

Over the Horizon: Impact of 3D Gaming, MMOG, and Mobile Technologies on Politics and Social Order

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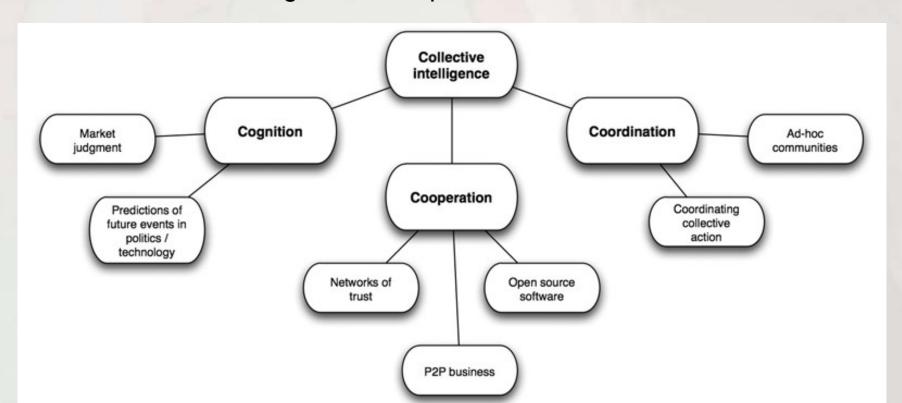




Collective Intelligence

"An intelligence that emerges from the collaboration and competition of many individuals, an intelligence that seemingly has a mind of its own."

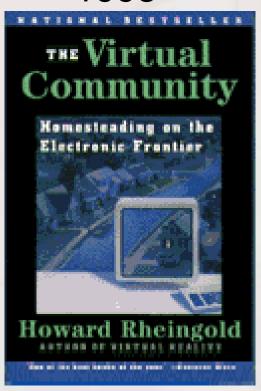
"The capacity of human communities to evolve towards higher order complexity and harmony, through such innovation mechanisms as differentiation and integration, competition and collaboration."



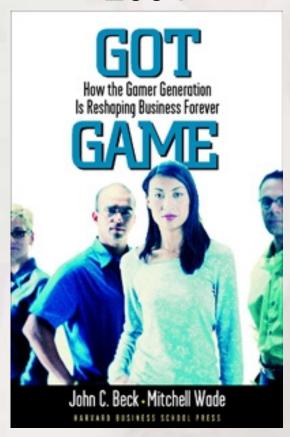


Digital Business Pundits

1993



2004



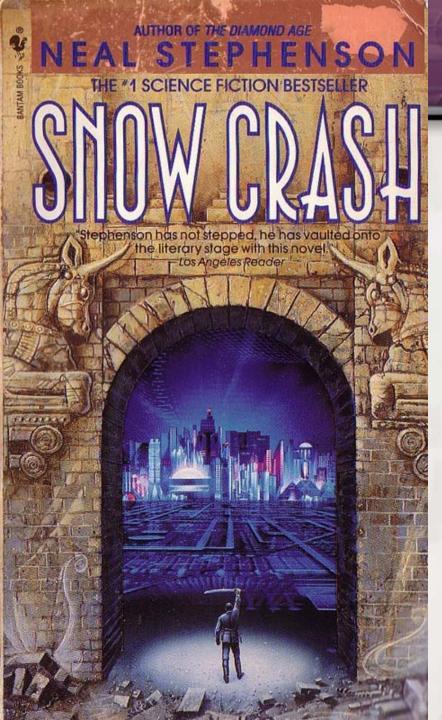
2006



WIKINOMICS

How Mass Collaboration Changes Everything

Don Tapscott
Bestselling Author of The Digital Economy
and Anthony D. Williams



Snow Crash: the seeds of a great idea

- Digital 3D World
- VR video, audio, motion interface
- Snow Crash virus can jump from digital to physical world
- Inspiration for Second Life

1992



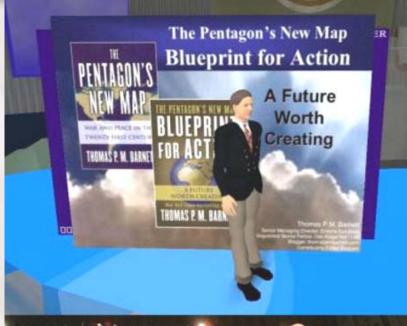
Evolution of Digital Worlds





Bridging the Gap Between the Real and Virtual Worlds









Virtual World Impact on Politics and Democracy





Virtual World Anonymity



"On the Internet, nobody knows you're a dog."



Ubiquitous Computing and Mixed Reality Games

- Desktop Computers
- > Laptops
- > Game Consoles
- Gameboy DS
- > Pocket PC/Palm Pilot
- Cellphone

> Hybrid Devices





Closed vs. Open Societies



- > Closed
- >Adapt
- >Wait



Threat to Citizens

Information acquisition costs are falling to zero



Data Mining

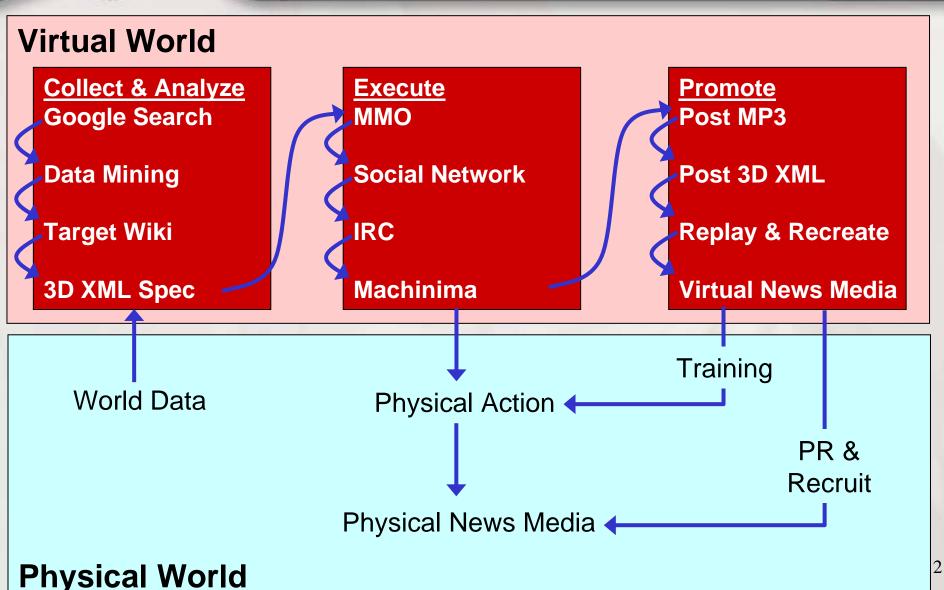
Target Wiki

3D XML Spec





MMOG Coordinated Attack





Staying Ahead of the Competition

What if Democracies stuck with newspapers while only Extremists moved to television?



The Washington Post



Fairfax Man Whose Son Killed Police Is Arrested

Father Possessed Guns Illegally, Charges Say

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A 21-yang indictaoru, menaloci lav yezindig in US. District Court in Menanchia, portrago u brailly cought up in a world of gen and drags. N alleges that Brian Semendy emol of mor general with his worse and his work screen; brained and has Michael Semendy's mother. Margant, terrain territory i monte, stargette prac-tor firing awaint rifles.
Authorities found green and madjeuma troughout the family's horne, and the in-

HARVESTING CASH | The Many Definitions of Thurnt'



Rural Aid Goes to Urban Areas

USDA Development Program Helps Suburbs, Resort Cities

Hussein's **Prewar Ties** To Al-Qaeda Discounted

Pentagon Report Says Contacts Were Limited

Captered Itsel documents and intelli-grace interrugations of Stabilars Hosele and two fermer aides "all confirmed" dua

also complete new details about the in-

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"This is al-Queels operating in Iraq," Che



Ask the same question of 3D worlds.





References

- > Beck, J.C. and Wade, M. (2004). *Got game: How the gamer generation is reshaping business forever.* Boston, MA: Harvard Business School Press.
- > Casti, J. (1997). Would-be Worlds: How simulation is changing the frontiers of science. New York: John Wiley & Sons.
- Michael, D and Chen, S. (2005). Serious games: Games that educate, train, and inform. Thompson Publishing.
- Smith, R. (March-April 2007). "The Disruptive Potential of Game Technologies: Lessons Learned from its Impact on the Military Simulation Industry". Research Technology Management, 50(2), pp. 57-64.
- Smith, R. (2007). "Game impact theory: Five forces that are driving the adoption of game technologies within multiple established industries". Games and Society.
- Smith, R. (2007). "Competitive Impact of Game Technologies on Five Industry Segments". *Technovation: The International Journal of Technological Innovation, Entrepreneurship and Technology Management*