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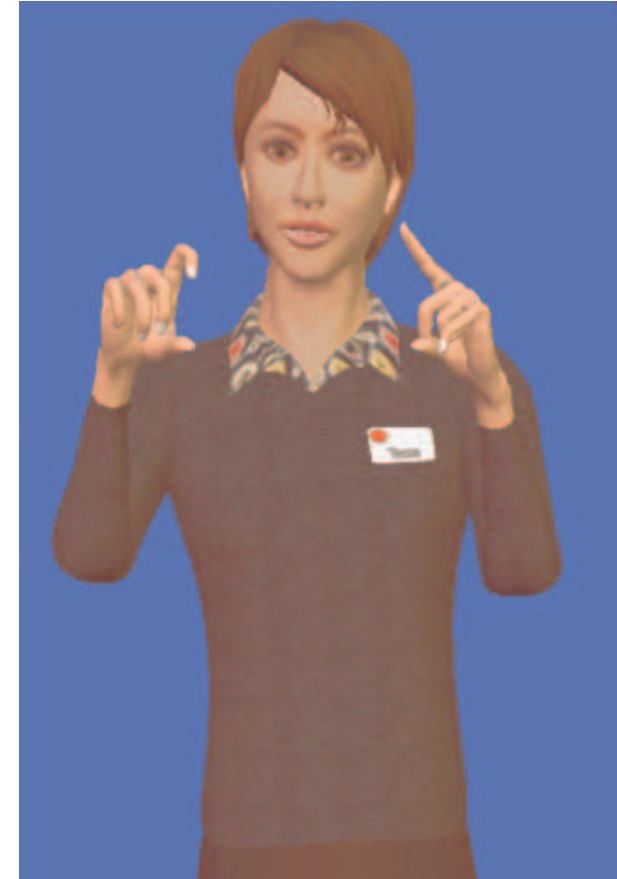
A look into the future of Internet : the Web3D



- Web 2.0 and Social Networking (Facebook, ..) are changing the way we join networks and the way we share ideas and relationships.
- Different websites and portals are already interacting with users via avatars (virtual alter egos) automated
- In the coming years more and more people will enter the Internet with avatars which interact with the surrounding environment

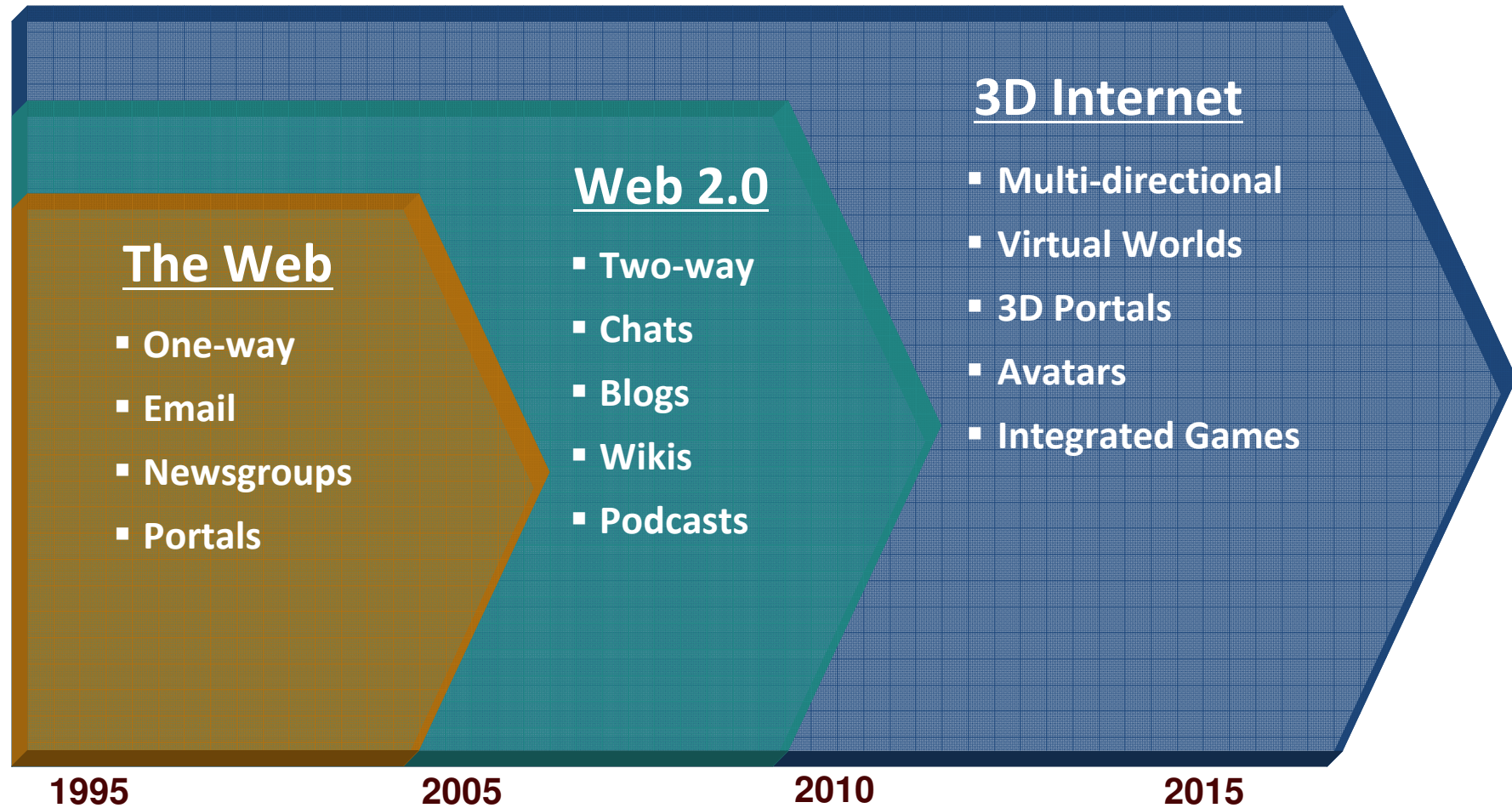


- Is the way to access the Internet for the new Z generation (children born after 2001)

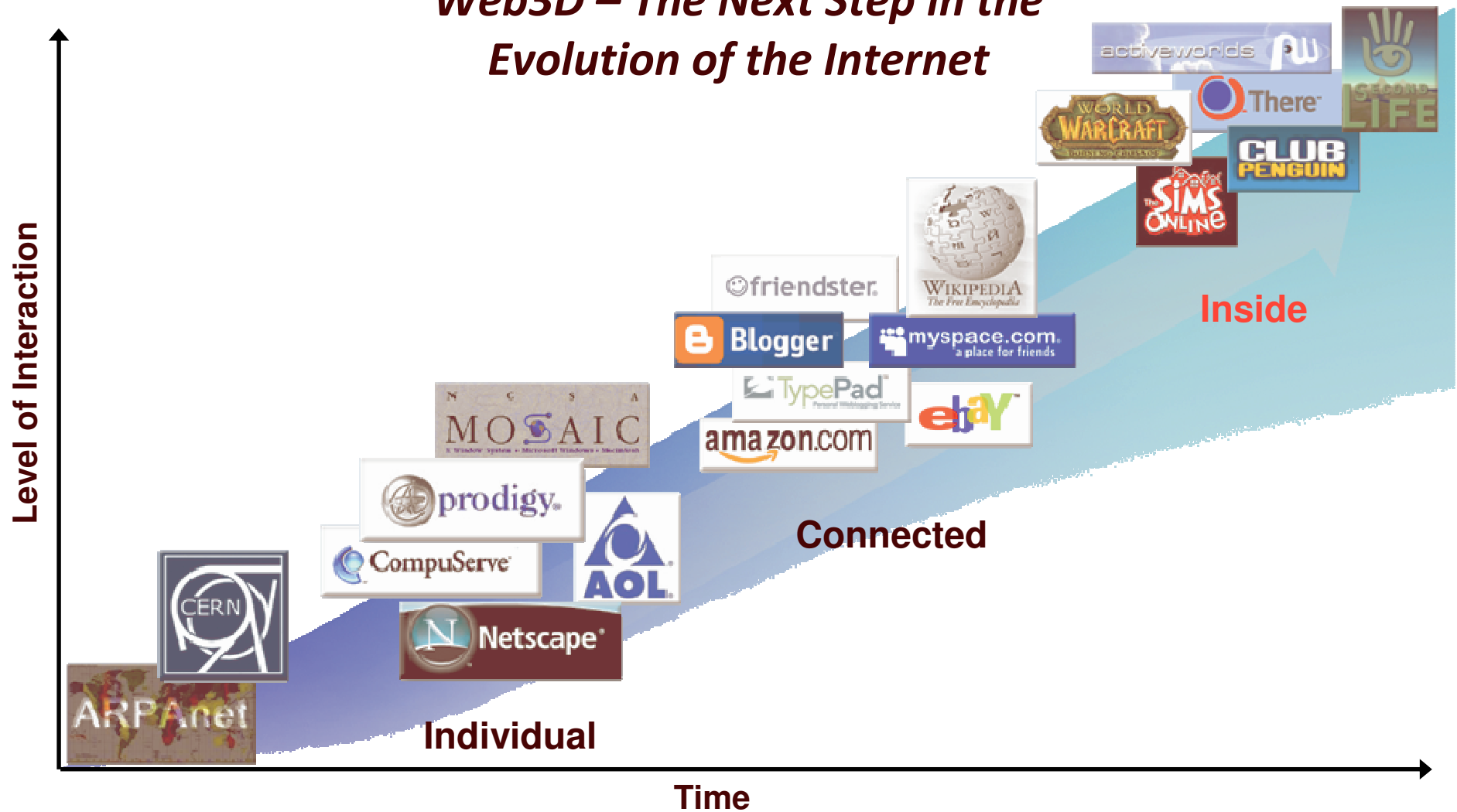


Tessa, English post office assistance

enhanced Web 2.0 + 3D = WEB3D (?)



Web3D – The Next Step in the Evolution of the Internet

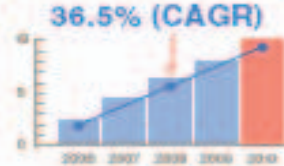


Why virtual worlds [for companies]?

Quick Facts

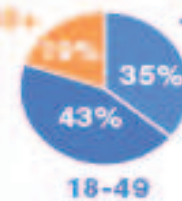
Number of online gamers worldwide
>73 Million

Rate at which MMORPG economies are growing

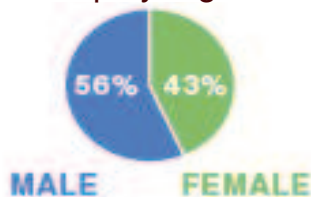


Average age of online gamers
27

Distribution of age



Game player gender



'Real' money spent in 2006 by game players to acquire virtual assets or insights from other players

\$1 Billion

Average number of hours per week gamers spend playing online

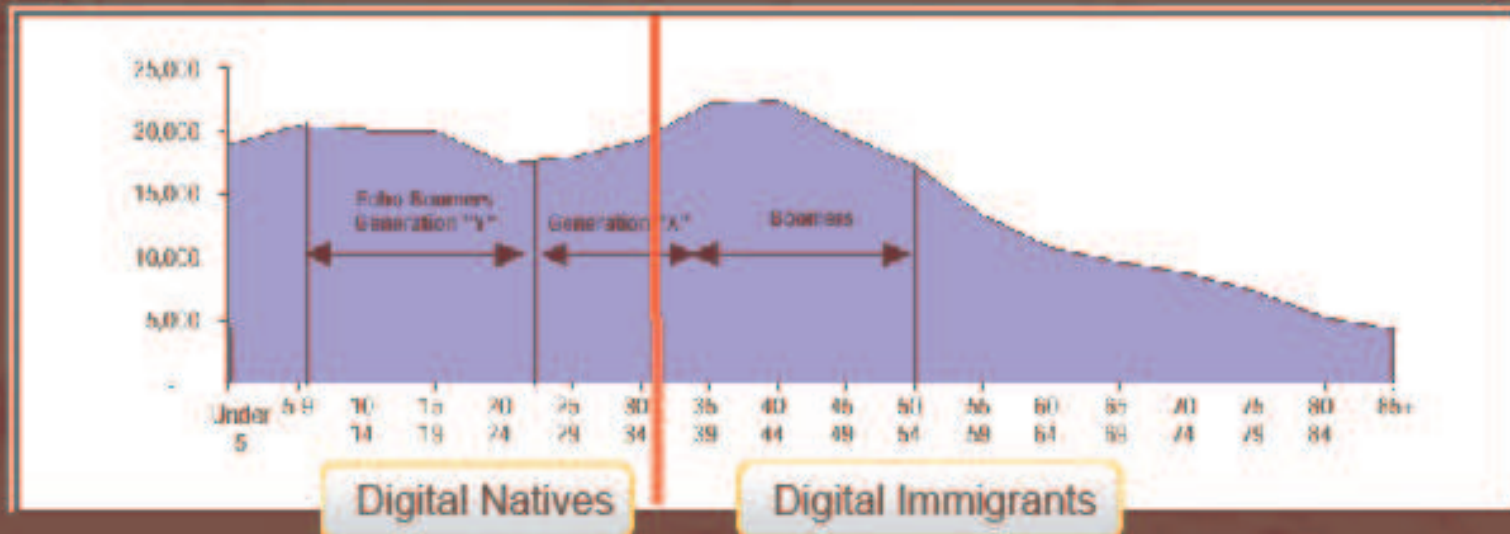
22



from online gamers today...
to online workers/
consumers tomorrow

Demographics and digital divide

The new generation is huge, 90 million people in the US alone. Already there are more of them around than there are baby boomers. Beck and Wade



- 81% of the business population age 34 or younger are gamers
- 56 million are old enough to be employees
- 7 million are already managers in the current workforce

*Grown Up Digital.
How the Net
Generation is
Changing Your World,
Tapscott (2009)*

Generation X (also called *Baby Bust*)

Born between 1964-1976

Generation Y (also called *Millennials* or *Net Generation*)

Born between 1977-1997

Generation Z (also called *Generation Next*)

Born between 1998-today

	Traditionalist 61 - 84	Boomer 42 - 60	Gen X 26 - 41	Gen Y 18 - 25
Training	The hard way	Too much and I'll leave	Required to keep me	Continuous & expected
Learning style	Classroom	Facilitated	Independent	Collaborative & networked
Communication style	Top down	Guarded	Hub & Spoke	Collaborative
Problem-solving	Hierarchical	Horizontal	Independent	Collaborative
Decision-making	Seeks Approval	Team informed	Team included	Team decided
Leadership style	Command & control	Get out of the way	Coach	Partner
Feedback	No news is good news	Once per year	Weekly / Daily	On demand
Technology use	Uncomfortable	Unsure	Unable to work without it	Unfathomable if not provided
Job changing	Unwise	Sets me back	Necessary	Part of my daily routine

Source: Lancaster, L.C. and Stillman, D. *When Generations Collide: Who They Are. Why They Clash. How to Solve the Generational Puzzle at Work.* Wheaton, IL: Harper Business, 2003.

We cannot yet evaluate the ZGeneration digital divide, but it'll be incremental...

By 2012, more than **70% of organizations will use intraverses** (private virtual worlds) to support internal collaboration and social interaction...

The flexibility of business models is an important success factor for virtual worlds. In the long run, as the 2D Internet evolves

toward Web3D, **virtual worlds have the potential to become the new user interface** for various Internet applications, opening up even more business opportunities..

...within five years, the **3-D Internet will be as important for work as the Web is today**. ...replicate the experience of working physically alongside others; allow people to work with and share digital 3-D models ... make remote training and counseling more realistic

The promise of this technology for the entire virtual world movement is that, through its revolutions in content integration, unified communications, and spontaneous collaboration, **it provides a tool that gives a clear sense of its value and purpose as a**

collaboration hub for the enterprise.

Avatar - an **avatar** is a representative of you in a virtual world.

(Union)avatars can **meet and interact** with other avatars in a 3D environment



Web 3.0: a virtual world created by its users

(and not created by “few smart builders” of the actual web 2.0 websites)

1. User's connection



Web3D client
Integrated
Application

2. Creation of his own avatar



3. Access to a virtual interactive environment

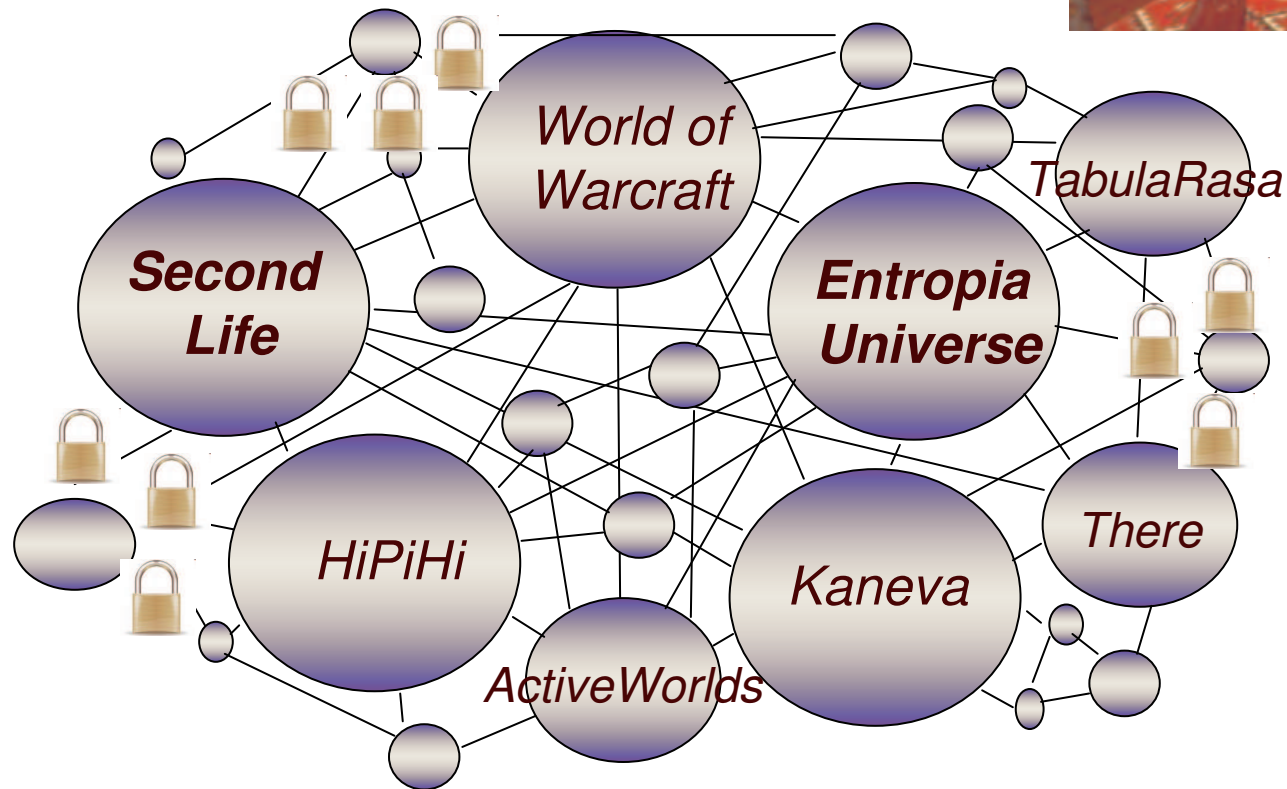


4. The user meet other avatars of friends or customers, discuss via voice or text chat, visit places, participate in business meetings, purchase products and use online services. Every user build its structures and expand the world.

Not only "Second Life"...

and "not only a game"...

There are more than 30 metaverses, few of them with mature internal economy and social organizations... and their number is growing



Keys: interoperability and intra/extra-verses



- Purchase of products and online services

Customized products, modifiables, placed in their context

- Collaboration

Meetings, discussions, games in a deeply immersive environment

- Learning

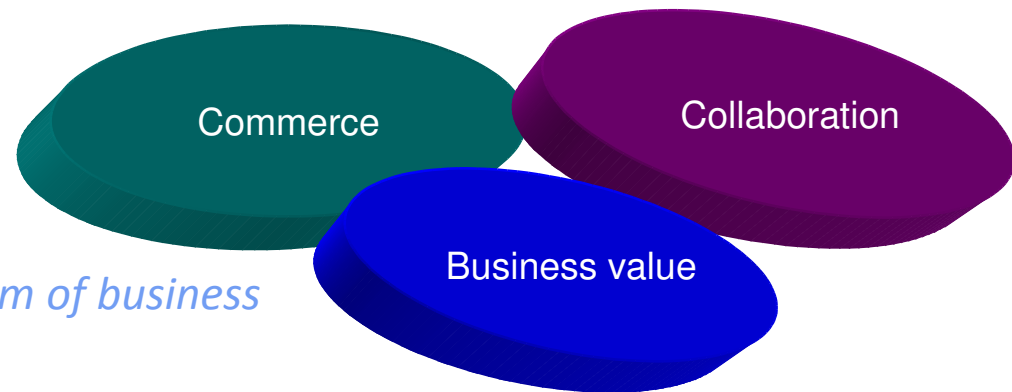
Demo and education events

- Simulation

Architecture, art, studies

- Business

Meetings, events with customers, new form of business



Advantages: lower costs, more interaction between people and objects



Greater leverage across an experts' organization



Faster response to company and client issues

Turning into a
Enterprise 2.0
means

Increased
Efficiency
+
Improved
Access
+
Enhanced
Learning and
Collaboration
+
Decreased
Cost



Realtime collaboration
on tasks



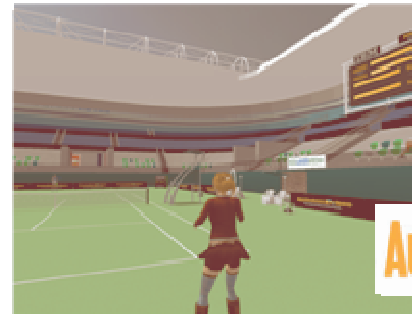
Enables connection of globally
dispersed teams

Objectives in entering virtual worlds



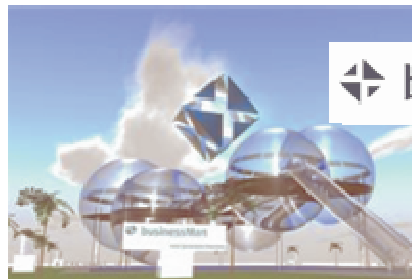
Shop in a Virtual World

Supermarket
GURU



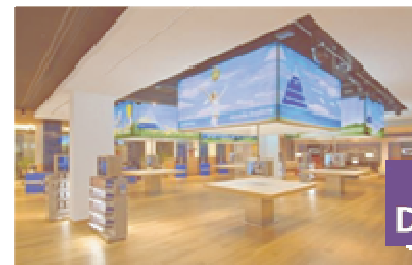
Real world events in the virtual world

Australian Open



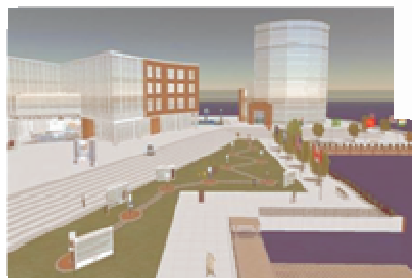
businessMart

Exploring commerce in the virtual world



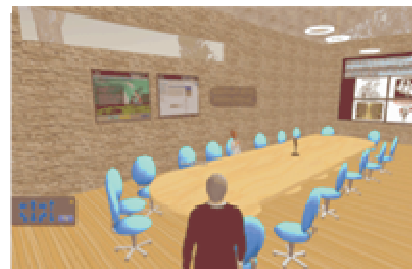
Bridge real and virtual worlds

Deutsche Bank



Manpower

Extending their recruiting reach



Extend collaboration and learning

IBM

IBM Employees VW Guidelines

Cyberunionism
is born

First IBM virtual
Union Room in SL to
meet workers 2.0

7 unions involved

Starting
independent
trade unionist
islands



First VStrike
against IBM in
Secondlife

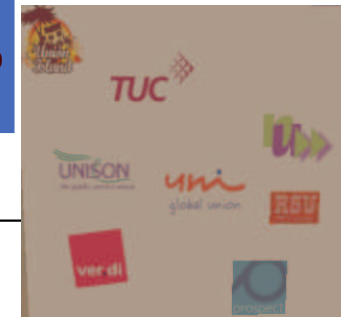
LabourStart
project

1st Virtual
Law Conf

Virtual protests
threatened



Elgg
is born



UnionBook

reaches 3000
unionists registered

<http://n-1.cc/>
technopolitical project

Local and specifical
experiences.
200 members



enters in
2.0 era

facebook

Starting protests
and unionist groups

UNIONS
2.0

275 members with more
than 15 unions involved

Bibby- UNI
online rights
revised

Opensim
is born



Opensim
full availability

2007

2008

2009

2010

2006: IBM starts with guidelines for virtual worlds



*Unilateral
Approach!*

Since 2008, IT companies are developing virtual worlds, internal/external blogging and social networks usage policies, to limit or control employees' activities and collaborations.

No Union involvement in rules definitions !

- > **Digital rights** will be needed for virtual webworkers
- > New rights needed for **virtual strikes and online protests**
- > **Confidentiality and working time** unclear for Vwebworkers
- > New business relations with customers
- > **Avatars' rights**, property and identity ownership



**EMPLOYEE's
PERSPECTIVE**

- Dealing with an environment outside a company's control
- Make it clear that your employee conduct guidelines and core values apply
- Recruitment and jobs in virtual worlds
- Address unique virtual worlds issues through VW Guidelines
- Employees will treat this environment as a workplace

EMPLOYER'S PERSPECTIVE

WatchOut!



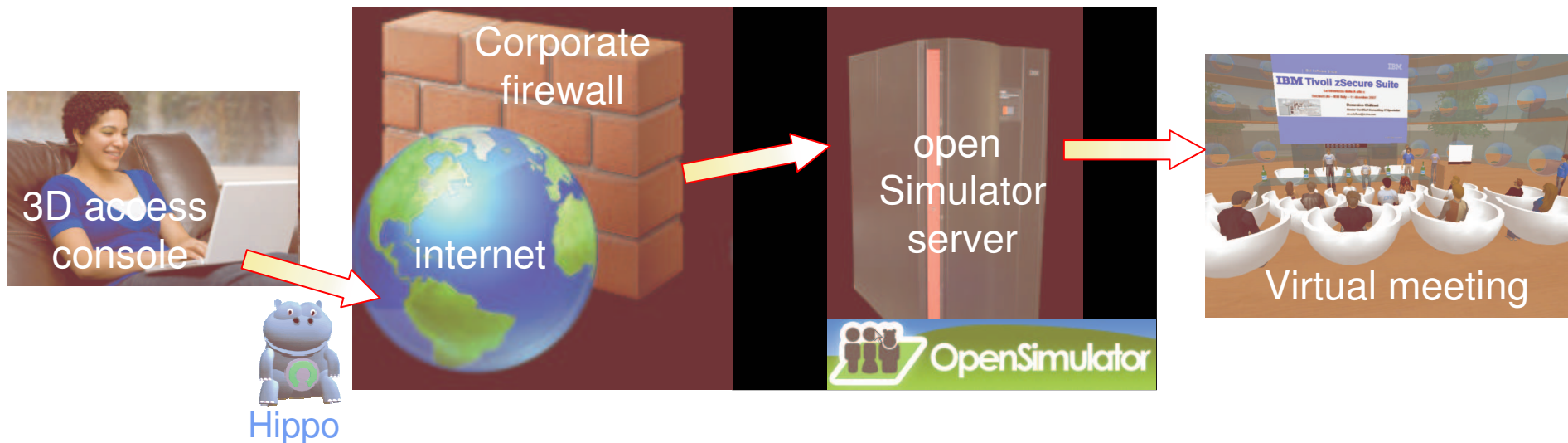
real virtual business meeting



real temporary virtual workers

- 3D Simulators on private grids

OpenSimulator allows you to develop your OWN metaverse (virtual 3d environment) in a fully secured area (the so-called “intraverse”) deeply integrated into the web.



- 3D Simulators on public grids

But... thanks to OpenSource software, this means also access to virtual spaces for all, without restrictions

Where do we go from here ?



Virtual environments via mobile devices

Web 2.0 applications will be fully integrated with Web3D (2011-2015)
Open standards and full interoperability reached before 2010.

Most of traditional unions will be not able to innovate



New Unions 2.0 will evolve, using PRIVATE UNIONS GRIDS on Opensim



Mixed Reality environments



Realistic avatars

Arise of WebXD/Semantic immersive web (2020)
 Hybrid virtual/real-word immersive experience

ZGeneration workers+ hacktivists will organize new online struggles



New inworld global communities of self-organized workers



http://en.wikipedia.org/wiki/Generation_Z

<http://www.wired.com/science/discoveries/news/2002/03/51059>

<http://socialnets.wikispaces.com/Metaverses>

http://www.asifproductions.com/systems/world_systems.html

<http://en.wikipedia.org/wiki/Metaverse>

http://opensimulator.org/wiki/Main_Page

<http://allvirtual.wordpress.com/tag/linden-lab/>

<http://www.fantasilab.com/?p=947>

<http://www.facebook.com/home.php#/group.php?gid=6617589981&ref=ts>

<http://www.slunionisland.org/>

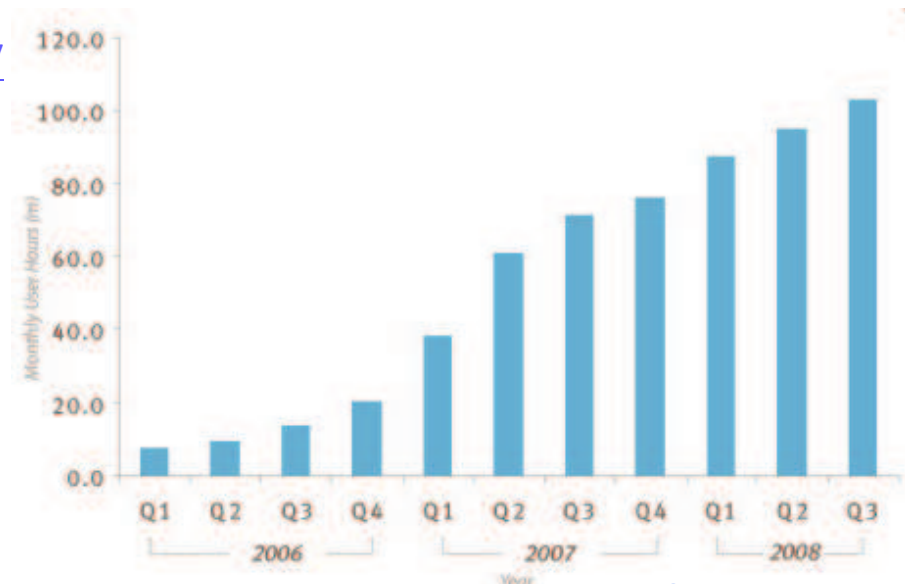
<http://www.unionbook.org/pg/groups/173/unions-20/>

<http://www.unicomunicators.org/?q=node/412>

**IBM/LindenLab –Case Study –
How Meeting In Second Life
Transformed**

**IBM's Technology Elite
Into Virtual World Believers**

<http://secondlifegrid.net/casestudies/IBM>



Hours spent in SecondLife
(<http://allvirtual.wordpress.com>)