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

Gert-Jan de Vreede
The Center for Collaboration Science
University of Nebraska at Omaha
gdevreede@unomaha.edu

Moez Limayem
College of Business
University of South Florida
MLimayem@usf.edu

Imed Boughzala
Telecom & Management Sud Paris
Institut TELECOM, France
imed.boughzala@it-sudparis.eu

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 gameplay 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).

As collaboration has become the predominant modus in which organizations accomplish work, recent surveys show that collaboration is a key driver in organizational performance and may contribute more to organizational performance than strategic orientation. Therefore it is important to understand how virtual worlds can best be used as an environment for organizational collaboration and co-creation. Thus this minitrack covers collaboration issues in virtual worlds and metaverses. This year, seven papers were selected for inclusion in the proceedings.

The first paper, “The virtual ‘me’ is the actual me: Self-disclosure in Virtual Environment” by Hooi and Cho, tested a research model to investigate how self-disclosure is affected by avatars in online communities. The second paper, “Experience Richness: Effects of Training Method on Individual Technology Acceptance” by Luse, Mennecke, and Townsend, extends TAM and UTAUT by studying individuals receiving different training methods.

The third paper, “3D Virtual Environments and Corporate Learning: An Empirical Investigation of Benefits” by Massey, Montoya, and Wu, develops and empirically tests a model that examines the relationships among organizational participants.

The fourth paper by Nordbäck and Sivunen, “The influence of 3D virtual world technology on leadership behaviors in virtual team meetings”, investigates virtual team leadership in a virtual world.


The sixth paper, “Social Affordances for People with Lifelong Disability through using Virtual Worlds” by Stendal, et al., explores the role that virtual worlds play in facilitating people with disability to experience a self-perceived improvement of social participation, independence and well-being.

The final paper, “Characterization and Evaluation of Serious Games: A perspective of their use in higher education” by Boughzala, Bououd, and Michel uses design science to propose, develop, and test a new serious game evaluation grid to support the selection of the most suitable serious game for a specific educational goal.

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 processes within and between organizations and individuals. We commend them to your reading, and hope they will inspire your research and practice.