The Contradiction of Social Status in Mobile Digital Gaming Applications

by

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Abstract

The digital gaming business has changed in the last years. In the past digital games have been a product. People went into a brick and mortar store or looked into a download portal and bought them. Today digital games are no longer just products. They developed into services (Clark, 2014). A digital game as a service is continuously updated. People play games not only on a stationary device, but on mobile devices, too. Competition between mobile digital gaming application takes place at a download price of zero (Spencer, 2016). According to Mangan, today Freemium is the dominant monetization method in digital gaming (Mangan, 2016). The emotional connection between the player and the respective game influences the revenue on a game. Players are more likely to spend money on in-app purchases for a game that they enjoy. There are many different social determinants that influence usage behaviour of mobile digital gaming. People seek for attention and social status. Some people also seek for this inside mobile digital gaming applications. This study presents and discusses an empirical research of social status aspects of mobile digital games. The data presented in this study are from Hungary. The survey was done in July 2019.

Keywords: freemium, social status, mobile gaming, mobile digital gaming applications

Introduction:

The subject of this paper are the social determinants of users of mobile digital gaming applications in Hungary. People like to interact with each other. This interaction can have a competitive aspect, but it can also be social interaction. There are many different determinants that influence the players attitude towards a mobile digital gaming application. In the context of this paper digital games are treated as fully digital goods in the sense of Stelzer's definition. According to Stelzer, digital goods are "immaterial ways to satisfy needs that can be developed, distributed or applied through an information system. Digital goods are products or services that can be represented, transmitted and processed in the form of binary data" (Stelzer, 2000).

The games industry - especially the field of mobile gaming - has changed significantly in recent years. Paid offers are becoming less common (Spencer, 2016). There is an increase in free mobile digital games. According to Spencer free games generate the highest revenue in respective online portals (App-Store, Play Store, etc.) (Spencer, 2016). These games can be categorized as freemium games. "Freemium" is a term composed of the words "Free" and "Premium". In a freemium business model companies provide a substantial portion of their offer for free. Revenue

is made by in-app-purchases for additional services. Thus, freemium is a combination of free and paid offers.

The freemium revenue model is a form of price differentiation. The game publishing companies no longer try to sell as many copies of the games as possible. Instead, these games maximize user numbers and try to get their users to make in-app purchases. These purchases give players an advantage within the game or are cosmetic changes to the game (skins).

The global mobile gaming market in 2019 according to the global digital games analytics portal Newzoo will be even bigger than the global gaming market for PC or console games (Wijman, 2019). It is estimated that the global mobile gaming market will have the volume of \$68.5 Bn. For example, according to Takahashi, the mobile games Clash of Clans and Clash Royal from publisher Supercell together generated \$2.3 billion worldwide revenue in 2016 (Cowley, 2017).

Newspaper articles have been piling up in recent years, reporting many in-app purchases by minors and adults in a short period of time (Kleinman, 2019). In individual cases, these in-app purchases have led to very high costs (Bauer, 2018). Because of this, criticism of mobile digital games increased.

Games are no longer just products. They changed to services. People use games over a longer period of time and the game publishers keep updating the game. In 2014 Oscar Clark has discussed this phenomenon in his book "Games as a service. How free to play can make better games" (Clark, 2014). In 2014 Dimitar Draganov has published his book "Freemium mobile games - Design & Monetization" (Draganov, 2014). He discussed how game design can keep people interacting with a game over a longer period of time and how to convert players of a game into paying customers. Tim Fields published his book "Mobile & Social Game Design - Monetization, Methods and Mechanics" in 2014 (Fields, 2014). He also discussed effects of game design on converting players into customers. Field's book focuses on key performance indicators. According to Fields, if there is a low ratio of daily active users relative to monthly active users then the game has a problem getting players back into the game. Fowelin and Uddsten published in 2015 a general article about how and why game publishing companies use freemium as a monetization for their games (Carl Jägerholm Fowelin, 2015). Their research method was qualitative and quantitative. The authors see freemium as a competitive strategy or a marketing tool.

Methods:

There is a public discussion about excessive usage of digital games and in-app purchases (Au, 2019) (Landtag, 2017). This discussion is held in many different countries all over the world and is still going on. The central research question of this paper is, how important is social status for users of mobile digital gaming applications.

The research method of this study is empirical. In July 2019 an online survey in social media and game related forums has been done. The survey was promoted with ads in social media (Facebook and Instagram). The presented data of this study is part of a bigger survey. The survey was done in many countries all over the world. The presented data in this study is relevant for mobile digital games. 125 people from Hungary participated in this survey. The survey asked its participants for their usage behaviour of in-app purchases. The presented data in this study focuses on the responses from Hungary.

For this study there were 10 relevant statements in the survey. Participants could respond to these statements with answers from one to seven. One stands for "Do not agree at all" and seven stands for "Completely agree". A pre-test has been done in June 2019 with seven people. During

pre-test attention was paid to an as balanced as possible gender ratio. Four man and three women participated in the pre-test. There is a possible bias in the presented data for people who do not use social media. Running ads inside games is not possible in many cases. The social media bias is a bias that couldn't be avoided. The ads in social media for the survey have been targeted specifically to each country's gaming ranking in July 2019 to avoid a preference bias in the data.

Results:

There are ten relevant statements from the survey for this study, which all are related to the social status of users of mobile gaming applications. These statements and questions are:

- i. My social status in games is important to me.
- ii. My social status outside of games is important to me.
- iii. I have friends within the gaming application that I play.
- iv. I have more friends inside than outside the game that I play.
- v. I'm proud of my game progress.
- vi. Being strong and influential in a game is important to me.
- vii. Dominating other players is important to me.
- viii. I want to have a good ranking in the leader boards.
- ix. Playing in a team / guild / alliance / clan is very important to me.
- x. The existence of a chat function is very important to me.

Figure 1 shows survey responds to the statement "My social status in games is important to me". This statement gives information about how relevant social status is for users of mobile digital gaming applications.

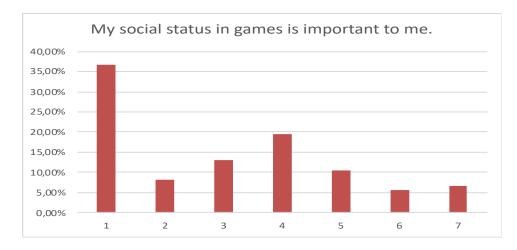


Figure 1: Survey response in relative numbers to the statement "My social status in games is important to me"¹

¹ Based on author's work

The majority of people disagreed with this statement. 57.72% of the survey participants responded to this statement with a three or lower. 22.76% responded to this statement with a five or higher. The most common answer to this statement is the complete disagreement. Social status in general isn't important to users of mobile gaming applications.

The second statement is about the relevance of social status outside of mobile digital gaming applications. This statement is relevant to get information about how important social status is for the participants of the survey. The figure 2 presents the responds to the statement "My social status outside of games is important to me."

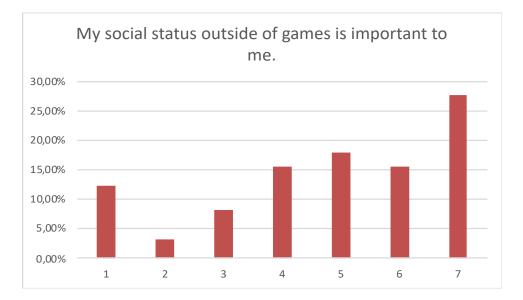


Figure 2: Survey response in relative numbers to the statement "My social status outside of games is important to me"²

The majority of people agreed to this statement. Social status in general is important to people. The social status outside of games compared to the social status inside games is more relevant to people, according to survey results. The results from figure 1 and 2 are clear. The majority of people don't play mobile digital gaming applications to achieve social status inside the respective game. Social status outside of games is more important than social status inside of games.

The responds presented in figure 1 and 2 lead to the question how strong the emotional connection between the player and the game actually is. If social status inside mobile digital games is not relevant at all, this could mean that mobile digital games are not relevant at all for the users. One way to get an estimate about the relationship between users and the respective game is to take a closer look at the social connections to other players inside respective game. The survey participants have been asked if they have friends within the game that they play. The figure 3 presents the survey responds to the statement "I have friends within the gaming application that I play".

² Based on author's work

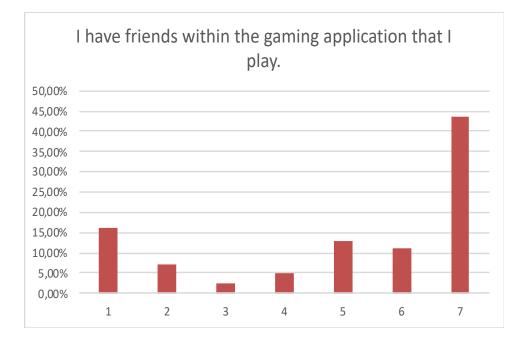


Figure 3: Survey response in relative numbers to the statement "I have friends within the gaming application that I play"³

The majority of 67.74% responded to this statement with a five or higher. Users of mobile digital gaming applications interact so much with each other inside a game that they actually have friends inside the game. 25.81% disagreed to this statement by responding with a three or lower. There is social interaction inside of mobile digital gaming applications. This social interaction is relevant to the users.

There are different intensity levels of social interactions. The social connection to a mobile digital gaming application can be normal, but it is also possible that one day it becomes unhealthy. This can happen in the case of excessive usage of a mobile digital gaming application. Excessive usage of a mobile digital gaming application can lead to social isolation and other negative consequences. Social isolation can be estimated by taking a closer look at, if people have more friends inside then outside of the game that they play.

³ Based on author's work

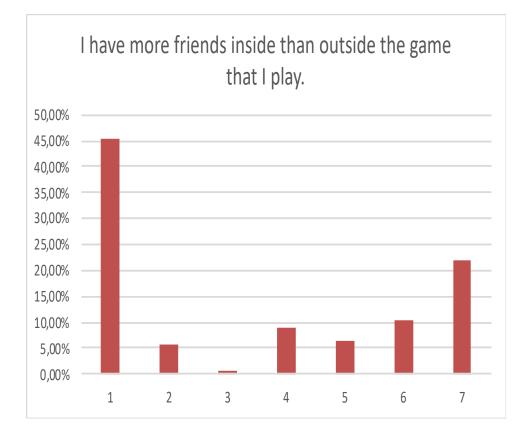


Figure 4: Survey response in relative numbers to the statement "I have more friends inside than outside the game that I play"⁴

There is a majority of 52.03% that declines this statement by responding with a three or lower. 39.02% agreed to the statement by responding with a five or above. People have friends inside the game that they play and some of them even have more friends inside then outside of the respective game. The emotional connection between players and the respective game is not homogenic. It is different for every player. 21.95% responded with a seven. The number of people who actually have more friends inside then outside of mobile digital gaming applications isn't small. This doesn't necessarily mean that there is unhealthy usage behaviour and social isolation. This variable is an indicator that there are social interactions inside mobile digital gaming application that are actually very relevant to round about every 5th person.

There are other indicators that are useful to get information about the relevance of social status and social interactions in general. The participants of the survey have been asked, if they are proud of their game progress. Figure 5 shows the survey responds to the statement "I am proud of my game progress".

⁴ Based on author's work

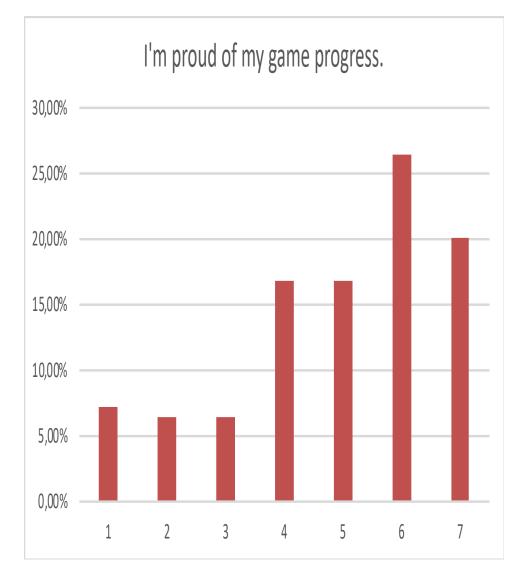


Figure 5⁵: Survey response in relative numbers to the statement "I'm proud of my game progress"⁶

The majority agreed to this statement. 63.2% responded to this statement with a five or higher. 20% reacted to this statement with a three or lower. People are proud of what they achieve inside a game. There is an emotional connection to the game. This emotional connection between the user and the respective game exists because of social contacts and because people are proud of what they achieve inside the game. There are other reasons possible, too.

The participants of the survey have also been asked about their role inside the game that they play. The statement "Being strong and influential in a game is important to me" was shown to the people.

⁵ Based on author's work

⁶ Based on author's work

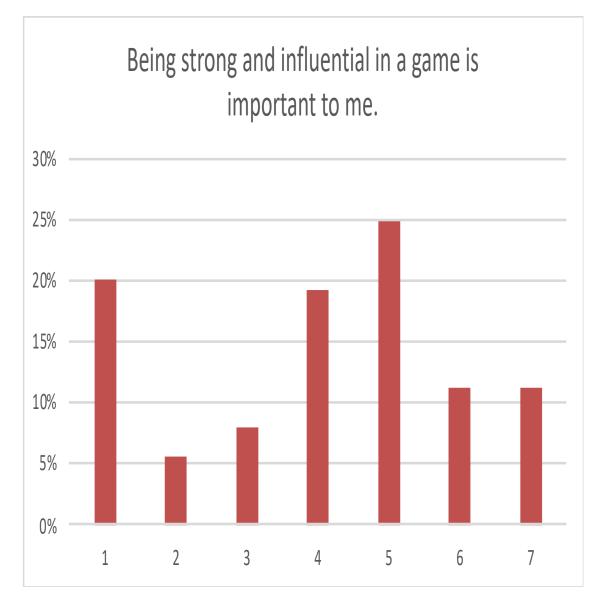


Figure 6: Survey response in relative numbers to the statement "Being strong and influential in a game is important to me"⁷

The responds to this statement are widely spread out. 33.6% disagree and 47.2% agree to this statement by responding with a three or lower or a five and higher. Being influential inside a mobile digital gaming application automatically means to achieve some kind of social status inside the game. Almost every second survey participant likes to be strong and influential inside of a game. This leads to the question, how this influence should look like, according to the participants. The next figure shows the responses to the statement "Dominating other players is important to me".

⁷ Based on author's work

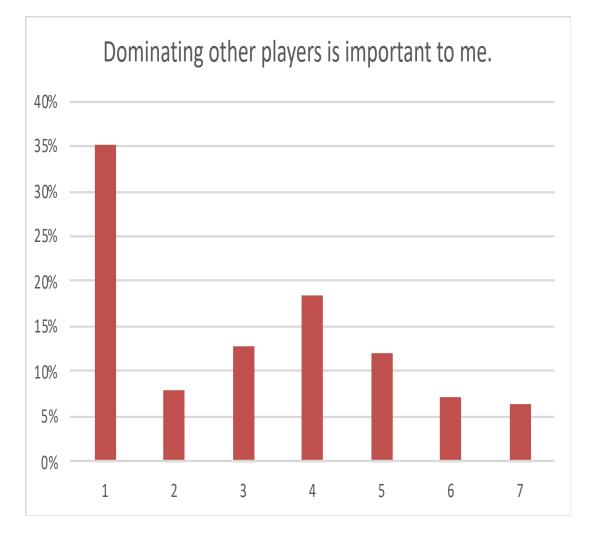


Figure 7: Survey response in relative numbers to the statement "Dominating other players is important to me"⁸

People are mostly not maleficent. Crushing other players isn't what the majority of 56% wants. Only 25.6% agree to this statement by responding with a five or higher. If social status inside of mobile digital gaming applications is important then this social status shouldn't be achieved because of the domination of other players. This leads to the question on which other way people want to be strong and influential inside a mobile digital gaming application. The figure 8 presents survey responses to the statement "I want to have a good ranking in the leader boards".

⁸ Based on author's work



Figure 8: Survey response in relative numbers to the statement "I want to have a good ranking in the leader boards"⁹

There is a small majority of 53.8% that responded to this statement with a five or higher. 32% disagreed to this statement with a three or below. The ranking inside of the game is a very good indicator for the social status inside the game. A ranking puts people into a hierarchy. People compete against each other inside of the respective game to improve their ranking. This can happen by gaining some kind of points.

Participants of the survey have also been asked about how important it is for them to play in a team. Teamplay is typical for many mobile digital gaming applications. Teamplay is a good proxy variable for the relevance of social interaction and it can lead to some kind of social status inside the team. The less important teamplay becomes, the less important social status in mobile digital gaming application will be. The figure 9 shows the survey responds to the statement "Playing in a team / guild / alliance / clan is very important to me".

⁹ Based on author's work

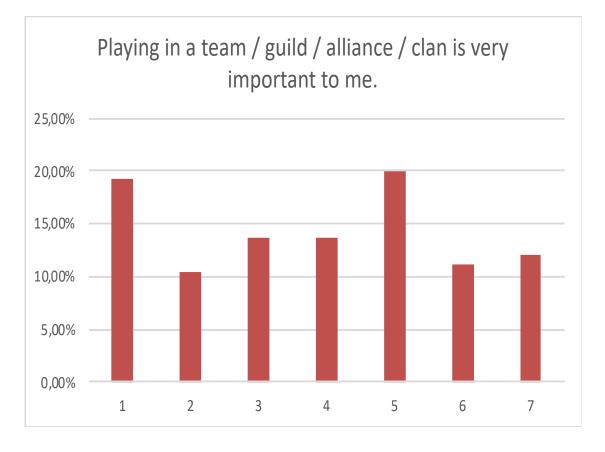


Figure 9: Survey response in relative numbers to the statement "Playing in a team / guild / alliance / clan is very important to me." ¹⁰

43.2% disagreed to this statement by responding with a three or lower, but also 43.2% agreed to this statement by responding with a five or higher. 20% responded with a five and 19.2% with a one. The role of teamplay is actually not clear. Teamplay is important for some players and not important for others. Users of mobile digital gaming applications have different preferences concerning the teamplay aspect.

Teamplay is not important for the majority of players. This leads to the question of how relevant social interaction is at all. Another way to measure social interactions is to have a closer look at the relevance of a chat functionality inside a mobile digital gaming application. The survey asked the participants about their opinion of chat functionality. The statement "The existence of a chat function is very important to me" was shown to the survey participants. The results are shown in figure 10.

¹⁰ Based on author's work

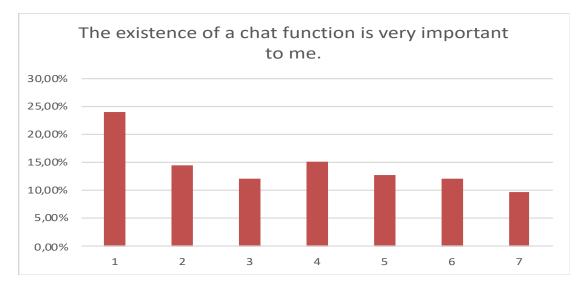


Figure 10: Survey response in relative numbers to the statement "The existence of a chat function is very important to me."¹¹

The majority of 50.4% responded with a three or lower to this statement. Only 34.4% agreed to this statement with a five or higher. A chat functionality isn't important to many players. Users of mobile digital games have different preferences concerning the social interactions inside the respective game. The table 1 is a two-way table of the last two figures and gives an overview about the distribution of the two variables.

| Table 1: Two-way table for the statements ''Playing in a team / guild / alliance / clan is very |
|---|
| important to me." and "The existence of a chat function is very important to me." 12 |

| n is | | Playing in a team / guild / alliance / clan is very important to me. | | | | | | | |
|--|-------|--|--------|--------|--------|--------|--------|--------|---------|
| function | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| The existence of a chat funvery important to me. | 1 | 13,60% | 4,80% | 1,60% | 2,40% | 1,60% | 0,00% | 0,00% | 24,00% |
| | 2 | 3,20% | 2,40% | 4,00% | 3,20% | 0,80% | 0,00% | 0,80% | 14,40% |
| | 3 | 1,60% | 1,60% | 3,20% | 1,60% | 2,40% | 1,60% | 0,00% | 12,00% |
| | 4 | 0,80% | 0,00% | 2,40% | 2,40% | 4,00% | 2,40% | 3,20% | 15,20% |
| | 5 | 0,00% | 0,80% | 1,60% | 2,40% | 4,80% | 1,60% | 1,60% | 12,80% |
| | 6 | 0,00% | 0,80% | 0,00% | 0,80% | 4,00% | 4,00% | 2,40% | 12,00% |
| | 7 | 0,00% | 0,00% | 0,80% | 0,80% | 2,40% | 1,60% | 4,00% | 9,60% |
| | Total | 19,20% | 10,40% | 13,60% | 13,60% | 20,00% | 11,20% | 12,00% | 100,00% |

There is a positive correlation between these two variables concerning the existence of a chat function and the teamplay. Those players who don't want to play in a team don't need a chat

 $^{^{\}tt 11}\, \rm Based$ on author's work

¹²Author's table

inside the respective mobile digital game. Social status in mobile digital gaming applications doesn't need a direct way of communication to each other for all users.

Discussion:

There is a contradiction. On the one side social status inside of mobile digital games in general is not important for people and they have a high tendency to value social status outside of games higher than inside of games. People have more friends outside of mobile digital games then they have inside of the games that they play. People also do not want to dominate other people inside games.

On the other side a majority has friends inside of mobile digital gaming applications and wants to be strong and influential. Every 5th user of mobile digital gaming applications from Hungary actually has more friends inside than outside of the game that they play. Good rankings in the leader boards are also important. There are social interactions inside of mobile digital gaming application's virtual environments. Even though that people highly disagree to the statement, that social status isn't important for them, they are proud of their game progress and want to be strong and influential inside the game. The ranking is also important for them. These are indicators for the importance of social status.

Conclusion and further research approach:

There is possibly a wording-bias in the data. Agreeing to the statement that social status inside of a mobile digital gaming application is important might be an uncomfortable situation for some survey participants. Social status is often connected to showing off and egoistic behaviour.

Seeking for recognition and social status are both motivators to play a mobile digital game, but are also motivators to spend money on in-app purchases. There are many newspaper articles that report excessive spending on in-app purchases (Kleinman, 2019) (Bauer, 2018) (Au, 2019).

This paper gives a better understanding of this motivator. People have different preferences. For some people social interactions are important and for others not. Players of mobile digital games are not maleficent and don't want to dominate others. They can be seen as achievers who like to climb the leader boards and have a nice time with friends inside the respective game.

Further research can go into more detail and look at other in this study unobserved variables, too. Possible unobserved variables can describe the game design or the revenue. This could help for a better understanding of the motivation behind in-app purchases. The presented data only shows survey responds from Hungary. Conclusions only apply for Hungary. Further research can focus on other countries, too.

Regulation for mobile digital games, like age restrictions is widely discussed (Au, 2019) (Landtag, 2017). Information about player's motivation behind in-app purchases can help to investigate which kind of regulations for mobile digital games are useful. Age restrictions can be one possible regulation, but there are many further possibilities to increase consumer protection.

Corporate social responsibility can be a solution to increase customer satisfaction and reduce socially undesirable situations for customers. A code of conduct for human game design can be a step in the right direction to avoid a social undesirable status for players.

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