

Introduction to Virtual Worlds



Battle Command Knowledge System

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US ARMY COMBINED ARMS CENTER

Virtual Worlds

A Short Introduction to Second Life



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Technology Trends

- If present trends continue the current distinctions between 3D games, 3D simulations, Massive Massively Multiplayer Online Games (MMOGs) and Virtual Worlds will largely become meaningless within 5-10 years as all will end up converging as some form of online virtual world. The current industry practice of using standard 3D gaming and rendering engines to build these software products will ensure this.
- Virtual world have matured over the last 5 years and are rapidly advancing in user capabilities.
- Virtual Worlds will eventually replace most existing 2D Internet online collaborative, social learning and social networking software such as Community of Practice Software, Adobe Connect, Blackboard and other similar software products. The recent addition of VOIP capabilities to existing virtual worlds guarantees this.
- Virtual Worlds will eventually encompass all activities that you wish to do online with others, and be seen for what it is – The 3D Internet.



Why are virtual worlds superior to the existing online 2D knowledge management software?

- Virtual worlds offer possibilities for synthetic experiences, role playing, gaming, training and immersion not easily created in the real world or within current 2D software like Tomoye ECCO, AKO or SharePoint.
- Virtual worlds offer superior synchronous modes of human collaboration and virtual teaming not currently available at equivalent levels in most 2D software like Adobe Connect, Tomoye ECCO, AKO or SharePoint.
- Virtual worlds provide superior social networking and learning opportunities not currently available at equivalent levels in most 2D software like Tomoye ECCO, AKO or SharePoint.
- Will eventually replace 2D community of practice software like Tomoye ECCO, AKO or SharePoint as well as most other forms of 2D online collaboration and connection software.



Learning in Three Dimensions:

Experiencing the Sensibilities and Imagining the Possibilities



Dr. Tony O'Driscoll (AKA Wada Tripp)

Current shortfalls of most existing virtual world software

- Focus almost entirely on synchronous collaboration to the exclusion of asynchronous capabilities.
- Does not allow the average user to upload documents and store them for download by others at a later time.
- Does not allow the average user to leave behind asynchronous discussions for others to read and reply to at a later time.
- Have security concerns. This trend is being addressed.
- Requires a client to be installed on a users computer. The industry is addressing this and is moving towards a browser based standard solution.
- Is beyond the capability of most government and military computers to use at present due to insufficient graphics card capability. This is being addressed and should largely be corrected by replacement system acquisition within 3-5 years.
- Many government and military IT departments currently block access to such virtual worlds by government or military personnel.



Military Virtual Worlds are a Reality Today

- US-Nexus virtual world created and operated by NGB J-7
- USAF Huffman Prairie Island in Second Life
- Team Orlando projects (DOD/RDECOM/PEO STRI)
- National Defense University Island in Second Life
- Navy World



Knowledge Management is the key to success of Virtual World communities

- Virtual worlds are composed of online human communities no different than existing online 2D communities of practice. While mechanics are different in virtual worlds the needs of humans are the same, if not more acute.
- Virtual Worlds that must produce results must be facilitated and managed just as any other online community is managed to ensure achievement of those results.
- Current efforts in Virtual Worlds often fail to recognize the essential need for knowledge management (KM) as part of the overall effort. The software is not enough by itself to ensure success of the project.
- Collaboration and interaction is greatly enhanced when KM is present to manage and facilitate it.



Why facilitated virtual world communities will always do better than those that are not facilitated

- Facilitators put a human face to the community which members can reach out and connect to. It keeps it personal for the community.
- Facilitators moderate discussions, presentations, meeting and events to ensure they stay on focus with community goals.
- Facilitators review and approve content to ensure it is relevant to the community before allowing it to be seen by the members.
- Facilitators constantly review community content items to ensure they remain up-to-date and still relevant to the needs of community members.
- Facilitators are able to exploit unexpected or emerging opportunities that surface to the benefit of the community.
- Facilitators keep the environment civil by enforcing behavioral standards established by the community. The lack of such enforcement is a major issue with most virtual worlds!
- Facilitators are in-tune with the pulse of the community and can respond quickly to implement community member desired changes in order for the community to remain relevant and constantly evolve.
- Facilitators help to connect members with SMEs or other members.
- Facilitators recruit and train volunteers from among the community to act as greeters, SMEs and mentors for the community.



Example #1

- NOAA island in Second Life





Example #2

- NTC Negotiation Train-Up for a BCT



FORTERRA SYSTEMS INC

NTC DEMO

NTC DEMO

MS INVO

NEGOTIATION

Example #3

- Air Force MyBase concept brief



How do I get to the Virtual Worlds for Advanced Learning Community of Practice (CoP)?

- The Virtual Worlds for Advanced Learning Community of Practice is located at: <https://acc.dau.mil/virtualworld>
- You must first request membership by going to the following URL, filling out the membership request form and submitting it: <https://acc.dau.mil/> (At top left side of the page locate "*Request and Account*")
- Fields on the membership request form marked with an "*" are required, the rest are optional.
- In the "*Reason for Request **" field located at the bottom of the form be sure to type in: "*To participate in the Virtual Worlds for Advanced Learning Community of Practice*"
- The more information you provide on yourself the richer the community of practice experience will be for you.
- Allow at least one full working day for screening and approval of your membership request by the Defense Acquisition University (DAU) Acquisition Community Connection (ACC) staff.

