

# Tech Fads vs. Fundamental Shifts



[http://p10.metroflog.com/pictures/529/37/5/828537529\\_JWJLBHIPANXCMYK.jpg](http://p10.metroflog.com/pictures/529/37/5/828537529_JWJLBHIPANXCMYK.jpg)

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Dawg Days  
Technology Fair  
29 Sep 2010

In search of the  
Next Big Thing...

By recognizing  
the Next Big Fad



<http://www.theshinywave.com/wp-content/gallery/post-images/google-wave-disappointment.jpg>

# Define “Fad” !

My definition:

- (1) phenomena characterized by rapid rise, rapid fall, and “irrational exuberance”\*  
i.e. lots of people **buying or believing without *good* reason**
- (2) a derogatory term for something you don't like

(\* apologies to Alan Greenspan, 1996)

# Not a Fad?

Decline due to normal technical obsolescence

Good ideas that don't work (yet)

e.g. AI, fusion power

Good ideas that are (still) too expensive

e.g. Ferrari Testarossa

Exponential phenomena that no one asked for

e.g. viruses

**What's Your Favorite Fad?**

# Candidate Fads

from UW colleagues

Social networking  
Cloud computing  
TCP/IP  
Perl, Python, Smalltalk, Ada ...  
WordPerfect, Lotus 1-2-3  
Blogging  
Podcasting  
Pong  
Thin Clients  
CDs  
Tablets

classmates.com  
Paperless office  
Multimedia  
Crowd-sourcing  
Second Life  
ATM, Token Ring  
NeXT, Amiga Computers  
“Push” technology; PointCast  
Computers for K12  
Virtual Reality  
Physical books

# The “Pet Rock” of IT?



Tamagotchi (digital pets)



## Can You Invent a MILLION-DOLLAR



All smiles over the success of the multimillion-dollar business they've built out of fun and games, Richard P. Knerr (left) and A. K. Meier clown among some hit products in their San Gabriel, Calif., office.

A California firm isn't kidding when it invites you to send them your ideas for fun and games. They've made millions on fads—from Hula Hoops to bubbles

**H**ere's a firm whose president may suddenly start bouncing spectacularly lively rubber balls for the chief of research and development to catch—if he can. And the executive vice-president thinks nothing of firing a blast of air from a formidable-looking plastic gun at his busy and unsuspecting secretary.

That's the Wham-O Mfg. Co. of San Gabriel, Calif., where anybody's idea of an amazing toy, or a novel product of almost

*Continued*



Ever dodge a balloon-size soap bubble drifting by? It had probably floated away from generators like these. The youngsters are playing with Monster Bubble sets, an idea bred in Wham-O's factory.

78 | POPULAR SCIENCE



## FAD?

By WESLEY S. GRISWOLD

If fun is your business, illustrating it with gag shots comes natural. This gal supposedly needs the hard hat to survive a shower of Super Balls, a spectacularly bouncy item set in motion by Wham-O.

Slip'n Slide gets a try-out by a young enthusiast. Like many of Wham-O's best sellers, this slippery product grew from an outsider's idea. A young upholsterer is now getting royalties on this one.



JANUARY 1966 | 79

<http://blog.modernmechanix.com/2008/12/30/can-you-invent-a-million-dollar-fad/>

Popular Science article on Wham-O --Jan 1966



# It's Easy to be Wrong

"Airplanes are interesting toys  
but of no military value."

— Marechal Ferdinand Foch, Professor of Strategy,  
Ecole Superieure de Guerre.

"I think there is a world market for  
maybe five computers."

— Thomas J Watson, Chairman of the Board, IBM.

# The Internet?

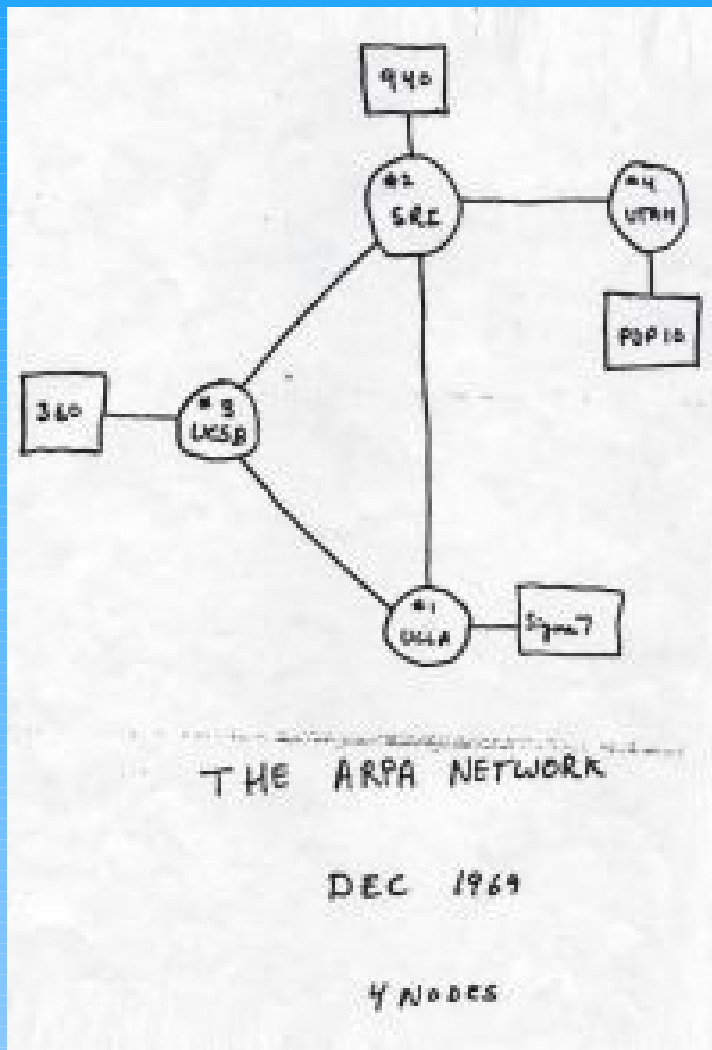
At UW in **1997**: Bran Ferren\* asks:

**Is the Internet like fire or CB radio?**

→ only 1/3 of the audience said “fire”

\* VP, Disney Imagineering

# ARPAnet / Internet Growth



From 4 nodes  
to 4 billion nodes  
in 40 years.

No sign of decline.

Conclusion:  
Not a fad!



## Ignoring Social Media Growth Can Be Dangerous

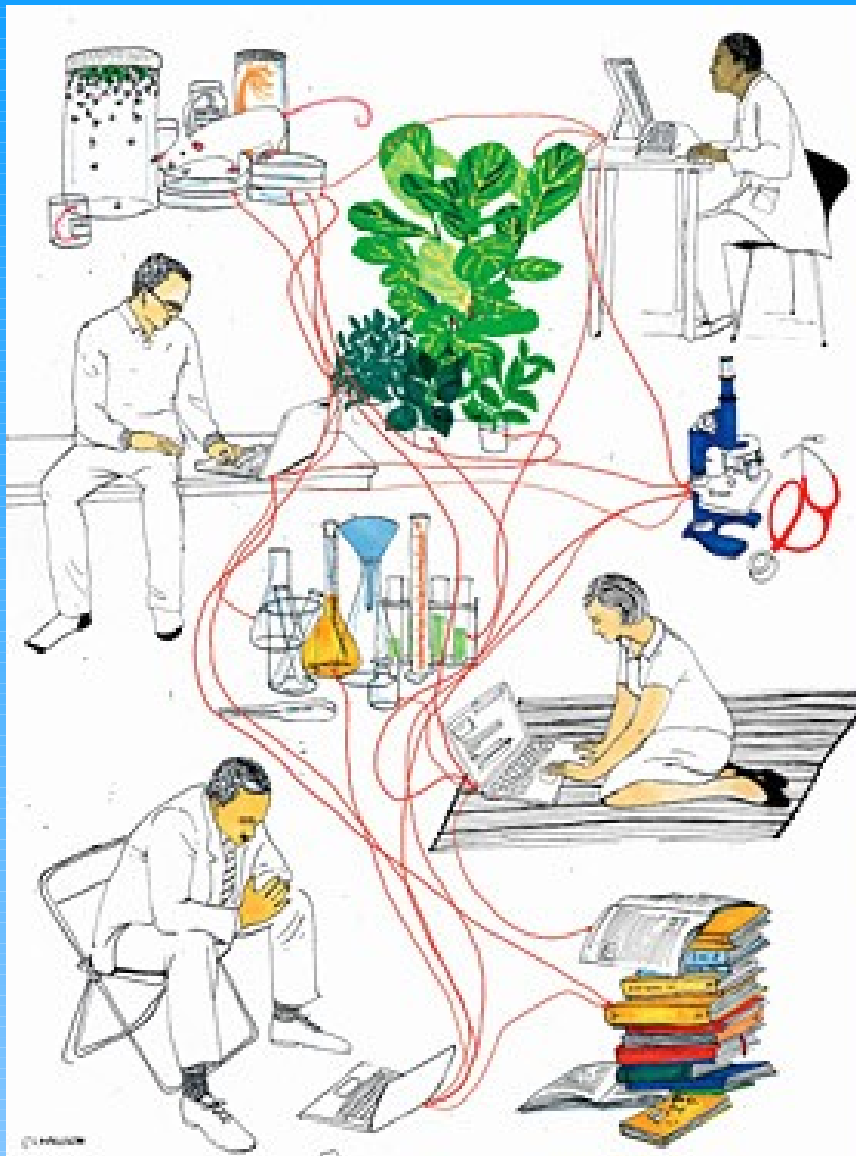
By JENNIFER OVERHULSE-KING

Choking games – a dangerous fad!

December 19, 2007 by [latha vidyaranya](#)

Can the Internet Policing not ban these kind of dangerous sites? Oh my god, where is technology leading our kids to???????





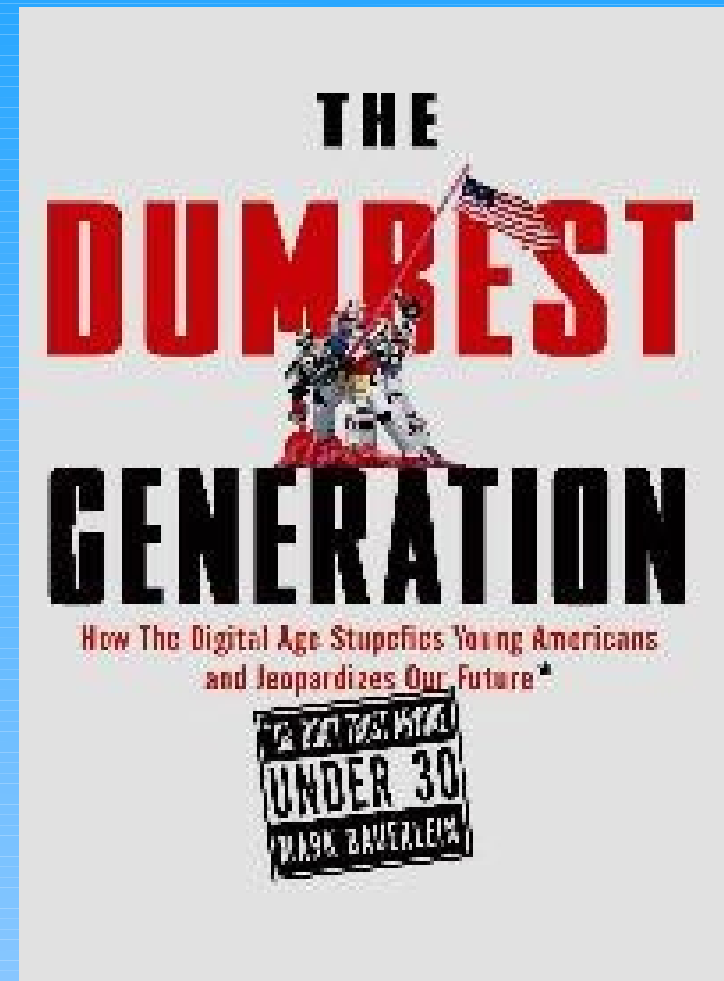
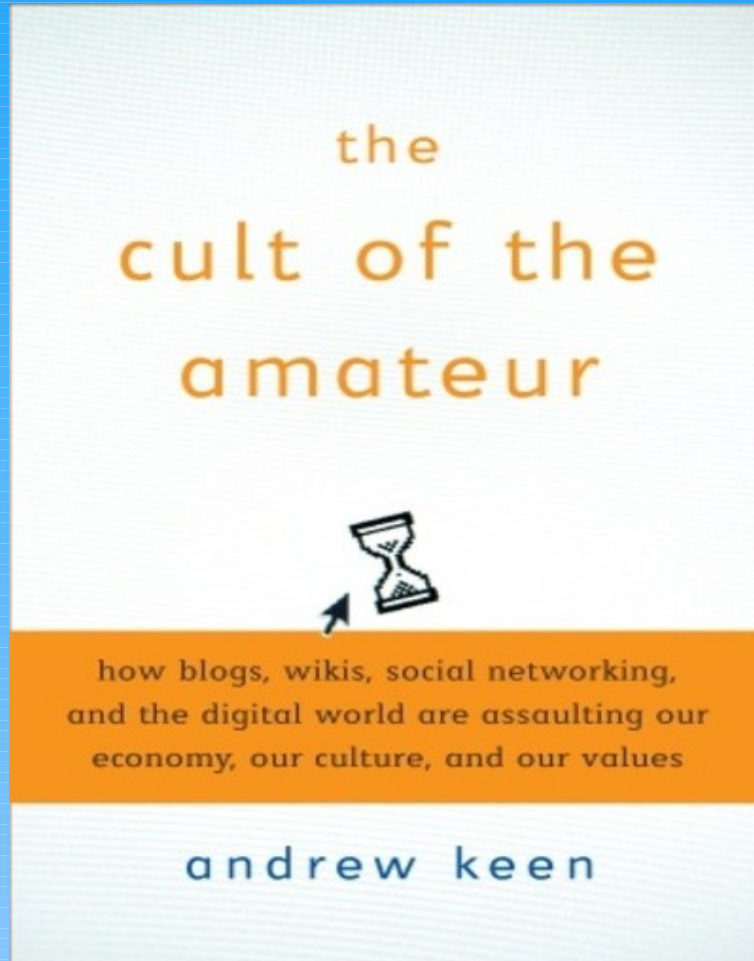
# SCIENCE 2.0: YOU SAY YOU WANT A REVOLUTION?

The collaborative online tools people are using in other parts of their lives, such as Facebook, YouTube, and blogs, are roiling the disciplined world of scientific communication.

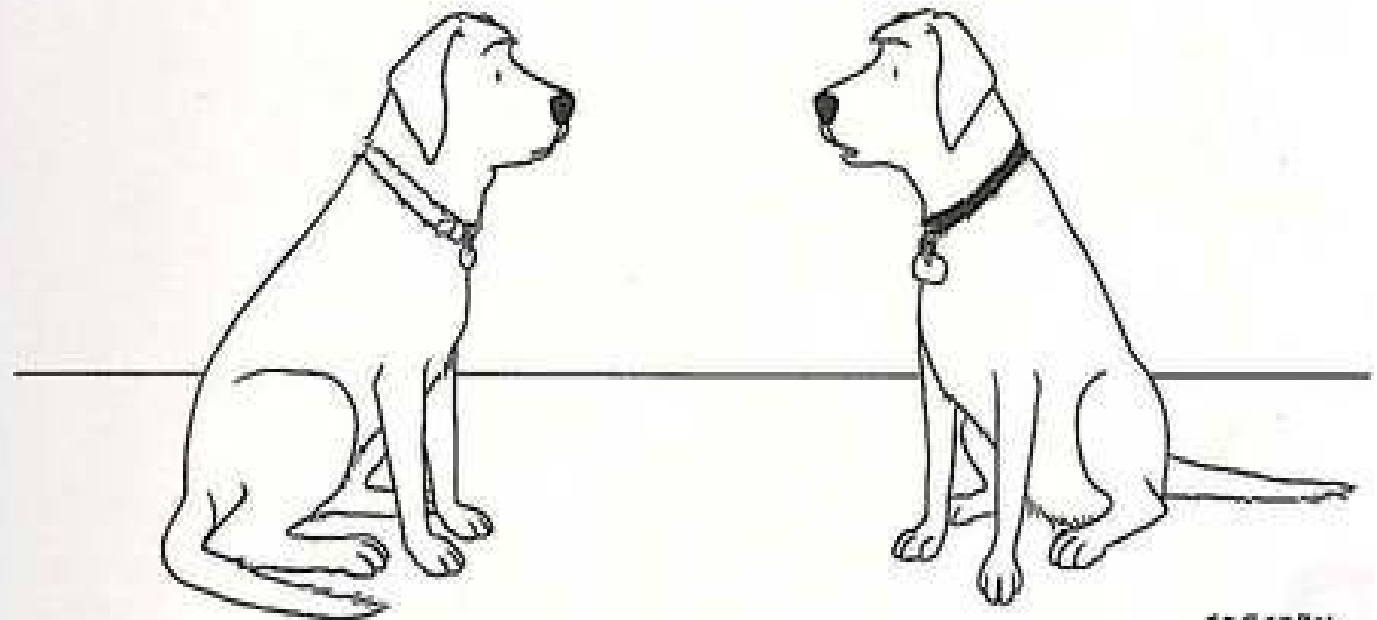
<http://www.hhmi.org/bulletin/nov2008/features/revolution.html>

# Social Networking Backlash

## The Dark Side of Crowd-Sourcing



Jefferson, meet Hamilton...



*"I had my own blog for a while, but I decided to go back to just pointless, incessant barking."*

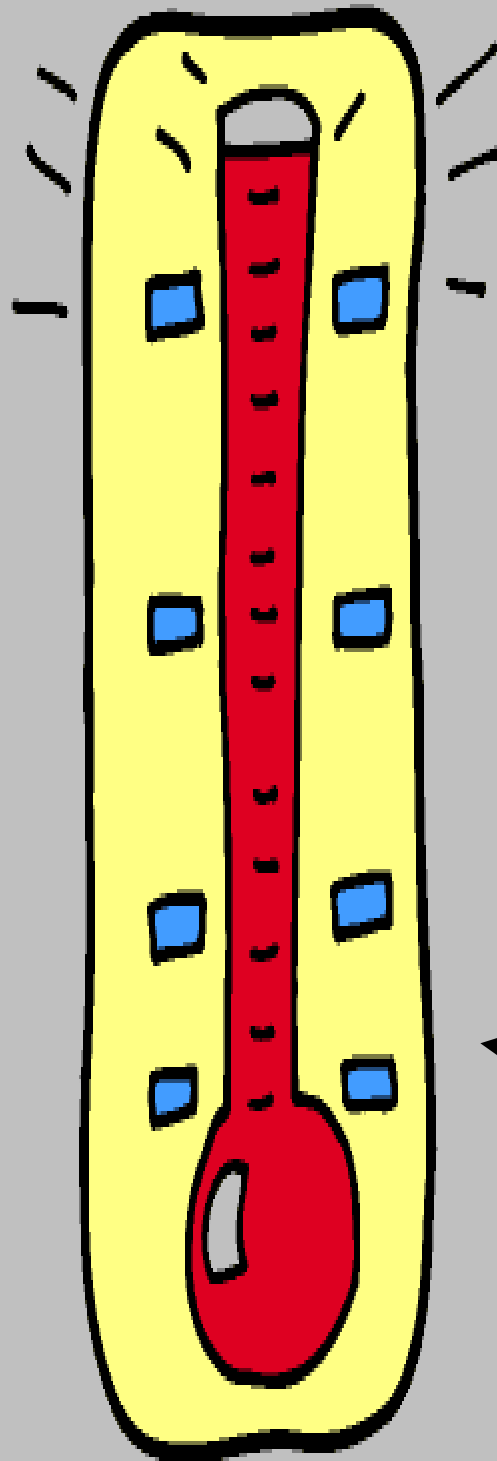
REBOOTING THE WORKFORCE  
**WEB WORKER DAILY**  
A GIGADOM NETWORK SITE

## Social Networking: Modern Tulip Mania?

March 9th, 2008 (8:55am) Mike Gunderloy : [8 Comments](#)

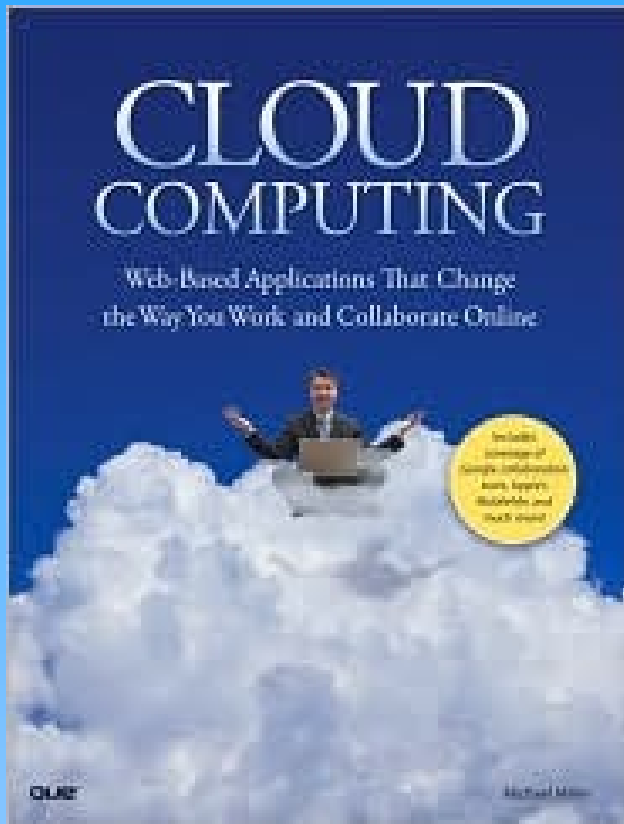
So...  
Cloud  
Computing:

*Hot or Not?*



- ← Nick Carr
- ← Eric Schmidt
- ← Bill Gates
- ← Larry Ellison
- ← Richard Stallman

# It must be Hot if ...



<http://img.brajeshwar.com/cloud-computing-vote.jpg>

<http://www.virtualizationconference.com/node/597208>



<http://gemsres.com/section/156/Cloud-Computing-307x100.jpg>

[http://res.sys-con.com/story/dec08/770227/CloudComputingBook\\_MichaelMiller.JPG](http://res.sys-con.com/story/dec08/770227/CloudComputingBook_MichaelMiller.JPG)



# Gone but not forgotten?



<http://www.technobuffalo.com/blog/google/what-went-wrong-with-google-wave/>

<http://www.marketingpilgrim.com/2010/08/google-wave-shuts-down-google-refuses-to-admit-it-sucked.html>

# EVERY GREAT REVOLUTION NEEDS A PLAN.



*Mega Value Combo Plan*

## 500 MB DATA

PLUS TONS OF TALK  
& MESSAGING

**\$15**

	<b>FAD?</b>	<b>RAD?</b>	<b>MEH?</b>
<b>Twitter</b>			
<b>Facebook</b>			
<b>Farmville</b>			
<b>Second Life</b>			
<b>3D TV</b>			
<b>Tablets</b>			

# Adoption Curves and Gravity

What drives exponential growth? What comes after?

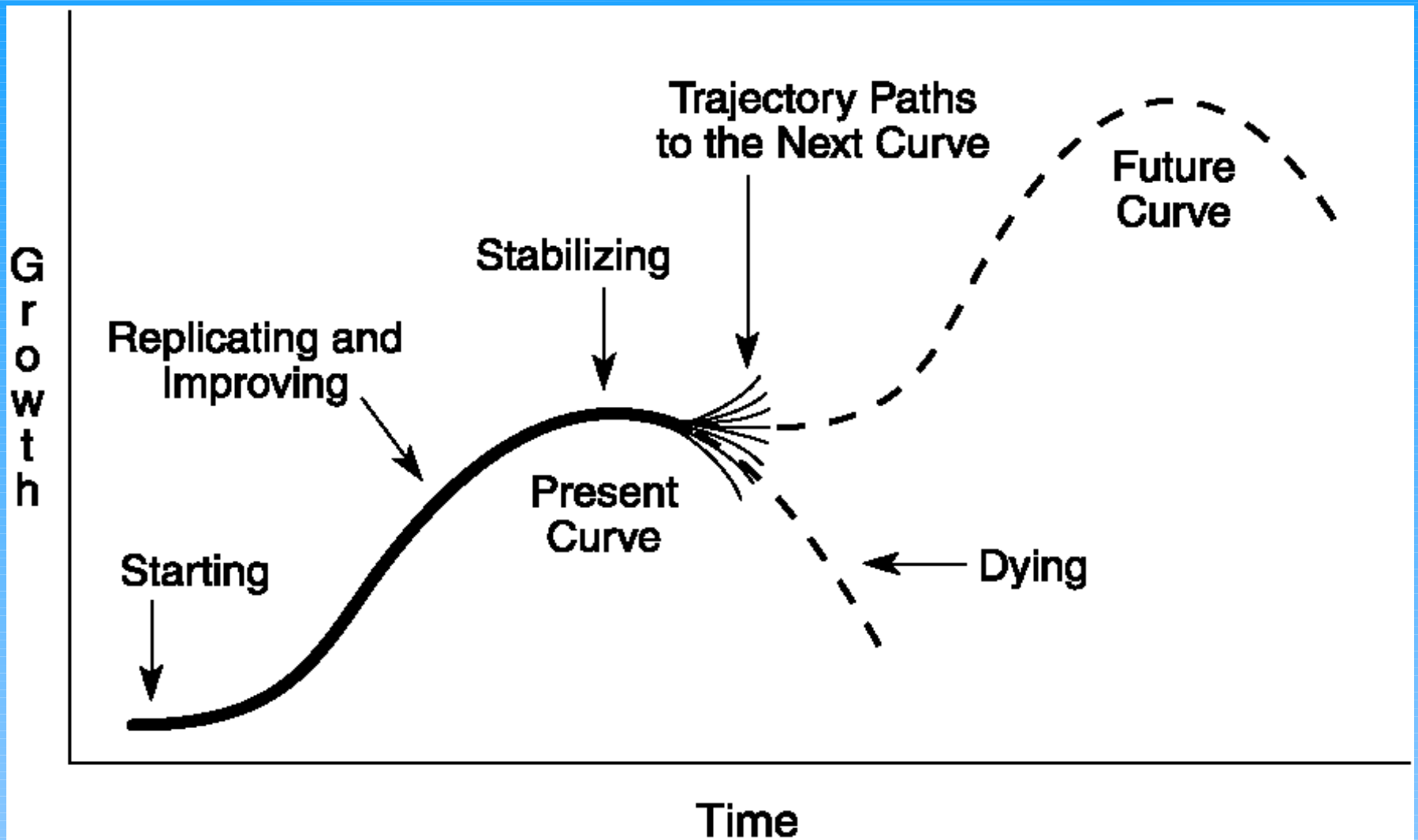
## Explanations for Rapid Rise

- Mass hysteria, contagion, greed, addiction
- Mandates
- Breakthru pricing

Does “what goes up must come down” apply?

- Timescale and scarcity matter
- Are we dealing with physics or psychology?
- No end in sight: data, network traffic, inane tweets

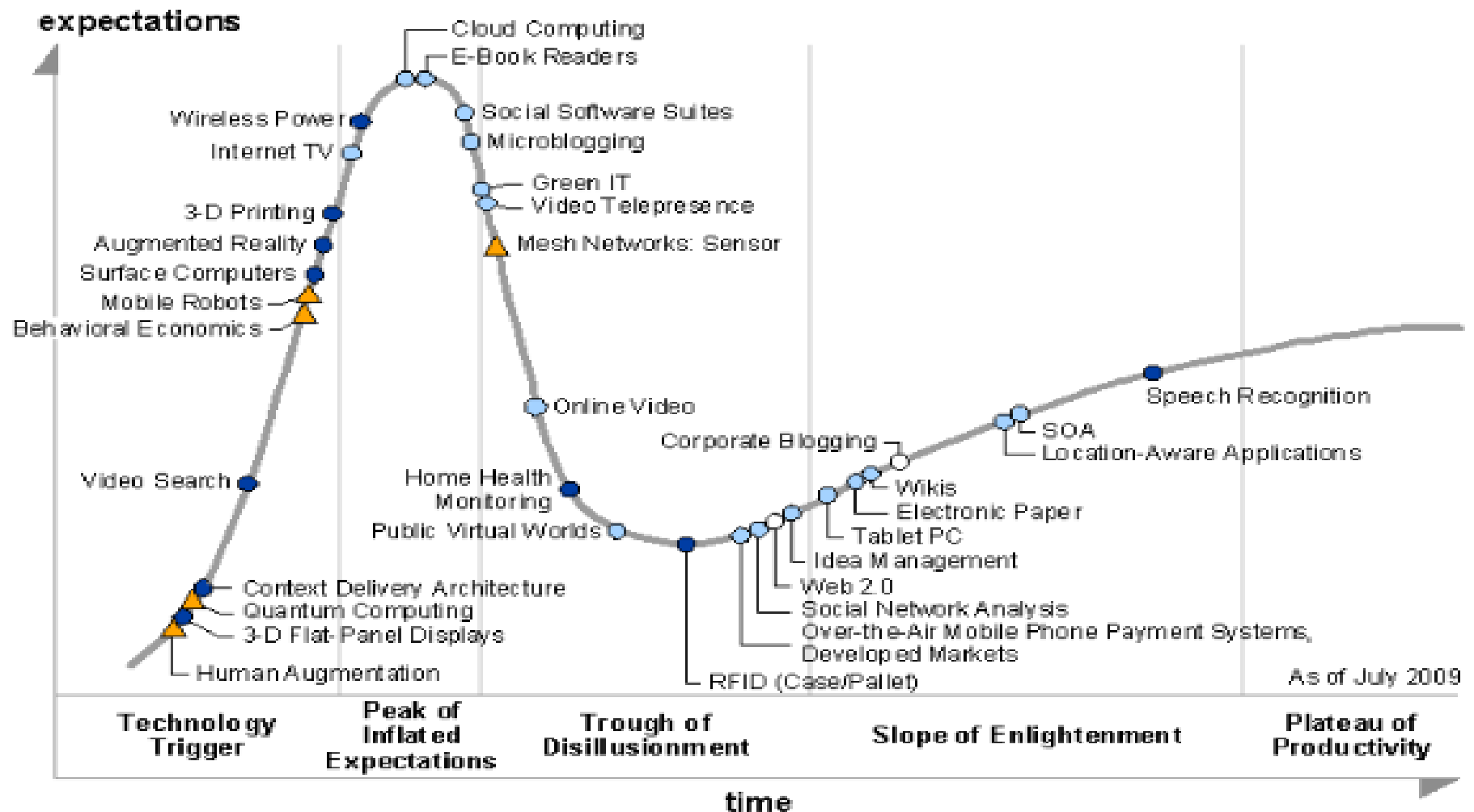
# S – Curve Adoption Cycle





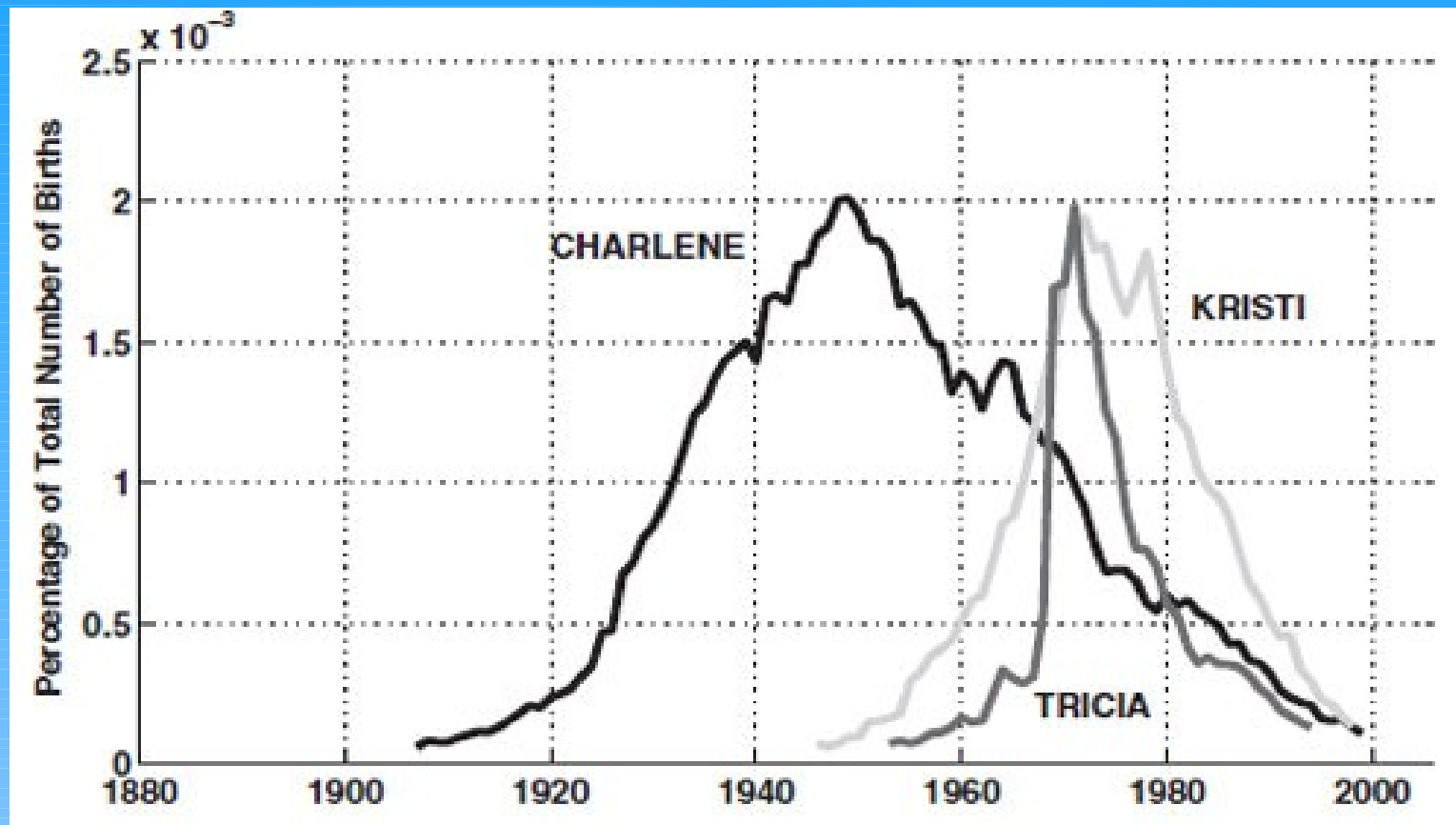
# Gartner Hype Cycle

**Hype Cycle of Emerging Technologies, 2009**



Source: Gartner (August 2009)

# Faster Rise, Faster Fall?



Berger and Le Mens

“cultural trends are abandoned more readily the quicker they catch on”

# What's the Punchline?

It's all about adoption curves

It's easy to be wrong

Timing and time-scales matter

Technology obsolescence is routine, but not a fad

Most common use of “fad” among techies: put down

Many exponentials are driven by cost breakthrus

Distinguish: trends, cycles, exponentials, singularities

Discussion!