Introduction to the Working and Gaming in 3D Virtual Environments Minitrack

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In his famous science-fiction novel Snow Crash, Neal Stephenson envisioned the evolution of the Internet into what he called a "Metaverse", a three dimensional (3D) virtual reality-based space where people interacted with each other through their avatars (i.e. graphical representation of themselves) and manipulated virtual artifacts. Since the last few years, Metaverses have become a reality with the development of virtual/mixed reality applications, called 3D virtual worlds. A growing and strong interest has emerged in the field of information systems (IS) around the characteristics and possibilities of these virtual worlds. Virtual worlds have now evolved into sophisticated social systems, such as Massively-Multiplayer Online Role-Playing Games (MMORPGs), where millions of people chat, collaborate and compete with each other through their avatars. Beyond the entertainment and game play features, virtual worlds are evolving towards business needs, where social, organizational and economic interactions are the main drivers. In fact, today's virtual worlds bring a variety of opportunities to organizations with respect to collaborative value creation and team work. Several companies such as IBM, Intel, Cisco, Microsoft, e-Bay, Accenture, and others are already using virtual worlds for their team processes – meetings, seminars (internal or with partners), training/certification, recruitment, or simply for socialization (virtual events).

Distance education or e-learning finds itself in the midst of these technical developments and is constantly reinventing itself to take advantage of the new opportunities offered. An important application of 3D virtual worlds concerns Serious Games. Serious Games are digital games and equipment that go beyond pure entertainment to achieve an educational agenda. They combine computer or video games with a serious intention such as an educational, informational, communicational, marketing, or ideological purpose. Serious Games are widely used in many sectors, such as military (e.g. America's Army), health (e.g. Pulse), recruitment simulation (e.g. Star Bank The Game), and advertisement (The Coke Zero game).

This minitrack covers issues in virtual worlds and metaverses related to collaborative teamwork, recreation and e-learning. This year, three papers were selected for inclusion in the proceedings.

The first paper, "Repositories of Community Memory as Visualized Activities in 3D Virtual Worlds" by Fominykh, Prasolova-Forland, Hokstad, and Morozov, test a prototype to capture, crystallize, and reuse learning community memory. The results suggest that repositories of 'fluid' community knowledge can be successfully created and used.

The second paper, "Explaining the Development of the Excessive Use of Massively Multiplayer Online Games: A Positive-Negative Reinforcement Perspective" by Lee, Cheung, and Chan, develops and tests a model to explain excessive use of massively multiplayer online games (MMOGs). Their results suggest that both positive reinforcement (i.e., perceived enjoyment and the associated positive affect) and negative reinforcement (i.e., withdrawal and the associated negative affect) have strong influence over the development of the excessive use.

The final paper, "You: What Generation Y thinks about Corporate Social Networking Applications?" by Boughzala presents an exploratory study on the perceptions of Gen Y on organizational use of social networking applications. The results present interesting insights on the perceived benefits and usage of these applications.

The papers in this minitrack discuss different aspects of collaboration and team work in virtual worlds. Each offers a unique contribution to our understanding of how virtual worlds could be used to support work and entertainment processes within and between organizations and individuals. We commend them to your reading, and hope they will inspire your research and practice.