

## **Risks and Benefits to Consumers of Innovating IT Products. Social Online Gaming Applications**

by

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*Abstract* The current socio-economic context makes innovations in informatics increasingly present in consumers' lives, shaping society as we know it. Enhanced access to internet and social networks have led to the development of numerous innovative IT businesses and the trend is ascending. Social online gaming is a new domain, whose main characteristic is that consumers play an online application that promotes and facilitates socializing with other players. The market for some of these products is just starting to develop in Romania, however the increasing access to internet and technology will likely generate more users also locally and concerns about the benefits and risks of such activities are already arising worldwide. The investigation is based on a survey, administered through an on-line questionnaire which aims to describe the characteristics of the Romanian social online market and also strives to extend the research on the risks and benefits of this activity to the consumer. Research results show that most of the respondents access the internet daily and have an account on a social platform. More than 1 third of them have paid for social gaming products. As for gender, young women are more attracted to such products. They prefer role playing applications and find design as the most important aspect of a game.

Key words: benefits, consumer, online gaming, social networks, risks.

JEL classification: O1, O3

### **1 Introduction**

Online games have become a mass phenomenon both from a social and economic point of view. Players don't use these platforms simply for gaming, but also for communicating and building relationships. While in some cases online games serve for obtaining psychological well-being, for educational purposes, to make friends or achieving profit, in other cases players can submit themselves to various risks, ranging from addiction to informational risks, harassment, being misled or financial trouble.

Current global trends, applicable also in the case of Romania, show that people's accessibility to internet will increase in the following years as well as their exposure to the online gaming world, thus determining increasing concerns on the dangers of such activities for consumers, as well as on the legal and ethical aspects implied.

### **2 Innovation in development of informatics products**

#### **2.1 Social online networks**

Humans have been creating social networks throughout the evolution of the human race. We have always felt the need to communicate with others, share thoughts, ideas and feelings. 'Only the tools in which we communicate have changed over the millennium.' (Safko, 2010, p. 447)

Internet has provided a new way of exchanging information, of socializing as well as a new channel for commerce.

Social network sites such, as Facebook – probably the most notorious, Google+, Twitter etc. have gained more and more followers during the past years and along with their growth, businesses have adapted to using these platforms as communication channels or as a base for their activity. The great advantage of social networks is the community they create, which helps retain users.

## 2.2 Social online gaming

Computer games have been around for decades, however the online social component has been emphasized recently as an innovative way of retaining players within the application and is linked to the increasing popularity of Facebook.

Furthermore, this has led to the development of an innovative gaming domain- social platform games. These are online games developed on the infrastructure of a social platform, unlike their predecessors that were mainly developed on independent sites. Some of their characteristics are low complexity, simple gaming instructions, ability to be played in short sessions, that separate them from previous, classic, games – more complicated and time consuming.

Some of the best known social network applications are Zynga's Farmville released in 2009, Candy Crush Saga released by King in 2012, or Slotomania, released by Playtika in 2010, which currently have millions of players worldwide. (Miller, 2014).

Social online games in general have had a continuous increase in popularity over the years. The industry is expected to reach \$7 billion in revenue and 34% of the total internet population is predicted to be playing social games by the end of 2015, meaning an estimated 1.55 billion people (Miller, 2014).

## 2.3 Moving to mobile devices

Another new trend is the development of mobile applications and the migration of internet usage from a PC to mobile devices. App stores such as iTunes, Google play, Microsoft Windows App store have gained popularity, offering a multitude of types of applications. A research on the online utilities of smartphones and tablets showed that 80% of mobile time was within applications rather than on a browser. (Safko, 2010)

Considering the impact social networks and social network games have had on consumers, justified concerns arise regarding the risks and

benefits of such activities to consumers. To which extent is the Romanian consumer exposed to these?

## 3 Social online gaming in Romania

This research intends to analyze how familiar Romanian internet users are to social online gaming and to identify some of the characteristics of the Romanian gamer. It has been carried out based on a questionnaire managed through the online survey platform eurveyspro.com over a 1 month period, during which 60 people have replied to the survey.

Participants were recruited online, through a simple random sampling method. The survey included individuals of different age, with various social and economic background. They received the link to the online questionnaire via email or through a social platform and results have been managed automatically through the platform. The survey was built on 10 questions, from general to specific question. Demographic information collected in this research included age, sex and average income.

Although the sample might not be representative, the findings reveal some interesting aspects that can be used as a reference point for future research.

Firstly, subjects were asked how often they use the internet; 98% of them replied that they use it daily.

The main use (43%) is for informing themselves followed by 37% to socialize.

The majority, 98% of those questioned replied that they have an account on a social network.

In case of gaming activity, almost half respondents play online games, 22% on social networks and 22% outside of social networks, while 42% replied that they do not play computer games at all.

As seen in *Figure 1*, most subjects (58%) do not play online games at all, while 22% of subjects replied that they play online games only

occasionally, followed by 15% respondents that play frequently.

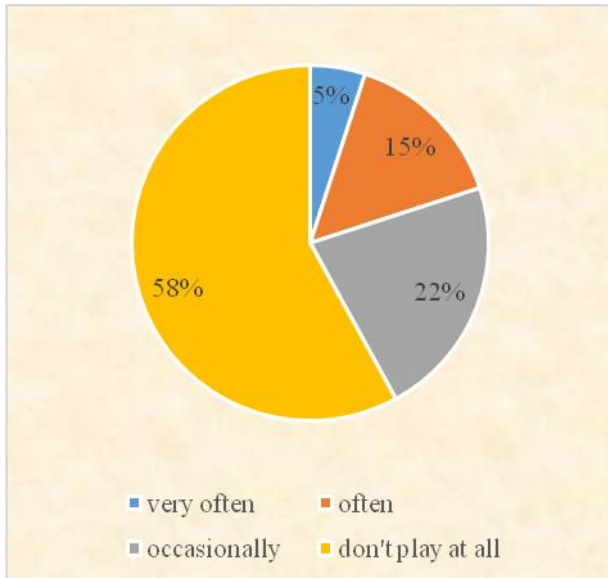


Figure 1. Frequency of playing online games. Source: original

Regarding favorite types of games, most subjects (38%) chose role playing games, that are mostly built on individual site infrastructure. These are followed by puzzle type games (31%), virtual community games (17%) and social casino games 12%. As seen in Figure 2, puzzle games, social casino games and virtual community games sum up a total of 60% of respondents' choices. As these are some of the main types of social network games, results can indicate a preference towards social network gaming in the detriment of on-site gaming.

Some of the game aspects most important for subjects were game design, chosen as highly important by 76% of subjects, followed by regular updates and improvements and adequate technical support (49% respectively 48% considered these both of medium importance).

Over half of the respondents (59%) replied they have never paid for a game or items within a game, while 41% replied they have made in-game purchases.

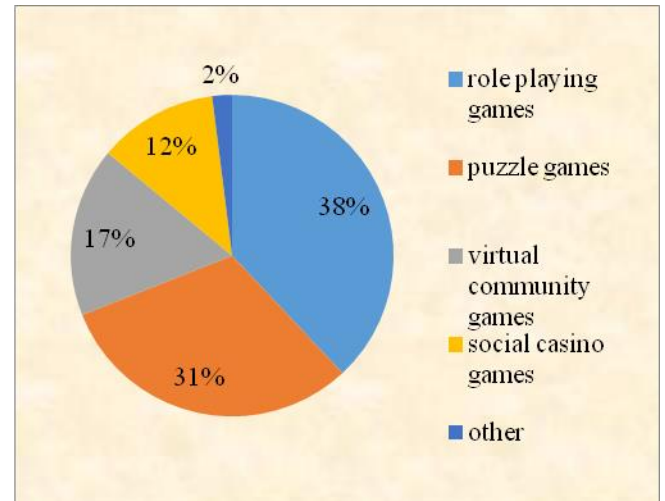


Figure 2. Types of online games preferred by respondents.. Source: original

The majority of respondents (93%) were 20-34 years old, 62% of female sex and 93% of them have monthly income over the average Romanian monthly income.

Most subjects access the internet daily and have an account on a social network. A recent research conducted on a more numerous sample, by leading online marketing consulting agency on Europe-MiddleEast-Asia, *Gemius*, shows similar results. The top sites accessed by Romanians in 2013 are popular social networks: Google (7.5 million, reaching 86% of internet users), Facebook (7.02 million users, 80% of the total internet users) and Yahoo (6.4 million users, meaning 73% of the total internet users). [9]

Even though only a third of those questioned play games on a social network, their viral character can lead to an increase in numbers in the future. Furthermore online games built on individual sites also have social communities and fan groups on Facebook, so even if they are not played on the network, gamers use the network to socialize among themselves.

#### 4 Risks concerning social online gaming

##### 4.1 Legal void

Given the fact that social online gaming is a relatively new domain, there are few laws that

target this activity directly. Essentially, social online network games have to submit to the rules and regulations of the platforms they operate on. For example in the case of Facebook, to Facebook's rules and regulations. This might not necessarily be in the user's best interest. The fact that Facebook does not allow gambling on its platform, for example, eases the explanations that certain applications give when questioned why they do not have a withdrawal option for achievements within the applications, gained by players, most of the time through paying with real money.

Some of the laws that are partially applicable to this domain, are characteristic to digital marketing in general, such as: data protection and privacy law, contract law, social media (Chaffey, 2015)

The *International Social Gaming Association* takes proactive measures, mostly concentrated on limiting the access of minors and directing players that admit to have addiction symptoms towards rehabilitation centers. (Miller, 2014)

However the diversity of social network applications and platforms, as well as national jurisdiction characteristics, make it hard to build a clear, cohesive, globally adaptable legislative model.

Countries such as Australia and USA are investigating the possibility of developing a legal frame for such activities, still a realistic time frame for its finality has yet to be determined.

Currently, Romanian law obliges the acquirement of a license only in the case of online casinos. Since social network games are not included in this category they cannot be subject of this law.

Until consumers' interest will be legally protected, the responsibility falls on each consumer to try to protect himself as well as possible.

#### **4.2 Malware**

Facebook currently states 'Trust is a cornerstone of our business' and they allocate impressive funds now to developing and implementing

programs dedicated to protecting user privacy, promoting a safe environment and ensuring data security. (Chaffey, 2015)

However these do not guarantee a safe environment for the user and threats continue to exist, ranging from viruses to spam messages.

One example is copying the interface or logo of a certain application along with spam messages offering players high rewards in in-game tokens in exchange of private information such as phone numbers, email addresses etc.

New anti-spam legislation has been developing around the world in countries such as: USA (started since 2004), Australia (2003), Canada, New Zealand, however their main prerogatives focus on requiring unsolicited emails to be labelled and to include simple, clear, opt-out instructions (Chaffey, 2015) and almost no reference to social network games spamming users.

#### **4.3 Not banning minors**

Another concern is the access of under aged to such games and the impact this could have on them. Nonetheless, research on this subject has already started, countries like Australia and USA taking a proactive approach. (Miller, 2014), however the anonymous character of the internet user makes it hard to identify cases.

One interesting statistic shows that 25% players of MMORPG World of Warcraft are teenagers while the average MMORPG player is approximately 26 years old. (Safko, 2010) Similar results were determined by the questionnaire, 93% of respondents being 20-34 years old.

Facebook itself requires users to be at least 16 years old for creating a profile but cannot verify the real age of users in any way.

#### **4.4 Addiction**

While some can get positive outcomes from playing online games, others can experience

difficulties in controlling their urge to play which can have devastating consequences on their finances (especially in the case of casino type games), as well as family and social life.

Gambling online or offline has been known to be potentially addictive.

A type of application that has become increasingly popular over the past years is the social casino game. Although just 12% of the survey respondents preferred social casino games, these are much more popular worldwide, some having millions of users. This category of application is advertised as being free, which can influence the perception of consumers and make them see these games as financially 'safe'. There are cases of regular casino gamers that choose these applications as a way of coping with their gambling addiction, because they are 'free', when actually the main difference between social casinos and real casinos is that they don't have a withdrawal option. 'Free' social casino applications offer gamers the option to buy in-app tokens with real money, while all winnings cannot be redeemed. The tokens earned can only be further played within the game.

Whereas addiction to casino type games can have a higher financial negative impact, addiction to role playing games (MMORPGs), preferred by 38% of survey respondents, can have a serious adverse psychological impact. Internet Gaming Disorder is considered by scientists the most predominant gaming addiction. It can manifest itself through symptoms leading from depression, anxiety, and social phobias, and on the long term can lead to altering parts of brain structure and/or functions. (Kishi et al, 2009, as cited by Ko, 2014). The reason for which role playing gamers are more prone to this is that these games offer higher rewards to gamers that have long-term and everyday activity within the game. It seems however, that differences in the brain predispose certain individuals to such disorders in the first place, nonetheless, the characteristics of Internet such as anonymity, high availability, or information and efficiency (Chiang & Su, 2012,

as cited by Ko, 2014) facilitate the development of altered behavior for such individuals.

#### **4.5 Lack of information**

Another factor of risk for social online gamers in general and social casino gamers in particular is the lack of information. One can notice an absence of clear information about the functionality of gaming applications. Thus players can be misled into believing, for example, that the coins accumulated within the game can be turned into real currency, as some applications use real currency symbols such as '\$' or '€' signs for their in-app tokens. Some players invest more real money into the application, buying in app tokens to build up their balances of fake tokens with the hope to withdraw those winnings.

#### **4.6 Interaction with potentially dangerous game users**

As some online friendships can continue offline, one can risk exposing himself to potentially dangerous situations. The risk is even higher in case of minors who could be easier misled. Even without meeting an online friend face to face, a social online gamer can risk harassment and having to deal with foul language during his gaming interactions.

### **5 Benefits**

#### **5.1 Financial benefits**

Social games have crossed the boundary of leisure activity and have become, for some, a way of earning money. From online tournaments to selling items within an application or full profiles with achievements, more ideas on how to turn leisure into profit evolve each day.

During the past years there has been an exponential increase in the number of platforms and dedicated portals, along with a decrease of gamers' age. Taking into consideration the fact that some tournaments can have prizes of up to 1



million dollars while a professional gamer can have an average annual income ranging from \$12,000 to \$30,000, for playing 6 to 8 hours per day (Santarnecci et al, 2013) the attraction of such an activity is quite obvious.

Some players build achievements on game profiles and then sell them; for example on gamersunite.com, a blog dedicated to online games, an account for the House of Fun social casino is sold with a minimum of 5,000\$ .

## 5.2 Belonging to a group – socializing

A ‘trusted network is a group of like minded people who have come together in a common place to share thoughts, ideas and information about themselves.’ (Safko, 2010, p. 320)

Most applications have groups or fan pages where players communicate, exchange ideas and feel as part of a community. Other social platforms take social gaming to a whole new level. Games such as *Second Life* allow users to build their own virtual world, with families, jobs and normal daily activities. Some users build strong connections with other virtual friends, for example get married to other users and leave their lives more in the virtual world than in the real world. While some studies promote the idea that online and offline relationships are different in terms of their quality, others say that these distinctions are surpassed in time. (Domahidi, 2014)

Playing alone does not imply the need to interact with other gamers, one can simply play the games on his own. Game developers design most games so as to provide more benefits to the players with a numerous network of friends within the application. Hence, developer’s main interest of promoting the game is actually leading to human interactions and building relationships.

Research results in this field are somewhat contradictory. Some theories state that an excessive use of online gaming can limit a gamers social contacts and lead to isolation (Griffiths & Hunt, 1998; et al, cited by Domahidi,

2014). Other studies, however, show that gamers that are part of online gaming communities are more likely to develop friendships online and transform them offline. (Zhong, 2011, et al, as cited by Domahidi, 2014). The nature of the game could also have an impact on the strength of the relationships built among gamers. Games that promote a pronounced motivation to compete with others, thus seeing the other players as opponents instead of friends can affect community relationships.

Overall, most studies show a positive social impact of online game playing. Social gamers can play games with their real friends which strengthens their real relationships and use social games as a means to meet new people. (Domahidi, 2014)

## 5.3 Educational benefits

Since computer games are increasingly present in our daily lives, some of them are specifically designed to integrate educational goals within them, such as problem-solving, vocabulary, and social-emotional skills. Even if these are not directly aimed towards education, most computers games are also thought to have some positive influence over the gamer such as: good practice for attention, motivation and patience, exercising analytic capabilities and decision making. (Sande et al, 2014)

## 5.4 Psychological well-being

Human beings have been interested in leisure activities for millennia. Increasingly in today’s fast moving society, people need to find relief, to find ways of coping with stress. Whereas this tends to be a normal characteristic of society, some people have a more pathological need for stress relief.

Some recent theories imply that some gamers manifest psychosocial problems linked to high stress and low self-esteem and use online games as a form of treatment, basically to escape reality.

(Kardefelt-Winther, 2014) In some cases traumatizing events in their lives have affected such individuals on a psychological level and they see online game use as a way to keep their minds off of those strong emotions affecting them. It is not a matter of compulsion as in the case of addiction, but a strategy of coping with life's problems, which according to recent studies seems to work. (Kardefelt-Winther, 2014)

## 6 Conclusions

Internet and social networks are increasingly accessed in Romania. Almost half of those interviewed play online games. Although social network gaming is a new domain in general, Romanians seem to be familiar with it, as more than half of survey respondents prefer gaming on such a platform.

Through the use of social network gaming, Romanian consumers submit themselves to some risks such as: informatics risks, void in legislation concerning consumer safety, harassment, insufficient information, little possibility to ban minors or addiction. From a legal point of view, Romanian gamers have very little protection, as no legal step has been taken towards anti-spam or online gaming consumer safety. Based on personal observations, the Romanian consumer is enthusiastic towards western influences, however some distinguishing characteristics can be identified especially when it comes to consumers of gaming products. Most of the survey respondents have never paid for a gaming product, although their monthly income is above average and play online games just occasionally. This could translate into a lower risk of financial trouble generated by addiction in the case of Romanian gamers.

Nonetheless, the possibility of turning gaming into profit can influence some gamers into making regrettable life choices, such as quitting jobs or studies.

Also, in the case of local gamers, the difficulty to limit minors' access to such applications can expose them to a multitude of risks.

On the other hand, social online games might be benefic to those that seek sociability, ways of relieving stress or educating themselves; these are the reasons that the majority of survey respondents use the internet for. In the case of a psychologically normal person, using social network games can have a positive impact.

As social network gaming is a new domain, that had quite an impact in the recent years, numerous aspects concerning it will probably demand further investigation.

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