Chapter 10

Virtual Learning Communities of Practice in Metaverse

Gaia Moretti
Libera Università Maria Ss. Assunta, Italy

Eliane Schlemmer
Universidade do Vale dos Rios dos Sinos, Brazil

ABSTRACT

Characteristic of the contemporaneous age, and taking advantage of the diffusion of digital technologies, virtual communities are diffusing in the organization’s culture such as places where members can learn, work, or simply meet. The evolution of the same digital technologies, and the development of Digital Virtual Worlds in 3D (such as Second Life), permits now to think of new tools for the organizational communities and for communities in general that could build new knowledge, share common practices, and work together in immersive and collaborative spaces. Digital virtual spaces can contribute to change the traditional structure and definition of virtual communities, and can also contribute to their digital development, in the field of participation.

INTRODUCTION

This paper aims to present the possibilities offered by some new technologies and cultural paradigms to the organizational world, particularly investigating the concept of Virtual Learning Community of Practice in the context of 3D technologies. Therefore the concept of Metaverse and the characters of Metaverse technology will be useful to define the possibilities that could be realized in the field of the Virtual Community.

Starting from the importance and the characters of the so-called “contemporaneous Age”, and from the centrality of the digitalization process, we are going to describe Virtual Learning Communities of Practice as communities that produce knowledge, make subjects express their emotions, create spaces of collaboration and cooperation. The success cases of UNISINOS (ECODI Ricesu e ECODI PPGs) will show the role of Metaverse technology in the creation of several Virtual Learning Communities of Practice.

DOI: 10.4018/978-1-60960-854-5.ch010
BACKGROUND

According to Castells (1999), the contemporaneous age can be called ‘Information Age’: main processes and functions are growing organized in Nets. These Nets put in order a new social morphology, and the diffusion of Net logic modifies productive, cultural and social processes, and also experience processes. Therefore, Net is a system of interconnected elements that can also connect to other elements, creating other Nets and creating “new orders in the world and in heads” (Eco, 2004, p. 162).

The new paradigm of Information Age consist in the capacity of information and communication technology in diffusing the Net into the social structure. The power of information and communication flows is more important and stronger than political power: to be or not to be present in the Net and in relation with other nets is a crucial element to dominate and transform society. In this framework, virtual communities play an important role, because communities live in Nets and constitute Nets: the same constitution of the Net passes through people that are in it, building relations with other people, building infinite Nets.

Moreover, according to Veen e Vrakking (2006), a new generation is emerging in the contemporaneous age: the Digital Natives. This generation lives absorbed by digital/virtual tools and environments, using them daily to connect with people, especially building communities.

According to Levy (1999) and Palloff and Pratt (1999), virtual communities are defined as electronic Nets of interactive communication, constituted by sharing interests, knowledge, common projects and tools to realize it, established in a cooperation process. Communities can also be characterized by identity processes (Turkle, 1999; Wenger, 2006): members of communities experiment ‘sense of membership’ because of sharing common contents. Members are involved, moreover, by social relations and interactions: because of this, Levy (1999) and Castells (1999) state that the importance of Digital Technologies is in offering the possibility of creating and implementing communities. In developing communities, emotions play an important role: members of communities express themselves online through different tools, not only writing; voice, ‘smiles’ and graphic/video expressions contribute to communicate different feelings. Therefore, different digital technologies offer the possibility of members sharing emotional ties; in the case of Metaverse technology, this possibility is developed by textual language, voice, graphics and sign language. It means that the members’ personality can be expressed by his way of writing, his opinions in a discussions, the customization of his own avatar and so on; Virtual Learning Communities of Practice are surely involved in this process, and are based on maintaining relations and developing new interactions.

Neal Stephenson coined the term Metaverse in his postmodern novel Snow Crash (1992), where it represents a fictional virtual world. For the author, Metaverse is a lifelike private and public utility, an extension of the physical world’s real space within an Internet virtual space. Therefore, Metaverse is constituted in cyberspace, and according to Lemos (2002) it is the technological incarnation of the old daydream of creating a parallel world, a collective memory, with the imagery, myths and symbols, pursuing man since ancestral times, and is materialized with the creation of DVW3Ds, where subjects represented by avatars experience immersion in a digital virtual environment, by interacting and creating several 3D spaces for living and living together, thus allowing parallel worlds to emerge. DVW3Ds are multimedia environments (Boccia Artieri, 2004), permitting communication through supporting technologies, 3D representation, computer-graphics modelling. DVW3D are materialized through 3D graphic representations and require human actions to come into being. Without the acting of e-citizens through their avatars, DVW3D would not come about at all. Any action by the avatars has real-
Related Content

Cubios Transreality Puzzle as a Mixed Reality Object
www.igi-global.com/article/cubios-transreality-puzzle-as-a-mixed-reality-object/188478?camid=4v1a

Multi-User Virtual Environments for Physical Education and Sport Training
Pooya Soltani and João Paulo Vilas-Boas (2019). Teaching Cases Collection (pp. 20-41).
www.igi-global.com/chapter/multi-user-virtual-environments-for-physical-education-and-sport-training/225121?camid=4v1a

A Structure Analysis of Keiretsu of Toyota
www.igi-global.com/chapter/structure-analysis-keiretsu-toyota/17790?camid=4v1a

Pedagogical Responses to Social Software in Universities
www.igi-global.com/chapter/pedagogical-responses-social-software-universities/21382?camid=4v1a