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Virtual Worlds in Reality

1

Virtual Worlds

“Eighty percent of active Internet users will have a “second life” in the virtual world by the end of 2011.”

Gartner Group

2

Virtual World Definition

- “An electronic environment that visually mimics complex physical spaces, where people can interact with each other and with virtual objects, and where people are represented by animated characters.”

- (Bainbridge, W. “The Scientific Research Potential of Virtual Worlds,” *Science*, 317, 472-476.)

3



HiPiHi



Entropia



Virtual World Promise

- ✦ Extension of existing capabilities
- ✦ Envisioning of new ways of interaction
- ✦ Support for wide range of areas
 - Business of all sorts
 - Medical practice
 - Quality of life
 - Government provision of service
- ✦ Mix of pleasure and work
- ✦ Creative solutions to old problems



Support for Medical Practice

- ✦ Doctor and staff training
- ✦ Fewer cadavers
- ✦ Operating room coordination practice
- ✦ Pandemic simulation
- ✦ International coordination exercises
- ✦ Hazard drills
- ✦ Removal of uncertainty
- ✦ Team building
- ✦ Multi-stakeholder conferences



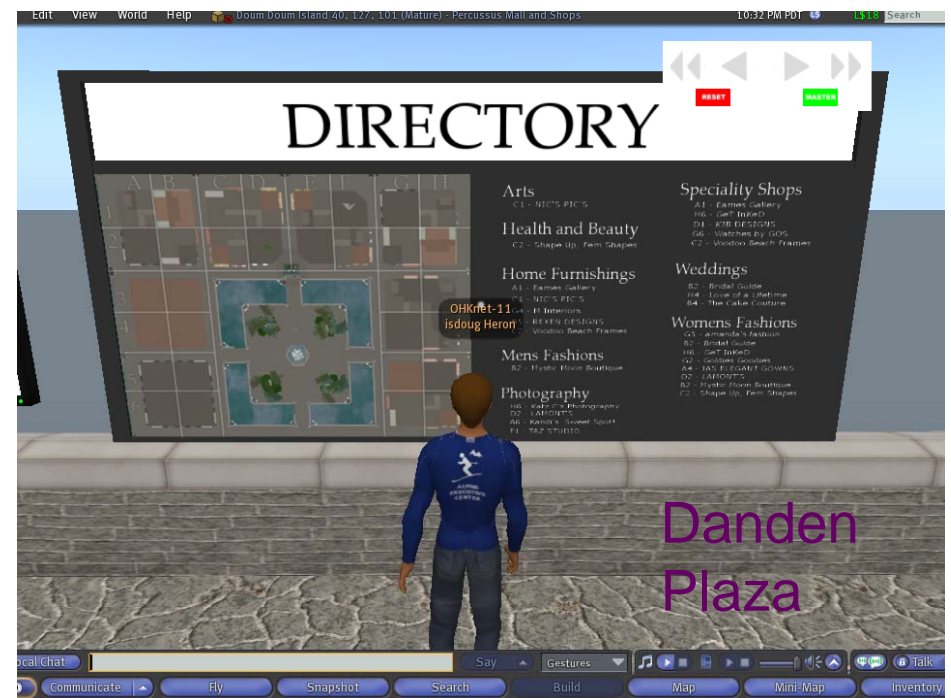


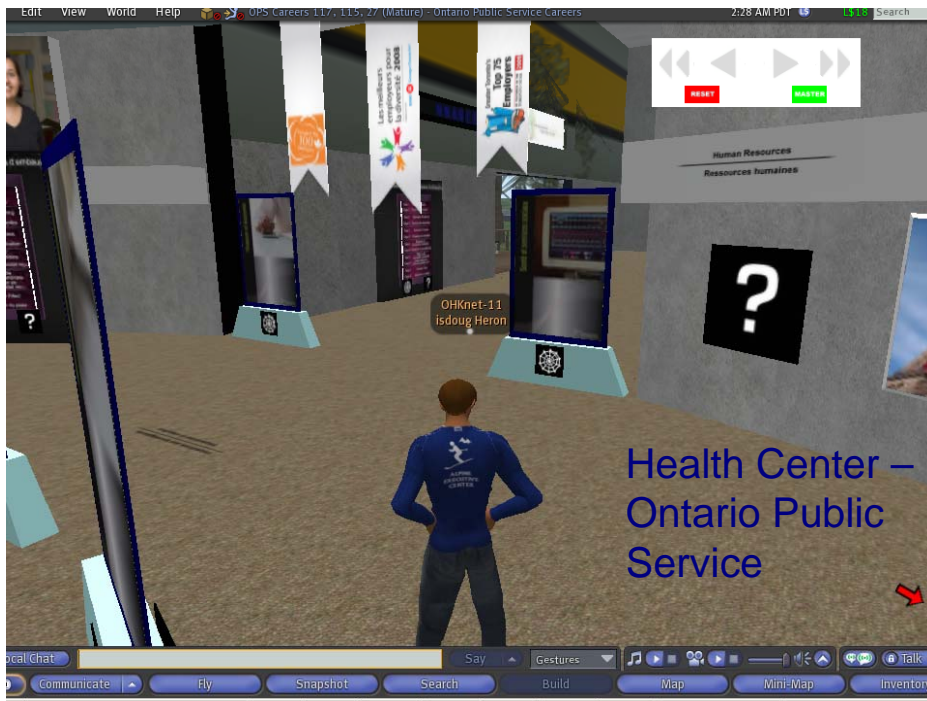
Thanks to IBM
 - Craig Becker

Collaborative Training for Environmental, Health and Safety



Thanks to Eilif Trondsen,
 Director, Virtual Worlds @
 Work, SRIC-BI





Current Virtual World Reality

- ✍ Existing applications neither strikingly creative or well received
- ✍ Most virtual world sites suffer from lack of visitors
- ✍ Technology has a long way to go
 - Performance
 - Reliability
 - Poor interoperability
 - Human-computer interface
- ✍ Robust business models yet to emerge



14

Conclusions

- ✍ Does this mean that virtual worlds are bad or not useful or will not survive – **NO**
- ✍ What is does mean is that additional care needs to be exerted
 - Alignment of task and technology
 - Selection of theoretical evaluation base
 - Stability of technological environment
 - Facilitation and support
 - Management of expectations
- ✍ Opportunity for supplemental task support



15

Issues

- ✍ Resolution of technical issues
- ✍ Avatar dynamics
- ✍ Appropriateness of spatial metaphor
- ✍ Collective appeal and usefulness
- ✍ Corporate receptiveness and adoption
- ✍ Cultural dynamics
 - segmentation of work and play
 - Communities of interest
 - Social differentiation
- ✍ Appropriate evaluation approaches



16

Place vs. Space

Space

- Theoretical underpinnings from Greek philosophers, sociologists, cognitive psychologists, architects, etc.
- Multiple conceptualizations
 - ◆ Abstract and unbounded
 - ◆ Concrete
- Directionality
- Does not have a locally-specific meaning
- Sum of all places



17

Place vs. Space

Place

- Psychologically meaningful domains where people form identifications to locations
- Sharing of experiences
- Appropriate behaviors, languages, practices are co-constructed
- Familiar
- ◆ Challenge to preserve supportive elements of place while taking advantage of the extra dimensions afforded by space



18

Welcome to the Alpine Executive Center

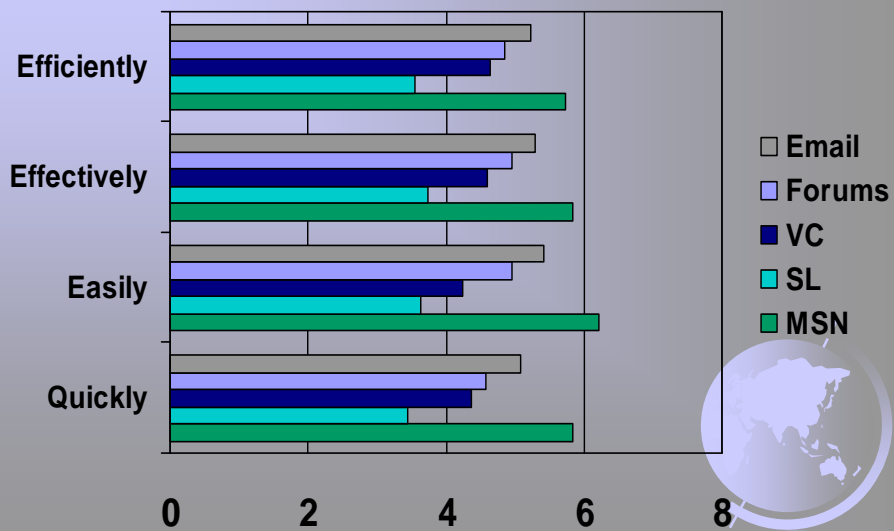
“Active Spatial Immersion”

Virtual Meeting Support

19

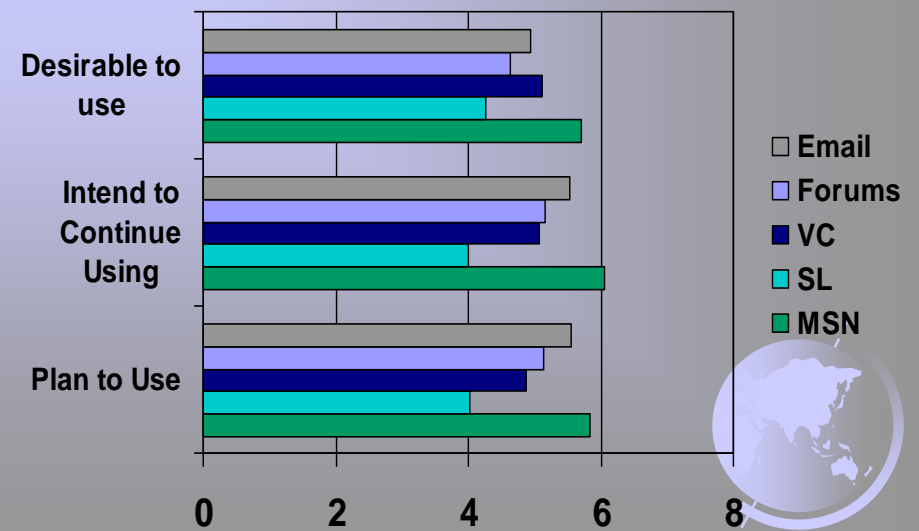


Perceived Usefulness



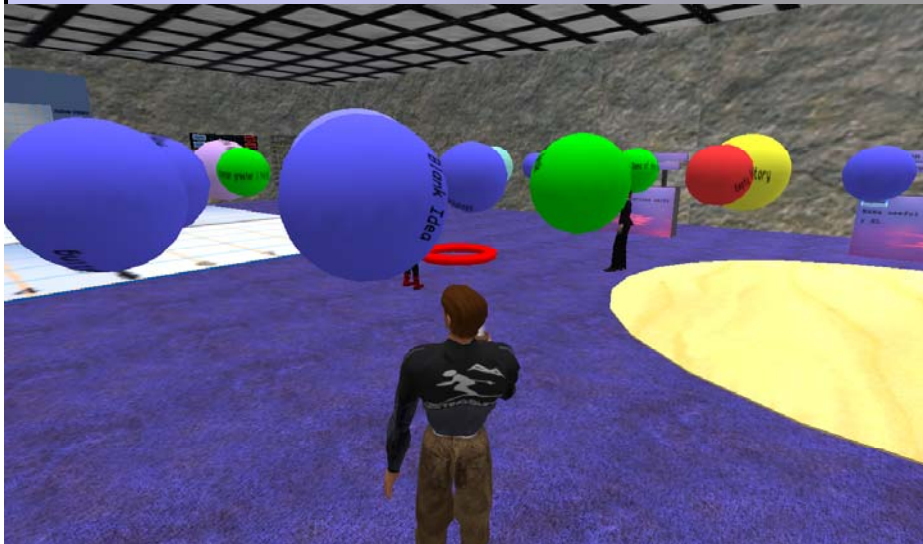
21

Intention to Use



22

Universe Metaphor



But Bright

The virtual world
future is challenging!!

24