

Meme Mining for Fun and Profit

By Broward Horne
DefCon 13

A stylized silhouette of a mountain range in a darker shade of teal, located in the bottom right corner of the slide.

3-Part Presentation

- ◆ Tactical – MemeMiner Parlor Tricks
- ◆ Operational – S-curve theory
- ◆ Strategic – Social Bandwidth

Dot Com Crash Continues?

- ◆ Recent layoffs in 2005

IBM – 13,000

Sun – another 5%

GM – 25,000

GE – “reorganization”

Alcoa – 6,500

Winn Dixie – 22,000

Lear – 7,700

Hypercom

BMC

Krispy Kreme

Cray

DHL

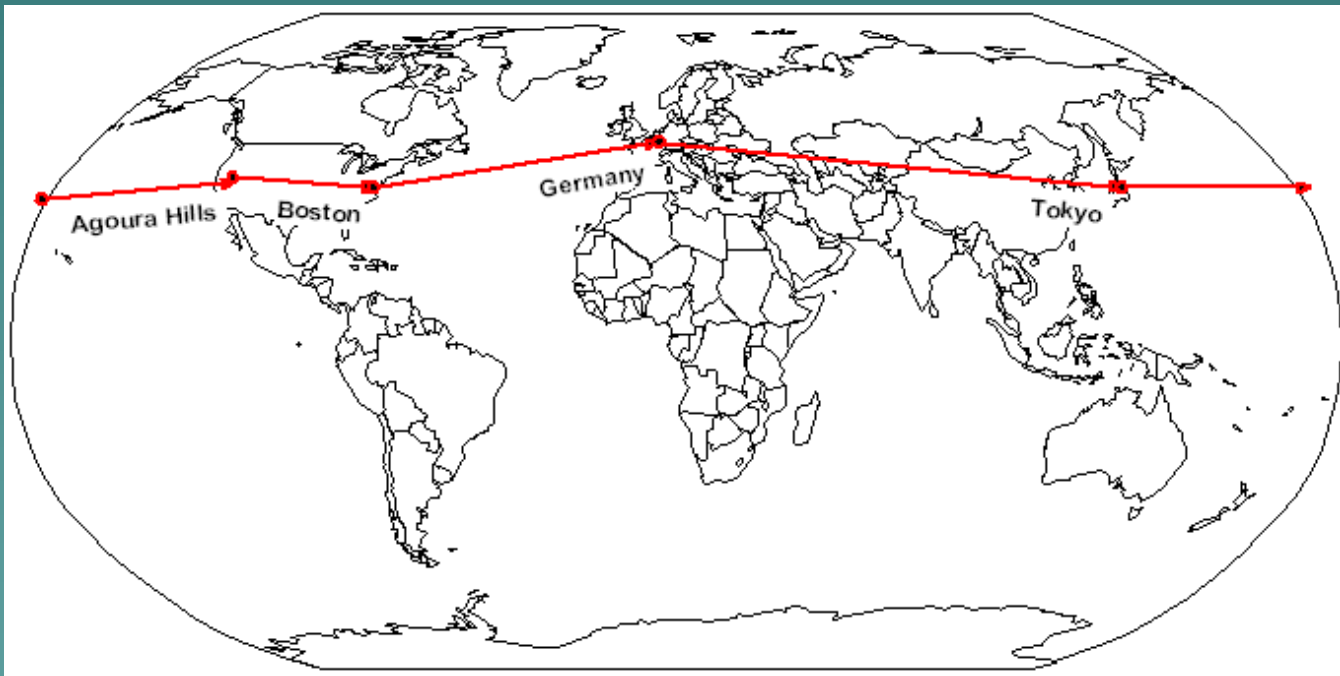
American Express

What To Do?

- ◆ Your time and effort are finite.
- ◆ The IT market changes constantly.
- ◆ What skills should you focus on?
- ◆ A mistake can be costly.

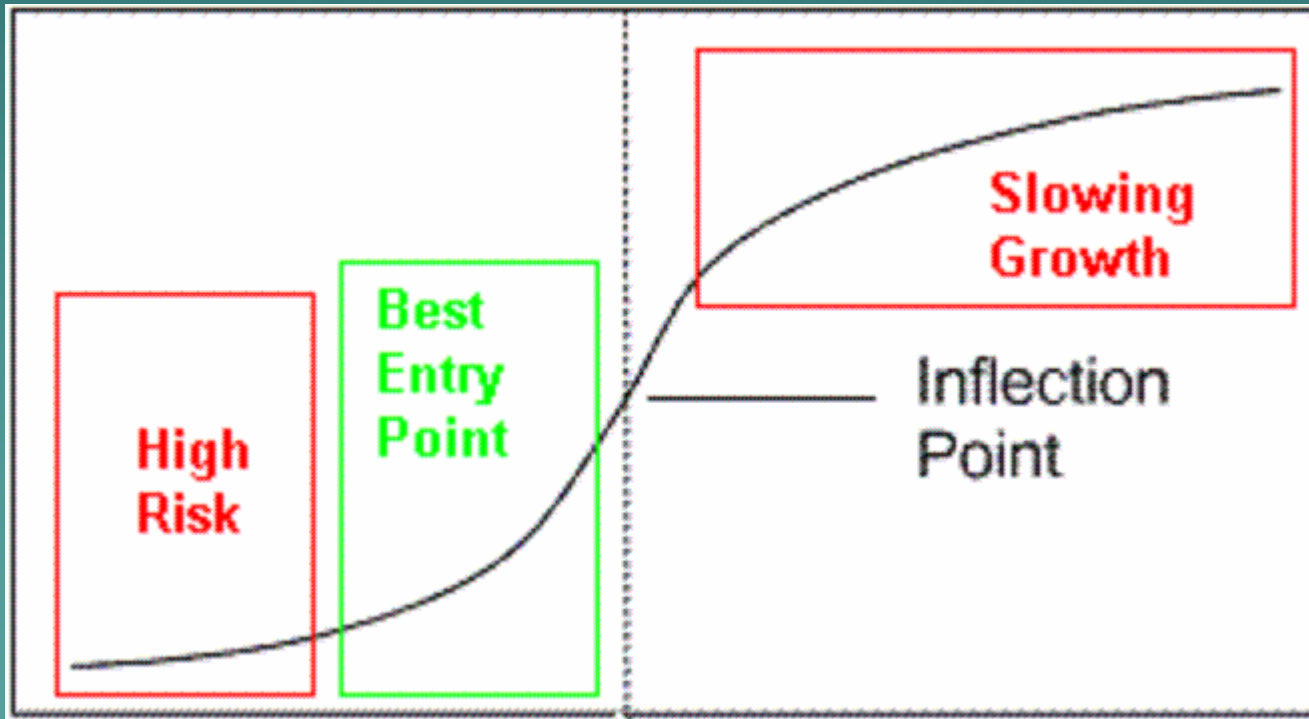
Me

- ◆ Why should you listen to me?
- ◆ Hacked some systems prior to 1991



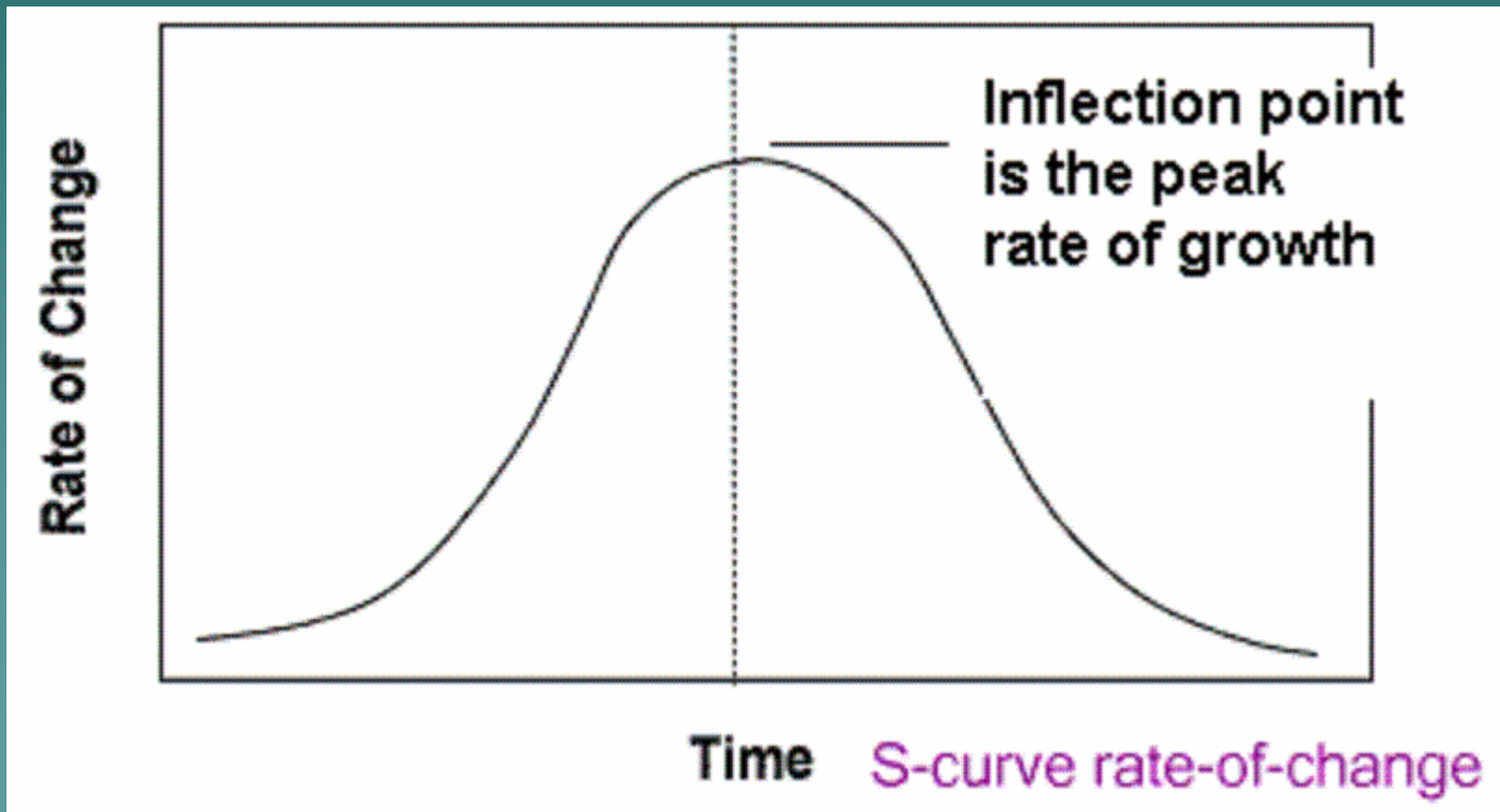
S-Curve

- ◆ Fundamental business function



S-Curve

- ◆ Rate of change in normal curve

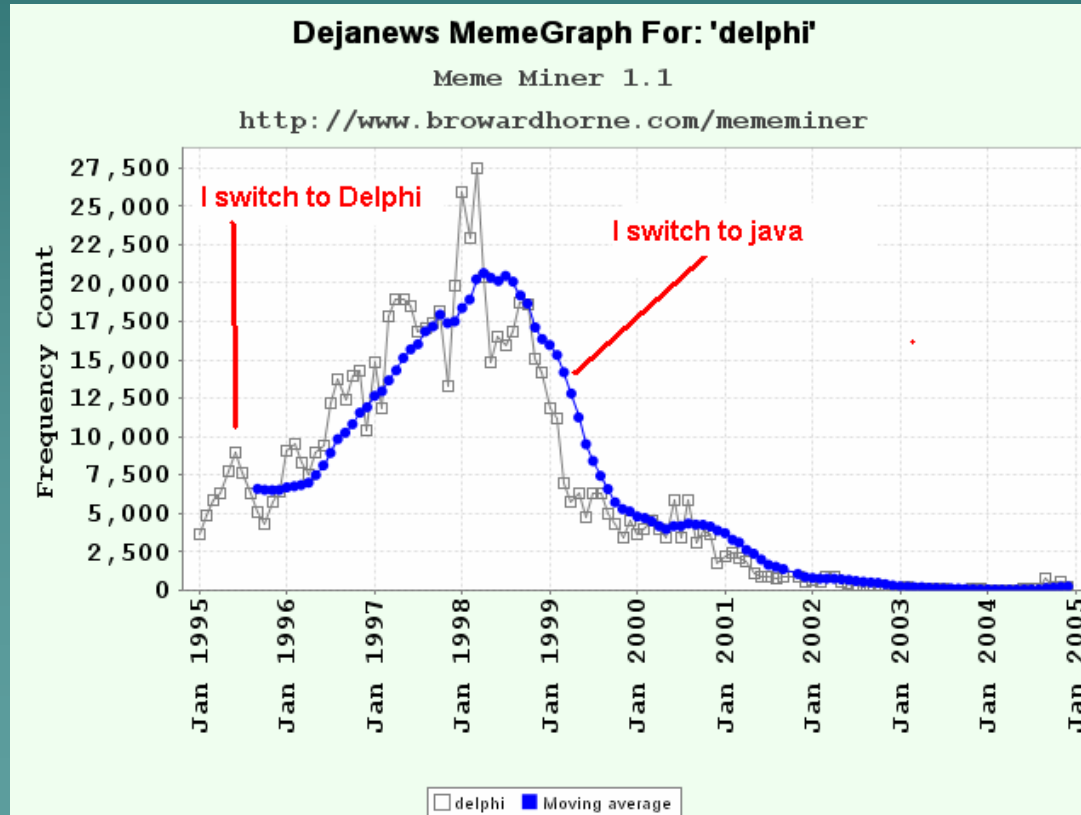


Meme Mining Theory

- ◆ Frequency count is proxy for S-curve
- ◆ Monitor technical trends
- ◆ Ride the S-curve

Example

◆ Delphi Programming Language

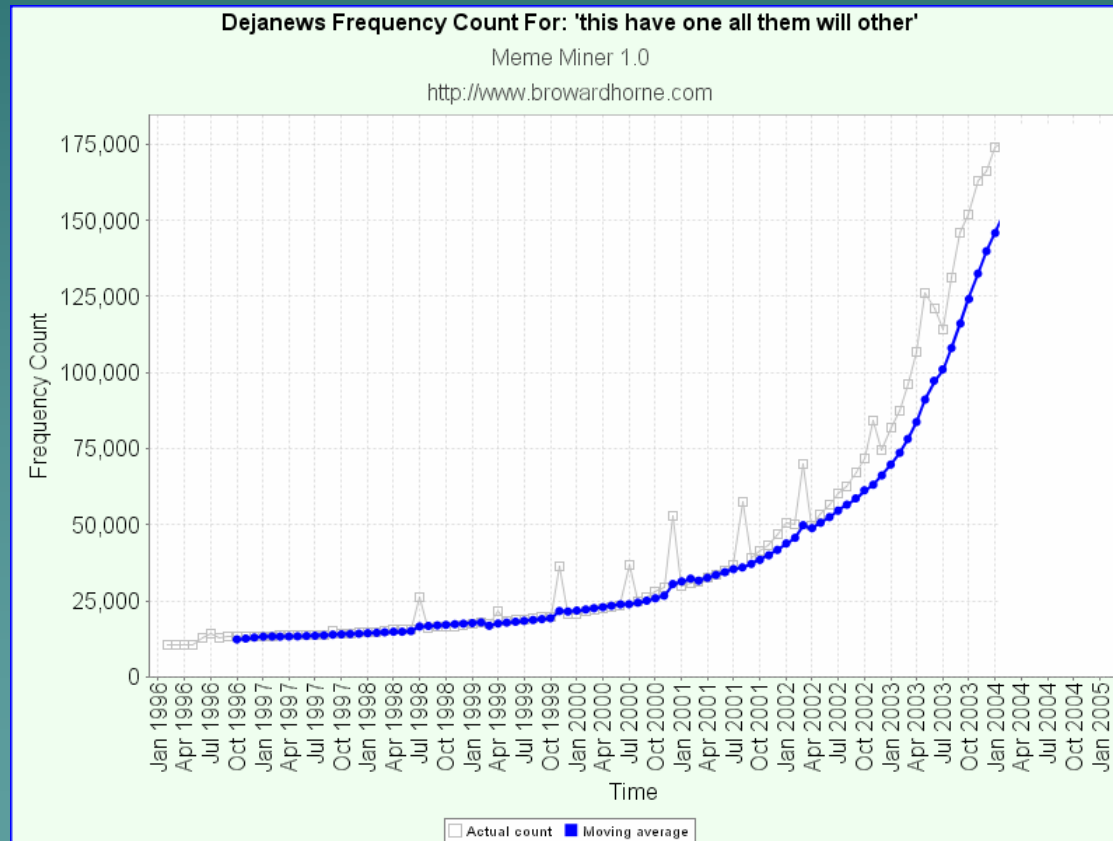


Meme Miner

- ◆ Simple java program
- ◆ Executes sequential queries
- ◆ Builds chart with query results

DejaNews Frequency Count

◆ Rough Proxy for Internet Growth

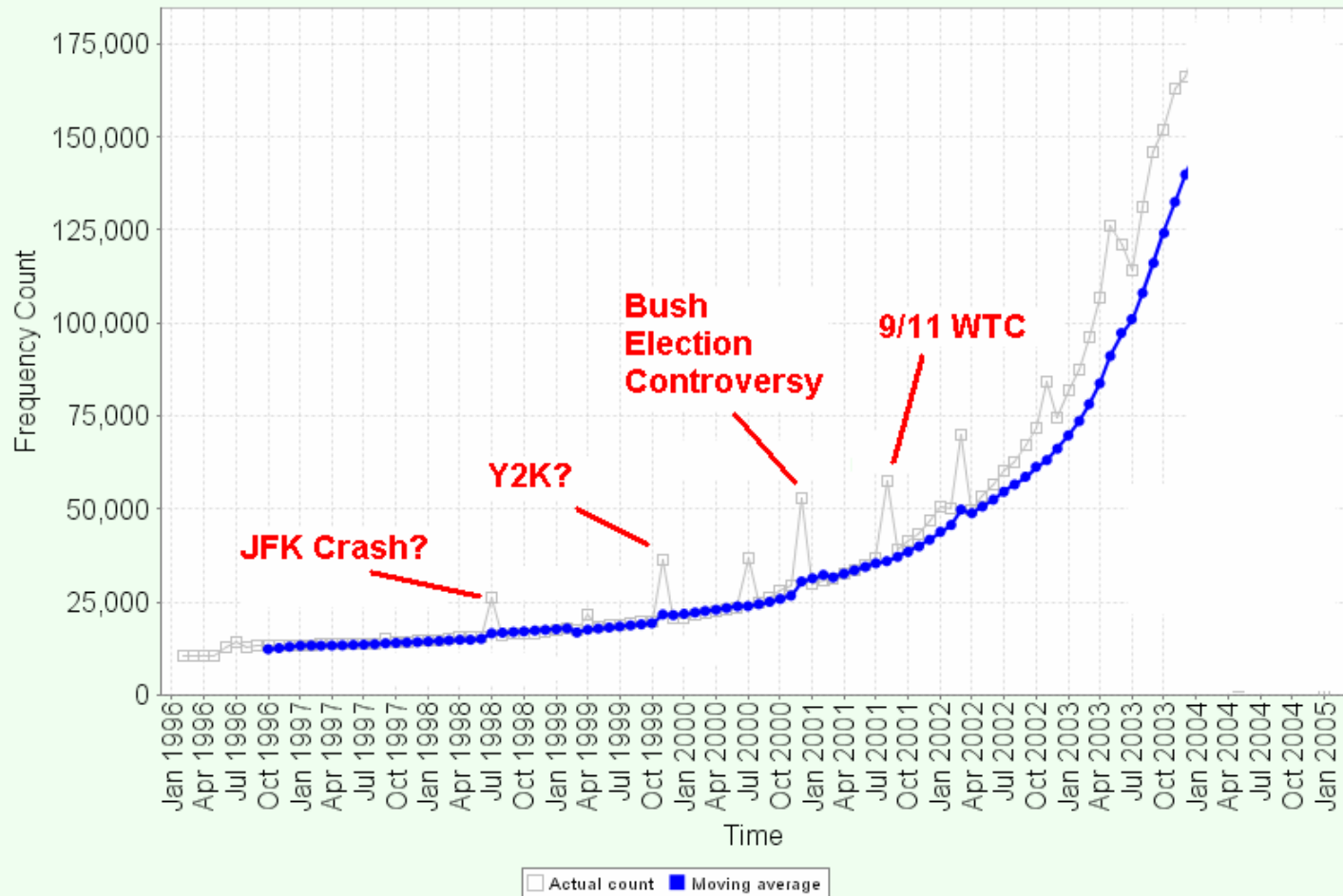


Major Events

Dejanews Frequency Count For: 'this have one all them will other'

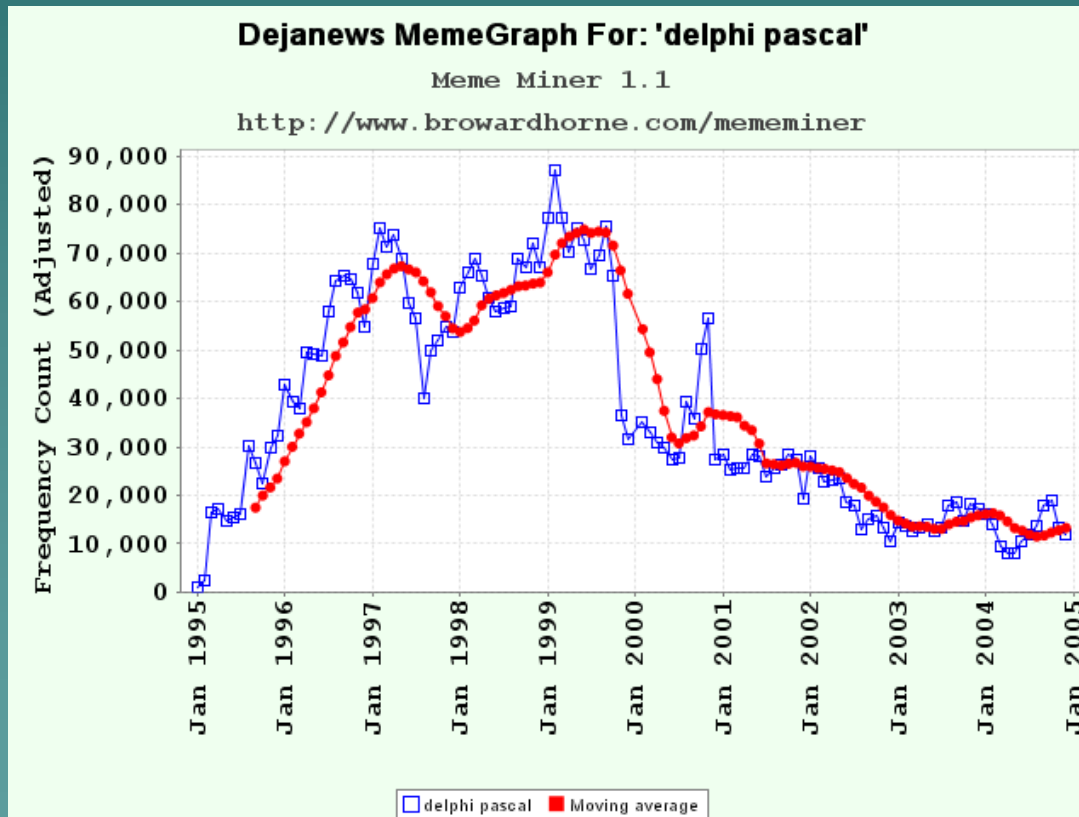
Meme Miner 1.0

<http://www.browardhorne.com>



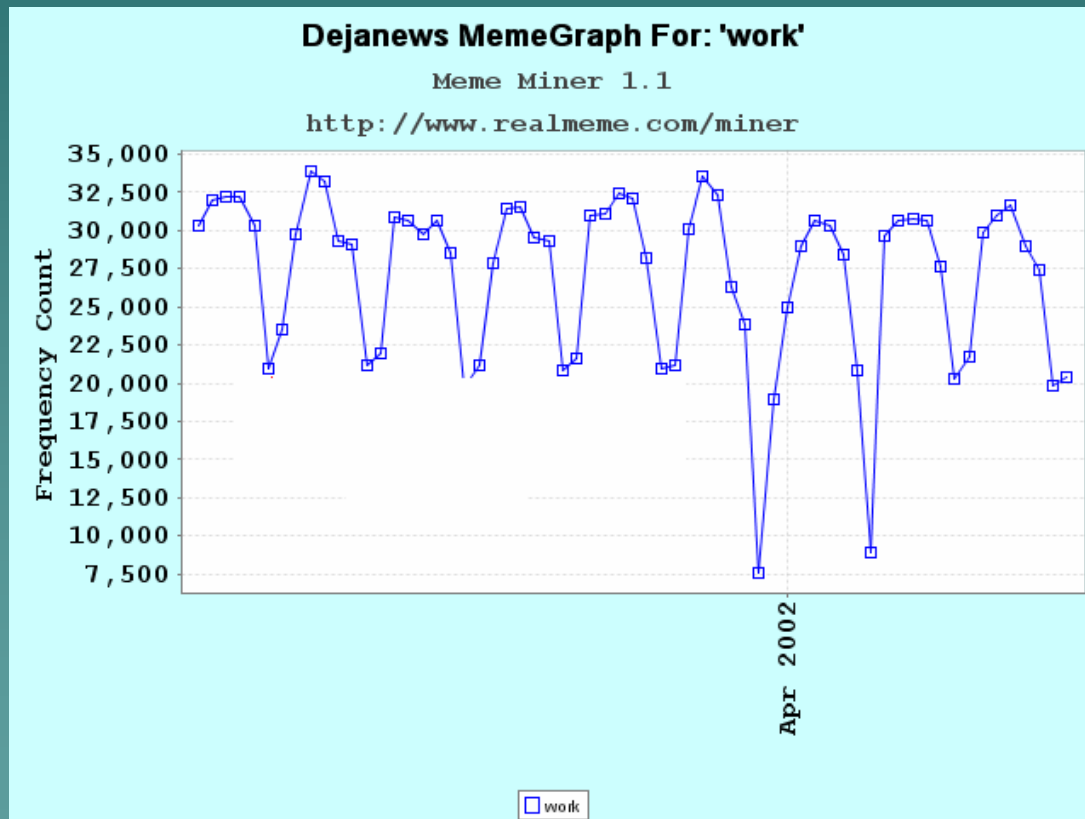
Historical Graphs

◆ Delphi



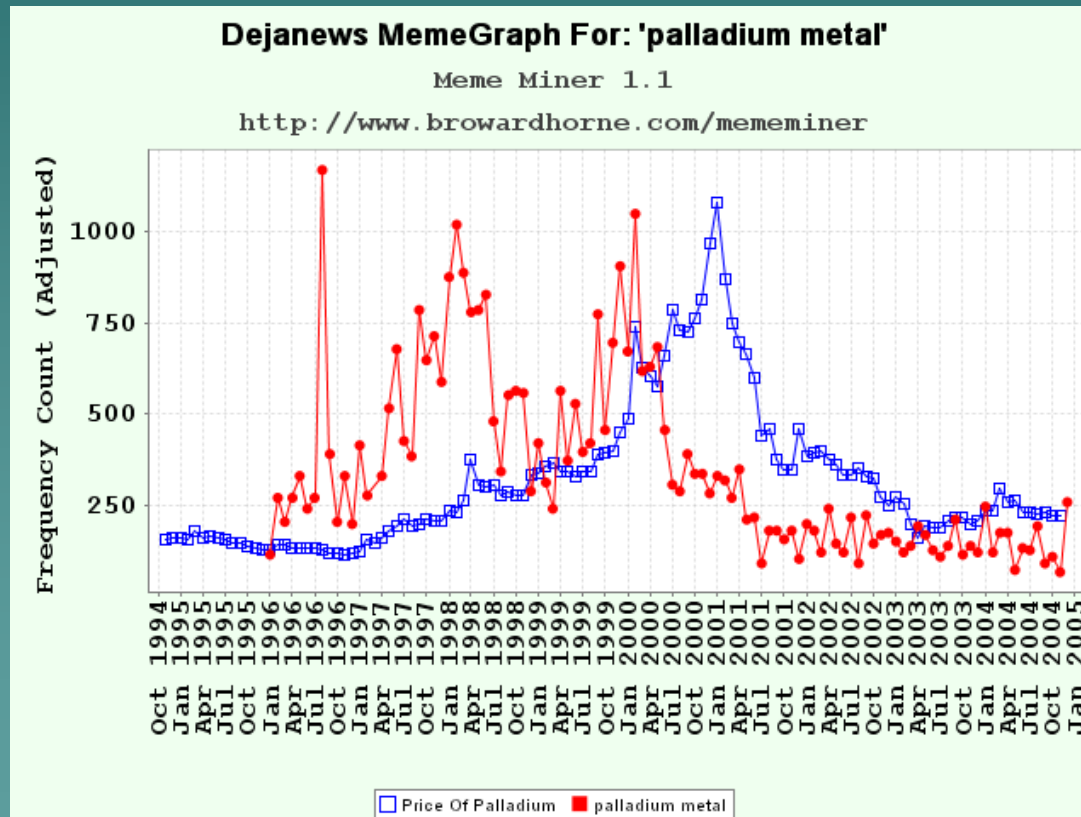
Historical Graphs

- ◆ Work – can you identify the pattern?



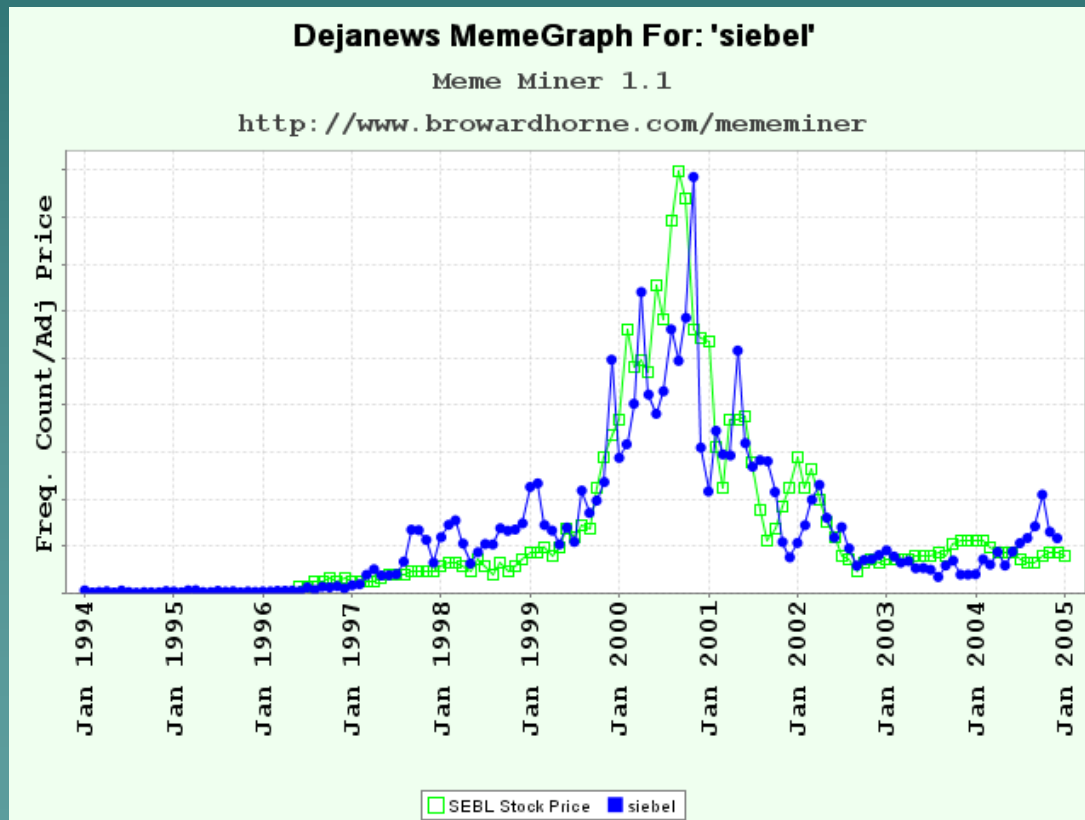
Historical Graphs

- ◆ Palladium – rumors precede rise



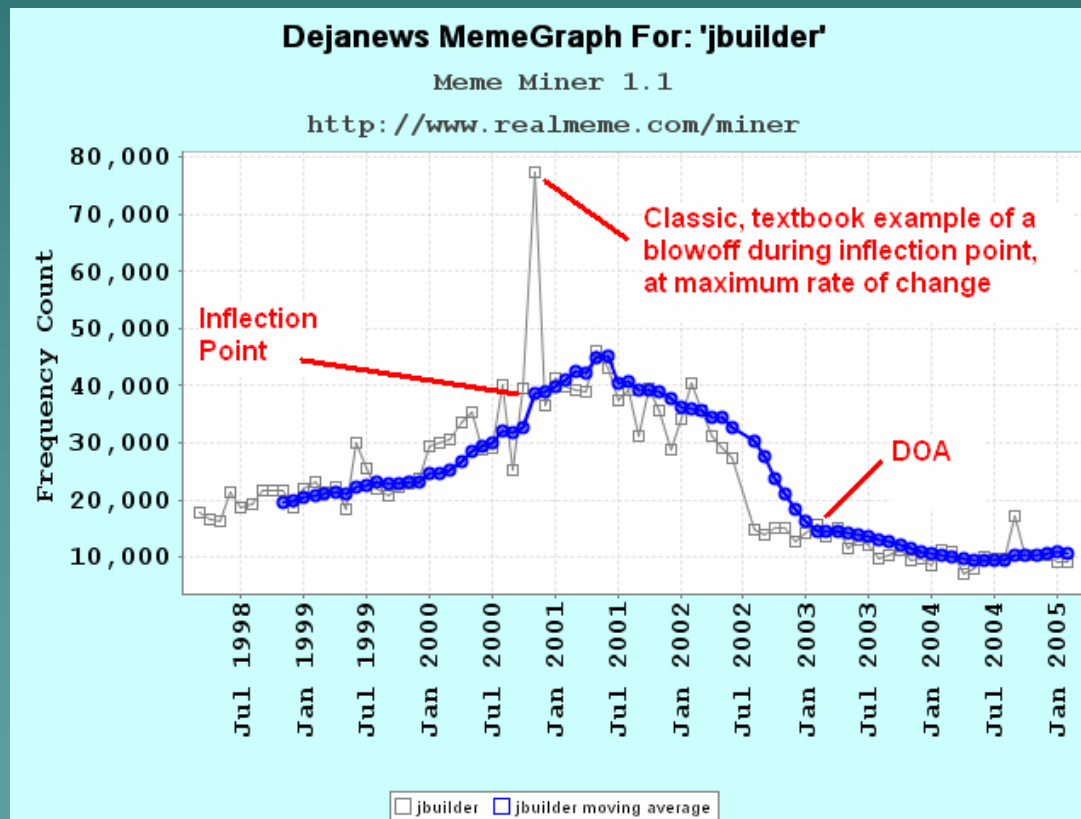
Historical Graphs

- ◆ Concurrent with stock prices



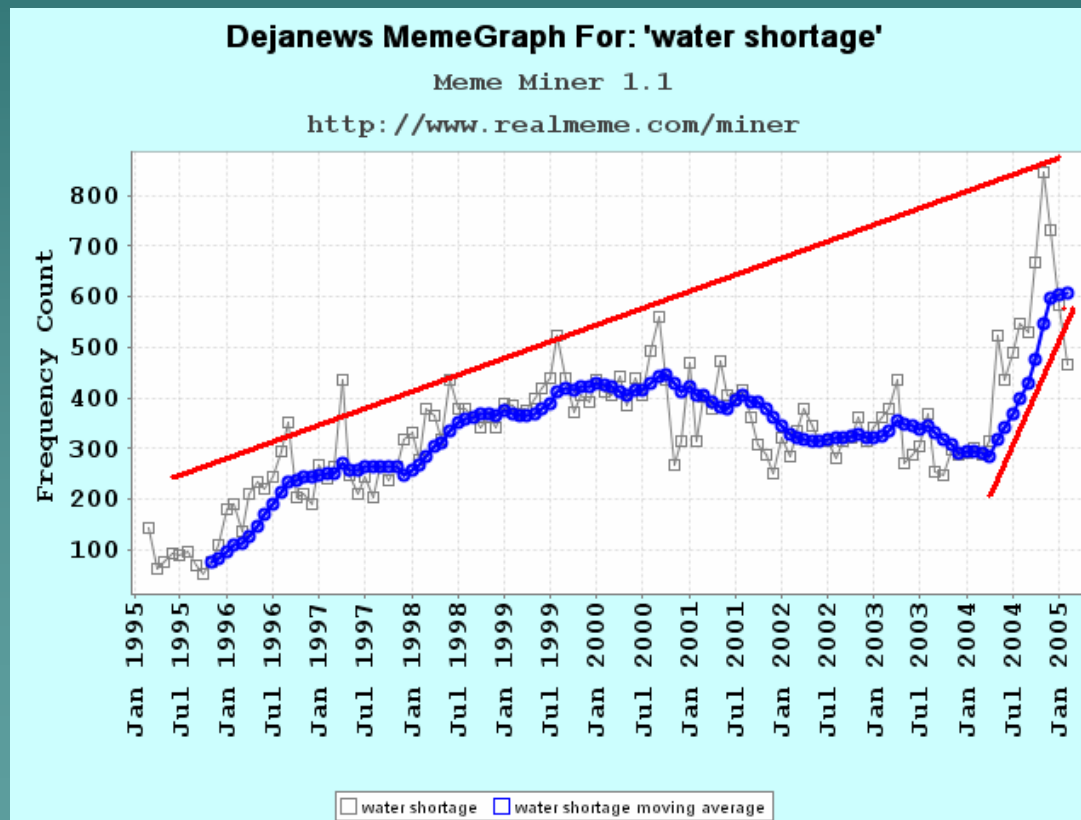
Historical Graphs

◆ Classic S-curve points of interest



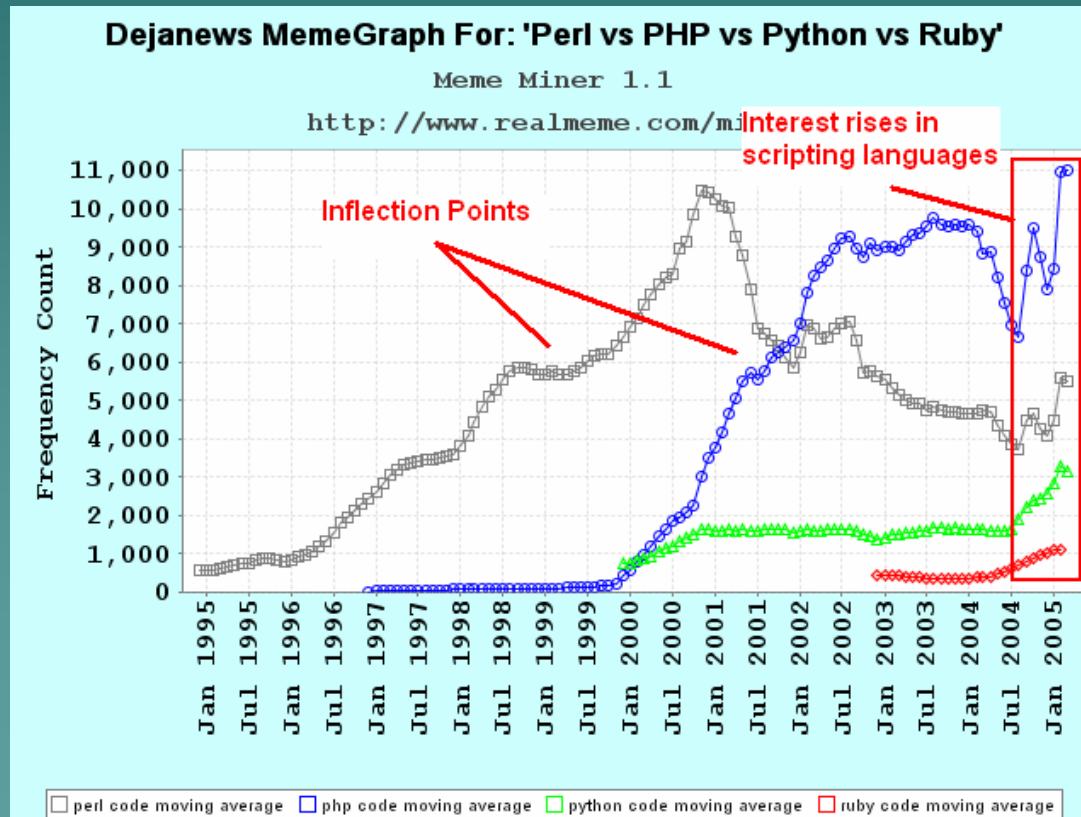
Pre-inflection Graphs

◆ Water shortage



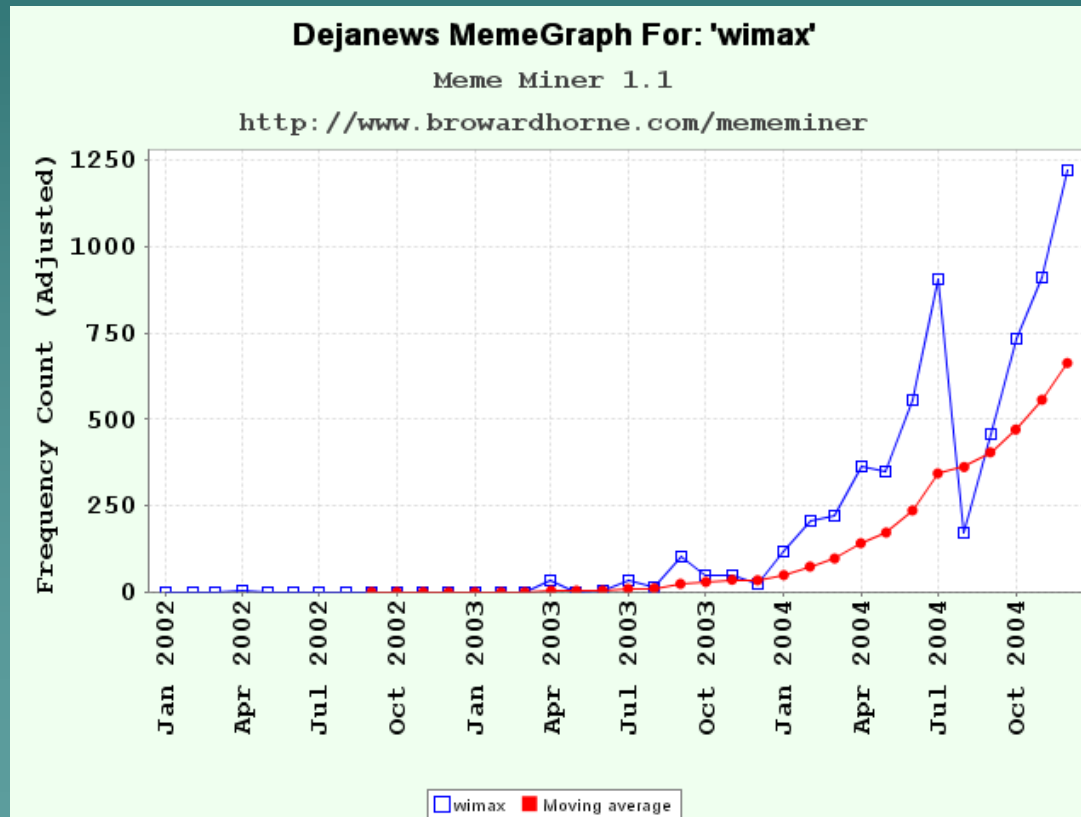
Pre-inflection Graphs

◆ Trends in Scripting Languages



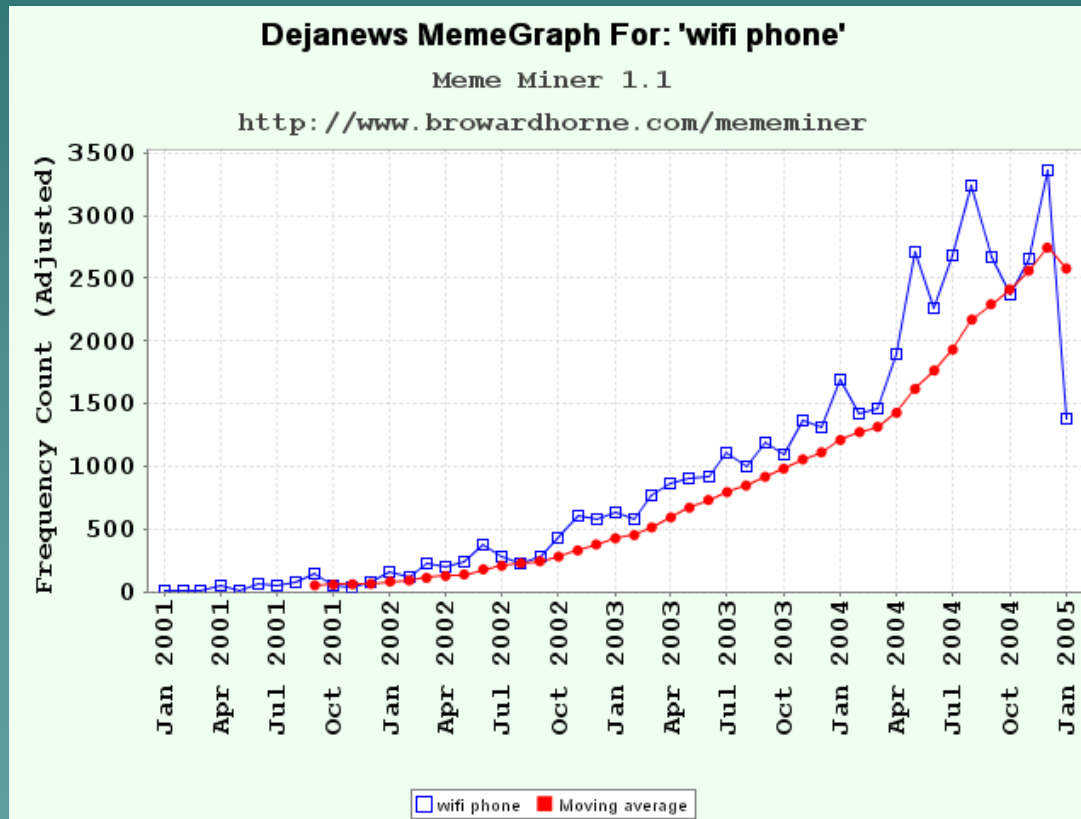
Pre-inflection Graphs

◆ WIMAX about to explode?



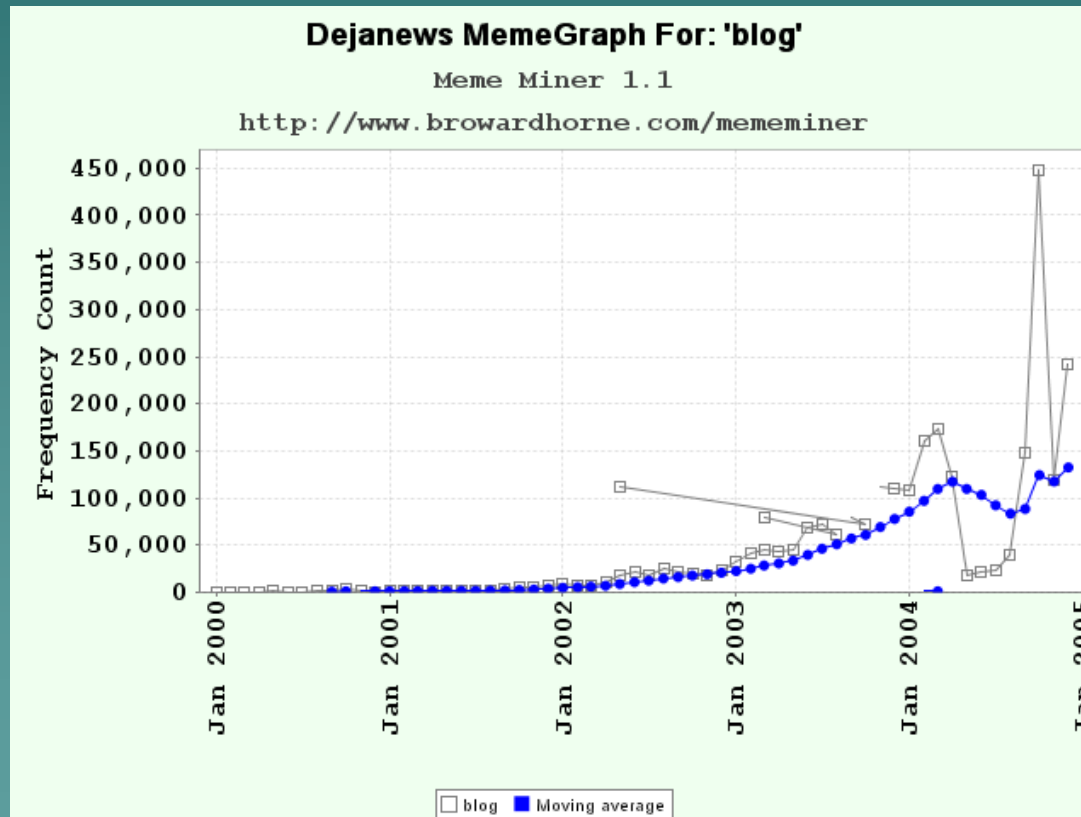
Pre-inflection Graphs

- ◆ Wi-fi phone is hot



Pre-inflection Graphs

- ◆ Blogs (27% don't know what it is)

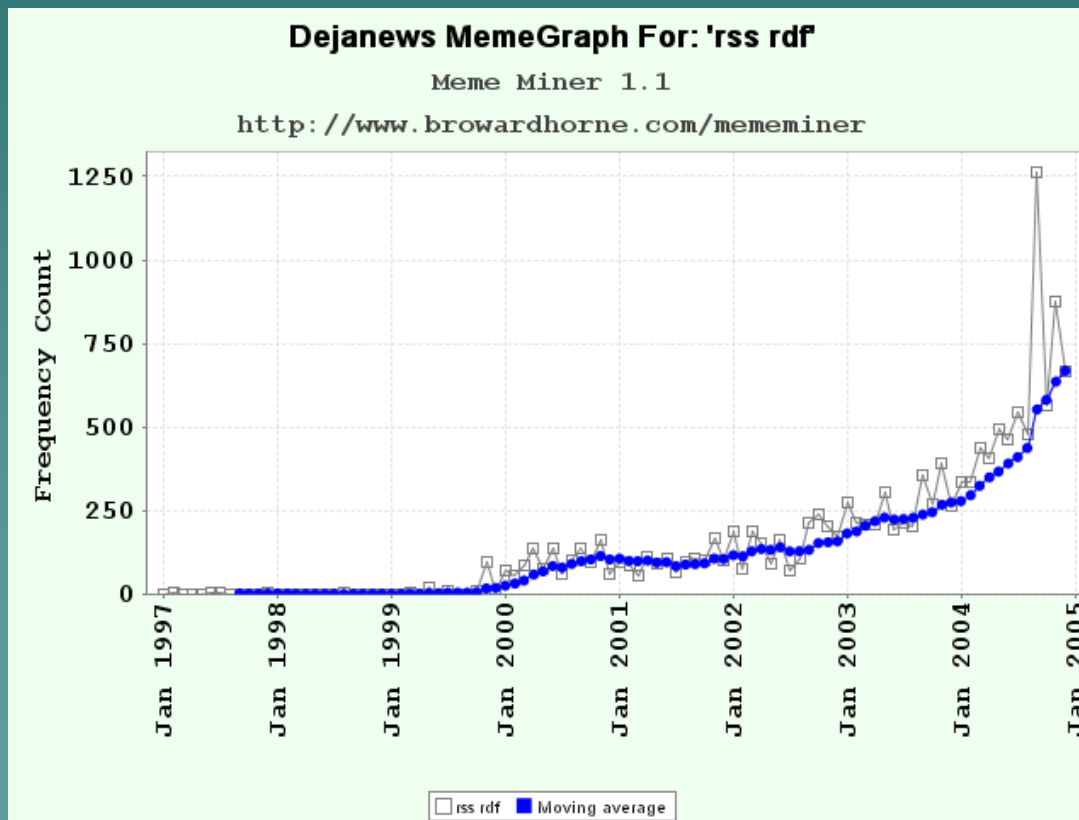


Pre-inflection Graphs

- ◆ Inflection tends to be at 50% point
- ◆ Inflection point is maximum hysteria
- ◆ What can we predict about “blogging”?

Pre-inflection Graphs

◆ RSS Feeds



Miner Deficiencies

- ◆ Requires knowledge of trend to test
- ◆ Subject to manipulation
- ◆ Not statistically rigorous
- ◆ Dependent on good keywords
- ◆ Works poorly for non-technical trends

Potential Improvements

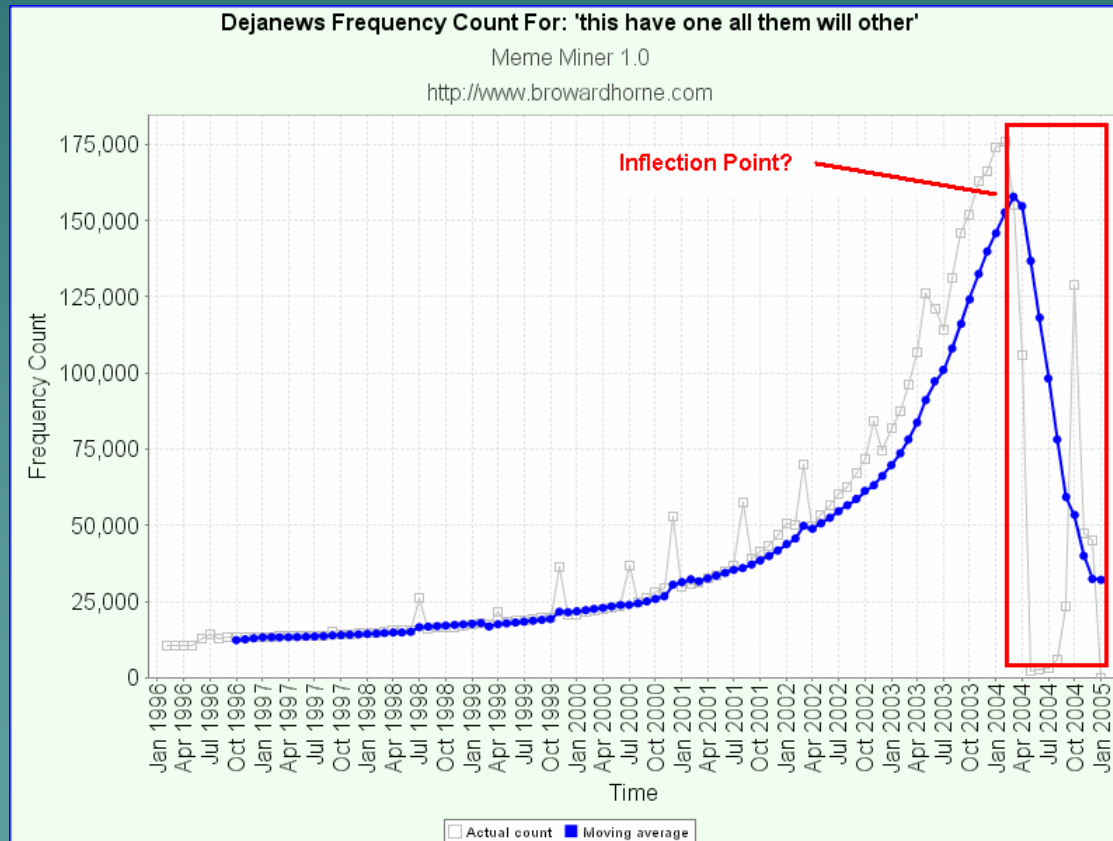
- ◆ Use RSS feeds to catch trend earlier
- ◆ Skewing factor for search engines
- ◆ Extract more abstract relationships

Internet S-Curve

- ◆ Has Internet Growth peaked?
- ◆ What happens if growth peaks?

DejaNews Anomaly

◆ Market saturation?

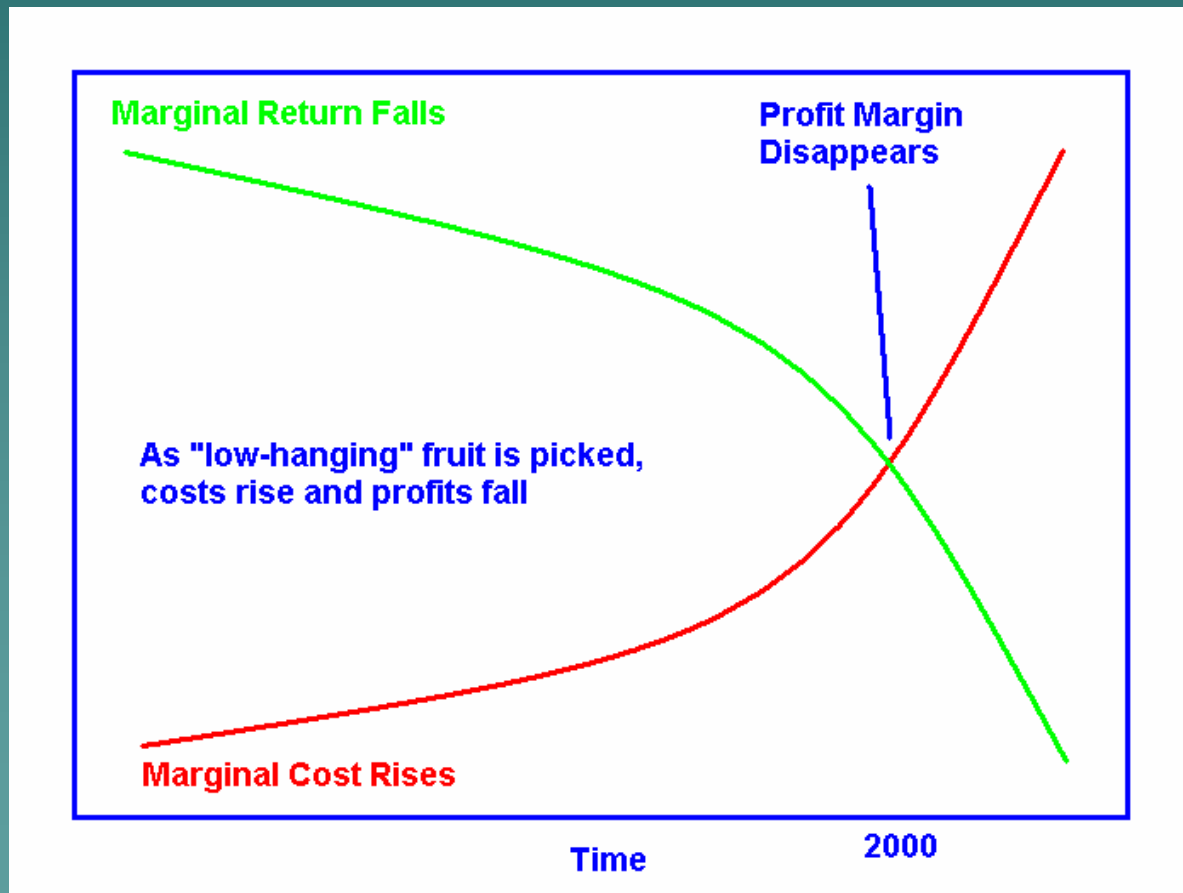


Social Bandwidth

- ◆ People have finite bandwidth
- ◆ People have finite storage
- ◆ Shared context impacts bandwidth

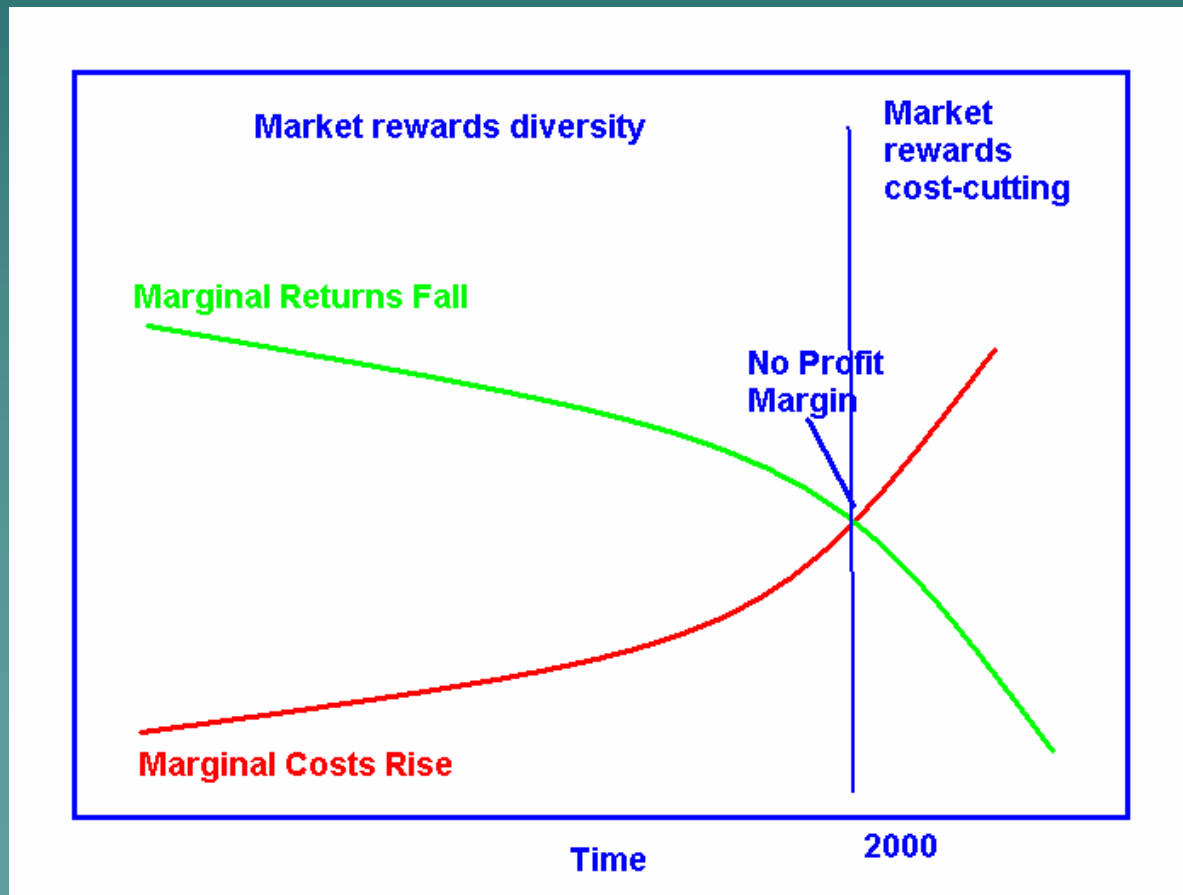
Cost of Information

◆ Marginal Cost versus Marginal Return



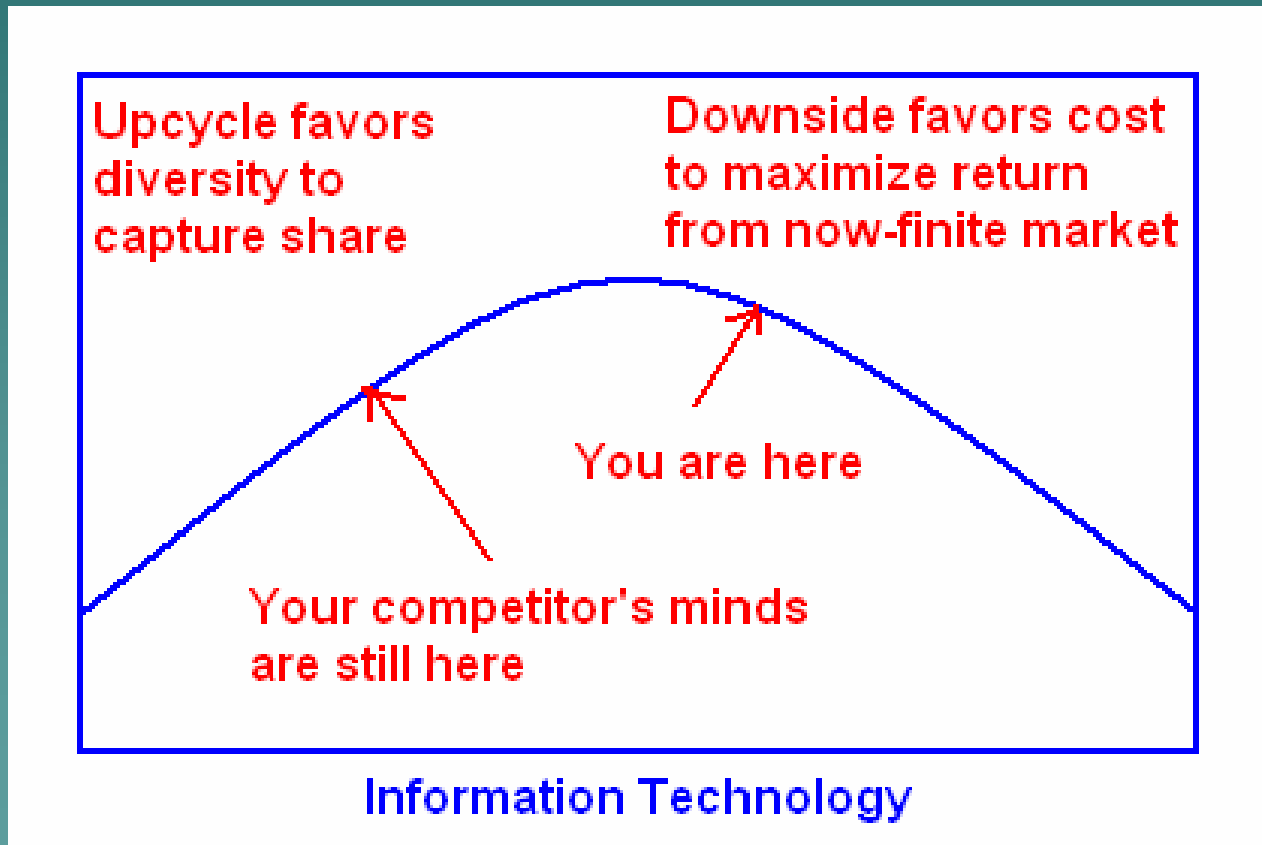
Cost Versus Price

◆ Diversity versus Cost



IT Trend Change

- ◆ Marginal cost exceeds return



Other Signs

- ◆ Comdex shows no recovery

