

SOCIAL INNOVATIONS IN VIRTUAL WORLDS WITH AN EXAMPLE FROM SECOND LIFE

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Abstract

During the past few decades, virtual worlds have been developing and growing with increasing speed and relevance, as technology has become more advanced but also more accessible to large parts of the population. While most people associate the idea of a virtual world with the entertainment industry, some of the virtual worlds, such as Second Life, have proven to be a virtual space that can go beyond the boundaries of entertainment and can provide opportunities for education, training, counseling, or raising awareness about some important topics. The goal of this article will be to introduce the topic of social innovations in a virtual world and to connect this topic with terms such as social capital while reviewing available relevant literature resources and pointing out few examples of social innovations in Second Life. At the end of the article, there will be also recommendations for social policy, as we see virtual worlds as a tool that could eventually find its role within employment policies, social services, education, and other areas.

Keywords

Virtual World, Second Life, Social Innovation, Social Capital, Entrepreneurship

I. Introduction

In recent years the Internet has emerged as one of the most powerful tools that have been changing the lifestyle of human beings on this planet. Today the internet has become more accessible to people and it is started to become part of everyone's daily life routine. Advancement in Internet technology has brought tremendous opportunities for people.

The Internet has impacted every aspect of life, either it is about taking formal education, learning new knowledge or skill set or doing business or shopping. It has changed the way business was done before. Now, jobs are getting done swiftly and requiring fewer people at the workplace, new kind of jobs are getting created that requires new kind of skills and specific qualifications.

In one-way internet has brought advancement and eased the life of a human being and also prompted rapid communication and lifestyle. However, at the same time automation at the workplace decreases the demand for skilled-unskilled labour. Now, fewer people are requiring in the real-life job market. As much as dependence on the internet is growing, an increasing number of people are living in isolation, and are at risk of depression. More people are attached to the computer screen. It is difficult to imagine life without the internet. It has broadened the opportunity to visualise people's dreams. It wouldn't be surprising to say that 'imagination is the limit'. Now, the internet is not limited only to real life but it has given us the power to visualise or even materialise things in the virtual world.

There are several virtual platforms where real life people participate and interact with the counterpart in online platforms, whether it is online gaming, social networking, and another metaverse (virtual) platforms. Technological advancement has allowed experiencing a virtual world that goes beyond the limitation of science fiction or online gaming and made us feel like

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we are living in a parallel world, one which is based on real life and other focuses on virtual life. Every day more people are exploring opportunities in the virtual world. Some may ask what is the difference between a virtual world, such as Second Life and a game, whether it is an offline game meant for one person or online multiplayer game which also can be a platform for the development of social capital and support for social networks in certain sense. The main difference is the tools that are provided to gamers/users, the extent to which they can utilize their social capital and social networks for some other purpose than just gaming. Every game or the virtual world has a different environment and gives the player a different level of freedom in how he or she is going to spend time in that environment. In some games, players have quests that consist of smaller tasks and if those are not completed, often a player can't make progress within the main storyline or some chapter of the story. Even in less straight forward games, there is always a certain system of quests or activities that follow certain rules. In the virtual world, such as Second Life, there is an emphasis on creating an open platform that users can shape, explore and enjoy in whatever way they wish or need. When the platform launched in June 2003, there was one official viewer that was used to access Second Life. However, throughout the years Linden Lab (the firm that created Second Life) allowed third parties access to the servers and provided information on how they can create their viewers with different user environments. Today, there are at least 7 alternative viewers and 4 subset viewers that are used for messaging or managing in-world groups (Second Life Wiki, 2019). Users can choose whichever environment suits them the best. Other rules by Linden Lab need to be agreed on when joining Second Life. Those are often based on ethics and in many aspects remind of the real life norms and standards. For example, there are copyrights that creators must be aware of or there are rules that are meant to prevent cyberbullying within the platform. But unlike in games, everything else in this virtual world is up to the user to decide on. Not just the look of the avatar, but also the environment, buildings, objects and even the games within Second Life are all created by users themselves who learned how to utilize their skills to create the world they want to spend their virtual lives in.

There are more virtual worlds with similar characteristics like Second Life (SL), such as for example Sansar, InWorldz or IMVU, however, in this article, we chose to focus on Second Life, as in our opinion, it is a wonderful platform that offers many tools and supports the creation and development of innovative project. Since many believe that Second Life is emerging as one of the most powerful tools to facilitate entrepreneurship and social innovation. SL is one of the largest online 3D virtual worlds where users create their profiles and design an avatar. They can pretend to be whoever or whatever regardless any age, gender, so give desired shape, size, color of the skin to their avatar and interacts with other avatars which in real life is operated by real people. This virtual world presents tremendous possibilities to explore, interacts and participates in social life, it reflects the users' activities and interests, at the same time SL creates incredible opportunities for individual and business professionals to engage in business activities and earn terrific wealth from this virtual world. Not only this, SL creates an opportunity for learning, educating, or sharing of information without any barrier. Many users use SL for entertainment or while others enter SL to escape from the real world (Huvila et al., 2010). This discussion shows that SL has emerged as a place full of opportunity where like-minded people or with common interests come together to build relationships, create, or recreate things, learn, and explore opportunities or just for entertainment purposes.

In Second Life interaction between individuals happen in intraverse mode and exclusively through Avatar. In most of the occasion, residents hesitate or do not disclose their real pictures. Nevertheless, entrepreneurial activity is thriving in second life and the population of second life is growing immensely. Therefore, building upon literature reviews we aim to understand what makes the virtual world such as Second Life so appealing? How Second Life facilitates social innovation and entrepreneurship development in the virtual world?

Activities in second life require collaborative and collective participation of users, which represents the notion of social capital. Social capital thus refers to both norms and networks that facilitate mutual action and encouraging cooperative behaviour. A study on social capital is on the rise since it plays an important role in understanding people's behavior. On many occasions, such behaviour also leads to business and entrepreneurship development. Social capital considered as a suitable framework for studying human behaviour, while it opens relational, structural, and content dimensions related to sharing and collaboration. Thus, social capital seems to be very relevant to understand business or entrepreneurship development in Second Life. We argue that SL emerges as a potential platform to harness social capital and promote innovation, creativity, and entrepreneurship development in the virtual world.

II. What is Second Life (SL)?

The idea of the virtual world is fascinating and a lot of people around the world are attracted to it (Kaplan and Haenlein, 2009). Although there are several applications such as Facebook, Google, Skype, etc. that facilitates networking and communication through the internet. However, Second Life is different from them, it is a virtual world that enables people to experience networking or communication in a multi-dimensional platform. Second Life a virtual world developed by Phillip Rosedale, and launched by the San Francisco based firm Linden Lab on June 23, 2003. In the beginning, SL was having only 1000 dedicated users (Rymaszewski et al., 2007). The population in Second Life in 2011 has grown to 1.7 billion residents (Floyd and Frank, 2012; Mackenzie et al., 2013).

They use imagination, creativity, and advanced technology to create and recreate structures or environments and engage collectively in a wide range of social activities, from exploring their world, meeting, and socializing with other residents, participating in group activities, creating and trading virtual properties, product or services using the virtual currency, the Linden dollar (L\$). Now SL is one of the biggest 3D multi-user virtual worlds where users also are known as residents create or recreate their avatar, structures, and environments (Gottschalk, 2010). Like in real life, second life residents can also build or buy any products by paying with Linden dollar or real money.

Several people around the world use Second Life for various purposes, some use it for entertainment and interaction while others use it for business development or education. Many institutions such as colleges, universities, clubs, bars, game zone, or fantasy land attract users in SL. Several renowned institutions have already made a presence in Second Life, i.e. Yale, Harvard, Stanford, Princeton, MIT, London School of Economics, NASA, Nike, Coca-Cola, Manpower, eBay, Nokia, L'Oréal, Microsoft, Sun Microsystems, Cisco, Dell, CNN, BBC, NBC, Reuters, and others have virtual buildings in Second Life (Gottschalk, 2010). Some universities or institutions in SL also provides sophisticated health care training, such as eye care, surgery or respiratory diagnosis and other treatment (Gottschalk 2010).

III. How does Second Life work?

According to SL annual report, there are approximately almost 1 million regular users in the SL world, and new people are joining SL every day. Reports say that many people use SL for professional purposes, such as engaging in business, while others come in SL to entertain themselves. There are few steps for a newcomer to join Second Life. A user interested in joining Second Life must create a resident account on the Second Life website (www.secondlife.com) and install the application on his or her computer. Thereafter, the user enters the Second Life platform using his or her login details while choosing an avatar during the process. Once the user enters the platform, he or she immediately becomes a resident of Second life and appears in the welcome area. A welcome area is a place where all new residents of Second Life arrive. In this area, new avatars are welcomed by the members and receive basic orientation regarding

their movement, events, activities, information about free or paid shopping or purchasing of land. Avatars learn to walk, run, jump, or fly freely using a computer mouse or arrow keys, they can speak or perform various gestures or facial expressions (Blasing, 2014). After initial orientation avatars can explore the world of Second Life on their own. There are several free and paid shopping malls, bars & pubs, clubs, beaches, businesses, museums, castles & ruins, coral-reef which attract the residents. Avatars can interact with other avatars and also make a relationship, have partners, involve intimacy, sex, marriage, wedding, or even keep babies. Several residents or business owners who own land in SL can create or design the product on their land, however, residents who do not own any land can also open, create or experiment with new products by using Sandbox. Sandbox is a free land where SL residents can open or experiment with the products they have purchased or created.

IV. Social Capital

The notion of social capital is not new, several scholars have been researching on it for long. It is the foundation of any human relationship since it is based on cooperation and collective action. However, some believe that the idea of social capital rooted in sociology (Westlund, 2003), while others see it from the perspective of the economy (Casson, 2007). According to Casson (2007), social capital is defined as ‘the capitalized value of improvements in economic performance that can be attributed to high-trust social networks’ (p. 221). Bourdieu (1980) believe that social capital is built from two components, the social relationship that an individual has and that gives access to the resources of these relationships, and the amount and quality of these resources (Huvila 2009, p 297). As mentioned in Westlund (2003, p. 77), Bourdieu defined social capital as “the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (Bourdieu and Wacquant, 1992, p. 119).

Social capital is often seen towards strengthening of social capacity and nurturing the social networks, which enhances high-trust relations between members. The purpose of social capital is to focus on social aspects that are based on trust, co-operation, reciprocity, and collaboration within their social networks (Bull and Rory-Duff, 2010; Light, 2013). It is mainly considered as the involvement of people in their community based on a common interest or geographical location (Bull and Rory-Duff, 2010). The social network enables people to interact casually and more often with each other, and share their feelings, experiences without restricting themselves in a specific time frame or rule regulation.

Casson (2007) mentioned that social networks can be explored at four stages, local, regional, national, and global. At local level, social networks are more intimate, and face to face interaction between participants takes place, while at the regional level networking is mainly aim to utilize specific resources, the main attention at the national level is towards policy-related initiatives, while at global level social network focuses on international trade and capital movements.

Huvila (2009) reported that social capital has been studied in many kinds of virtual communities and networking sites, such as Coursera, Ed-ex, Blackboard, Facebook group, Google groups where learners and teachers share their knowledge by coming together in the common platform. However, learning in Second life is very different from these online networking platforms. In Second Life, users who in real life are seated in distant geographical locations, but they interact with each other through their avatar in the virtual world, which gives them a sense of the presence of the partners or members near to them. Second-life gives more lively experience to both learners as well as teachers since they experience the sense of being in a learning space. Participation in these events is voluntarily or through memberships. Some believe that volunteerism can increase social capital in the community (Huvila, 2009). Next, we would

discuss what is entrepreneurship and social innovation and furthermore, we will explore how SL is facilitating entrepreneurship and social innovation environment.

V. What is entrepreneurship and social innovation?

Idea of entrepreneurship is not new it has been already existed. The term entrepreneur is derived from the french word 'entreprendre' which means 'to undertake' or 'initiate'. Although in 18th century philosophers such as Cantillon argued that anyone who setups enterprise and carries out business can be considered as an entrepreneur. Even in Adam Smith's book the 'Wealth of Nations' role of entrepreneur was dominated by wealthy or ruling class. Because he believed that role of entrepreneur involves risk taking capacity and heavy investment for infrastructure development from own money, which once either a ruling class or very wealthy persons were capable to do. Later in 19th century Jean Baptiste Say argued that an entrepreneur must possess several traits such as ability to make judgement, perseverance and knowledge of the world and Business, in the same time he or she should be to coordinate, supervise and administer the business and its activity. By late 19th century and early 20th century the notion of entrepreneur started to change. In this time period, Austrian economist, Joseph A. Schumpeter published his book "theory of economic development", where he emphasises on the importance to innovation. He argued that any business activity cannot be called as an entrepreneurship, until and unless that business involves innovation by any means. Idea of innovation was related with the new way of doing the business, either it is the newness in product, service, or new market that can potentially benefit the business by attracting large number of customers. By 20th century it is commonly accepted that entrepreneurship is a process of strategically carrying out business that involves risks but potentially benefiting in future. Here entrepreneurs are optimist, risk taker, coordinator, innovator, decision maker.

The idea of entrepreneurship was fundamentally related with the profit making for self or for the shareholders who has equally taken the risk and invested on the business. However, a new idea named 'social innovation' has emerged that was more focusing on benefiting society without showing personal interest for the profit. Social innovation as described by many is the process of carrying out entrepreneurial activity with the purpose of solving social issues in innovative way. According to European commission (2019) "Social innovations are new ideas that meet social needs, create social relationships and form new collaborations. These innovations can be products, services or models addressing unmet needs more effectively."

Mulgan et al. (2007) believed that social innovation is about improving the capacities of the society so that they can solve their problems. He argued that social innovation is related with new ideas that work to meet pressing unmet needs and improve people's lives. He discussed that social innovation is very existent in real life for instance, there are several self-help groups and consumer co-operatives, self-build housing; Helpline services, crowdfunding, community gardens; Wikipedia and the open university; microcredit or the fair-trade movement, all these are the examples of social innovation. Van der Have, Robert P., and Rubalcaba (2016) argued that social innovation is not about cutting-edge technology but about solving social problems. According to Cajaiba- Santana (2014), social innovations are set of social practices that resulted from collaborative, premeditated, and goal-oriented activities, with the purpose to bring social change.

VI. The role of social capital in entrepreneurship and social innovation development in Second Life

There is an increasing number of discussions on the importance of social capital towards entrepreneurship development (Casson, 2003; Westlund and Boston, 2003; Bahmani et al., 2012; Light, 2013). Some believed that strong social network structures facilitate entrepreneurship development (Casson, 2007; Light 2013). Entrepreneurial activity can be

described as a pre-determined behaviour of an entrepreneur to start or manage a business or its activity by applying innovation in its approaches. Entrepreneurs take the risks, recognise the opportunity and exploit it accordingly.

In real life, entrepreneurship is associated with starting or managing a business that involves a series of strategic decisions related with organisational growth and management such as investment, resource mobilization, recruitment, sells, production and so on. Therefore, the importance of social networks in entrepreneurship development cannot be undermined. While venturing a business an entrepreneur also expects to get financial benefit from the success of the business. Many believe that entrepreneurship is not necessarily related to profit-making and innovation can be used to empower society without seeking any financial benefit. Such kind of entrepreneurship is popularly related to the idea of social innovation. Second life as discussed above has been evolved as a potential virtual platform for individuals and business professionals to engage in income-generating activities. In this virtual world, social capital gives a thrust to the economy. The transaction of billions of Linden dollars (L\$) takes place in Second life activities by the residents. These linden dollars are also exchangeable to real currency.

According to Linden lab, there are several ways to start innovative entrepreneurial activities and make money. SL user can become a merchant, where he or she can create products or objects and sell them in the virtual market. Some of these merchants regularly participate in charity events and provide all (or part of the) profit from the sale of their products to the charity. There are even regular daily/weekly/monthly or yearly events organized to gather funding for social projects or organizations operating in SL but also in the real world. A wonderful example of such events is those that are organized by the SL project Feed a Smile on a land called The Lavender Field. The project was initiated by German non-profit organization Live and Learn In Kenya International. They organize frequent live concerts where real singers can use either their music stream or in-world voice to sing for all avatars that gather at the place. Avatars who visit these events have an opportunity to help the RL organization Live and Learn in Kenya International by sending the in-game currency that is exchanged for real life currency afterward and used to buy meals, clothes, school supplies and all other necessities for children living in a small village the organization built for them in Kenya.

User can also become a proprietor, they can rent their Second Life property such as land, island, house or so-called skybox (a building or platform in the sky – not only virtual ground but also around approximately 4 096 virtual meters above can be utilized (Second Life Wiki, 2019) and can earn lucrative money from it. Many SL agencies provide lands for sale or rent and most of them are only profit-oriented. However, there are examples of agencies trying to create communities of neighbors, similar to real life neighborhoods. For example, Celestial Estates focuses on creating quality space for virtual living, where their clients can choose to rent parcels of land with a central area for all virtual neighbors to meet together. This agency also does not support so-called ban lines that can separate different parcels and forbid strangers to enter the parcel (residents sometimes prefer to have a parcel with this option for keeping privacy). Forbidding setting up the ban lines creates more sense of open community-based environment.

There are many other opportunities for entrepreneurial activity. Some users can sing or be a Dj at music clubs. For some of the Second Life is a “training platform” that allows them to try to perform and get instant feedback from the audience in a safe environment since they can leave any time they want if they do not feel comfortable enough to continue. In the clubs, one can be hired as a dancer or host as well, greeting and entertaining the visitors.

Second Life has also many museums, art exhibitions, and art events. There are real life painters or photographers who are selling their virtual versions of their paintings, photographs, sculptures, clothes, etc. There is an option to use scripts and make the sculptures animated or interactive. To create unique art, creators often collaborate and create networks of users capable

to work with 3D modeling, animating, scripting, texturing, etc. Photographs in SL can be either represented by real life copies or by originals created in-world, as SL viewers support taking pictures within the platform and then saving it to the computer or to the in-world inventory.

There are many other several opportunities to get jobs. Jobseeker can always find a part-time or full-time job in Second Life. As a salesperson, customer support staff, artist, photographer, talent booker, event organizer, etc. Users of Second life buy or sell property, lands, or islands by paying thousands of linden dollars or in real currency. Property ownership in second life enables residents to monetize their second life products or services by creating a virtual store. For instance, some residents are experts in designing clothes, skin for the avatar, tattoos, various other objects such as cars, helicopters, yacht, or modern houses, fantasy land, romantic parks, sex clubs, live music, hotels, museums, etc...

VII. Education and learning centers

Online or internet-based training are given by teachers and academic institutions using various applications and software, many believe that Second life has attracted millions of participants to teach and learn (Livermore, 2015). Livermore (2015) argued that it is the one most open to educators. A lot of educational institutions such as universities, colleges, schools, and other educational bodies, are exploring SL for teaching and learning purposes. According to Floyd and Frank (2013), more than 50 percent of the SL region is dominated by the education sector. There are 800 universities/ colleges or other educational institutions in SL, and 10 percent of avatars/ residents are directly enrolled in these academic institutions. Semerano et al. (2008), believes that various training simulations enable teachers to create improved course work which advances leadership, teamwork, and technical skills among learners. 3D virtual platform, such as Second Life, can provide opportunities for experiential education, cooperative learning, increasing motivation and contextual learning (Yılmaz et al., 2013), while students and educators meet in the same virtual space in real time, no matter where they are. This can help to give access to education to many people who do not have such opportunity in real life, whether it is due to a handicap or simply the distance from a real life educational center.

Livermore (2015) shared several links of SL places from various fields such as history, arts, science, or technology, which can give great learning experience to anyone. Either it is learning about world war or to know about the Holocaust under Hitler's Nazi regime. Genome island in the SL world provides comprehensive knowledge of Genetics. Globe Theater in the SL world allows participating in their events (Livermore, 2015). There are several professors from various real life universities, such as St. John's University (NY) or New Iowa School laboratory (Katovich, 2014) provides business or technical skills via distant learning mode, in the same time allowing visitors or learners to access various facilities such as accessing of libraries, books, presentations which obviously is effective in the learning experience. Similarly, several other platforms in SL, allow residents to explore and learn from these activities virtually.

These facilities not only help learners but also helps universities or institutions to expand and broaden their boundaries globally in an inexpensive manner. According to reports presented by Michels (2008) in Livermore (2015), there are more than 300 colleges and universities made their presence in SL. Some of these universities and colleges, along with many socially innovative projects and organizations, are associated with Nonprofit Commons (NPC)– a group of volunteers and professionals from various fields whose goal is “to lower the barriers of access to virtual worlds, to create a community of practice for nonprofits to explore, learn, and to investigate the many ways in which nonprofits might utilize this unique environment” (NPSL, 2019). The NPC is managing an in-world group that informs all members about current events, presentations, lectures and even conferences and they even organize a member meeting every Friday where they can share and promote their activities, news, events and discuss important

topics. NPC members can apply for an in-world office where they can present their organization and all important information and message they wish to share with everyone who visits the location (that is accessible to all SL users).

VIII. Employment and entrepreneurial activities

In Second life offers great prospects from several job opportunities which are created by residents or business groups for residents. Many residents discussed that finding a job in SL is easier and quicker than Real life. Several real estate's owner's employee avatars as a real estate agent to promote their houses. Clubs, Disco, Bars owners also employee avatars for the management or to attend and to attract residents in their events. Not only this there are several communities within SL or in different internet sites such as Metabizlist business directory or job agency that provides employment opportunities to residents with various skills and expertise. They offer various positions with lucrative linden money. Museums, or any other training places, need avatars to orient visitors. A report of Fortune magazine's David Kirkpatrick, in December 2006, more than 17,000 residents have had positive cash flow in Linden dollars. According to the study made by Tudor 54.2% of the participants will prefer to participate in SL recruiting events. His studies indicate that more than 70% of the participants in his studies would consider visiting SL if companies recreated their virtual headquarters in Second Life. Many people who haven't explore SL yet would be interested in giving a try to understand and learn more about the environment and work opportunities to get a feel of it. Although many also believe that job search would not be easy in the SL world since first, they need to understand how avatar works, and to create a look or style of avatar, which is very technical and time-consuming. Especially in the present time when most of the residents compete to give perfect realistic looks to add in their Avatar skin. In spite of its SL is undoubtedly increasing its presence and attracting new residents every day. The great thing about second life is it attracts social capital and enhances its strength by using collaborations and equal participation. They use the approach of social innovation to empower other residents around the world in technical or their behavioural aspects. For instance access to most of the activities in second life s free. Either it is participating in a museum or any entertainment events. Several universities provide training or courses free of cost, they offer study materials free, which in real life would be expensive to access, more importantly, personal interactions with experts behind individual avatars influences learning strategy positively.

IX. Future of virtual worlds in context of social policy

Virtual worlds create many opportunities in the field of innovation, entrepreneurship or education. Platforms that allow users to create their own environment and objects are giving them their chance to grow, to learn, to establish their own networks, and last but not least, very often it also gives the users a chance to find something they are missing in their real life. Virtual worlds, such as Second Life, can be an effective complementary tool to provide services or to help people getting education and training they need in order to meet their real life needs, to integrate into the society or to the labour market, while the only condition to access this tool is to have a computer and internet connection.

In this article, we mentioned just few examples, but there have been numerous projects and organizations trying to reach social goals in Second Life. Many non-profit organizations have been providing social counselling to people who encounter issues while trying to reach help in real life, such as people with disabilities or those who do not have access to that kind of counseling help in their town or region. The difference from an ordinary online counselling (for example via e-mail or chat apps) is that virtual world can provide an experience (that can be entertaining and therapeutic) and information that can be presented in a different way from the

ordinary written text document we usually have to go through in real life in order to find answers to our questions.

There is also an important aspect of mutual community support that many projects and organizations using virtual world can build up on. Users can find support in the virtual communities of people with same problems, interests and needs, without having to deal with some of the barriers they can face in real life. One of such barriers can be fear of being labeled as a person who is having certain handicap or problem. There are many people who would prefer to stay anonymous while seeking help or would even decide not to reach for help if they were to provide personal information. Virtual world, such as Second Life, can be a solution in such situation, as the only personal information that is shared with public is the information user is willing to share.

As a space for learning and entrepreneurial activities, virtual world can be also an interesting tool for employment policy. Users can get training and education in various fields and if they decide to be a creator, they can also improve their computer skills, such as work with photo or audio editing software, 3D modelling software or scripting. This can help to improve the employability of people who are facing obstacles while trying to integrate into the labour market. In this article, we also described many entrepreneurial opportunities which could be perceived as support to those who can't find job in real labour market, teaching them some basic entrepreneurial skills while also providing a chance to earn Linden dollars which can be exchanged for real currency.

Since virtual worlds can present information in a different, interactive, contextual way, it can be an effective tool of prevention of pathological behavior. Either through education or direct communication with target groups, we can use Second Life or other virtual worlds to raise awareness about some issues, to create space for dialogue and to provide safe environment where every topic can be freely discussed. NGOs often organize presentations that focus on topics such as internet security, virtual worlds security, but also address real life issues, such as domestic violence, racism, global warming and many others.

X. Conclusion

Second Life is no longer considered as a platform for virtual online gaming. It has potential for growth in multi-directional sectors, while aiming at bringing individuals, groups and communities together and helping to improve their skills and knowledge by creating a learning and development environment. People around the world are using metaverse Second life innovatively for various purposes. In this article, we introduced many examples of how virtual worlds, such as Second Life, can provide opportunities for social innovation, growths of social capital and entrepreneurial activities. We argue that 3D virtual platforms that allow users to create content and environment themselves can be an effective complementary tool for education, training, counseling, group and community work or for prevention of pathological behavior. Virtual worlds will most likely continue getting more attention in the future, especially with the development and increasing accessibility of virtual reality (VR). We therefore suggest that this area, its strong and weak aspects and its opportunities in the context of social innovations, education and entrepreneurship shall be explored further, as it can contribute to finding solutions to some of the current and probably also future problems of the society, such as exclusion, unemployment or inaccessibility of services.

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