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Research potential in virtual worlds. An example of Second Life

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ABSTRACT

The emergence of virtual worlds made significant influence on companies' performance. Second Life became a space for various business activities like brand promotion, selling products, education, learning. Increase in use of virtual worlds on the business purposes can be also observed. This article is aimed to give an outlook on the research opportunities in virtual environment on the example of Second Life. In order to achieve the assumed goal, the author employed a literature review. The results show that virtual worlds offer a lot of sources of information's such as community groups, snapshots, video footages, in-game forums that can be utilize on the research purposes. Researchers can also involve avatars in the surveys. Literature review also offer many suggestions how to conduct business research in special game environment and show differences between virtual and real worlds.

Keywords: virtual worlds, computer games, research in games, second life

1. INTRODUCTION

From the beginning of commercial Internet, it can be observed the growth of the spending's for online marketing activity. Growing ranks of users as well as relatively low costs contributed toward this phenomenon. Managers have started to move the budget from traditional media to Internet.

Nowadays, the meaning of Internet is widely acknowledged. New online shops appear all the time, using auction portals to selling products is more prevalent, information's about customers are obtain and data bases are created¹.

Among this trend the new advertising channel emerged, namely advertising in computer games. Although advertisements in computer games constitutes small part of advertising market, vast part of specialists predict dynamic growth in the next few years. Increase in interest in this form of promotion can be related with growing popularity of computer games. The research carried out in Polish market indicated that 75% of people live in Poland played in any kind of game at all. Active players were identified in every age ranges in different gender².

Increase in attention from business, organizations and scholars in diverse disciplines as law, sociology, psychology, math and information systems gained the game based on strolling in virtual worlds³. This kind of online computer games allow users around the world to play with each other's. Players have possibility to know friends and join to virtual community. They become a part of virtual environment and take part in various economic activity. Customers interact with each other's and share the knowledge, experiences and opinions. Many companies and organizations decide to include activities in computer games into their marketing communication strategy (Sharma, Qiang, Wenjun, Qi, 2013). Virtual worlds also provide capabilities for education, learning, and virtual project management (Owens, Davis, Murphy, Khazanchi, Zigurs, 2009).

The purpose of this paper is to investigate research opportunities in virtual worlds on the example of Second Life. To reach the assumed goal a literature review was employed. The next part represents the concept of virtual world. After that the author describe the research opportunity that virtual worlds offer. The last part constitutes some final conclusions.

2. VIRTUAL WORLDS AS A PLACE FOR BUSINESS RESEARCH

Last couple of years, the special place in entertainment and business took the games based on 3D virtual worlds. Users of virtual worlds have own virtual representations named avatars. Vast majority of the avatars have human form but not necessary (Kock, 2008). It can be also an animal or another creation (Ramanathan, Purani, 2014). Users can create the appearance of their avatars by choosing hair color, clothing style and body type. They also control their avatars' behavior through body language, gestures, or touch. These capabilities enable users to express themselves and their feelings (Owens, Davis, Murphy, Khazanchi, Zigurs, 2009).

Communication between residents of virtual environment can take many forms such as private text message, chat, blog, voice calls or video conferencing. The special form is membership in various communities, e. g. fans' groups where participants are focused on particular artist (Laskowska-Witek, Mitreęga, 2014).

¹ Hofman-Kohlmeyer M. (2016), Customer loyalty and information privacy concerns in electronic commerce [w:] Selected aspects of management of contemporary enterprises, ed. A. Barcik, H. Howaniec, Z. Malara, University of Bielsko-Biała, 99-106.

² Mitreęga, M. (2013). Advergaming as the developing form of marketing communication. *Studia Ekonomiczne*, 140, 133-143.

³ Mennecke, B., Roche, E. M., Bray, D. A., Konsynski, B., Lester, J., Rowe, M., & Townsend, A. M. (2007). Second Life and other virtual worlds: A roadmap for research.

Virtual worlds are popular not only amongst individual users. Organizations (e. g. IBM, STA Travel, Sears, BP) utilize virtual worlds in the business context (Owens, Davis, Murphy, Khazanchi, Zigurs, 2009).

There is a wide range of virtual worlds. Virtual world can replicate a real world, where residents can get around similarly to real life, e. g. The Sims, Second Life. Virtual world can also depict fantasy world, which is created on the purpose of the game, have own rules and no connections with real world, e. g. Tribal Wars⁴.

Can be encountered also virtual worlds oriented on the game, e. g. World of Warcraft and Everquest, when the most important things are the rules of the game. Otherwise virtual worlds focused on social aspect like Second Life which gives the users more freedom and enable users involving in various economic activities (Koles, Nagy, 2012).

The most commonly known example of virtual world represents Second Life, game created in 2003 by Linden Labs in San Francisco. The game can be downloaded from the main website for free (Koles, Nagy, 2012). Without any charges First Basic account is available. For the more advanced accounts Additional Basic and Premium player need to pay⁵. In the end of 2007 Second Life had 10 million accounts and average 40 000 users was logged in at the same time. In 2011, amongst American nationals, registrations number reached approximately from 14 to 18 thousand new users per day (Koles, Nagy, 2012).

Second Life have own economic system with own currency named Linden Dollar. The Linden Dollars can be obtained by the virtual exchange office according to exchange rate for national currencies. Residents can also earn money inside the virtual world, for example by taking up work, running virtual business or taking part in special games. In terms of setting up own virtual business, users are free from formalities and charges. For example, residents can create and sell virtual products (Laskowska-Witek, Mitreęga, 2014).

Similar to real life, in Second Life occur purchases and consumption activities. Residents can buy and sell products and services. Currently, real world companies such as Apple, Nike and Nissan have become active participants in the Second Life market (Shelton, 2010). Second Life is also an important new channel for brand-building. It has more than 100 real life brands like Mercedes, Sony, American Apparel. In-game product placement is helpful in building brand awareness and promotions of products (Barnes, Mattsson, 2008).

Next level of virtual world expansion constitutes a process of conducting virtual business research (MacKenzie, Buckby, Irvine, 2013). The big companies such as Toyota, Reebok or Starwood Hotel use virtual worlds as a test market for future product creation. They can check the color or design of products (endra Sharma, Baoku, Lijuan, 2012).

3. RESEARCH POSSIBILITY IN VIRTUAL WORLDS

Business research embedded in-game environment can include interviews and surveys with avatars, recruiting avatar participants, inference from snapshots, video footage and avatars' behavior (MacKenzie, Buckby, Irvine, 2013). The possibility of obtain various information's also offer comments posted on numerous forums located in the game. For

⁴ Rzemieniak, M. (2010). Marketing Aspects of Second Life. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług, (55 Marketing przyszłości. Trendy. Strategie. Instrumenty. Zachowania podmiotów na konkurencyjnym rynku. Konkurencyjność podmiotów na ewoluujących rynkach), 569-578.

⁵ Ibidem.

example, Koles and Nagy (2012) investigated forums in Second Life to learn aspects of business activities, functioning of avatars and their impact on each other.

MacKenzie, Buckby and Irvine (2013) developed practical suggestions which are useful in conducting business research in virtual worlds. Those directives were based on the Llewellyn's framework from 2007. The framework was the result of research carried out in Second Life and contain five following virtual dimensions: the virtual physical dimension, the virtual structural dimension, the virtual agential dimension, the virtual cultural dimension and the virtual mental dimension.

The first, virtual physical dimension pertain to everything what constitutes the physical world, the visual appearance of avatars and objects situated in virtual world. Virtual environment of Second Life illustrates real world items like land, sky, water, gardens or buildings. There are significant differences between virtual and real world. Virtual world is a technological created space that can be flexible accessed by a user through a personal computer connected to Internet. It mitigates most of constraints of real life geographic distances between some locations. When the company decides to conduct a research in virtual world at first time, it is necessary to undertake the appropriate preparations and make a number of decisions. Firstly, company need to choose appropriate virtual world and learn the typical settings of this world in order to achieve the goal of the research. The consequences of the chosen game are for example conditions of registration and charges. Before data collecting researchers need to familiarize themselves with functionality of chosen virtual world, especially with navigation within the world, communication with other avatars, taking snapshots and how to feature survey instruments into virtual objects.

The second, virtual structural dimension encompass the operational processes, roles, rules, information system and legal issues such as jurisdiction, ownership, authority, user agreements and system of accountability. In terms of selected virtual world, researchers need to consider the legal structures managing all activities in the virtual platform and personal ramifications. Privately owned virtual world is commercial entities, governed by the laws where the platform's server is located. Researchers need to familiarize with rules of virtual trading, avatar conduct, copyright issues associated with the use of snapshots, trademarks and intellectual property. Researchers should also accommodate data collection method to the nature of virtual environment and virtual settings. In this dimension, the authors mentioned one more issue, namely ethical standards that determine the right to informed consent, privacy, confidentiality and safety. In terms of ethics, virtual world is a relatively unregulated space, therefore it is very important to obtain ethical approval from the researcher's organization to embed research in virtual world.

The third, virtual agential dimension is related with avatar as a virtual representation of researcher, his interactions with another avatars and membership in some communities. The researchers should be aware of the consequences of avatar's behavior in real life. Avatar behavior wield influence on personal reputation of researcher.

The fourth is virtual cultural dimension. These dimensions have no meaningful differences between virtual and real life. The emergence of a new digital cultures within the world of Second Life can be observed. The crucial element comprises the development of avatar's alter egos throughout unique fashions, language, communication styles and behavioral traits. It is important to understand some cultural conditions when researchers want to engage new countries, organizations and people in virtual worlds as well as in real life.

The fifth, virtual mental dimension articulate that the separation of the virtual world from the real world at the mental level is very complicated and perhaps impossible. Researchers can be affected by powerful sensory domains that exert influence on real world thoughts and feelings. The virtual experiences can be interpreted as a real sensation and can elicit emotional responses and behaviors. The researchers should stay focused on the tasks and project objectives.

Although the abovementioned five dimensions were developed on the example of Second Life, the findings will be applicable to other virtual worlds (MacKenzie, Buckby, Irvine, 2013).

Kaplan and Haenlein (2009) described two ways to use virtual worlds for marketing research purposes. The first one is to make use of Second Life's tools to conduct marketing research in virtual environment at lower cost than in real world. An example represents Repères, research company from French market. Repères evaluated a qualitative research (focus group) at approximately 33% lower cost and quantitative survey at half the cost in comparison to real life project.

The second way utilize the interactivity and impressiveness of Second Life. An example is using online communities. When company is developing new product and want to phase in this product on the market, he also need to endure the cost of testing this product on the market. Testing within virtual world is cheaper and decreases risk of failure of new product on the traditional market. When Starwood Hotels & Resorts company wanted to launch a new range of design hotels, it decided to build the virtual hotel in Second Life at first. When hotel was featured in the game environment, the company obtained the information of what features might be important for users. Information from conducted survey allowed to make improvements in hotel's design before building hotel in real world. Other firms decide to involve the virtual world in the design and customization process of their product from the beginning (Kaplan, Haenlein, 2009).

Second Life is becoming a place to test new products of big and well-known companies. Nissan featured real models of cars in Second Life to get ideas and feedback to design forthcoming models. Second Life as an experimental place allowed to modify the cars' design many times. In addition, the company was able to save the costs and rich a global audience. Cisco was using Second Life for B2B communication. The company presented its products at the event in order to get feedback about these products. Cisco can obtain immediate customer interaction (endra Sharma, Baoku, Lijuan, 2012).

4. CONCLUSIONS

The growing numbers of organizations successfully find the ways to use virtual worlds technology to improve business processes and experiments, confirming the important role of this new means of communication (Owens, Davis, Murphy, Khazanachi, Zigurs, 2009). Virtual worlds are platforms for collaboration and conducting research with low cost that mitigate a lot of disadvantages of traditional world like geographic constraints.

Vast majority of information are obtained from surveys amongst avatars, residents' behavior, snapshots, video footages and in-game forums. Literature review offer some practical suggestions how to conduct research in virtual environment and many examples of research experiences of real life companies.

Vast part of scholars such as MacKenzie, Buckby, Irvine (2013) emphasize a call for academic research that explores further opportunities and challenges of future virtual business research.

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