

# THE TRUTH ABOUT THE INTERNET ADVERTISING SYSTEM AND UNTAPPED MONETIZATION MODELS

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*Abstract:* - This article is focused on the presentation of the status of the real situation regarding the online advertising environment. The paper focuses mainly on the time frame comprising the start of the current world economic crisis, 2008, and the first quarter of 2013. The paper correlates the topic of the online advertising with a certain degree of similitude to the concept of “spam” – the term usually used for unsolicited email messages. Most of the TV, radio, printed or online advertisements are actually considered today as unsolicited and undesirable by the exact potential customers; some radical reactions to this situation, when the advertisements are reported as intrusive and offensive even, include direct, plain and automatic rejection of all online advertisements with the help of dedicated add-on modules available for any major browser application. Despite the fact that there is an uncontested increasing trend for the use of online advertising as replacement for the good old classic printed, TV or radio advertisements, this online environment has to cope now with the same problems as the other forms of marketing: the decline of the level of consumer trust, the power to lure and turn them into actual customers. The online industry, either e-businesses or advertising companies, need to find, develop and apply new complex solutions in order to focus on the stability of the revenue streams and on the monetization models suitable for the 21<sup>st</sup> century digital era.

*Key-Words:* - online, advertising, trends, crisis, consumer, gaming, monetization

## 1 Introduction

For the entire period of time that passed since the first important economic crisis signs appears, 2008, the internet driven advertising campaigns have grown on exponential bases. A significant increase of these online advertising vehicles had been recorded also for the 2009 – 2011 period of time, the worst times of the economic world-scale crisis. But, together with this increase of online advertising usage, there came a paradox of decreasing the revenues related to this topic. We can even state that there was a sort of inflation process, a lot more online advertising appeared on the internet but at a much less cost per unit (appearance, time etc. – depending on the unit of measurement used). While this fact was encouraging for the companies that relied on these advertisements there was also a negative sign for the advertising companies which saw their revenues decline while bringing to the market more and more “products” (advertisements).

Taking into account the data and information available for the US market – arguably the most advanced and developed online advertising

environment – we can discern the global trends. If the year 2008 brought an important 10.6 percent increase in revenues compared to the previous year, on the US internet advertising market, in 2009 we can find an important drop:

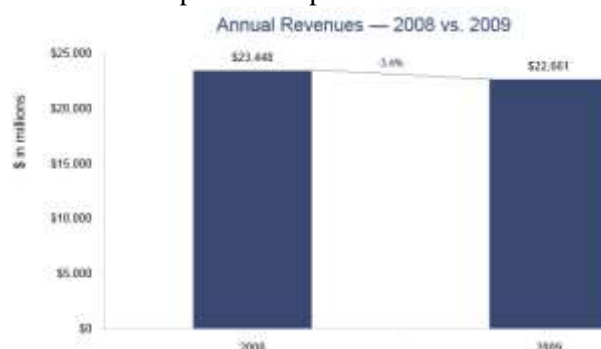


Fig.1 Online advertising revenues for 2009<sup>1</sup>

<sup>1</sup> IAB Internet Advertising Revenue Report publicly presented following an industry-wide survey conducted by PricewaterhouseCoopers, <http://www.iab.net/media/file/IAB-Ad-Revenue-Full-Year-2009.pdf>

Nevertheless, in just one year the revenues of the industry were right back on track, with an increase important enough to state the definitive return of the growth trend. The US market, followed closely by the EU market, has managed to obtain during 2009 a combined increase of both advertisements and revenues. The percentage increase of the revenues brought by the internet marketing environment was of no less than two figures, 14.9 %:

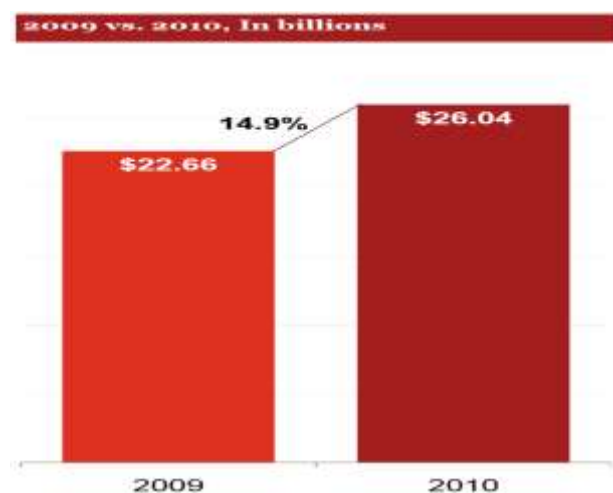


Fig.2 Online advertising revenues for 2010<sup>2</sup>

The year 2011 has been considered as the start of the recovery from the world economic crisis and this can be also argued by the revenues of the internet advertising industry. A new, huge, increase has brought happiness to all stakeholders involved. An even greater margin of growth than in 2010 has been calculated, 21.9 percent increase – bringing the revenues to for the US market to 31.74 billion dollars. This trend has been thoroughly researched and one of the most important and influent voices of the online advertising industry media, eMarketer<sup>3</sup>, foreseen for 2012 a world premiere – for the first time in history revenues from the internet advertising industry were projected to surpass the revenues of the printed advertising products. This trend would have settled the internet advertising

<sup>2</sup> IAB Internet Advertising Revenue Report publicly presented following an industry-wide survey conducted by PricewaterhouseCoopers, [http://www.iab.net/media/file/IAB\\_Full\\_year\\_2010\\_0413\\_Final.pdf](http://www.iab.net/media/file/IAB_Full_year_2010_0413_Final.pdf)

<sup>3</sup> eMarketer is used by over 750 corporate subscribers in more than 70 countries, <http://www.emarketer.com/Article/US-Online-Advertising-Spending-Surpass-Print-2012/1008783>

industry as second only to TV advertising when taking into account the specific media type for marketing message delivery. The amount of money foreseen as revenue for 2012 was of 39.5 billion dollars.

Actually, this number was not reached but the trend was correctly foreseen and the industry did report an important increase in revenues, again, for the 2012 year.

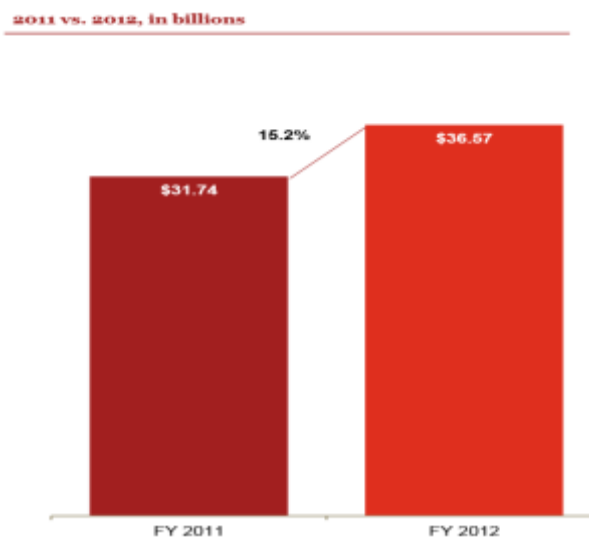


Fig.3 Online advertising revenues for 2012<sup>4</sup>

eMarketer seems to have been wrong by only a mere 3 billion dollars... a figure that starts to shrink when taking into account the overall amounts of money involved in the advertising environment.

For the first quarter of 2013 there is already available the partial report from PricewaterhouseCoopers and the trend is strong and healthy – the first quarter revenues have shown a new historical record, 9.6 billion dollars were recorded and this amount represents 15.6 increase over the amount calculated for the same period of the year in 2012. If we take into consideration the quarterly trends throughout an entire year and the fact the usually the last quarter, together with the most important holidays and the end of the year, is the best one regarding advertising spending, we can surely see the signs of a new record increase in revenues for this industry.

<sup>4</sup> IAB Internet Advertising Revenue Report publicly presented following an industry-wide survey conducted by PricewaterhouseCoopers, <http://www.iab.net/media/file/IABInternetAdvertisingRevenueReportFY2012POSTED.pdf>

This trend has been analyzed by different specialists, either economists or social-sciences representatives, and there are a lot of hypothesis explaining why this happens and how can we foresee the future movements on this field of activity.

“Consumers are turning to interactive media in droves to look for the latest information, to connect with their social networks, and simply to be entertained. [...] This first quarter milestone clearly illustrates that marketers recognize that digital has become the go-to medium for all sorts of activities on all sorts of screens, at home, at the office and on-the-run.” - stated Randall Rothenberg, President and CEO of IAB<sup>5</sup> in 2013, on the occasion of the PwC quarterly report publication. Just seeing this appraisals we can rest assured, everything is going in the right direction but... something should better bother us – the same data were available around 2006 - 2007 as related to almost every industry at world-wide level, the entire globalized economy was booming and everyone rested assured. Truth be told, with the exception of several scientific voices that were recognized in a sort of “too little, too late” way but we have to mention that some scholars did foresee those events: Dean Baker<sup>6</sup>, Med Jones<sup>7</sup>, Peter Schiff<sup>8</sup> or Nouriel Roubini.

The dominance of the internet advertising is a fact not only based on the more accessible level of the online environment for the usual consumer but also on the fact that the online advertising is cheaper to produce for mass use and looks more accurately targeted, much more sophisticated and with a higher degree of scientific approach.

A lot of public and privately owned companies considered as a given fact the reassurance of the media advertising companies stating that the advertisements are “going right to the right consumer”. For instance, as a substitute for renting expensive outdoor advertising locations in the most busy crossroads of a busy, modern city the companies can now choose the opportunity to rent,

<sup>5</sup> IAB – Interactive Advertising Bureau

<sup>6</sup> Dean Baker – macroeconomist and co-director of the Center for Economic and Policy Research, <http://www.iim-edu.org/u.s.economyrisks/>

<sup>7</sup> Med Jones - president of International Institute of Management (IIM), <http://www.iim-edu.org/u.s.economyrisks/>

<sup>8</sup> Nouriel Roubini - professor of economics at New York University's Stern School of Business

for a significantly lesser sum of money, internet advertising space that is regarded as “exactly targeted” for the clients that carry the potential to become buyers, by the use of sophisticated and advanced algorithms of artificial intelligence.

## 2 Problems of the online advertising industry

Everything looks perfect on paper for the online advertising industry but beneath all this golden wrapping one can see the seeds of a potential break down... just keep in mind the worldwide crisis that happened right after numerous record increases in different areas of the business environment.

A specialist interested in the field can look a little bit in depth and all of the sudden two issues might arise very clearly:

1. The revenue per unit of advertising has decreased drastically
2. The level of trust in these advertisements has dropped very abruptly

At the dawn of the online internet advertising the trust in this type of marketing messages was at its highest. Actually, historically speaking, the first online advertising vehicle can be considered the email message sent in 1978 (yes, the vast majority of the most active world wide web users were not even born yet!) by Gary Thuerk, marketing manager, on behalf of the Digital Equipment Corporation<sup>9</sup>. To be more precise and accurate, this first marketing message is considered as “father” of the “spam” concept and was not even using the internet – the global network was then in its incipient stage, it was called ARPANET and comprised only several hundreds of computers in the US. Today most people consider online advertising dangerously close to the spam messages received through the email systems.

While the overall revenues of the online internet advertising have increased by 56 percent from 2008 to 2012 the number of advertising units (banners, pop-up ads, pre-loaders, cover-pages, redirections etc.) have increased by 638 percent! While this might be irrelevant, up to a point, for the advertising industry we have to take into account also the increase of cost related to the production of all these materials. The second big issue of the online advertising is, truth be told, common to all marketing vehicles today – the level of trust. The

<sup>9</sup> Digital Equipment Corporation - known as DEC, was a major US company in the computer industry from the 1960s to the 1990s.

interconnection of almost all our communication gadgets (phones, tablets, computers, television sets etc.) gives the companies the possibility to bombard the users with advertisements but it also empowers the users, or at least the educated user, to check facts and sources related to a certain offer so as to become a “warned” customer.

The most reliable source when looking for information as a prospective client is by far the personal recommendation from someone that the client knows personally.

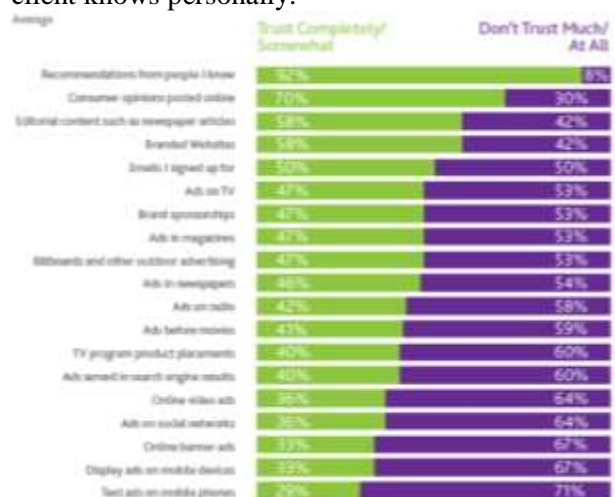


Fig.4 Extent of trust related to different forms of marketing messages<sup>10</sup>

All forms of internet online advertising (specialized advertisement actually, because the branded websites are in a different category) have degrees of trust of less than 40 percent. Quite contrary to usual math, this time, several times 40 does not add up to at least 100! This fact has already been mentioned by several specialists and respectable publications<sup>11</sup>.

The extent of this issue is not an immediate problem for the large companies but it might imply a lot of problems for the small and medium size online businesses. These enterprises sometimes rely for a significant part of their funding on amounts of money received based on their online marketing advertisements. The lower the trust, the lower the click rate and consequently the lower amount on their paycheck.

Taking into account the huge number of people spending enough time online nowadays, more and more enterprises shift their marketing

<sup>10</sup> Source: Nielsen Global Trust in Advertising Survey, Q3 2011

<sup>11</sup> “The end of the free lunch – again”, The Economist, Issue of March 21st, 2009, <http://www.economist.com/node/13326158>

advertisements focus towards the online environment; the trend has also been emphasized by the economic crisis that made the classical printed or TV advertising even more expensive as before. Seeing data provided in 2012, we can concise that in the most developed and modern countries today the internet access, and as a result exposure to online advertising, is already something on the same level of accessibility as the public transportation, running water or cable TV.



Fig.5 The percentage of population with constant access to the internet<sup>12</sup>

Moreover, in Europe even another step was taken related to the internet access issue. Since 2010, Finland has guaranteed by law the right of its citizens to have a broadband internet connection of at least 1 Mbps [1].

In my opinion the online internet advertisements are becoming quite fast almost irrelevant for the web surfers and completely lose their capacity to produce a significant impact and, more important, tangible results translated into real currency revenues for the companies involved. In the majority of cases, classical advertising is translated to the online environment, as a replacement for more expensive solutions such as outdoor billboards, printed media, radio or TV advertisements. Almost all online marketing campaigns of today are quite aggressive and try to flood the consumer with a lot of flash or html driven mechanism, lots of pop-ups, animated banners, applets or scripts. Almost 78 percent of web surfers in 2012 reported to be annoyed by these issue. Actually, in no less than 47 percent of the cases they report to ignore the advertisements and in 13 percent of the cases they reported to even dislike profoundly the companies that resorted to the specific campaign. Again, this is not a singular issue related to the online environment – several of the best

<sup>12</sup> Source: eMarketer.com; <http://www.gulf.com/blog/online-time>

known and respected printed media products have disappeared during the last few years or just survived by the means of a re-inventing process based usually on the migration to the online environment. Most of the problems faced by this classic printed media actually came exactly from the thing that made them viable as businesses before: the advertisements revenues.

In order to respect the economic truth, we have to abide by the rules of the free market - the media cannot survive without money any more than any other business. The mission of the media vehicles mission is described most of the times, usually by the journalists, as “feeding information to the public for their own good and for the society’s sake”. This statement is actually only a theoretical concept but no more than that. Media is always almost 100% biased towards something, it is always a lean towards one side or the other, either for politics, ethics, economics, education, art, social problems, market approach, industry trends etc. In case that everything is in order regarding the moral or ethics issues, there is still the problem of the revenues. Nobody working in the media environment is going to accept the fact that its work for educating the society has to be pro bono. The main revenue source of the media business was always coming in from paid advertisements of various clients. In our time we can clearly see the fail of the classic media advertising to support everything and is obvious enough that the concept of a sustainable model based on money for advertising exchange is in jeopardy.

Looking from the outside of the problem, we can do a simple test on ourselves anytime - try to remember when was last time you actually read an advertisement in the newspapers you browse daily (from the socio-economic perspective the job advertisements do not count to this because they are directly linked to another processes). We can forward the experiment and try to remember the last time we actually followed a television advertisements and didn’t chose to surf to another station. These simple things happen all the time and this behavior was already taken into consideration by the advertisers. Due to those facts we now have distinct times and larger allocation of minutes for the advertising streaks on the television stations. Another reaction of the advertising industry to this symptoms is the actual match of advertising pauses over many different television channels, in order to cover the user with advertisements even if he chooses to change the station.

Based on statistics, the best ratio for advertisements per client is found in the radio

environment. Reports and facts show a healthy 69 percent of clients that keep the same station even if advertisements are on. Although a very good fact for the advertisers, this information is to be taken with an attached footnote - in most situations the advertising clients of the radio environment are moving while listening and as a direct consequence it is quite hard for them to switch stations easily. Another issue is related to the fact that the attention of the radio clients is not as focused on the content itself (and the ads at one time) as in the cases of newspapers readers or television watchers.

All these possible problems that the advertisers faced in the classical environments have made it to the online advertising too. If the growth prospect and trend is to be a solid one for the advertising industry and not only a bubble like the notorious real-estate one just several years ago, the whole online advertising concept has to establish a new system of monetization, improve it all the time and enlarge in a constant manner.

An exponential increase in the development of the online environment meant the fail of quite a number of classic businesses. This online “monster” has also discovered things that are not obvious at the first glance. Most of the internet content today is free of charge. In several cases we can even find a sort of a paradox – if you want to read “old” news you have to pay for a printed newspaper but if you want to read fresh, updated, news you can just access the website of the same newspaper free of charge. Maybe the newspapers will someday relate to antiquated objects – the older it is the more expensive it gets! Of course, again, up to a point, we have to be glad with this situation. But we, as educated specialists of the online environment, have to also think about the future. Returning to the same example as before, the newspaper actually wants and needs to attract more paying customers for its printed edition and for the auditors in order to increase the revenues from direct sales and publicity. At one moment in time there is a clear possibility that the newspaper will disband the printed edition and rely only on the internet version; at that moment, most probably, the online content will become chargeable because we already have the experience of the printed content as not being able to support itself solely based on advertising money.

In order to obtain better results in transforming web surfers to customers for their clients, the advertising companies should focus more on the “intelligence” of the advertisement and only on the number of advertisements provided to the web

environment. For example, if we think about an advertising campaign for a car company – even without proper scientific research, just based on common sense, we can make a fair assumption that 99.9 percent of web surfers are not going to buy such a vehicle solely based on seeing the advertisement. For any significant purchase, even more nowadays during an economic crisis, everybody would take the time to find online and offline information about all the aspects of the purchase (company, model, costs, maintenance etc.). And in such a case, what drives the companies to spend billions (Euro or dollars alike) for advertising if most buying options are not mainly based on these specific advertisements.

The main direction for a more significant monetization for the online advertising expenses is better target the advertisements. The advertiser must provide the ads not in a bulk manner but in a much more sophisticated and scientific way, based on the client's interests and behavior compiled from its internet surfing history for example; complex and intelligent algorithms should be involved and they should be able to reliably target the client as a really prospective buyer or not. This approach is going to tackle with the issue of the unwillingness of the web surfer to see a certain advertisement; there is still the problem of the degree of trust related to the online advertisement. In fact, most specialists discern three distinct areas of inadvertence between the web surfers and the advertising industry:

#### I. web surfers do not need the advertisements

Almost all world wide web users have enough expertise to look by themselves information relevant to their specific wishes in case they want to make significant purchases.

#### II. web surfers do not trust the advertisements

A lot of specialized scientific research data states that the vast majority of web surfers tend to disregard the content of the advertisements.

#### III. web surfers reject advertising spam

During the last years there is a real upward trend for using different third-party modules or add-ons that just block all marketing advertisements altogether.

Personally, I think that most of the online universe suffered from a disorganization regarding the advertising companies. In the first place numerous specialists of the advertising industry considered that the agonizing results of the classical marketing campaigns were due to the migration of

the potential clients from the old media typology to the always-online internet environment. The first and easiest countermeasure was obvious for them – move all the flyers from parking places to the websites! A little bit later came the second step – the development of more sophisticated marketing tools, sometimes with some degree of interactivity even, especially tailored for the online environment. This was a normal and appreciated measure but it is not enough in my view to ensure the health of the revenue streams for both advertising companies and their clients on a long-time bases.

### **3 Solutions for a stable revenue stream model of the online environment**

I am sure that the solution for a strong revenue model has to take into consideration the realities of the online environment today. The online businesses, together with the advertising industry, must focus on bringing to life different models of monetization and providing constant revenue streams instead of brutally trying to feed the web surfers an increasing number of unwanted ads. It is clearly and scientifically documented that the direct revenues coming from online advertising cannot support the majority of the internet bases businesses.

After researching extensively and compiling different opinions and view on the topic, I can provide a set of three monetization models that have strong anchors to the realities of today:

#### I. Paid access

This model integrates the business model that most modern search engines actually use – the web surfers are in fact directed to certain favorite locations as results of their search queries. This calculated results take into account, as part of their complicated algorithms, the marketing funds committed by different clients of the search engine's companies. A separate direction comprised in the same model is based on the paid access to expertise – the most trusted and recognized web sites can provide their expert opinions or advice in relation to a process of evaluation or validation of the data coming from a third party location.

#### II. Paid virtual commodities

The monetization model includes e-content and information paid access. In this area we can find access for audio, video or generic multimedia



resources, scientific databases, specialized information (Application Stores, financial magazines, etc.). A distinct category inside the same model includes the access to a virtual community and the accessories related to that community; that virtual universe has a surprising capacity to provide significant amounts of revenues based on a very sound concept – receive small amounts from a very large number of clients.

### III. Paid real products

This is most widely used model today and includes the famous online retailers such as Amazon, E-Bay etc.

Anyone of these revenue models I think would provide a healthy and sustainable solution because they are all based on the idea of a small income coming from a large number of customers. The enormous number of potential customers is growing every day, as more and more regions of the planet approach the level of development of the Western European, North American or some Asian countries like Japan or South Korea. The penetration of the mobile phones, a fairly new marketing vehicle for the advertising industry, is at peak levels all over the planet; despite the global crisis, during the 2007 – 2012 period of time the mobile-broadband subscriptions have grown from 268 million to 2.1 billion [2], figures that represent an average annual growth of approximately 40 percent – and all these on the background picture of the falling economies. For the last three years, for the 2010 – 2012 period of time, Africa, which is arguably the lesser developed continental area on Earth, has passed from a 2 percent mobile-broadband penetration to 11 percent. In absolute numbers, taking into account the massive population of the African continent, this is already a huge achievement. And there still is another huge stake of 89 percent of the population that has the potential to become future advertising clients through personal computers, phones or tablets. Another huge market that I believe is going to open more and more for the world is also China – they have a sort of controlled society that cannot stop the progress forever. The enrichment and development of the Chinese society for the past decades is already a factual thing, clearly visible through the number of tourists coming from China and from the sales figures of the large companies doing business in China. This inevitable opening of the Chinese society I believe that will trigger a huge

wave of modern products (software, advertising campaigns etc.) targeted and customized to the culture and even the language of this huge and quite compact mass of population that up to now was somehow disregarded by the mainstream companies because of the difficulties of operating into a closed and controlled society that China displayed since the second world war (and which actually is just beginning to open).

## 4 Conclusion

The end of the online advertising industry is nowhere in sight! We just have to find solutions for keeping it on a predictable and steady trend for the best outcome for both advertisers and advertising companies.

I strongly think that there is still at least one direction that most advertising companies did not follow massively yet. In the last few years the computer industry, at least related to the hardware components updates, has actually relied on the gaming industry for providing the much needed sales boost. The common office user of a PC or the common web surfer is more than satisfied using any normal computer unit, several years old; he does not have the need to spend money on a more modern and powerful variant that can bring him a spectacular 0.5 second of faster accessing the web page of the online retailer that sells coffee machines. On the other hand, if a gamer has to keep in line with the possibility to play all the latest titles at the best frame rates and with the most beautiful rendering solutions he has to pay a premium amount of money for continuous upgrades. On average, twice a year he should spend money on a new and more complex CPU (from time to time it also runs cooler and consumes less energy but this is not really a deal breaker for this category of clients), he has to buy a more modern and incredibly powerful standalone video card, he has to install a faster SSD drive and change the RAM modules with the latest and fastest DDR type available. In truth, several video card solution today include a processing power that was not in reach for full scale CPUs just a couple of years ago; they are even more complex than the fastest CPUs today and are more and more used to aid with other calculations [3] because pure and simple they are too powerful for their main task – render the image on the displays. Even security solutions with very high degrees of complexity, based on powerful and smart algorithms for, are starting to take advantage of the calculation power encapsulated by the video processors of today in

order to achieve a seamless and nonintrusive integration of the resource-hungry on the fly encryption/decryption processes [4]. Embedded into the content, story or plot of these modern games an entire universe actually exists – a universe that the advertising companies can get a hold of. There is a space much larger than a mere niche for advertisements – a lot of messages can be integrated with the game’s specific environment and targeted to the player just by analyzing his in-game behavior or the type of the game, the playing habits etc. An entire complex artificial intelligence algorithm can be developed and put to work in order to analyze and provide best options for targeted advertisements, based solely on the analytical processes of the data collected through the game itself. The social and economics behavior of the player might also be taken into consideration for the profile development and, based on these aspects too, the advertising industry can provide an ad that the user might really find relevant for his needs. A very important aspect that has to be taken into account is related to the social background of this type of potential customers. Usually, the part of the population that represents the players of such modern games is formed mainly from young and active people; they have above average incomes or have access to family resources above the average income and they are more susceptible to advertisements suggestions that would be delivered to them via such an unusual and futuristic marketing vehicle.

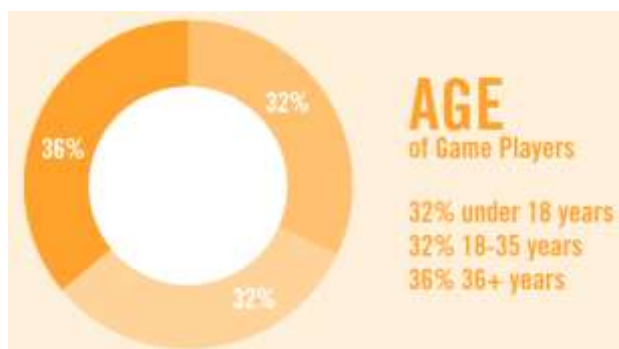


Fig.6 The average age of modern online games players [5]

From the data available in 2012<sup>13</sup>, there are at least 520 million people on Earth playing videogames on daily bases. In the US alone there are reported figures of 183 million people playing video games

on regular bases, covering more than 70 percent of all households in the US. Based on the same statistics, at least 3 billion hours each week are spent by the gamers while playing. Even for an outsider of the computer industry such numbers must trigger the clear signal that there is an enormous opportunity here for an articulated and complex advertising system which can bring significant revenues by intelligent use of diverse monetization models.

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