009). However, some of the chosen professionals state that metrics driven methods have a tendency of making games resemble each other, so they should be used carefully.

F2P as a revenue model doesn't work if none of the players ever use real money in the game, so the designers need to fit into their vision some methods that will get the players to spend money. Often this is done by using mechanics and game elements that create frustration in the players. The player can then be offered frustration alleviating items for real money. According to Hamari & Lehdonvirta (2010) this kind of methods are intentional marketing tactics from the developer. The designer deliberately creates a need, and then creates a solution for that need to be sold to the player. One of the most frequent and effective ways to accomplish this is to slow down gameplay so that the player either has to use a lot of time to progress or spend money on paid speed-ups. This method, also called grinding, is mentioned by Zagal et.al. (2013) as one of their dark patterns. They define dark patterns as follows:

Final Definition: A dark game design pattern is a pattern used intentionally by a game creator to cause negative experiences for players which are against their best interests and likely to happen without their consent. (Zagal et.al, 2013).

They state that since many players are unable to correctly estimate the time required by the grinding, it can be said to be a dark pattern. Many of the professionals in this study however, state that done right frustration creating methods can fit well into the design of the game and the players understand and accept it. They state however that too aggressive use of these methods can destroy game experience, which leads to players looking for another game. This requires very careful design that balances fun and frustration.

As a general advice on monetization design, many of the chosen professionals agree that the aggressive methods, which have been very effective before, do not work as well anymore. They recommend avoiding all coercive and intrusive monetization methods. They are short term solutions, which should be avoided. Instead the chosen professionals recommend generosity as the main principle in monetization.

Real money decisions can disturb immersion, if not designed carefully. If the player is harassed with constant real money decisions during gameplay, immersion suffers and it is more difficult for the player to make informed decisions. Some of the chosen professionals feel that careful design doesn't help in that respect. They feel that as soon as the real world and its financial inequalities are allowed to disturb the game world, the experience is ruined. Most of these professionals agree that it is a problem, but feel that with careful design the disturbance can be kept to minimum, and the whole game experience doesn't have to suffer.

Hamari & Lehdonvirta (2010) states that the value of virtual items needs to be created by designing the context for those items first. The professionals in this study seem to agree. They say that virtual items' value for the player is not usually related to the cost of their creation, but instead comes from the experiences the player associates those items with. This can be seen as support for the suggestion that designers should not concentrate too much on polishing the core loop or things like graphics, but instead concentrate on providing meaningful and fun experiences for the players. Those experiences will then create value of virtual and the player is perhaps more willing to spend money later, in hopes of more fun experiences.

One fundamental choice designers need to make is whether the sold items should affect gameplay or not. Gameplay neutral items are an easy way to monetize your game according to most of the chosen professionals. They state that neutral items are not as lucrative as gameplay impacting items, but they also don't create problems with game's

balance and fairness. Gameplay impacting items are seen more difficult to design. To be desirable the items need to give a noticeable advantage, but the advantage should not be so big that it breaks the game's balance and fairness. As long as these advantages are not too distinct, they are considered by most of the chosen professionals to be acceptable. Although some of them are against all sold advantages.

Since only a small percentage of players actually use money in F2P, it is very important to get a lot of players to play your game. You can use paid advertisements to get players or use a publisher to publish your game and let them find the players. According to some of the chosen professionals, paid customers are often not as lucrative as the customers gained naturally through word of mouth. In social network games player acquisition is often accomplished by asking, or forcing with progress gates, the players to invite their friends to the game. This technique seemed to work well in early social network games, but it is not as efficient anymore, and these chosen professionals do not recommend it. Zagal et.al. (2013) also mentions these techniques as their dark pattern called "social pyramid schemes".

Instead of the above techniques, the chosen professionals suggest different kind of social features. In co-operative multiplayer games people can often play either with strangers or with their friends, and playing with friends is usually more fun. Co-operative games also incentivize recruiting friends to play the game without forcing players to invite them. Many of the chosen professionals feel that social features should not be just using the advantages offered by social networks, but enabling and encouraging players to actually socialize with other players.

Most of these professionals mention the importance of player enjoyment and fun. Some of the chosen professionals especially stress the importance of making sure the player's first experience of the game is entertaining, fun and engaging. The first 10 to 15 minutes need to convince the player that it's worth his time to continue playing. If the player doesn't enjoy the game, he will find another game. Finding another game is easy since F2P games are free and there are a lot of choices available. Here again designing for casual gamers is different than designing for core gamers. The chosen professionals believe that casual players want to get started quickly, so the install process and game's launching should be easy and fast, and the game should be easy to learn. Core gamers are used to long install times and are usually willing to spend a bit more time learning

the game, according to some of the chosen professionals. The importance of the first experience can be extended to the importance of the first purchase. The first purchase the player makes should be designed to be easy and very beneficial for the player, according to some of the chosen professionals. They also state that when the player finds out how fun paid content can be, he will be more likely to spend some more money in the future.

Many of these professionals seem to believe that if players enjoy the game, they are more likely to spend money in the game. Some of the other opinions here support this. If the player likes the game he will probably play it more often and in longer sessions than he would play a game he dislikes, and the players who play longer are more likely to spend money in that game. If the player enjoys the game he is also more likely to recommend the game to his friends, thus benefiting marketing. (Luton, 2013). Another supporting note is that these professionals suggest that the value of virtual items is related to the experiences player associates with those items, and obviously player is more likely to pay for an item if he sees it as valuable for himself. On the other hand, the idea that frustration is the key to monetization seems to be contradictory to this. If players pay for frustration alleviating items, it seems that they turn into paying customers as soon as they stop enjoying the game enough as it is.

All commercial games need to make profit, and F2P is just one way to do it. It is a renegotiation of the developers' deal with players, as Luton (2013) calls it. Some developers have elected to use psychological trickery and coercive monetization methods in their games, but those methods are not recommended by the professionals in this study. One of the main themes in monetization strategy advice in these articles was that developers should move away from aggressive and abusive monetization methods. Although those methods can produce large revenues quickly, they are short sighted and will eventually backfire by driving players away. Instead these professionals suggest generosity in monetization. Some of the sample articles stated that designers should stop designing purely to maximize profits and start to concentrate on offering meaningful, emotional and fun experiences for the players.

One controversial property of F2P is that, while most of the players never pay for these games, there are some players who use huge amounts of money in them. Some of the chosen professionals believe that games should have a cap on the maximum amount

players can spend. Others feel that it is essential that people can spend as much as they want. When a player starts to spend money in a game, that game is no longer just a game but has turned into a hobby. Some people might spend more than they can afford in F2P games that have no spending limit. Does that entail that these games should be regulated, or that F2P should not be used at all? F2P games are not the only hobby people use huge amounts of money on. Looking from the outside that spending can often seem insane to a person who does not have that same hobby. Just as often that outsider has a hobby of his own, which he uses his money on. It is really a question of how much people should be allowed to use their money the way they want, and how much they should be controlled. Another question is who should do the controlling. These are too broad, difficult and philosophical questions to go into in this thesis. It is however notable that many of these professionals advocate long term thinking in F2P design. They seem to think that anything that is unethical and likely to get a negative reaction in public, is a bad thing for the whole game industry. Therefore the designers need to balance between creating as much revenue as possible and not getting any of their players into financial trouble because they play too much. Knowing when any player is in danger of spending over his limits is of course difficult if not impossible.

Monetizing children is difficult to implement without problems. There has been some reported cases of children accidentally spending large amounts of money in F2P games. The opinions in this matter are quite clearly divided in two camps among the chosen professionals. Some of the chosen professionals feel that F2P just isn't suitable for games marketed for children. They recommend using other revenue models in children's games. Others feel that F2P can be used in children's games, but children's games should be designed carefully. They feel that designers should take into account children's inability to make informed decisions about real money usage in games. Safer methods probably won't produce as much revenue as the more aggressive methods, but for the industry's reputation, and keeping in mind the long term effect of unethical methods, it is perhaps better to be content with smaller revenue in this case. UK's Office of Fair Trade has given some guidelines on how they think virtual item sales based games should be designed if the target audience is children (OFT, 2013). Levy recommends developers start to follow those guidelines, and believes that they can't be harmful for the F2P industry.

There are some design elements and game mechanics that these professionals think must be included in all F2P designs. Having such a checklist of mechanics may hinder creativity. Deciding whether to deviate from that list or not, possibly in the expense of monetization, is another balancing decision designers need to make. Another view about this might be that also in traditional game design there are some things that are known to work and some that are known not to work. The building blocks at the designer's disposal are simply different, and the designer's task is to use those building blocks as creatively as he can.

The chosen professionals suggest that multiplayer games offer more ways to monetize the game than a single player games do. In competitive games players often get annoyed after losing to another player and buy equipment that gives them a chance for revenge. A few of the chosen professionals stated that selling a chances for revenge is unethical. Some of the chosen professionals stated that a better way to monetize multiplayer games is to design them to favor co-operation, so that players instead, or in addition to, revenge may buy items to help each other.

Competitive multiplayer games have usually some kind of matchmaking system, which attempts to pick players from the player pool and set them against each other so that the matches are not unfair. In some games this is done by setting players with equal amount of experience against each other. Some of the chosen professionals suggest that in competitive F2P games it is better to use the players' equipment as the criteria instead. That way the matches do not feel unfair, even if some people use real money to get that equipment, while others play a long time to get that same equipment.

To be successful a F2P game needs a lot of players that enjoy playing it for a long time. The chance that a player turns from a free player into a paying player grows as he spends more time with the game. As a result many of the chosen professionals stated that it is advisable to design F2P games to be never ending.

Many of the chosen professionals seem to agree that the best basic structure for a F2P is to have a short core loop incased in other longer loops. Short core loops make the game engaging and makes it possible to play a quick game, when the player doesn't have a lot of time to play. The longer loops work as a retention mechanic, luring player back again and again to complete those loops. There are several ways to create these longer loops,

such as mission, achievements or levels. These mechanics also add variety to the game offering the player alternative ways to play the game.

When designing appointment mechanics, there are some recommendations that the chosen professionals made. Negative reinforcement mechanics that punish the player, if he doesn't return to the game regularly, should be avoided according to them. Those methods have produced big revenues before, but the players will get tired of them sooner or later. The chosen professionals believe that positive reinforcement that reward the player for coming back, work much better.

Paywalls and mandatory tasks that can be skipped by using real money, are both considered bad design and not recommended by many of the chosen professionals. They feel that paywalls drive away a big portion of the players that would otherwise have loved to play the game for a long time. Mandatory tasks that can be skipped for money are just a clear sign of bad design according to them. If someone is willing to pay you so that they do not have to play your game, the game obviously is not good.

Some of the limitations of this study are noted here. The subject is quite extensive and there was a lot of material analyzed for this kind of study. Therefore the themes related to it are not analyzed as deeply as they would have deserved. This thesis does however give a good overview of the subject, which could perhaps be used as a starting point for more detailed research.

The study would have benefited from designer interviews, but that was not realistically possible to arrange at this time. Although there was a lot of material to be found on public web sites, each designer seemed to have different things they wanted to write about. For this kind of overview study this was a good thing, but interviews would have made it possible to get opinions about key issues from more designers.

Other dependencies and contradictions designers need to balance in their work could be an interesting subject for a later study. Such contradictory pairs could be formed for example by looking at the permutations of the pairs considered in this study: 1) artistic freedom vs. game experience, 2) artistic freedom vs. ethics, and 3) game experience vs. ethics. Other such pairs probably could be identified as well.

6 CONCLUSIONS

The purpose of this study was to find out what kind of free-to-play related issues or themes game designers and other game industry professionals find important enough to write about, and do those issues suggest any higher level problems that game designers might face when designing F2P games. To find the answer to those questions 69 articles and blog postings from 40 designers and other game industry professionals were gathered and analyzed using qualitative content analysis. Most of the material was taken from Gamasutra.com. Additional blog entries were found on the chosen professionals' own web sites.

The chosen professionals' general attitude towards free-to-play was determined by studying the nature of their main subjects and the tone of their writing. Out of all 40 chosen professionals 13 were determined to have a neutral attitude, 10 were clearly negative, and 17 seemed to have a positive attitude. The results seem to indicate that, at least among the professionals in this study, the F2P model is seen as an acceptable way to finance games, as long as designers keep away from unethical monetization methods, and try to offer the players great and fun experiences.

Next the articles were searched for all kinds of opinions and statements about F2P. These statements were then grouped under more general themes to better understand what issues these chosen professionals were writing about. Themes found included statements for and against F2P, ethics, cost of free games, business and production, F2P's impact on game industry, game design, monetization, and a few isolated subjects. The contents of these themes are summarized in chapter 4.5 (p. 43), and can be seen as an answer to the first research question: What kind of free-to-play related issues or themes game designers and indie developers find important enough to write about?

The second research question in this study was: Do those issues suggest any higher level problems that game designers might face when designing F2P games? A more detailed analysis revealed that most of these issues could be related to one of three different view point contradictions, which F2P designers need to solve or balance in their work: business vs. artistic freedom, business vs. game experience, and business vs. ethics. Game designers want to realize their own vision, they want to provide great experiences for the players, and at least most of these chosen professionals also want to use

ethically acceptable methods. However, all commercial games need to make profit and the designers need to constantly balance those goals with the financial realities.

REFERENCES

Literature

Alasuutari, P. (2011). *Laadullinen Tutkimus 2.0*. 4th revised reprint, Tampere: Vastapaino.

AppAnnie.com. (2014). *iOS Top Charts*. Retrieved from <http://www.appannie.com/apps/ios/top/united-states/?device=iphone>

Beyer, H., & Holtzblatt, K. (1998). *Contextual design: Defining customer-centered systems*. San Francisco, CA: Morgan Kaufmann.

Crawford, C. (2003). *Chris Crawford on Game Design*. USA: New Riders.

Crookall, J. (2000). Editorial: Thirty years of interdisciplinarity. *Simulation & Gaming*, 31(5), 5-21.

Fields, T. & Cotton, B. (2012). *Social Game Design: Monetization Methods and Mechanics*. Waltham, MA: Morgan Kaufmann.

Guo, Y., & Barnes, S. J. (2012). EXPLAINING PURCHASING BEHAVIOR WITHIN WORLD OF WARCRAFT. *Journal of Computer Information Systems*.

Hamari, J., & Järvinen, A. (2011). Building customer relationship through game mechanics in social games. In M. Cruz.Cunha, V. Carvalho & P. Tavares (Eds.), *Business, Technological and Social Dimensions of Computer Games: Multidisciplinary Developments* (pp.348-365). Hershey, PA: IGI Global.

Hamari, J., & Lehdonvirta, V. (2010). Game design as marketing: How game mechanics create demand for virtual goods. *International journal of business science and applied management*, 5(1), 14-29.

Kozinetz, R.V. (2010). *Netnography. Doing Ethnographic Research Online*, page 89. London: Sage Publications Inc.

- Kuittinen, J., Kultima, A., Niemelä, J., & Paavilainen, J. (2007, November). Casual games discussion. *In Proceedings of the 2007 conference on Future Play* (pp. 105-112). ACM.
- Lastowka, F. G., & Hunter, D. (2004). The laws of the virtual worlds. *California Law Review*, 92(1), 1–73.
- Lehdonvirta, V. (2005). Real-money trade of virtual assets: ten different user perceptions. *In Proceedings of digital arts and culture (DAC 2005)* (pp. 52–58), IT University of Copenhagen, Denmark, 1–3 December 2005.
- Lehdonvirta, V. (2008). Real-money trade of virtual assets: new strategies for virtual world operators. *Virtual Worlds, Ipe, Mary, ed*, 113-137.
- Lehdonvirta, V. (2009). Virtual item sales as a revenue model: identifying attributes that drive purchase decisions. *Electronic Commerce Research*, 9(1-2), 97-113.
- Lin, H. and Sun, C. T. (2011). Cash Trade in Free-to-Play Online Games. *Games and Culture*, 6(3), 270-287.
- Luton, W. (2013). *Free-to-Play: Making Money From Games You Give Away*. New Riders.
- Mäyrä, F. (2008). *An Introduction to Game Studies*. London: Sage Publications Inc.
- OFT (2013). *Online game principles*. Retrieved from http://www.of.gov.uk/shared_of/consumer-enforcement/of1506a.pdf
- Oh, G., & Ryu, T. (2007). Game design on item-selling based payment model in Korean online games. *In Proceedings of DiGRA '07*, 650-657.
- Paavilainen, J., Hamari, J., Stenros, J., & Kinnunen, J. (2013). Social Network Games Players' Perspectives. *Simulation & Gaming*, 44(6), 794-820.
- Superdataresearch.com (2012). *Social Network Games 2012 Casual Games Sector Report*. Retrieved from <http://www.superdataresearch.com/content/uploads/2011/12/CasualConnectSocialGames2012.pdf>

Superdataresearch.com (2014). *US Digital Games Market*. Retrieved from <http://www.superdataresearch.com/blog/us-digital-games-market/>

Stenros, J., & Sotamaa, O. (2009). Commoditization of helping players play: Rise of the service paradigm. *In DiGRA 2009 Conference Proceedings*.

Tuomi, J. and Sarajärvi, A. (2009). *Laadullinen tutkimus ja sisällönanalyysi*. 5th revised reprint, Helsinki: Tammi.

Zagal, J.P., Björk, S., Lewis, C. (2013). *Dark Patterns in the Design of Games*. Retrieved from http://www.fdg2013.org/program/papers/paper06_zagal_etal.pdf

Blog entries and Internet articles

(1.1.) Blumental, Mickey. 31. January 2013. "10 Ways to Retain Your Players". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/MickeyBlumental/20130131/185858/10_Ways_to_Retain_Your_Players.php.

(1.2.) Blumental, Mickey. 31. March 2013. "The Real Price of Free". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/MickeyBlumental/20130331/189611/The_Real_Price_of_Free.php.

(2.1.) Schell, Jesse. 16. July 2013. "The Shame Game: An Interview With Jesse Schell". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/195145/the_shame_game_an_interview_with_.php.

(3.1.) Luton, Will. 26. July 2013. "Return Triggers: Enticing Your Players to Come Back". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/WillLuton/20130726/197053/Return_Triggers_Enticing_Your_Players_to_Come_Back.php?print=1

(3.2.) Luton, Will. 18. April 2013. "The Future of Games: F2P Is Not Evil Nor The Only Solution". Gamesindustry.biz. Retrieved from

<http://www.gamesindustry.biz/articles/2013-04-18-the-future-of-games-f2p-is-not-evil-nor-the-only-solution>

(3.3.) Luton, Will. 25. June 2013. "Free-to-Play Marketing: Positioning and Proposition". Gamesindustry.biz. Retrieved from <http://www.gamesindustry.biz/articles/2013-06-25-free-to-play-marketing-positioning-and-proposition>

(3.4.) Luton, Will. 24. June 2013. "A Conversation with Will Luton on Free-to-Play Games". Peachpit.com. Retrieved from <http://www.peachpit.com/articles/article.aspx?p=2102826>

(4.1.) Adams, Ernest. 8. April 2010. "Selling Hate and Humiliation". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/132707/the_designers_notebook_selling_.php

(5.1.) Appella, Thiago. 2. July 2013. "Is there room for optimism on Zynga?". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/ThiagoAppella/20130702/195461/Is_there_room_for_optimism_on_Zynga.php

(5.2.) Appella, Thiago. 1. July 2013. "Monetization policy for freemium games". Timeboxednotes.com. Retrieved from <http://timeboxednotes.com/monetization-policy-for-freemium-games/>

(6.1.) Engelbrecht Fisher, Carla. 15. July 2013. "Children, Ethics, and Free to Play Games". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/CarlaEngelbrechtFisher/20130715/196316/Children_Ethics_and_Free_to_Play_Games.php

(7.1.) Fradera, Xavi. 22. December 2011. "Classic Design Lessons: What Free-To-Play Can Learn From Arcades". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134942/classic_design_lessons_what_.php

(8.1.) Järvinen, Aki. 21. April 2010. "First Five Minutes: How Tutorials Make or Break Your Social Game". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/132715/first_five_minutes_how_tutorials_.php

- (8.2.) Järvinen, Aki. 28. September 2012. "Free to Play, Tricky to Design". Slideshare.net. Retrieved from <http://www.slideshare.net/gameswithoutfrontiers>
- (8.3.) Järvinen, Aki. 3. October 2013. "Free to Play: Evolved - Aki Järvinen - Grand Cru". Slideshare.net. Retrieved from <http://www.slideshare.net/SocialityRocks/speech-free-to-play-evolved-aki-jarvinen-grand-cru>
- (8.4.) Järvinen, Aki. 23. June 2010 - 30. January 2012. "Games for Social Networks – blog": Games4Networks.wordpress.com. Retrieved from <http://games4networks.wordpress.com/tag/monetization/>
- (9.1.) Levy, Ethan. 27. September 2013. "Why the OFT's 8 principles for in-game purchases are great for game developers". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/EthanLevy/20130927/201182/Why_the_OFTs_8_principles_for_ingame_purchases_are_great_for_game_developers.php
- (9.2.) Levy, Ethan. 18. September 2013. "Make Purchasing Present". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/EthanLevy/20130918/200558/Make_Purchasing_Present.php
- (9.3.) Levy, Ethan. 30. July 2013. "Know when to fold 'em: how to quit your live, free-to-play game". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/EthanLevy/20130730/197238/Know_when_to_fold_em_how_to_quit_your_live_freetoplay_game.php
- (10.1.) Luban, Pascal. 22. November 2011. "The Design of Free-To-Play Games: Part 1". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134920/the_design_of_freetoplay_games_.php
- (10.2.) Luban, Pascal. 18. January 2012. "The Design of Free-to-Play Games, Part 2". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134959/the_design_of_freetoplay_games_.php
- (10.3.) Luban, Pascal. 12. December 2012. "Designing Freemium Titles for Hardcore Gamers". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/183307/designing_freemium_titles_for_.php

(11.1.) McNeill, E. 9. August 2013. "Exploitative Game Design: Beyond the F2P Debate". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/EMcNeill/20130809/197958/Exploitative_Game_Design_Beyond_the_F2P_Debate.php

(11.2.) McNeill, E. 1. August 2012. "An Indie F2P Dilemma". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/EMcNeill/20120801/175211/An_Indie_F2P_Dilemma.php

(11.3.) McNeill, E. 15. March. "Black Hat Game Design". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/EMcNeill/20120315/165853/Black_Hat_Game_Design.php

(12.1.) Paris, David. 10. July 2013. "F2P Gaming - Removing the Stigma". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/DavidParis/20130710/195974/F2P_Gaming_Removing_the_Stigma.php

(13.1.) Perry, Lee. 10. May 2013. "There's good in you yet, F2P games, I can sense it!". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/LeePerry/20130510/192097/Theres_good_in_you_yet_F2P_games_I_can_sense_it.php

(14.1.) Pollock, Greg. 22. July 2013. "Two Questions to Ask Your Free to Play Game Designer". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/GregPollock/20130722/196748/Two_Questions_to_Ask_Your_Free_to_Play_Game_Designer.php

(15.1.) Serviss, Ben. 11. April 2013. "Virtual Goods and the Loss of Authenticity". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/BenServiss/20130411/190240/Virtual_Goods_and_the_Loss_of_Authenticity.php

(16.1.) Sipe, Benjamin. 6. March 2013. "5 Ways to Fail Freemium". Gamasutra.com. Retrieved from

[http://www.gamasutra.com/blogs/BenjaminSipe/20130306/187935/5 Ways to Fail Fr
eemium.php](http://www.gamasutra.com/blogs/BenjaminSipe/20130306/187935/5_Ways_to_Fail_Fr
eemium.php)

(16.2.) Sipe, Benjamin. 4. December 2013. "5 Tips for Boosting Virtual Economies".
Gamasutra.com. Retrieved from
[http://www.gamasutra.com/blogs/BenjaminSipe/20121204/182817/5 Tips for Boostin
g Virtual Economies.php](http://www.gamasutra.com/blogs/BenjaminSipe/20121204/182817/5_Tips_for_Boostin
g_Virtual_Economies.php)

(17.1.) Sivak, Seth. 5. March 2013. "The Future of Games as a Service". Gamasu-
tra.com. Retrieved from
[http://www.gamasutra.com/blogs/SethSivak/20130305/187766/The Future of Games
as a Service.php](http://www.gamasutra.com/blogs/SethSivak/20130305/187766/The_Future_of_Games
as_a_Service.php)

(18.1.) Souki, Francisco. 8. March 2013. "On Dead Space 3, Tungsten and Microtrans-
actions". Gamasutra.com. Retrieved from
[http://www.gamasutra.com/blogs/FranciscoSouki/20130308/188118/On Dead Space 3
_Tungsten and Microtransactions.php](http://www.gamasutra.com/blogs/FranciscoSouki/20130308/188118/On_Dead_Space_3
_Tungsten_and_Microtransactions.php)

(19.1.) Winkler, Robert. 2. October 2013. "Monetizing Community in Free-to-Play
Core Games". Gamasutra.com. Retrieved from
[www.gamasutra.com/blogs/RobertWinkler/20131002/201503/Monetizing Community
_in FreetoPlay Core Games.php](http://www.gamasutra.com/blogs/RobertWinkler/20131002/201503/Monetizing_Community
_in_FreetoPlay_Core_Games.php)

(20.1.) Alessi, Jeremy. 4. December 2012. "Free-to-Play: The Lost Generation". Gama-
sutra.com. Retrieved from
http://www.gamasutra.com/view/feature/182777/freetoplay_the_lost_generation.php

(21.1.) Edery, David. 1. October 2013. "F2P game publishing is a tricky thing". Gama-
sutra.com. Retrieved from
[http://www.gamasutra.com/blogs/DavidEdery/20131001/201401/F2P game publishing
_is a tricky thing.php](http://www.gamasutra.com/blogs/DavidEdery/20131001/201401/F2P_game_publishing
_is_a_tricky_thing.php)

(21.2.) Edery, David. 17. July 2012. "The Magic of F2P". Edery.org. Retrieved from
<http://www.edery.org/2012/07/the-magic-of-f2p/>

(21.3.) Edery, David. 10. August 2010. "Debating F2P Monetization". Edery.org. Re-
trieved from <http://www.edery.org/2010/08/debating-f2p-monetization/>

(22.1.) Isaksen, Aaron. 13. December 2012. "Piracy Tracking for In-App Purchases". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/AaronIsaksen/20121213/183519/Piracy_Tracking_for_InApp_Purchases.php

(23.1.) Johnson, Paul. 2. July 2013. "Ranting about Free to Play (it's not what you think)". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/PaulJohnson/20130702/195491/Ranting_about_Free_to_Play_its_not_what_you_think.php

(24.1.) Roth, Simon. 21. September 2012. "Piracy is the purest form of Free-to-Play". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/SimonRoth/20120921/178111/Piracy_is_the_purest_form_of_FreetoPlay.php

(25.1.) Saltsman, Adam. 18. October 2011. "Contrivance and Extortion: In-App Purchases & Microtransactions". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/AdamSaltsman/20111018/90430/Contrivance_and_Extortion_InApp_Purchases_Microtransactions.php

(25.2.) Saltsman, Adam. 20. October 2011. "Contrivance and Extortion II: Clarifications, Feedback & Suggestions". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/AdamSaltsman/20111020/90448/Contrivance_and_Extortion_II_Clarifications_Feedback_Suggestions.php

(26.1.) San Filippo, Aaron. 13. November 2012. "7 Ways to Fail at Free-to-Play". Gamasutra.com. Retrieved from www.gamasutra.com/view/feature/181419/7_ways_to_fail_at_freetoplay.php.

(27.1.) Schneider, Luke. 26. June 2013. "F2P: Do or Do Not, There Is No Try". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/LukeSchneider/20130626/195077/F2P_Do_or_Do_No_There_Is_No_Try.php.

(28.1.) Doucet, Lars. 15. November 2012. "Free 2 Play and the Four Currencies" Gamasutra.com. Retrieved from

http://www.gamasutra.com/blogs/LarsDoucet/20121115/181659/Free_2_Play_and_the_Four_Currencies.php

(29.1.) Pruett, Chris. 1. May 2013. "Free-to-Play is A-OK". Gamasutra.com. Retrieved from

http://www.gamasutra.com/blogs/ChrisPruett/20130501/191548/FreetoPlay_is_AOK.php

(30.1.) Quintero, Benjamin. 27. June 2012. "The Death of Free-To-Play". Gamasutra.com. Retrieved from

http://www.gamasutra.com/blogs/BenjaminQuintero/20120627/173129/The_Death_of_FreeToPlay.php

(31.1.) Lovell, Nicholas. 19. September 2013. "The Pyramid of Free-to-Play Game Design". Gamasutra.com. Retrieved from

http://www.gamasutra.com/blogs/NicholasLovell/20130919/200606/The_Pyramid_of_FreetoPlay_game_design.php

(31.2.) Lovell, Nicholas. 8. August 2012 – 14. November 2012. "Design rules for free-to-play games". Gamesbrief.com. Retrieved from <http://www.gamesbrief.com/rules/>

(32.1.) Shokrizade, Ramin. 6. September 2012. "Next Generation Monetization: Supremacy Goods". Gamasutra.com. Retrieved from

http://www.gamasutra.com/view/feature/177190/next_generation_monetization_.php

(32.2.) Shokrizade, Ramin. 13. March 2013. "The Language of Monetization Design". Gamasutra.com. Retrieved from

http://www.gamasutra.com/view/feature/188359/the_language_of_monetization_design.php

(32.3.) Shokrizade, Ramin. 3. May 2013. "Free is Getting Very Expensive". Gamasutra.com. Retrieved from

http://www.gamasutra.com/blogs/RaminShokrizade/20130503/191429/quotFreequot_is_Getting_Very_Expensive.php

(32.4.) Shokrizade, Ramin. 17. June 2013. "Group Monetization". Gamasutra.com. Retrieved from

http://www.gamasutra.com/blogs/RaminShokrizade/20130617/194428/Group_Monetization.php

(32.5.) Shokrizade, Ramin. 20. June 2013. "Monetizing Children". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/RaminShokrizade/20130620/194429/Monetizing_Children.php

(32.6.) Shokrizade, Ramin. 26. June 2013. "The Top F2P Monetization Tricks". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/RaminShokrizade/20130626/194933/The_Top_F2P_Monetization_Tricks.php

(33.1.) Hyman, Paul. 16. March 2010. "Free To Play Games, Meet The Virtual IOU". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/132686/free_to_play_games_meet_the_.php

(33.2.) Hyman, Paul. 9. June 2009. "What Are The Rewards Of 'Free-To-Play' MMOs?". Gamasutra.com. Retrieved from www.gamasutra.com/view/feature/132437/what_are_the_rewards_of_.php

(33.3.) Hyman, Paul. 16. June 2011. "The Next Wave of Free-to-Play: Licensing". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134776/the_next_wave_of_freetoplay_.php

(33.4.) Hyman, Paul. 20. April 2011. "The Necessity Of Making Free-to-Play Moves". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134721/the_necessity_of_making_.php

(34.1.) Ludgate, Simon. 5. July 2011. "The F-Words of MMORPGs: Fairness". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134789/the_fwords_of_mmorpgs_fairness.php

(34.2.) Ludgate, Simon. 21. July 2011. "The F-Words Of MMOs: Faucets". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134805/the_fwords_of_mmos_faucets.php

- (34.2.) Ludgate, Simon. 16. August 2011. "The F-Words Of MMOs: Free-To-Play". Gamasutra.com. Retrieved from www.gamasutra.com/view/feature/134825/the_fwords_of_mmos_freetoplay.php
- (35.1.) Miller, Adam. 6. June 2013. "Free to Play: A Call for Games Lacking Challenge". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/AdamMiller/20130606/193810/Free_to_Play_A_Call_for_Games_Lacking_Challenge.php
- (36.1.) Miller, Patrick. 14. May 2013. "Playing with money = playing with emotions". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/PatrickMiller/20130514/192217/Playing_with_money_playing_with_emotions.php
- (37.1.) Rose, Mike. 28. February 2013. "What we really need is a free-to-play game jam". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/MikeRose/20130228/187523/What_we_really_need_is_a_freetoplay_game_jam.php
- (37.2.) Mike, Rose. 9. July 2013. "Chasing the Whale: Examining the ethics of free-to-play games". Gamasutra.com. Retrieved from <http://www.gamasutra.com/view/feature/195806/>
- (38.1.) Levy, Luis. 24, July 2012. "Why Free-to-Play Could Spell the End for Mobile Developers". Gamasutra.com. Retrieved from http://www.gamasutra.com/blogs/LuisLevy/20120724/174685/Why_FreetoPlay_Could_Spell_the_End_for_Mobile_Developers.php
- (39.1.) Knowles, Isaac. 6. June 2013. "Pay-to-trade" Gamasutra.com. Retrieved from <http://www.gamasutra.com/blogs/IsaacKnowles/20130606/193795/Paytotrade.php>
- (40.1.) Lastowka, Greg. 1. December 2011. "Virtual Justice". Gamasutra.com. Retrieved from http://www.gamasutra.com/view/feature/134927/virtual_justice.php

APPENDIX 1: LIST OF THE CHOSEN PROFESSIONALS

1. Blumental, Mickey
 - <http://www.gamasutra.com/blogs/author/MickeyBlumental/570714/>
2. Schell, Jesse
 - http://www.gamasutra.com/view/authors/612156/Brandon_Sheffield.php
3. Luton, Will
 - http://www.gamasutra.com/view/authors/815491/Will_Luton.php
4. Adams, Ernest
 - http://www.gamasutra.com/view/authors/2003/Ernest_Adams.php
5. Appella, Thiago
 - <http://www.gamasutra.com/blogs/author/ThiagoAppella/648474/>
6. Engelbrecht Fisher, Carla
 - <http://www.gamasutra.com/blogs/author/CarlaEngelbrechtFisher/641716/>
7. Fradera, Xavi
 - http://www.gamasutra.com/view/authors/226223/xavi_fradera.php
8. Järvinen, Aki
 - http://www.gamasutra.com/view/authors/439226/Aki_Jarvinen.php
9. Levy, Ethan
 - <http://www.gamasutra.com/blogs/author/EthanLevy/404017/>
10. Luban, Pascal
 - http://www.gamasutra.com/view/authors/136385/Pascal_Luban.php
11. McNeill, E
 - <http://www.gamasutra.com/blogs/author/EMcNeill/855972/>
12. Paris, David
 - <http://www.gamasutra.com/blogs/author/DavidParis/326904/>
13. Perry, Lee
 - <http://www.gamasutra.com/blogs/author/LeePerry/937123/>
14. Pollock, Greg
 - <http://www.gamasutra.com/blogs/author/GregPollock/933891/>
15. Serviss, Ben
 - <http://www.gamasutra.com/blogs/author/BenServiss/650673/>

16. Sipe, Benjamin
 - <http://www.gamasutra.com/blogs/author/BenjaminSipe/927799/>
17. Sivak, Seth
 - <http://www.gamasutra.com/blogs/author/SethSivak/629367/>
18. Souki, Francisco
 - <http://www.gamasutra.com/blogs/author/FranciscoSouki/862541/>
19. Winkler, Robert
 - <http://www.gamasutra.com/blogs/author/RobertWinkler/946682/>
20. Alessi, Jeremy
 - http://www.gamasutra.com/view/authors/223635/Jeremy_Alessi.php
21. Edery, David
 - <http://www.gamasutra.com/blogs/author/DavidEdery/875972/>
22. Isaksen, Aaron
 - <http://www.gamasutra.com/blogs/author/AaronIsaksen/532882/>
23. Johnson, Paul
 - <http://www.gamasutra.com/blogs/author/PaulJohnson/917065/>
24. Roth, Simon
 - <http://www.gamasutra.com/blogs/author/SimonRoth/843064/>
25. Saltsman, Adam
 - <http://www.gamasutra.com/blogs/author/AdamSaltsman/864723/>
26. San Filippo, Aaron
 - http://www.gamasutra.com/view/authors/869396/Aaron_San_Filippo.php
27. Schneider, Luke
 - <http://www.gamasutra.com/blogs/author/LukeSchneider/192081/>
28. Doucet, Lars
 - <http://www.gamasutra.com/blogs/author/LarsDoucet/846854/>
29. Pruett, Chris
 - <http://www.gamasutra.com/blogs/author/ChrisPruett/193720/>
30. Quintero, Benjamin
 - <http://www.gamasutra.com/blogs/author/BenjaminQuintero/698573/>
31. Lovell, Nicholas
 - <http://www.gamasutra.com/blogs/author/NicholasLovell/875820/>

32. Shokrizade, Ramin
 - http://www.gamasutra.com/view/authors/914048/Ramin_Shokrizade.php
33. Hyman, Paul
 - http://www.gamasutra.com/view/authors/300178/Paul_Hyman.php
34. Ludgate, Simon
 - http://www.gamasutra.com/view/authors/664002/Simon_Ludgate.php
35. Miller, Adam
 - <http://www.gamasutra.com/blogs/author/AdamMiller/880358/>
36. Miller, Patrick
 - <http://www.gamasutra.com/blogs/author/PatrickMiller/915144/>
37. Rose, Mike
 - <http://www.gamasutra.com/blogs/author/MikeRose/861856/>
38. Levy, Luis
 - <http://www.gamasutra.com/blogs/author/LuisLevy/861927/>
39. Knowles, Isaac
 - <http://www.gamasutra.com/blogs/author/IsaacKnowles/924417/>
40. Lastowka, Greg
 - http://www.gamasutra.com/view/authors/555386/Greg_Lastowka.php