



Virtual Worlds Perspectives from Silicon Valley

The Virtual World Conference

15 September 2010

Eilif Trondsen, Ph.D.

Director, Strategic Business Insights

www.strategicbusinessinsights.com

Agenda

- ❖ **A Brief Retrospective**
- ❖ **The Promise...and the Hope & Vision**
- ❖ **Some Reflections on Recent Developments**
 - **Weak or Strong Signals and Meaning/Implications?**
 - **Current Realities in VW market?**
- ❖ **Where are We Heading?**
 - **Consumer Market**
 - **Government and Industry**

A Brief Retrospective

Gartner forecast in April 2007 (at Gartner Symposium/ITxpo in San Francisco): "80% of world's active Internet users (and Fortune 500 enterprises) will be in a virtual world by end of 2011."*

*** 2010 estimate⁺: 1.97 billion Internet users (including 825 million in Asia)**

+ <http://www.internetworldstats.com/stats.htm>

A Brief Retrospective: 2009 VW Industry Status & Developments

- ❖ **Small industry – "\$50 million in total revenues* as measured by vendor software license fees and subscriptions from business customers. We do not include revenues from professional services (i.e. custom development projects and implementation services)" (Source: ThinkBalm, 2010**)**
- ❖ **Fragmented industry – ThinkBalm tracked around two dozen companies and it estimates that less than half of them are profitable. Also, it estimated that in 2009 "immersive software revenues" for none of these players exceeded \$15 million.**

Other Revenues in VWs/MMOGs:

- **Virtual Goods Transactions**
(estimated to \$1.5 billion in 2009)
- **Second Life User Transactions**
(estimated at \$450 million in 2009)

But, also note the following statistics from Linden Lab:

- Over \$1 Billion worth of transactions have occurred in SL since 2003
- According to NeXtUp Research, in July 2009, LL was worth \$658-700 Million, and 2009 LL Revenues forecasted at \$100 million

* Estimated revenues of global software industry in 2008 was \$305 Billion

** Source: The Enterprise Immersive Software Decision-Making Guide; January 2010

A Brief Retrospective: VW Players Included in Latest ThinkBalm Report

- *A World For Us** -- Assemb'Live
- *Altadyn* -- 3DXplorer
- *Amphisocial*-- Pivot Tatkaal and Pivot Dhruva
- *American Research Institute* -- PowerU
- *Avaya** -- *Web.alive* [Avaya acquired enterprise assets from bankrupt Nortel]
- *Forterra* -- *Olive* [Olive sold to SAIC in early 2010]
- *IBM*-- Virtual Collaboration for Lotus Samtime
- *InXpo* -- InXpo Virtual Events Platform
- *Linden Lab* -- Second Life
- *On24* -- Virtual Show; Virtual Briefing Center
- *ProtonMedia* -- ProtoSphere
- *ReactionGrid* -- ReactionGrid harmony
- *Rivers Run Red* -- Immersive Workspaces
- *Sun* -- *Wonderland* [Oracle decided not to support Wonderland; and Wonderland team--led by Nicole Yankelovich--taking it into open source community]
- *Teleplace* -- Teleplace
- *VenueGen** -- VenueGen
- *Unisfair*-- Unisfair Virtual Engagement Platform
- *VastPark*-- Vastpark
- *Virtual Italian Parks* -- Moondus

Metaplace of Ralph Koster--not really targeted at enterprise market--also was also disbanded in 2009

* Require plugin

Source: The Enterprise Immersive Software Decision-Making Guide; January 2010

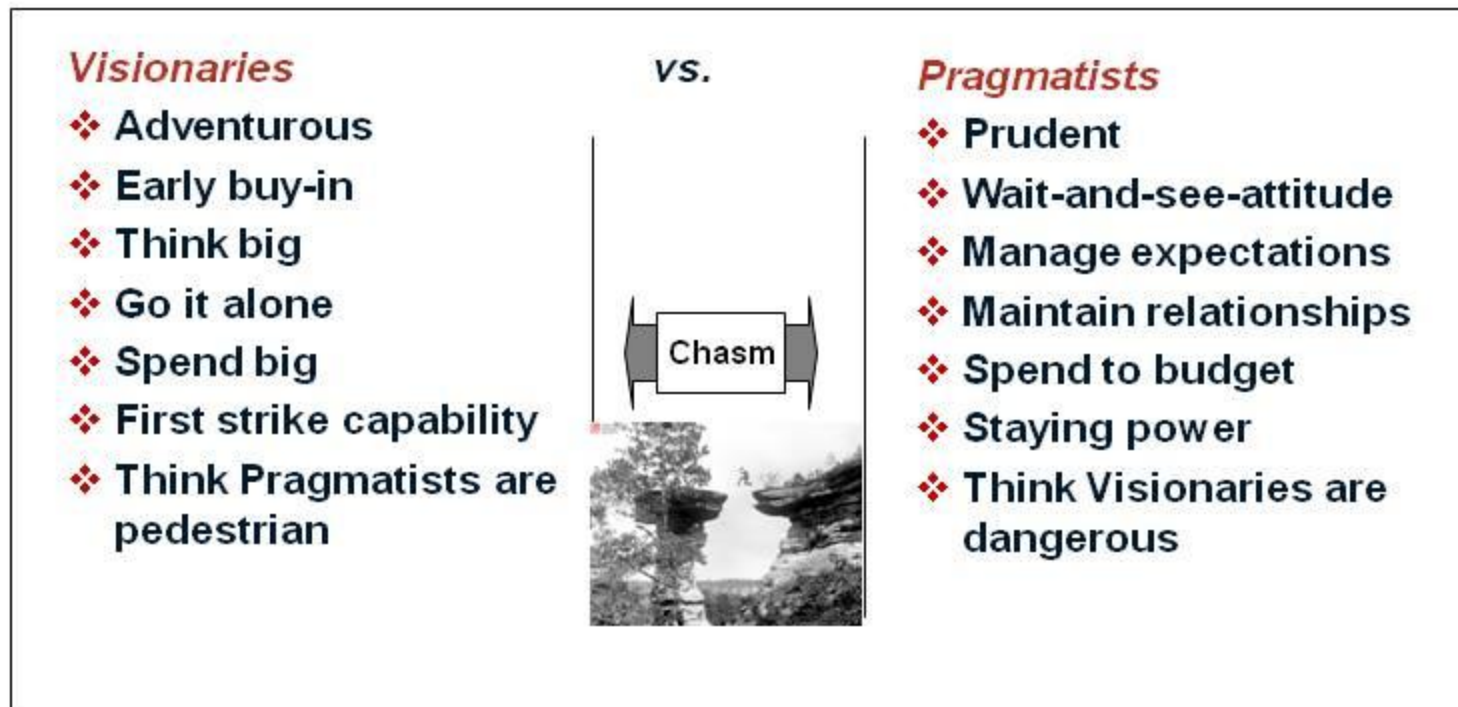
The Promise...and the Hope & Vision: Expected “Serious Applications” of VWs

Applications

Industries and Companies (early adopters)

- | | |
|---------------------------------------|---|
| ❖ Collaborative work | All industries with distributed project work (IBM, Intel, Unilever) |
| ❖ Meetings & Events | All industries (Cisco, Oracle, IBM and others use VWs and Virtual Meeting Platforms (Unisfair, InXpo, CGS, Digital Reactor, On24, and others) |
| ❖ Learning & Training | Universities and industry (Silicon Image, BP, AstraZeneca, DoD, BAE) |
| ❖ Prototyping and Experimentation | Architecture and Construction (Starwood Hotels, Phillips, Crescendo Design) |
| ❖ 3-D Modeling and Data Visualization | Data centers (computer industry and other high-tech industries) and control centers (Chevron, Statoil, NOAA, FXPAL) |
| ❖ Trust Building and Socialization | All industries using virtual, distributed teams (IBM, Sun, Cisco, J&J) |
| ❖ Focus Groups with Innovators | Music and entertainment (Sony BMG Music Entertainment, Viacom, Electrolux) |
| ❖ Branding and Promotion | Consumer product companies (P&G, Pepsi, Dell, CIGNA) |
| ❖ Talent Discovery and Recruiting | Consulting industry and hiring agencies (TMP Worldwide Advertising & Communications, Manpower, Kelly Services) |

The Promise...and the Hope & Vision: Visionaries versus Pragmatists



Pragmatists don't trust visionaries as references.

Source: Geoffrey Moore, *Crossing The Chasm*, Strategic Business Insights

Some Reflections on Recent Developments: Weak or Strong Signals and Meaning/Implications?

- ❖ **Linden Lab Developments: Prioritizing consumer markets and less focus on enterprise and education markets**
- ❖ **Erica Driver--the premier analyst of VWs--leaving ThinkBalm and VW market analysis**
- ❖ **Questions:**
 - **How will enterprise and government prospective customers see recent developments?**
 - **Temporary setback or indicative of very slow adoption ahead?**
 - **Will VWs remain small niche market in enterprise and government sectors?**
 - **What "disruptive technologies" could be "game changers? (Combined forces of HTML5, WebGL, Collada, and X3D and more powerful browsers--> Native 3D in browsers?)**

Some Reflections on Recent Developments: Current Realities in VW market?

❖ Interesting enterprise and government projects:

- **First responders project for City of New York (Gronstedt Group)**
- **BP (especially in learning and training)**
- **Chevron (used Teleplace as integration point for multiple applications and sources of data; use as "refinery asset visualization environment")**
- **Small and interesting projects in medical and health markets (See next two slides)**
- **Virtual meetings and events (market targeted by Venuegen, Unisfair, InXpo, Virtualis, Clever Zebra and others)**

❖ Nordic Virtual Worlds Network (NVWN) and other research projects:

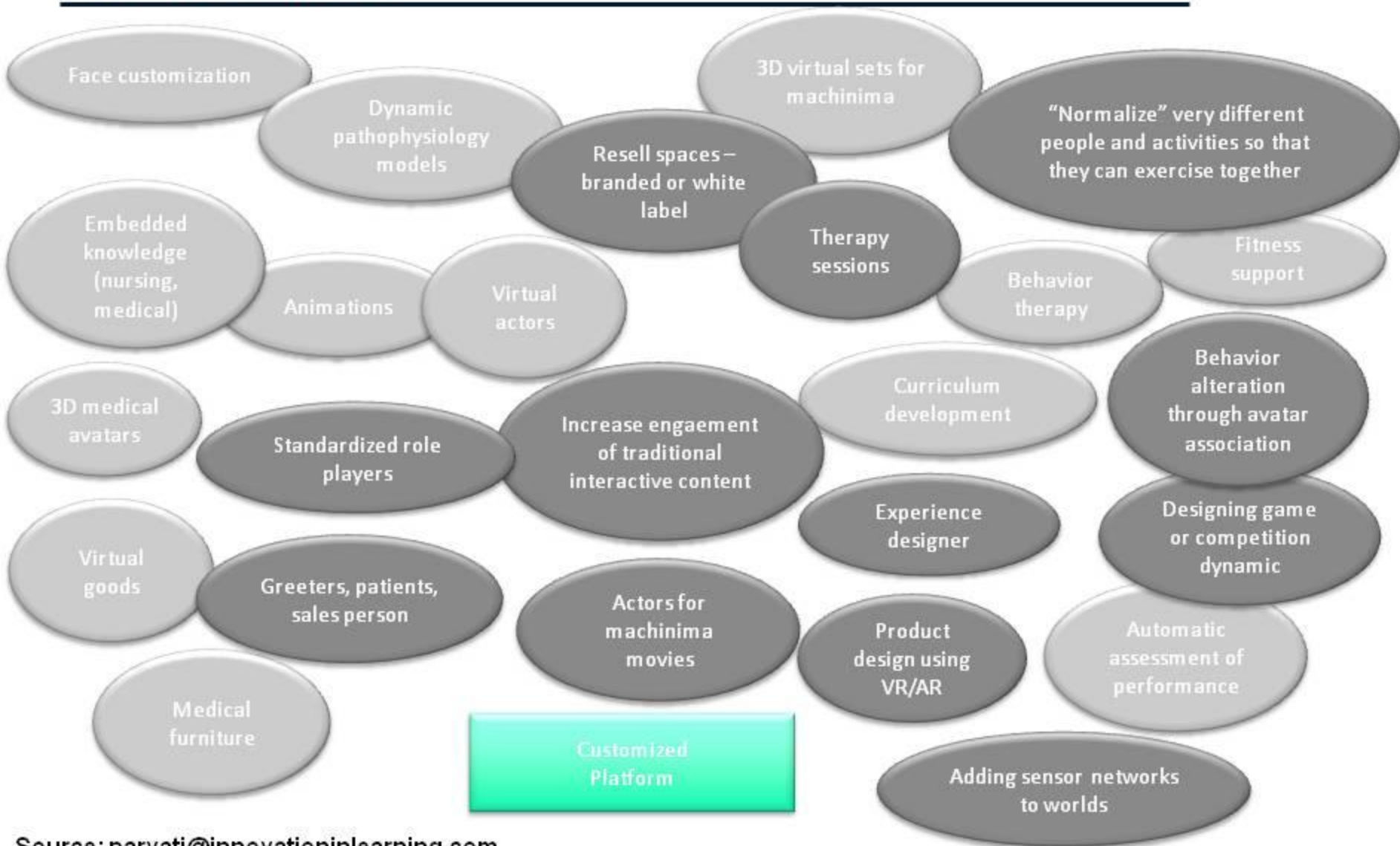
- ❖ **NVWN--see: http://nordicworlds.net/?page_id=5**
- ❖ **VW Sense-making and innovation (A strategic research project at Roskilde University, Copenhagen Business School and partners)--see <http://worlds.ruc.dk>**

Selected Work Packages:

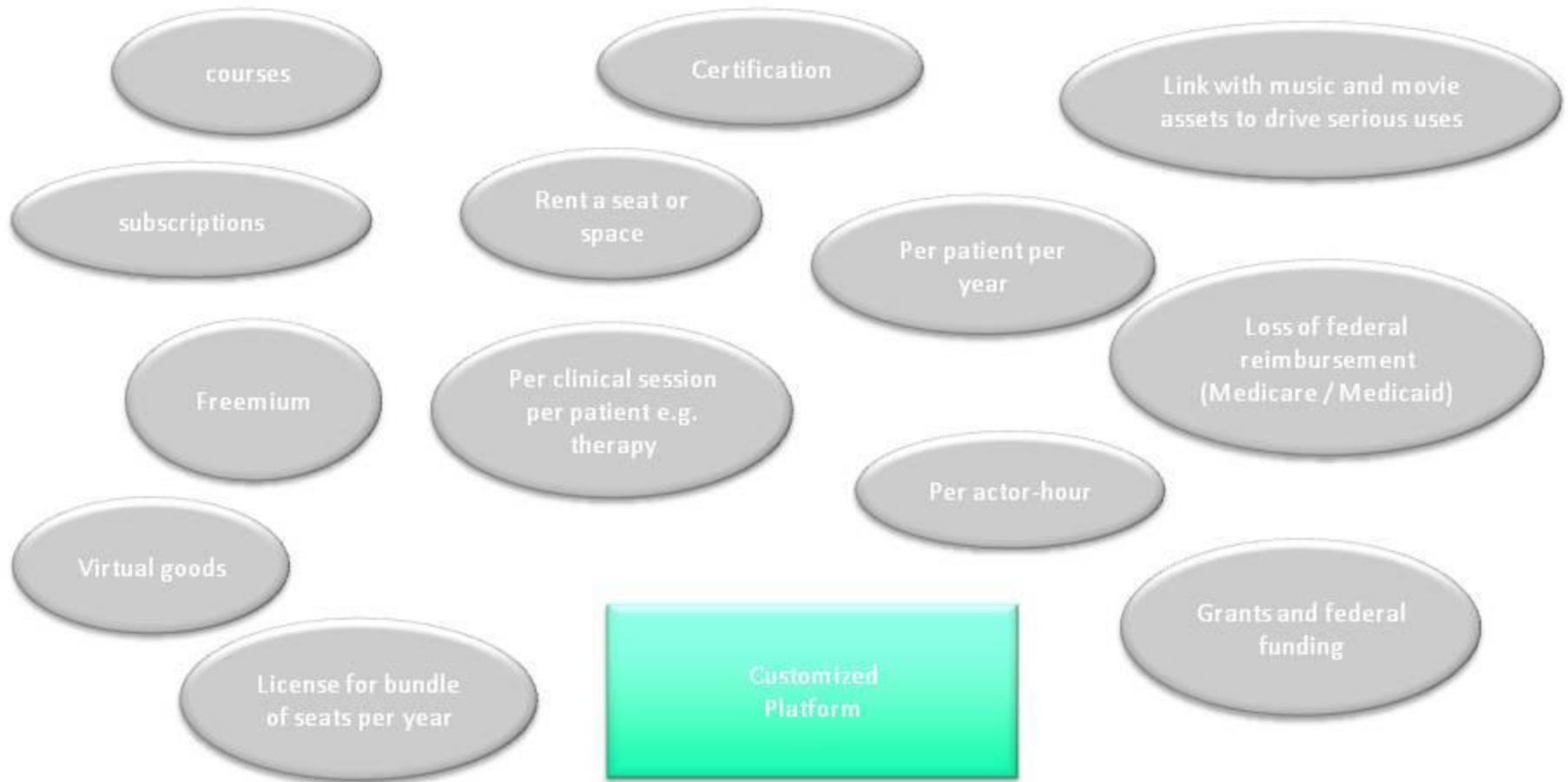
- ❖ Best Practices in VW Innovation
- ❖ Best Practices in VW Entrepreneurship
- ❖ Future of Entrepreneurship and Innovation in VWs
- ❖ Virtual Center for Entrepreneurship and Innovation

Key Research Organizations: Stockholm School of Economics, University of Turku, Roskilde University, University of Agder

EcoSystem Elements: VWs for Medical and Health Markets



Distribution/Revenue Models: VWs for Medical and Health Markets



Source: parvati@innovationinlearning.com

Where are We Heading?

Consumer Market

- ❖ **Browser-based VWs dominating? Using tools and platforms from players like Unity3D and others?**
- ❖ **Linking to big social media players of today and tomorrow? (Zynga-Facebook model)**
- ❖ **Money mostly to be made in virtual goods transactions?**
- ❖ **Key to success is building huge customer base**
- ❖ **More "fully immersive worlds" serving niche markets?**

Where are We Heading?

Government and Industry

- ❖ **Very slow and gradual adoption in these markets?**
- ❖ **But interesting and potentially high-value use cases could emerge:**
 - **Oil industry, for example: Collaborative work around 3D model of "Blowout Preventer, etc.**
 - **Emergency response preparations: Like what Gronstedt group and others have demonstrated**
- ❖ **More broadly, collaborative work for SMEs who could see VWs as economic platform for highly distributed virtual teams--re NVWN project**

Contact Information

Eilif Trondsen, Ph.D.
Director, Strategic Business Insights
Co-chair, SDForum SIG on virtual worlds
Telephone: +1 650 859 2665
E-mail: etrondsen@sbi-i.com
Skype: etrondsen
Twitter; eilifT
<http://www.strategicbusinessinsights.com>

