

DEVELOPMENT OF BUSINESS MODELS IN ENTERTAINMENT AND GAMES SOFTWARE INDUSTRY

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Abstract *The topic of this article are the specifics and the characteristics of contemporary business models and platforms in online gaming industry. Main focus is on how development of information and communication technologies influenced new organizational forms. Furthermore it is described how the video games industry grew through the time and what is the actual situation and future directions of this industry. Within this, different business models and modern platforms for playing video games are presented. At the end, there is a detailed presentation of a Nordeus company business model, dedicated to development of video games in international market.*

1. INTRODUCTION

Common business environment trait for most of contemporary industries today is change. Throughout history, the companies which didn't perceive changes in their environment and the necessity to adapt, ended their life cycle very quickly. Changes can also mean opportunity for improvement and organizational learning. Entertainment and video games industry is among most dynamic industries today, having with fast S-curve and paradigm changes. First concept of video games was offline entertainment, even when Internet started to spread in wider population. In that environment, the companies developed software for games and sold them through different retailers. In the mid-1990s new online environment for playing games appeared. It is crucial to understand that all these possibilities arose due to the rapid technological development and new business models. Although young, the video games industry has been developing rapidly and adapting easily to the modern tendencies in the world of hardware and software. With the emergence of the internet, and online platforms later on, not only that the traditional business model was changed, but new organizations, products and services appeared. However, major changes happened to the users themselves, their habits, expectations, needs and their life style. The impact of video games on business world, and society in general, is growing in its significance.

2. BUSINESS MODEL THEORY

In the past, business models were defined as a way in which company produces a product or provides a service in order to gain profit. Nowadays, as information is

spread more quickly, it is much easier to produce a product than to sell one, due to a great competition in the market and very well-informed users [1]. For this reason, the organizations are directed towards different concepts of activities to be carried out, and also to more complex definitions of business models. It is clear that the foundation for a company business is its clearly defined business model. Without vision on how to carry out the activities, communicate with potential users and gain profit, it is hardly possible to do the business. Accordingly, without clear and precisely made business model the existence in the market is not possible. As the employees are the heart of every organization, business models give an opportunity to each of them to notice the core of the system in which they work and recognize their role in it. Zott, Amit and Massa have performed synthesis of how business model is perceived by different authors [2], and with respect to different authors business models could be observed as: Statement [3], Description [4], Architecture [5], Conceptual tool [6], Structural template [7], Method [8], Framework [9], Pattern [10] and Set [11].

The growth of information and communication technologies not only significantly influenced daily business operations and facilitated communication, but directly influenced the core of the organizations - their business model. Many organizations did business even before those technologies were developed. However, even though they continued doing business, their business models notably evolved and they were, to a great extent, based on the possibilities of information and communication technologies. On the other hand, there are organizations that have appeared recently due to the development of modern technologies. For those organizations, the information technology is the basis of business management.

3. ENTERTAINMENT AND GAMES SOFTWARE INDUSTRY

There is a huge variety of terms that could describe world of video games. Most common are virtual world and cyberspace. Edvard Castronova suggested that video game environment could be described as synthetic world: an expansive, world-like, large-group environment made by humans, for humans, and which is maintained, recorded, and rendered by a computer. This synthetic world is important because it could influence human behavior on a

daily basis and it could contribute to people's well-being and that is essential. The more people are emotionally involved in the game, the better it is for a business model of the company that produces the game [12].

As to many different industries, the Internet brought significant changes to video games industry as well, not only in terms of distribution, but more importantly, in the terms of audience and business models. The evolution of the internet reminded those who work in the video games industry of how the game is actually a flexible product and how easily it could be adapted to different types of audience.

Video games industry has now a completely new form, much different than it had in the past. The traditional and the modern industry could be observed as two separated industries that have little in common. In the past, the users had to buy certain hardware components in order to play games. Consequently there were two ways of gaining profit: through selling the hardware and the games and through users who played on the arcade machines or in the internet cafes. The main disadvantages of traditional industry are these: 95% of the profit was made through selling a product during its life cycle, the market was reached only through retail stores, piracy growth and selling of used products, a great number of unsold games, long installation processes that postpone immediate access to the game etc. Computer Entertainment Suppliers Association estimated that the game piracy costs for Nintendo and other consoles industry about \$41.500.000.000 between 2004 and 2009 [13].

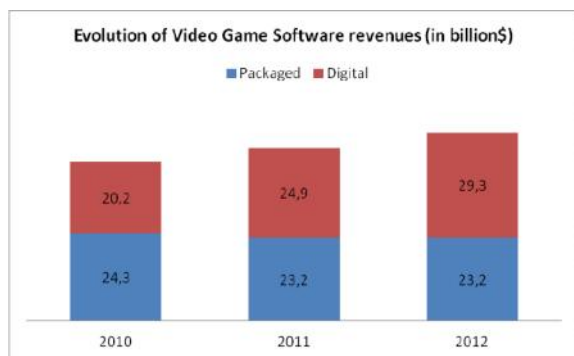


Figure 1. Evolution of video game software revenues in the past 3 years

Video games became a part of mass market, especially with the emergence of the internet. Video games industry has not succeeded so far to define universal business model which will include all the models. In the past the game was only a physical product. Cloud computing paradigm influenced business performance and organization in general [14] through Software As A Service (SAAS), Infrastructure As A Service (IAAS) and Platform As A Service (PAAS), and caused emergence of new models in various industries like bioinformatics [15]. Also, in our environment concept changed significantly and now the game can be observed as a service - Videogames As A

Service – VAAS. Video games are more and more distributed in digital form through internet. The annual report of Entertainment Merchants Association (EMA) given in figure 1. shows that the income from the games purchased online exceeded the income from the games purchased in retail stores in 2012 [13].

4. BUSINESS PARADIGM CHANGES IN ENTERTAINMENT AND GAMES SOFTWARE INDUSTRY

It is absolutely clear that the internet has become the medium for playing games. The Newzoo Institute research has shown that 29% of time that people spend online on the territory of the USA, was spent on the playing games. The number of the platforms that average player used in 2010. was 3,4 according to Newzoo. Only 18% of the population plays games using just one platform [13]. Taking in consideration platforms and the segments of the video games industry on the online market, further on there will be described some of the most significant platform considering the profit and the number of users.

4.1. Digital distribution for the computers

When we reckon with the video games for computers the content is delivered in two ways: by the Internet and the retail stores. For the products bought in the retail stores certain reinforcements and upgrades are delivered mainly by the Internet. However digital form of the game delivering is more present, first of all because the games bought this way are more adaptive on the various computer configurations and the price is generally lower in comparison with the retail stores. The concept of digital delivering of video games is called the DTO (Download-to Own).

4.2. Digital Distribution for the Console

This type of the digital distribution is less represented in comparison with the computer games because is only possible to download content for the last generation of consoles such as Xbox 360, Nintendo Wii, Playstation 3, PSP Go. Apart from that, there are also some limits considering the lack of the memory on the consoles as well as the conflicts of the interests of the producers of the consoles and the games, and their distributors that sell the games in the retail stores and that do not want to give up the profit that they make by the physical selling of the products. That is why the games for the console are usually delivered by the Internet in the form of the demo versions of the games, or in the form of the upgrades to the existing games. It is not unusual that certain new games for console appear on the Internet few days or months after they appear in retail store. The most significant services that deliver the content of the video games for console are Xbox Live and Playstation Home. Xbox Live service income is made by the subscription, and the price of the Gold subscription is 60\$ a year. About 22.000.000 people are subscribed on this service, what makes a year income

of \$800.000.000. The average user spends about 60h a month online [13].

4.3. Casual Games

Casual games are played by a large number of players around the world (Casual Game Association). About 80% of those who play use internet portals (Pogo, PopCap...), 62% play games on the social networks, 54% play games on their mobile phones and finally 33% play video games using all three platforms [13]. Two biggest groups that play casual games are women over 30 years and men, ex hardcore players. The main motivation for playing is the stress release, as well as making a short break, challenge and boredom. The advantages of this casual games segment are: significant distribution on the web, important social aspect, the fact that they are often based on the existing social games which means that players do not need game instructions. In this segment the profit is made in three ways: by playing games free on line and selling various advertising contents (Free-with-ads), possibility of playing game certain amount of time for free, before the player decides to pay for a game (Trail-to-purchase) or by paying subscription fee to certain portals that distribute games.

4.4. MMORPG

MMO(RPG) and Casual games can be distributed in two different ways : client or browser. The games based on the client distribution request from player certain installations on his computer before connecting online. On the other side, games that are distributed through browser can be played directly on the web without previous installation. In both cases player must have his own account to be able to play in the name of some character (avatar). The huge value of the MMO comes from the creation of the communities during the game. To keep the game going it has to retain certain number of the players that play constantly.

The deeper connection of player to the game is also the biggest challenge for manufacturers, not only for the financial reasons but because it makes the game more interesting. The closeness of players to the game also means the big investment of time from their side and it can often cause some kind of addiction. About 47.000.000 players play the games MMO and between them high school and university students are dominant because they have more free time to play games. In that sense hardcore games in MMO are more often played then Casual games. The way that these games made profits has changed comparing to previous concepts, from the way which included subscription fee (pay-stay-play) to the free-to-play concept that includes free games and it is players' decision to spend amount of money that he wants during the game itself (play-stay-pay). Good example is the company SOE and the game Everquest 2 that in January 2012. shifted to free-to-play model and they had increase the number of users for 300% within one month. Company LOTRO and its game Lord of the Rings Online, that also shifted to

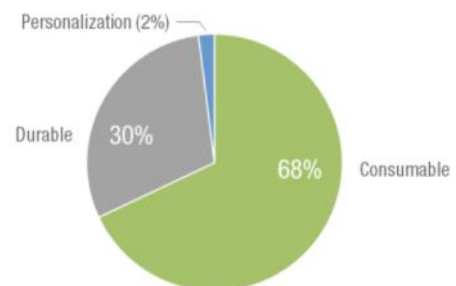
free-to-play model in September 2010. had the increase of profit for 200% [17].

4.5. Digital distribution of the video games for mobile devices

Digital distribution of the video games for mobile devices has significantly increased due to Smartphone and Tablet computer appearance on the market. In fact, in the USA in 2011., 44% of users of mobile phones had Smartphones and 71% of people that have iPad play the games (Nielsen). When it comes to the way of making profit mainly it comes from downloading application from, in most cases Android or Apple market, subscription fees or selling of the advertisement space within web sites (Free-with-ads). However, the mostly represented model is Freemium (free-to-play) that involves spending players money on virtual goods in the game.

There are three types of virtual goods: goods connected to game personalization, durable goods that provide long-term benefit or consumable goods that provide player instant benefit during the game [13].

iOS & Android Freemium Games, Dollars Spent on Virtual Goods



Picture 2. Percentage of money spent on Virtual goods

4.6. Games on the Social Network

In 2011, 293.000.000 users played games on the social networks in the whole world. The number of the players has increased for 29.5% in 2011. The main reason for that can be found in the fact that the games on the social networks approach people that have never played before, bringing them more benefit than the playing itself. It can be competition with friends or playing games related to some passion, like sport for example. The game on Facebook, without doubt the most popular world's social network, can be summarized in the following statistic: 53% FB users play games , 69% of FB players are women , 9% say that they are addicted to video games, 20% of users has paid for the certain benefits in the games, 56.000.000 of users play every day, 290.000.000 of users play at least once a month, 50% of users log in FB to play games (average 210 min) [18].

A huge number of the producers distribute their games through this social network. First of all, it is because Facebook provides approach to the enormous number of the

users and second of all because it is free for the game producers, and each of them has equal chances to succeed this way. Of course, the profit is shared with the Facebook in defined ratio. The main drawbacks for the game manufacturers are frequent modifications in the rules and usage of virtual money called FB Credits [19]. The common model of earning profit is based on selling of virtual goods (freemium). Apart from that profit from in game advertising is included as well possibility for different brand to advertise on Offer Wall within the game. It's on players to choose if they want to see those advertisements in change of certain amount of the virtual money [20].

5. BUSINESS MODEL EXAMPLE – NORDEUS

Nordeus is a leading European manufacturer of games and officially the best start up company in 2011 [22]. Their game Top Eleven is officially the most played sport game in the world, with 6 million users per month and more than 2 million users on a daily basis. Their goal is to provide a unique experience to millions of players around the world, regardless of the platform used for gaming. The company was founded in the 2010. by three mechanical engineers from Serbia, with the headquarters in Belgrade. Their team, which is increasing day by day, at the moment has about 80 people of various profiles and characters who share the same vision, to create the best experience in playing video games in the world.

Top Eleven is one of the most popular sports games in the world of online gaming. In 2010, the game emerged on the social networking site Facebook. In addition to Facebook game is available on Russian social network Odnoklassniki, over the web, as well as on the application market for Apple and Android mobile devices. The game exists in 35 different languages and it is played in almost every country in the world. The essence of the game is a unique experience that offers every player to be a manager for successful football team, playing in the MMO environment against a large number of other people from all around the world. The great advantage of this game is top quality simulation tasks and obligations of football manager with many characteristic and subtle details related to this business.

The business model of the company Nordeus

Consumer segment - Top Eleven players can be seen as a niche market, which means that one huge segment is dominant and it requires a specific type of relationship and communication. This segment actually consists of more than 95% of players around the world. According to its characteristics these are primarily men aged from 15 to 35, who are sports fans, especially football.

Value proposition - Top Eleven is a game that excels in functionality and capabilities offered by the game. No sports game offers so many subtle details and the oppor-

tunity for advancement and development of games like this. This is a game that anyone who has an internet connection, computer or mobile phone of new generation can play for free. Access to the game is very simple. It is up to the players to choose whether they want to access the current game within 10 seconds without seeing commercials and video tutorials, or not. An important characteristic is that installations are not necessary when it comes to playing on the computer, and when it comes to mobile devices is the only step that a player has to make a game to download the appropriate Apple or Android marketplace.

Channels - These are own indirect channels (website www.topeleven.com) and indirect partner channels (Facebook, Odnoklassniki, Apple's online marketplace Android online marketplace).

Customer relationship - The team at Nordeus consists of great number of people who speak more than 30 languages. Each player is able to communicate on a daily basis with someone from the team in the language of his choice, in order to clarify some confusion about the rules or to overcome the obstacles. A smaller number of players, who spend large amounts of money in the game, have a special status and a person on a daily basis to communicate to them, with respect to the game and to other various topics, thus building a specific friendly relationships. Also, anyone who wants to play the game, without any prior communication with anyone from the company, can do so by using clearly defined instructions and guidelines. On the social network Facebook there is fun page with over 4.5 million users, who can communicate with employees in the company, so that other players from around the world.

Revenue streams - The company's revenue in 2011 amounted to about 9,000,000 \$. Revenue from user games acquired through one-off transactions in two ways. One of them involves "freemium model" where players through micro-transactions in the game pay for the various virtual goods. Another way refers to the in-game advertising and wall offer. An example of this is the cooperation with Nike company, where they advertised Nike soccer shoes in the game. If the player decides to buy the boots, he will find specific code on the boots, which, when typed, gives a certain amount of virtual currency that can be used to purchase virtual goods. The company Nordeus has percentage of every pair of boots sold in this way.

Key Resources - Key resources are related to areas in which the company operates with a large number of computers and other hardware and software components without which the work could not be executed. Human resources are the core of the organization without which the organization absolutely could not exist or be developed.

Key activities - In the company Nordeus, production refers to the process of conceiving, designing, and creating

a game that is delivered to users through indirect channels.

Key partnerships - Key partners of the Noredus are Facebook, Apple and Google.

Structure of costs - The structure of costs consists of salaries, depreciation, capital equipment, investment in the modernization of capital equipment, servers, computer equipment, network and data security[21].

6. CONCLUSIONS

Achievements in the segment of information and communication technologies influenced business in a way of decreasing costs of communication and the prices of hardware, thus enabling companies to define the new ways to create and deliver the value. Business models of the companies in the video game industry have been changing through the history, from the traditional which included buying of the physical product such as console, to the modern industry that no longer necessary include spending money for being able to play. The value of the game now is defined exclusively by the players, who demand to have the game available at anytime. The internet and online game platforms have made the video games market mass market. Development of technology, especially information and communication technologies influence organization, management orientation [23] and business development. It creates new paradigms and industry-wide concepts, and often industries, like entertainment and games software industry became completely different in short period of time, as it was presented in this article.

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