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## Players as a prosumer. Individual motives for engaging in game modding

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### ABSTRACT

In present information consumption pattern several interesting changes can be observed. Numbers of consumers are no longer willing to choose from existing companies' offer. Instead, they prefer to be engaged in process of production and, as a result, obtain more customized product or service. Digital games represent type of commodity which users became a hobbyist creators and perform unpaid labor for others. The phenomenon of game modding plays an important role for the success of a particular game. Present paper is aimed to give an outlook on individual players' motives to engage in game modding. According to literature review, vast part of players engage in game modding for pleasure related to playing the game and the process of modding themselves, especially when players feel the content lacking. The results also suggest that it is important for players to develop friendship and achieve sense of belonging to some communities. What is more, some motivations are related to development of programming or graphic skills. Finally, the minority of players decide to produce game mods, because they hope to get some benefits from gaming industry, such as job as game developer.

**Keywords:** User-generated content, game modding, prosumption, mods, individual motives

### 1. INTRODUCTION

Nowadays, when the Internet is prevalent, it can be observed the continuous emergence of new opportunities and challenges for brands and products. In terms of communication,

Internet is used by managers not only to spread some promotional message but allows to maintain two-way dialogue between company and customer (Estrella-Ramón, Ellis-Chadwick, 2017, p. 955). In the era of Web 2.0, consumers more often engage in production of content for digital audience (Westecott, 2011, p. 90). This content, called “user generated content” in literature, is usually published on publicly accessible website or on a social networking site. Such behavior requires certain amount of creative effort and is created outside of professional routines and practices. It can be produced, modified, shared and consumed by individual user or as a result of some collaboration between two or more persons (Estrella-Ramón, Ellis-Chadwick, 2017, p. 956).

Prominent grow in content creation is expected in video game industry (Koch, Bierbamer, 2016, p. 358). Player become a game producer and design add-on components, well known as “mods” (Postigo, 2007, p. 302). The game mods and the modder communities play an important role for the success of a particular game (Sotamaa, 2010, p. 2). As Arakji and Lang (2007) emphasized, the game mods can significantly extend an average shelf life of computer game (Arakji, Lang, 2007, p. 12) and expand period of time when the game receives high sells revenue. Popular mods can help to understand the players' preferences. This information can be used in advertising and future design activities. Moreover, modding community is a source of innovation and recruitment source for the game industry (Sotamaa, 2010, p. 5). Roberts, Hughes, Kertbo (2014) stated that understanding the motives of engaging in value co-creation can help companies to strategically manage their interactions with consumers who receive superior value as well as firms (Roberts, Hughes, Kertbo, 2014, p. 148).

Present paper is aimed to answer the question why players engage in game modding and is based on available literature. At first, the relation of computer game modding and prosumption is presented. Second, the author quoted selected research investigated individual players' motivations to start game modding. An article is ended by final conclusions.

## **2. COMPUTER GAME MODDING AND PROSUMPTION**

In present consumption can be observed several interesting changes (Ritzer, 2014, p. 3). Growing ranks of consumers are not willing to buy products and services from existing companies' offer (Alderete, 2017, p. 2). They convey information about their preferences to firms which then produce the relevant products according to received specifications. As a result of this cooperation between consumers and companies, products and services are treated as social objects which can be examined, discussed and shared among members of some networks (Etgar, 2008, p. 98). In 1980, Toffler recognized “a progressive blurring of the line that separates producer from consumer”, and foresaw a “customer-activated manufacturing system” (Paltrinieri, Esposti, 2013, p. 21). Toffler, in his book *The Third Wave*, introduced the concept of the proactive consumer, named prosumer. This consumer was predicted to become active and able to influence on design and delivery of goods and services (Ritzer, Jurgenson, 2010, p. 17). The concept of prosumerism provide a theoretical base for analyzing different levels of participation of people (Alderete, 2017, p. 2). Today, this term has evolved and is interpreted much broader. Prosumption is the increase involvement of customers in the process of production, which contain use of customer feedback and direct design request in the case of high-tech industries such as computer-aided manufacturing systems. Prosumerism cause the rise of customization in goods and services markets. Customization and personalization of

consumer products require significant input from consumers at the design and production stages (Alderete, 2017, p. 2).

Prosumer is a consumer who consumes what he produced, in various forms, with can involve brands and market or not. Colin Campbell described the ideal craft consumer as an individual who uses the products with creativity. He completing them, mixing them, processing them according to very personal ends, with passion (Paltrinieri, Esposti, 2013, p. 21, 23).

Digital games represent type of commodity which reconfigures the position of the consumer, who no longer simply purchases the game as a product, but is actively engaged in its continued development (Herman, Coombe, Kaye, 2006, p. 189). Players became a hobbyist creators and perform unpaid labor for other hobbyists, fans and casual players (Sotamaa, 2010, p. 4).

Game modification or modding is process of changing of computer game by a member of the general public, which contain introducing new artifacts into game environment (e.g. new buildings or weapons), characters (e.g. enemies), models, textures, skins, gaming areas (e.g. levels, maps), rule sets and story lines (Moshirnia, 2007, p. 512). It happens in extreme cases that the moderator removes almost the entire original content of the game and turns it into a completely new one (Wallace, 2014, p. 221). The main goal of producing game modifications is not related to the earning money (Moshirnia, 2007, p. 512). Contributors are called “modders” and the group of contributors is “modding community” (Hong, 2013, p. 7). Wide spread social media allow internet users interact with each other’s (Sashi, 2012, p. 254). Online communities give access to the vast pool of knowledge. Creators engage in producing content and share their work via Internet.

The other players have possibility to get to know how improve their game experiences (Roberts, Hughes, Kertbo, 2014, p. 156). There are also distributive platforms for the showcase mods, equipped with various ratings, rankings, and filtering mechanisms that algorithmically present mods for viewing through patterns of comparison and association (Hong, Chen, 2014, p. 292). An example of such platform is Steam, developed by Valve Software. Steam helps users with the installation, updates and management of their computer games (Lin, Bezemer, Hassan, 2017, p. 2098).

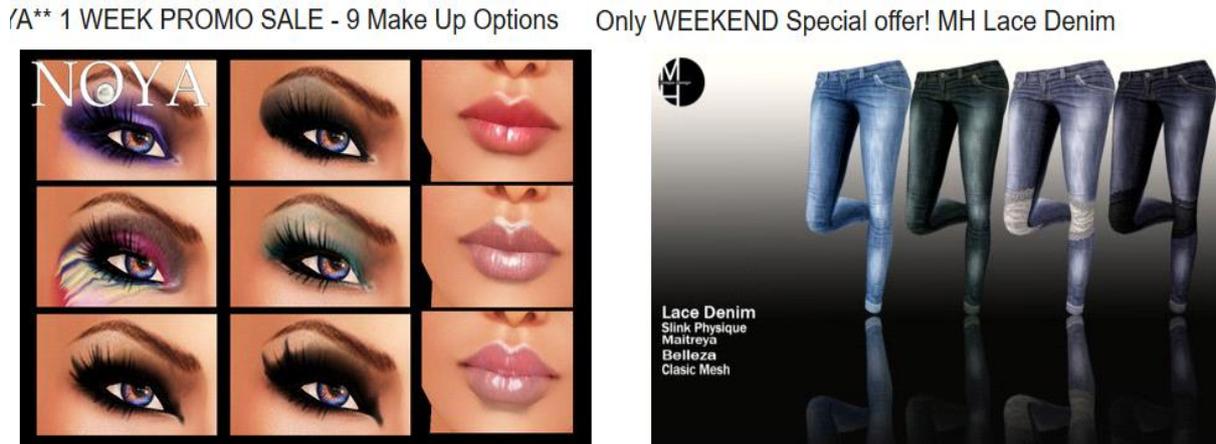
The most often mentioned in literature episode of game modification (as the very first modification) is the game called Adventure, produced in 1976 by Don Woods. It was variation of Colossal Cave developed between 1975-1977 by Will Crowther. The main task of player is to control the character using simple text commands. The goal of the game is to find hidden treasure (virtual encyclopedia). After that, the process of creating games and games themselves has changed. Trend of modifying the game content amongst players have blossomed. The practice of game modding received formal recognition when in 1993 the game DOOM was released. DOOM had its own supplementary software called “toolkit” or “editor” that allows players to create or modify parts of the game such as levels, interfaces, graphic design and storylines (Hong, 2013, p. 985). Contemporary example represents the game Second Life as well as Euro Truck Simulator 2.

Second Life, launched in June 2003 by Linden Lab, is persistent, open-ended and shared three-dimensional space in which users can interact usually via their virtual representation called avatar. Users spend time in this virtual environment doing numerous various things. They can socialize with each other by text or voice chat (Cooke-Plagwitz, 2008, p. 546). Second Life is space when the communities and social life is shaped by game users. It is part of co-created value with game developer (Bonsu, Darmody, 2008, p. 357).

The world of Second Life takes the visual forms of different geographical regions, such as islands, buildings, landscapes, universities, corporations, shopping centers and public places, where certain areas have limited access, e. g. due to the age of the player (Laskowska-Witek, Mitreğa, 2014, p. 36, Dethridge, Quinn, 2016, p. 30).

Second Life users frequently engage in creating of interactive virtual object and other content to which they own the intellectual property rights. They can distributed own creations to other users through market transaction (Page, 2011, p. 293). Second Life have developed economy with own market and own virtual currency, Linden Dollars, that can be exchange with real world currency (Ramanathan, Purani, 2014, p. 506).

Vast part of game modifications in Second Life is related to avatar's appearance. Players need to some virtual products such as clothes or accessories to change their avatars. An examples represent figure 1. Some products are popular amongst Second Life users because allow them stand out from the crowd. The other goods help residents gain access to certain social groups or confirm membership in some community (Koles, Nagy, 2012, p. 94-95; Papagiannidis, Bourlakis, Li 2008, p. 614).



**Figure 1.** Products for avatars.

Source: online shop dedicated to Second Life users

Players also are engaged in creating virtual buildings and landscapes. They build single houses, equipped with items of furniture and appliances, and whole cities like ancient Rome (Best, Butler, 2015, p. 187, 191; Kaplan, Haenlein, 2009, p. 565). The polish example represent Cracow (Figure 2), project conducted by advertising agency Supremum Group. Second Cracow had a replica of market square, faithful copy of surrounding tenement houses, Mariacki Church, cloth hall and the rest of building near the city center (Blasing, 2010, p. 102; website devoted to virtual media). Euro Truck Simulator 2, produced in 2012 by SCS Software, is sequel of simulator from 2008 (portal devoted to computer games). Virtual world of Euro Truck Simulator 2 allow players to impersonate a truck driver and the game environment reflects the real world in a way that the player has the impression that he really moves with the truck on the real roads of Europe (official website of the game). There are dozens of cities to explore from the UK, Belgium, Germany, Italy, the Netherlands, Poland and many more. Players have opportunity to run their own businesses which can grow even after users complete their freight

delivers. They can also build own fleet of trucks, buy garages, hire drivers and manage the companies for increasing profits. Joining online community such as World of Trucks offer additional features to basic version of the game (portal devoted to computer games). World of Trucks is the website that allows to download some additions from players.



**Figure 2.** Second Cracow, Poland.  
Source: website devoted to virtual media



**Figure 3.** Fiat Doblo D4 V1R4 and DAF F241 dirty Skin  
Source: Online blog devoted to computer games

There are articles about various add-ons and hyperlinks to other related platforms, namely [www.blog.scssoft.com](http://www.blog.scssoft.com). For example there is an article about possibility of map extension and available addition “Sardinia” with impressive landscapes and coastal roads, “Vive la France” or “Baltic Sea”. Players can modify the appearance of their trucks by using the Krone or Schwarzmüller trailers (reefer, curtain and log variants). These additions are available on official blog of the game producer (online blog devoted to computer games, official website of the game). There are also many of unofficial add-ons created by players. For example on [Ets2.tl](http://Ets2.tl) creator shares their own work. There are additions like Fiat Doblo D4 V1R4 cars (Figure 3). On the website players can see video which show how the Fiat looks like inside the game. There are also many of “truck skins” which are used to modify the appearance of trucks by adding the logotype of real life companies, like “Nasierowski Transport”, DHL, or using “DAF F241 dirty Skin” (Figure 3) to make the trucks dirty like real life cars on the road. It is also possible to change color of trucks or use various paintings. Many elements created by players are also in the background of the game, e.g. BP petrol stations presented on figure 3 (online blog devoted to computer games).

### **3. INDIVIDUAL MOTIVES FOR ENGAGING IN GAME MODDING**

Sotamaa (2010) analyzed the case of modder community of shooter-game Operation Flashpoint developed by Bohemia Interactive, small Czech studio. Sotamaa invited participants from official game's forum, where he placed hyperlink to the website with basic information about researcher and questions for users who create game's content. The author also contacted with a local mod team. Finally, he conducted 29 online interviews with modders. The participants were male from different countries, at the age between 15 and 40.

Sotamaa mentioned three players' reasons for engaging in modding the game from previous research. First, hobbyists treat modding as an artistic endeavor. Second, modding activities allows people to identify with the games and enhance their enjoyment with the game. Third, game modding allows players to acquire a job in the game industry. The results show that the most common way to begin modding was fiddling with the in-game editor. The combinations created in the in-game editor are unique, but this creation consist of pre-existing elements. This important limitation frequently inspires gamers to experiment with add-ons.

Based on conducted interviews, Sotamaa introduced following different modders' motivations identified in the interviews: playing, hacking, researching, artistic expression and co-operation. The first motive, playing, is quite obvious and is related to individual enjoyment drawn from creating new playgrounds and play-objects. Self-made game environments is extended and also personalized. Second motive appears when modding is seen as a contemporary game cultural manifestation of the “hacker legacy”. Researchers enthusiastically examine the details of the code, they want to clarify the background and the details of the subject matter. Moreover, some modder use the game as a medium of expression. There are also people that visit the forums and participate the mod projects to find other similar minded people. The author emphasized that motivations and roles can change with the time spent on playing and modifying the game items (Sotamaa, 2010, p. 3-9).

Poor (2014) explored the motivations to produce game mods and sense of community that modders have. The author combined quantitative survey data with qualitative interview material. An online questionnaire was run through SurveyMonkey and disseminated across

different channels, including appropriate email lists, game developer lists, and modding forums. Poor collected 111 correctly filled in questionnaires. Most respondents came from the forums of the game companies Sports Mogul, Ambrosia, and Bethesda. Poor assumed that including more than one game issue or game developers increase the variance of respondents and increase the representativeness of the findings. After the quantitative survey, respondents returned to the forums to discuss some selected topics. The author posted open-ended and semi-structured interview questions in order to rise a discussion.

Respondents represent various group of age from 14 to 63, with average of 31. Only 4,5% of participants was female. In terms of individual motives for engaging in game modding, Poor obtained following results. Almost everyone (90,9%) of respondents admitted that they engage in mods production because they want to have more fun with games or see process of modding as fun activity (89,2%). Vast majority of modders (86,4%) create modifications to make the game better for themself. Meaningful group of respondents (84,6%) engage in modding because want to feel proud of the work they made. There are also modders (72,9%) that make the game better for other players. For 71,1% creators, game modding is treated as a challenge and 48,6% talk about modding with friends. Much less (27%) of respondents produce game content to improve the game for the game developers or because they hope to get a job in the gaming industry (20,7%). As results show, vast past of players engage in game modding for pleasure related to playing the game and the process of modding themselves. Less players are geared by prospect of benefits from gaming industry (Poor, 2014, p. 1249, 1252-1253, 1257). The results are presented at Figure 4.

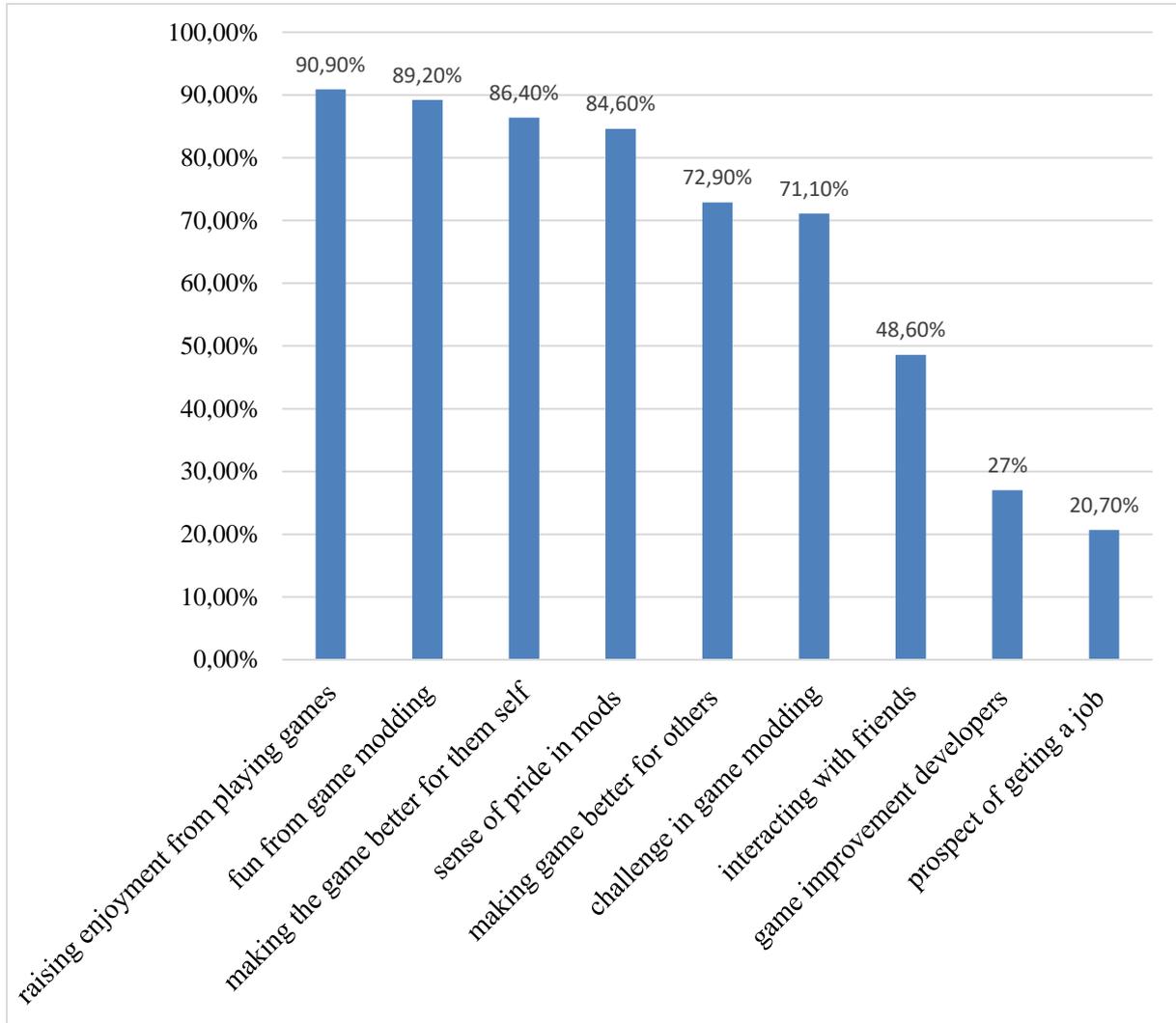
To better understand consumers' motivations of engaging in value co-creation in the context of interactive entertainment and online gaming industry, Roberts, Hughes, Kertbo (2014) conducted a research amongst users of selected online gaming communities of Civilisation IV and Electronic Arts. The authors carried out 17 in-depth semi-structured interviews with participants of mentioned online gaming community. The purposive sampling was applied, not representative. The average age of the player was 27, 14 participants were males and only 3 were females.

As a result, Roberts, Hughes, Kertbo divided motivations on three groups. First group contain individuals' motivation to innovate. Second, motivations to contribute to community innovation activities. Third, motivations to collaborate directly with companies. The author found out an important difference between this three groups of motivations, namely the extent of value co-creation. Individual motivations are characterized by lower level of co-creation value and motivations to collaborate directly with companies show the greatest extent of value co-creation.

Motivations to innovate contain hedonic motivations and motivations related to personal development. Players usually join virtual worlds because they expect positive experiences and enjoyment. Frequently they decide to modify the game content to improve their gaming experience. Engagement in modding activity can be also expression of escapism. Some players start to work on game modifications to forget about the worries of everyday life. Creating game mods and working with various software and tools allow players to upgrade their programming or graphical skills. Players' motivations to improve new skills and competencies are combined with the passion and fun.

Some players prefer work on game improvements in more social and altruistic ways. They cooperate within the community, share their own generated content and assess ideas and piece of works of others. It is important for players to develop friendship and achieve sense of

belonging. When social bonds are formed, users began to feel obligated to help each other's. Moreover, players like to be recognized for their skills and appreciated for their contributions. The authors suggest that this social exchange must be continued to maintain players co-creation efforts.



**Figure 4.** Motives for game modding according to Poor research

Source: Own elaboration

Players are motivated to collaborate with companies by desire for better products. They need to influence on future game developing process. When firms take into consideration suggestions of customers, they are able to co-create some value. Meaningful number of players make plans about potential career in game industry and try to use game modding as an opportunity to show their skills and talents (Roberts, Hughes, Kertbo, 2014, p. 156-160, 164).

Hackman and Björkqvist (2014) also investigated what aspects drive people to modding the game. They were studying motivations among creators of digital game Elder Scrolls V: Skyrim. Skyrim is another part of the cRPG series produced by Bethesda Softworks team.

Player personate the character of a dragon hunter and visits the continent of Tamriel. The appearance of the character can be freely modified and equipped with a weapon, shield or spell (portal devoted to computer games).

Hackman and Björkqvist used an online questionnaire on surveymonkey.com. The authors phrased 7 open-ended questions where they asked the modders how they started modding and questions aimed at highlighting the modders motivations. The questionnaire was posted on forum related to chosen game community. They collected answers from 11 modders. Based on the research results, Hackman and Björkqvist described the following categories of modding motivations: fixing perceived design flaws, personal advancement, social interaction, personal gratification, crafting a vision, artistic motivation, pastime, construction, adding content, crafting an experience. Fixing perceived design flaws is improving already existing game content or adding something, where the modder recognizes the lack of content. Personal advancement is related to using mods to achieve personal goals such as to step up a career, improve skills or reach a specific goal. Social interaction is connected with a need of interacting with the community through discussions, teamwork, assistance and sharing mods. Personal gratification is a category that contains self-motivation for example modding for own pleasure, fulfilling personal goals and desires either through achieving perfection, living out one's passion or simply exercising one's hobby.

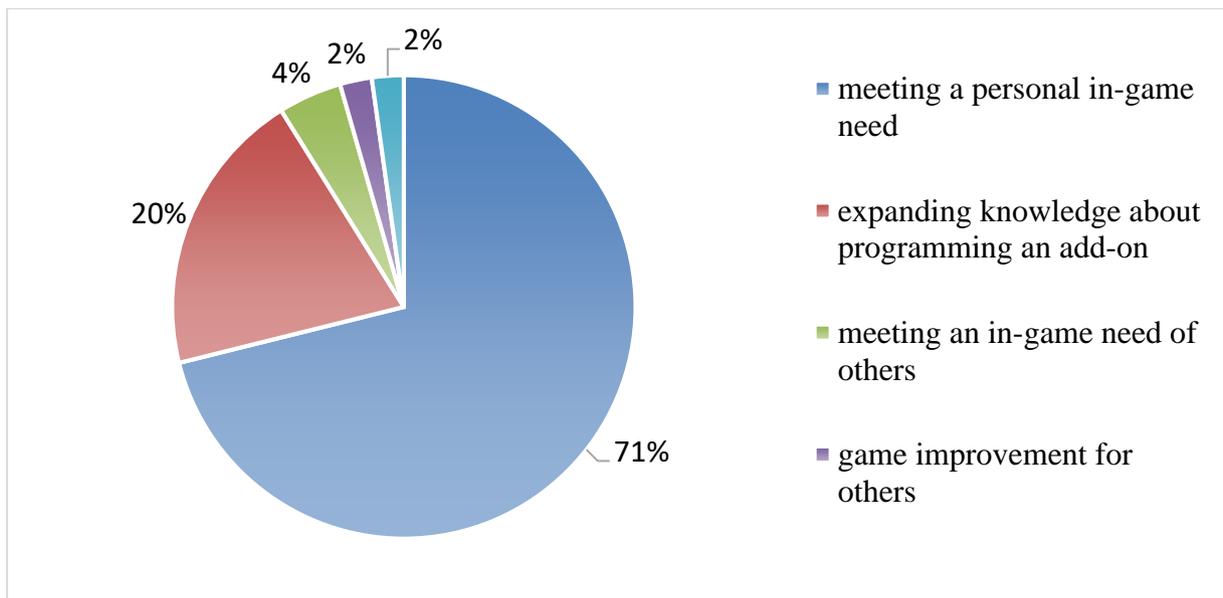
Crafting a vision takes place when players want to feel as designer of game mechanics, narrative, progression, balance or graphical. Some players are driven by artistic motivation. Modders feel as artists and mods are some kind of art that can be shared amongst players' community. Sometimes game modding is treated simply as a way of spending time. Constructions category contains motivation of creating buildings and similar structures utilizing both vision and craftsmanship. Adding content is a category related to expanding on existing content through crafting and adding levels, places, lore, narrative, equipment, characters and quests. Crafting an experience is altering a narrative or creating quests to adding new models, equipment, lands, and character, the modder is motivated by creating a compelling experience for the player. Those categories are interconnected because of their similarities, for example crafting an experience and adding content (adding new content alters the experience) (a qualitative study on what motivations and modifications the modders of Elder Scrolls: Skyrim exhibit).

Ellis (2014) specifically explored the first motivations for engaging in production of game mods amongst add-on developers of World of Warcraft (Ellis, Productive play: Exploring participant motivations of a modding community surrounding a massively multiplayer online game, Doctoral dissertation, Pepperdine University, p. 43). World of Warcraft is a computer game of the genre MMORPG (massively multiplayer online role-playing game) produced by the American company Blizzard Entertainment (official website of the game). The game takes the player to various wars and destructed fantastic world named Azeroth. The player may take the form of e.g. a warrior, mage, shaman, hunter or priest and determine his race and appearance. Strolling the virtual world, user can get snow-capped peaks, discover giant mountain fortresses or cross unfriendly canyons (portal devoted to computer games, virtual encyclopedia).

The research consist of two stages. In first stage the author carried out a semi-structured interviews. Ellis ask participants about their personal experiences around add-on development for World of Warcraft. The interviews was conducted from May to November 2012 with using the Voice-Over-Internet-Protocol system provided by Skype. The gathered information was

used to develop a survey instrument, questionnaire for the purpose of second stage. In second stage a web-based survey was made. Questionnaire was posted on several online forums where add-on development was discussed.

The research included 51 individuals, six interviewees and 45 survey respondents. Ellis identified following primary reasons of players' engagement in game modding. The most newcomers were drawn by a desire to fill a personal in-game need (71%), or an interest to learn more about the technical tasks involved in programming an add-on (20%). The minority of respondents admitted that their initial motivation was external: 4% wanted to fill an in-game need for someone else, 2% wanted to improve the game for all players, and 2% report taking up the task in order to meet others interested in add-on development. In addition, there were no respondents that stated their initial motivation is to building job skills or to seek employment in the games industry (Ellis, 2014, Productive play: Exploring participant motivations of a modding community surrounding a massively multiplayer online game, Doctoral dissertation, Pepperdine University, p. 45-46, 48, 53, 59, 62, 73). Primary reasons of players' engagement in game modding represent figure 5.



**Figure 5.** Motives for game modding according to Ellis research  
Source: Own elaboration

#### 4. CONCLUSIONS

In present consumption of information content several interesting changes can be observed. Numbers of consumers are no longer willing to choose from existing companies' offer. Instead, they prefer to be engaged in process of production and, as a result, obtain more customized product or service. Digital games represent type of commodity which users became a hobbyist creators and perform unpaid labor for others. The phenomenon of game modding plays an important role for the success of a particular game because mods can extend an average shelf life of computer game or obtain information's about customer preferences. Understanding the

motives of engaging in game modding can help companies to strategically manage their interactions with consumers.

According to research review from available literature, it can be said that vast part of players engage in game modding for pleasure related to playing the game and the process of modding themselves. First and foremost, players want to have more fun with games and modding activities give them enjoyment from creating new playgrounds and objects. Especially, when players feels the content lacking in the game. The results also suggest that it is important for players to develop friendship and achieve sense of belonging. Also, they need to cooperate within the community, share their own generated content and asses ideas and piece of works of others. What is more, some individuals create to make game better for other players and they are proud of work that made. The research also identified motivations related to personal development. Creating game mods and working with various software and tools allow players upgrade their programming or graphical skills. Finally, the minority of players decide to create game mods and share their work with others, because they hope to get some benefits from gaming industry, such as jobs as game developers.

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