Metaverse(s)

HTE Infokom 2022

Prof. Miklos Sarvary

Traditional virtual worlds

The basic idea:

- Persistent space built in a computer software
- You are represented by your "avatar" (digital self)
- You can move around and
- Interact with virtual objects and other avatars

Origins:

- MMORPG-s (morpegs): massively multi-player online roleplaying games
 - World of Warcraft
 - Grand Theft Auto
 - ...
- Have been around for decades
- Defined environment
- Defined goal

Defined universes







Fortnite: a revolution in the gaming universe?

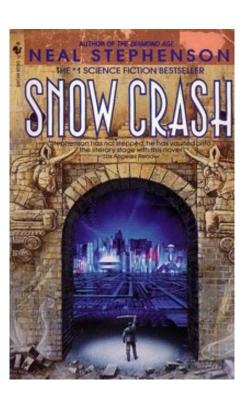


Paradigm shift: 'Making not slaying'

- New concept: virtual worlds entirely generated by users
- Example: Second Life W Life



- Owner: Linden Labs
- Founded by Philip Rosedale after 'Snowcrash'
- Launched in 2003
- Explosive growth in summer 2006
- Stalled since 2008
- Today: ~1 million active users (50-80k any time)
- No defined goal and environment:
 - people can build and do anything
 - own their virtual assets (can trade)
- SL is remarkable because it incorporates all interactive features of existing Internet platforms (social networks, games, streaming, voice, chat, etc.)





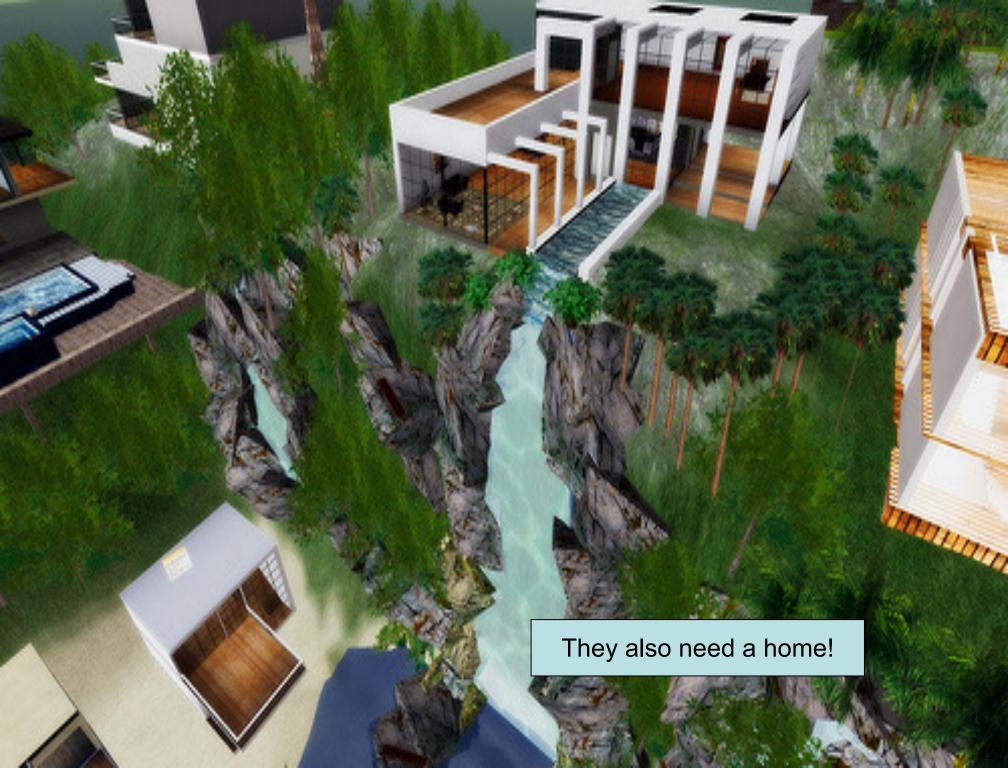














They do everything...and more

Bookworm

Chessmaster Challenge

- Culture museums, cinemas, theaters, concerts...
- Sports races, adventures
- Entertainment: film festivals, reality shows
- Nightlife gambling, sex, parties…
- Shopping, shopping, shopping....
- Work top incomes are ~\$200k
- Business thousands of profitable businesses
- Crime gunshots, retail fraud, terrorism
- Politics democracy, independence movements
- Currency, real estate, stock markets

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			Per Week	
1	Second Life	Linden Lab	760	3.2
2	Civilization IV: Beyond the Sword	2K Games	668	2.7
3	World of Warcraft	Blizzard Entertainment	653	46.7
4	Dark Messiah of Might & Magic	Ubisoft	582	3.0
5	StarCraft	Blizzard Entertainment	334	1.7
6	Civilization IV	2K Games	332	2.1
7	Half-Life 2	Vivendi Games	313	2.2
8	Warcraft III: Reign of Chaos	Blizzard Entertainment	213	1.7
1				

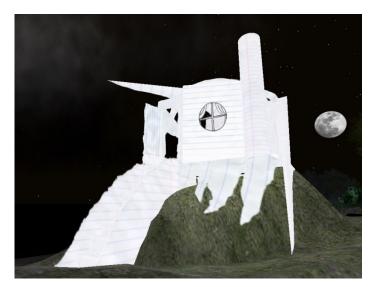
PopCap Games

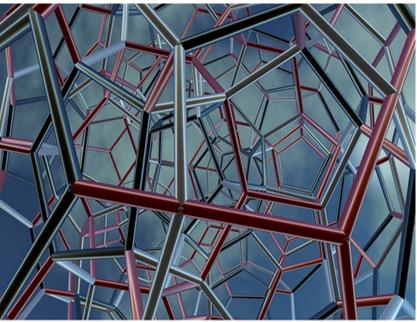
Exhibit 1: Second Life - One of the Most Immersive Experiences Online

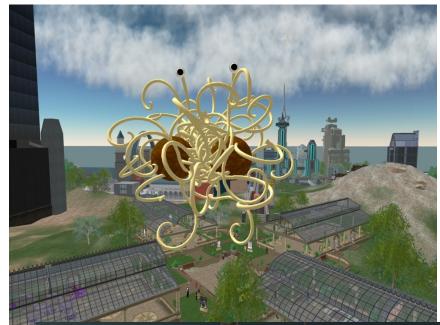
Source: Nielsen Games – GamePlay Metrics. Note: TMP% = Percent of total minutes played from the Top 100 non-casual/ pre-installed PC games measured. Data as of March 2009.

Avg. Min

Endless creativity...

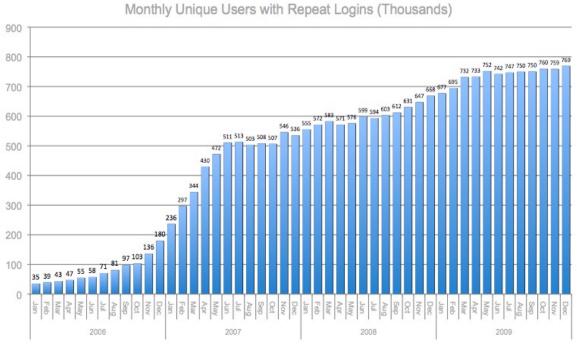


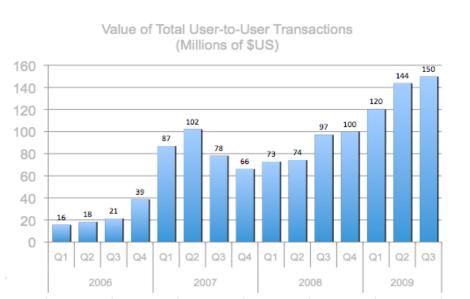






Growth









Major organizations join...

- Starwood Hotels showrooms/reservations
- Toyota, Nissan sell virtual cars
- American Apparel setup a virtual store for clothes
- U2, Duran Duran, Susan Vega concerts
- IBM business solutions (owns >15 islands)
- Intel tech conferences, product information
- Reuters permanent correspondent
- Sweden, Estonia have an embassy
- Presidential candidates' headquarters (Mark Warner, Sarkozy, Royale)
- US congress investigates taxable income earned
- FBI investigates illegal gambling

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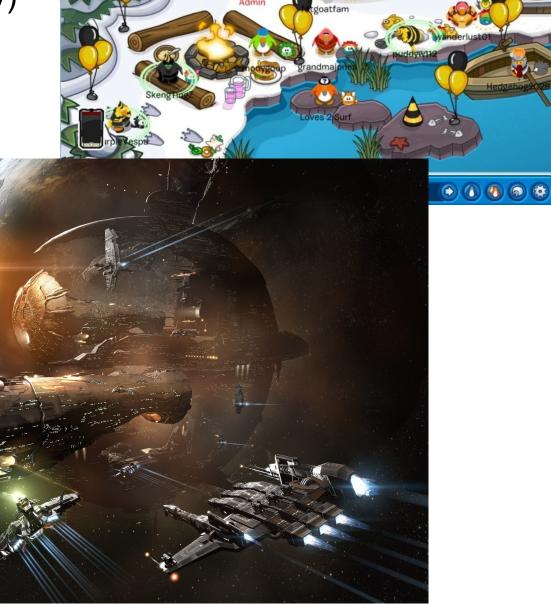




Other (old) metaverses

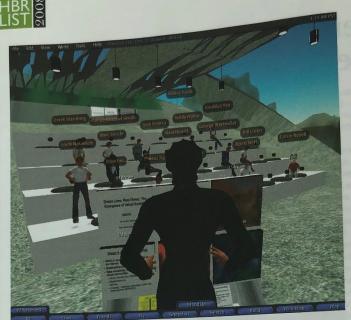
- Club Pinguin (Disney)
- Eve Online

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Question: Is the metaverse the ultimate media platform?

Harvard Business Review February, 2008



The Metaverse: TV of the Future?

BY MIKLOS SARVARY Here's a familiar story: A new communications technology that allows one to broadcast live to millions of people appears on the scene. At first it's clunky, and the content is largely trivial and of poor quality. But serious players soon latch on, the content improves, and before long everyone tunes in. AT INSEAD'S first businesses flock to buy advertising time, and shares in related companies MBA class on its Second Life campus, Professor

That was the early history of radio. The parallels with the dot-com frenzy are eerie. (In fact, the broadcaster RCA used WWW, for World Wide Wireless, as its logo.) And the party was just as short: Broadcasting companies struggled to turn a profit, stock prices plummeted, and only a few players survived. Then came the Great Depression and World War II. By the time these traumas had passed, a new technology was on the block: television, which has been the dominant broadcasting medium ever since. Radio is very much the poor cousin.

casting. The technology that produces websites as we know them is limited in its ability. to exploit the mass interactivity that the internet can potentially deliver. Sure, people can communicate with one another instantly online and even form communities – but they do it blind, through a keyboard. Once again, there's a new technology that gets around the

used to describe interactive multiplayer games such as Second Life. In these new cyber-

avatars can browse and chat with as sistants before trying on and eventual buying that dress, T-shirt, or tie, Who bother with a MySpace page when you can have your own room in a virtual clubhouse? Some companies already have these worlds in their sights: IRM for example, is developing ways for people to move their avatars from one metaverse to another.

If the metaverse is the future of the internet, what should companies do to prepare for it? History once again provides clues. For starters, there's the network effect. Just as early television networks got a leg up by approaching advertisers and building a base audience in the 1960s and 1970s, companies that get their metaverses up and running early will poach a lot of customers from rivals that leave metaverses for another day.

Also remember that it took decades for TV networks to learn how to efficiently address audiences with appropriate content and advertising, which was essential for the broadcasting business model. That suggests that companies had better start to experiment with the technology while it is still a sideshow. How, for example, might a company like L'Oréal use the metaverse community to build a brand? We've asked ourselves just that kind of question at Insead. We know that the metaverse will be an important channel for our educational

services, but we still have lots of questions about how best to attract students to it and present material on it. So we've opened a virtual campus on Second Life to find the answers.

Sarvary lectured on the

media to a full room of

students who had been

evalution of modern

invited by e-mail.

Finally, as was the case for

broadcasting, metaverses will present a real challenge for governments and regulators. We already see important issues emerging around security, network reliability, property legislation, and taxation. Down the road, questions of infrastructure, software standards, and compatibility between potentially competing metaverses may also dog regulators, who will have the additional difficulty of coping with these matters on a global scale.

All the signs are that the life cycle of the internet will continue to parallel that of broad-

Within five years, the dominant internet interface is likely to be the *metaverse*, a term worlds, companies will have not websites but, rather, virtual stores where their customers'

Backlash

Fraud

- Illegal gambling and casinos
- Phony banks and Ponzi schemes
- Real (virtual) estate bubble

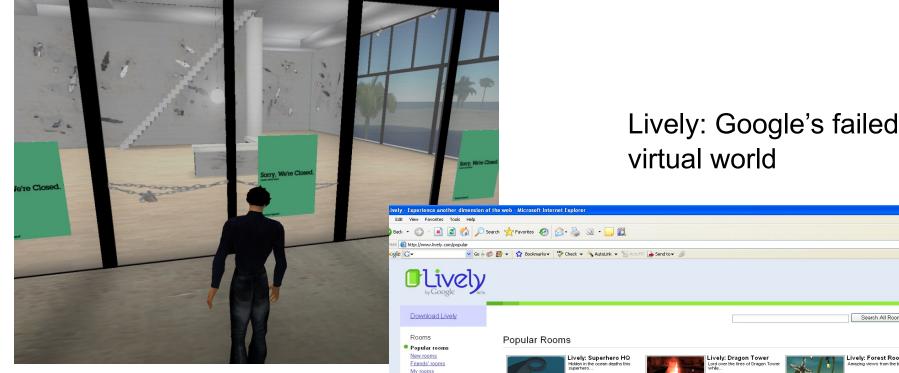
Scandals

- Huge sex industry (18% of real estate)
- Violent political clashes
- 'Terrorism' and cyber vandalism

Bad media coverage

- "There is nothing to do [...], except [...] try to get laid" (Forbes)
- Time includes SL in its "5 worst websites" list.
- Wired magazine: "How Madison Avenue Is Wasting Millions on a Deserted Second Life"

...and corporations leave...



All rooms

Catalog

/isitors: 5651

reated: Apr 9, 2008 isitors: 3899

Lively: Girl's Room

cupants: thirdgrid rio.Piantanida - mar

reated: Jul 8, 2008 isitors: 3721 ccupants: Reitaloli - iriska212 imboJudy - maxx110 -ehmet.ay.ay - HLM -

Lively: Winterland

▼ 🕞 Go

Search All Rooms

Lively: Forest Room

Lively: Record Room

American Apparel closed

What happened?

- Was it just too early?
 - Technology is not ready
 - No portable/mobile interface
 - Bandwidth and latency issues
- Was it badly managed?
 - Lack of quality control and certification
 - Lack of search capability(ies)
 - Lack of identity and accountability...
 - ...and, therefore, <u>lack of trust</u>?

Is this changing with

- better tech/Al/sw?
- No cross-platform availability?
- VR?

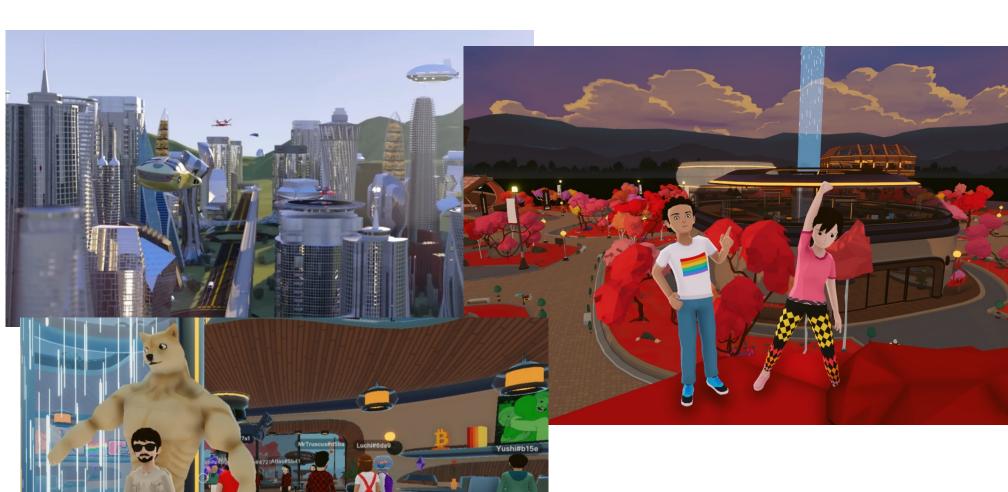
Is this changing with

- Meta?
- Fortnite?
- blockchain?

- Is it a fundamentally flawed as a "MASS" medium?
 - Too virtual/free/immersive...
 - Platform rivalry....
 - Lack of foreseeable government coordination

Philip Rosedale (2022): https://www.wsj.com/video/remember-second-life-its-now-taking-on-big-techs-metaverse/861F66EF-F3B0-47E4-B635-8FACCA2A648F.html

Decentraland?



Decentraland





Meta's metaverse









The "new" metaverse ecosystem: \$ billions of investment

