Business Opportunities and IPv6

These aren't the 'Droids You're Looking For

IPv6Now

Kevin Karp
Managing Director

kevin@ipv6now.com.au
ipv6now.com.au

IPv6

Where do new Business Models come from?

Inspiration from the Past - 1

Thomas J Watson Snr (IBM) 1943:

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

Inspiration from the Past - 2

William Henry Gates III (Microsoft) 1972:

"640kb ought to be enough for anybody."

Why were they Inspiring?

Both of their respective companies went on to:

- ***dominate newly established industry sectors***
- ***generated record profits from their new products***
- ***spectacular growth rates***

Today's Statement...

Kevin John Karp (IPv6Now) 2012:

"The world will never need more than 4.3billion IP addresses"

… but Why?

- The typical Internet user knows and loves their IPv4

- Internet utilisation has peaked at current levels of utilisation and there is no growth

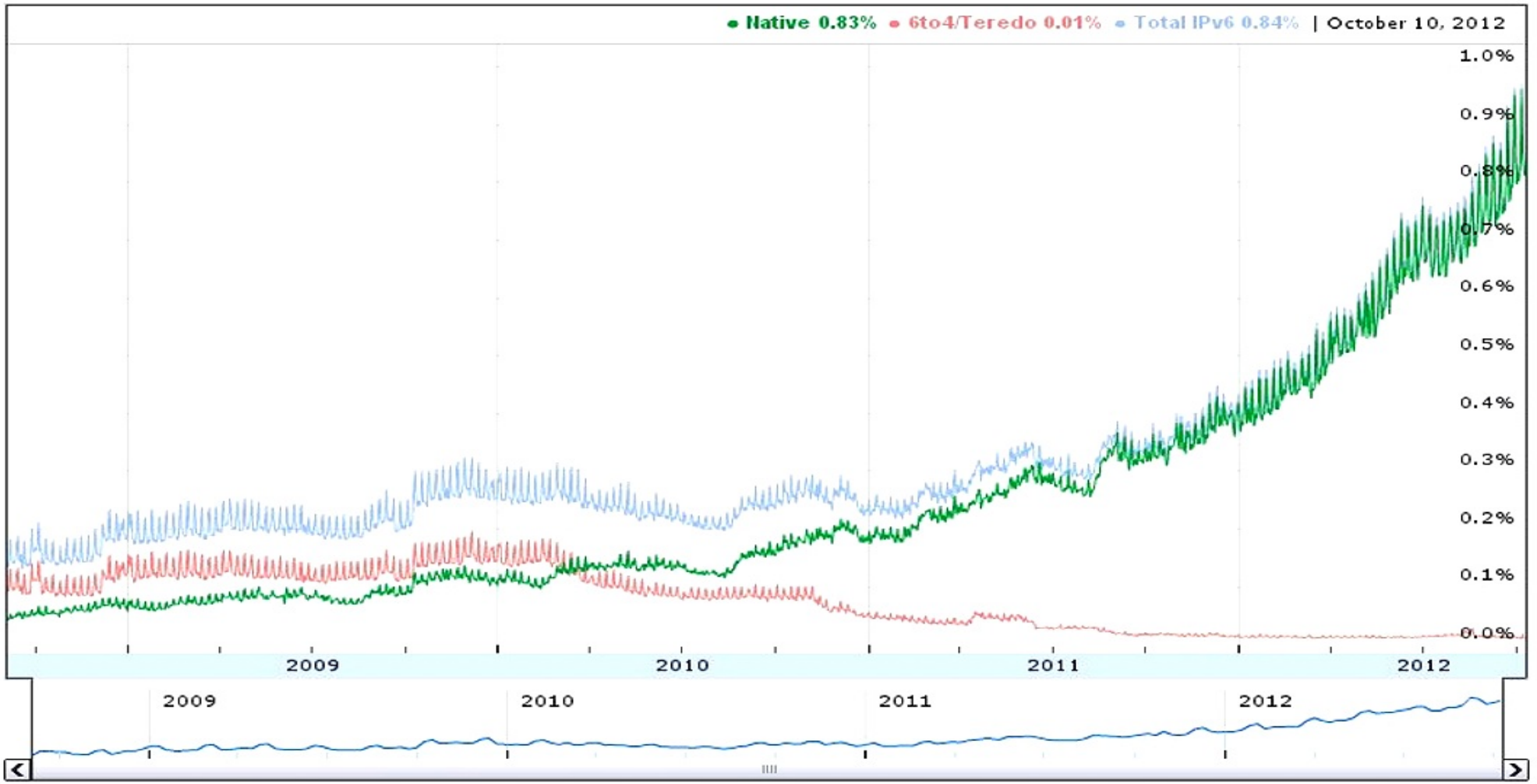
- Peer to peer is not an opportunity for new business models

V6 Utilisation - Now

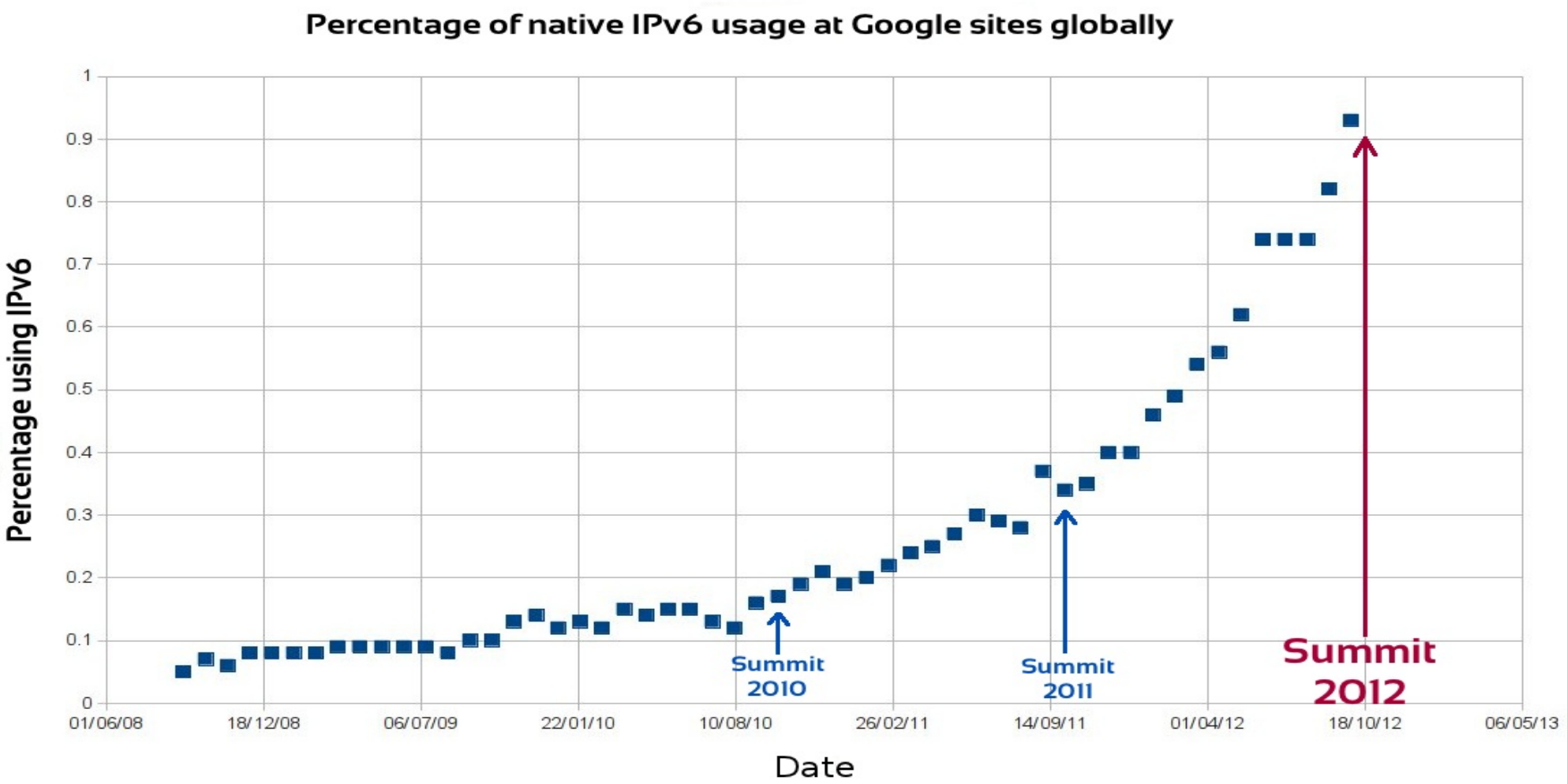
IPv6 Adoption

http://www.google.com/ipv6/statistics.html

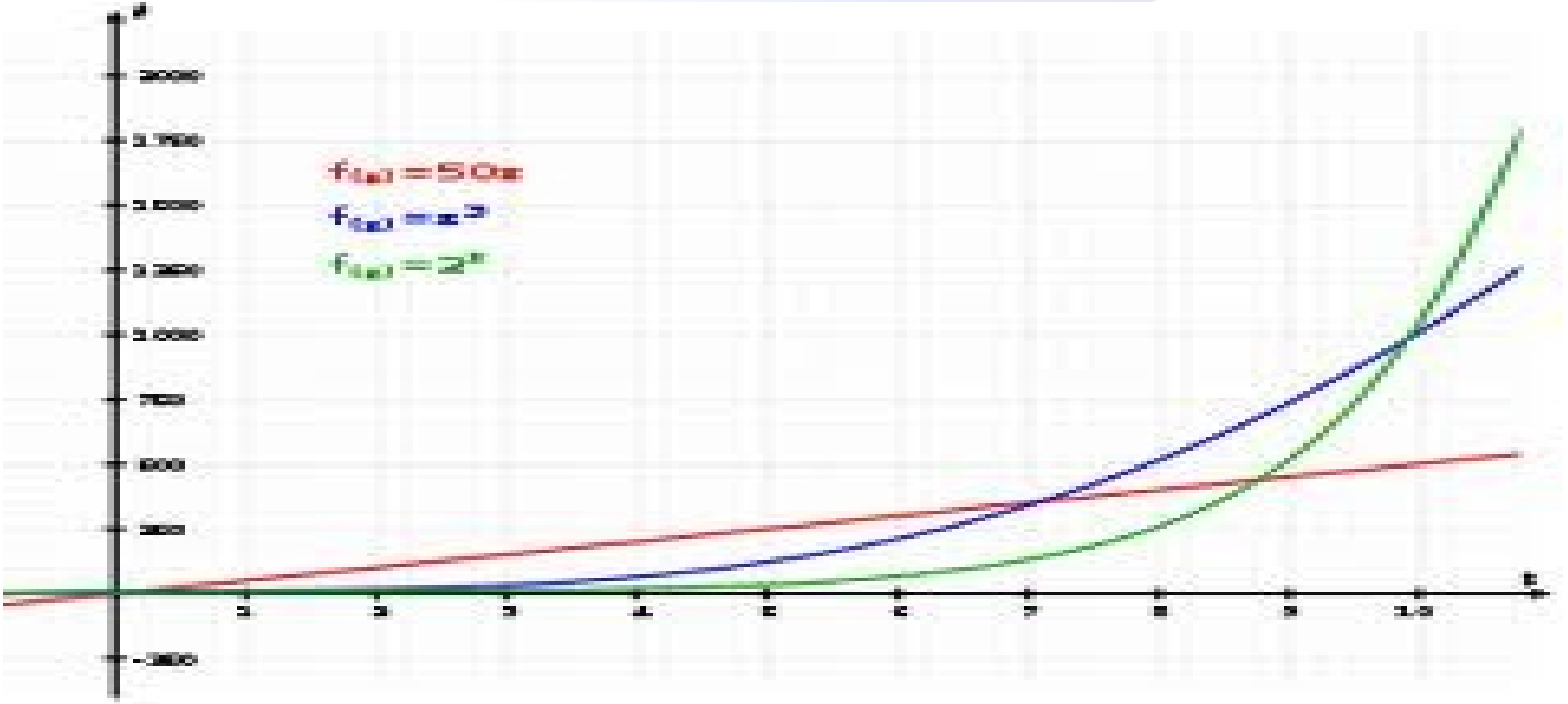
We are continuously measuring the availability of IPv6 connectivity among Google users. The graph shows the percentage of users that access Google over IPv6.



V6 Utilisation - Now



V6 Utilisation - Now



Exponential growth

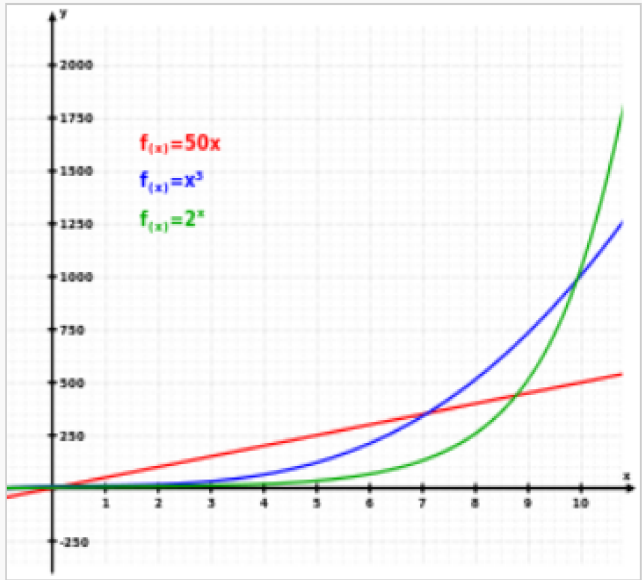
From Wikipedia, the free encyclopedia

Exponential growth (including exponential decay when the growth rate is negative) occurs when the growth rate of the value of a mathematical function is proportional to the function's current value. In the case of a discrete domain of definition with equal intervals it is also called **geometric growth** or **geometric decay** (the function values form a geometric progression). The exponential growth model is also known as the Malthusian growth model.

The formula for exponential growth of a variable x at the (positive or negative) growth rate r, as time t goes on in discrete intervals (that is, at integer times 0, 1, 2, 3, ...), is

$$x_t = x_0(1+r)^t$$

where x_0 is the value of x at time 0. For example, with a growth rate of r = 5% = 0.05, going from *any* integer value of time to the next integer causes x at the second time to be 1.05 times (i.e., 5% larger than) what it was at the previous time.

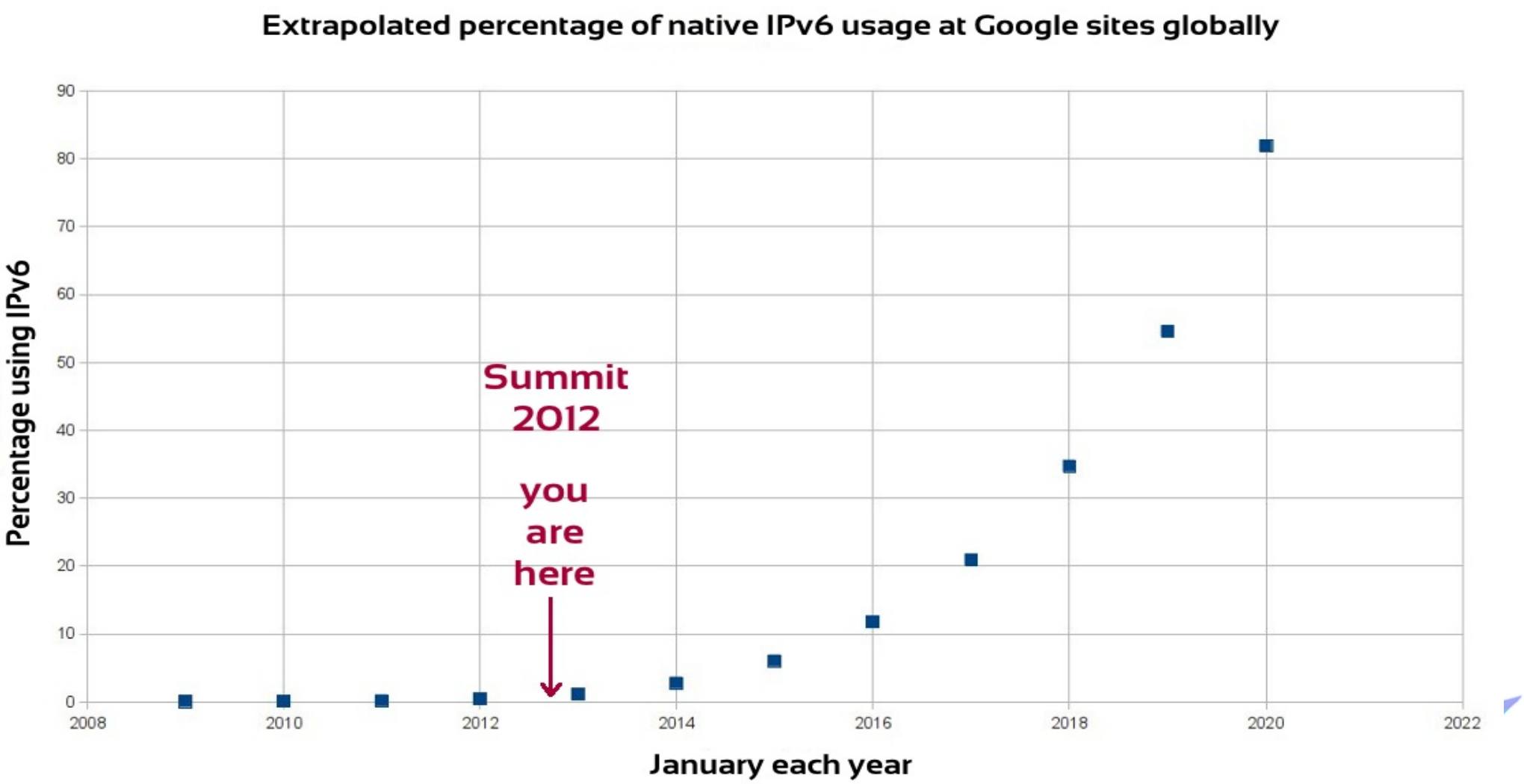


The graph illustrates how exponential growth (green) surpasses both linear (red) and cubic (blue) growth.

Exponential growth
Linear growth
Cubic growth

Contents [hide]

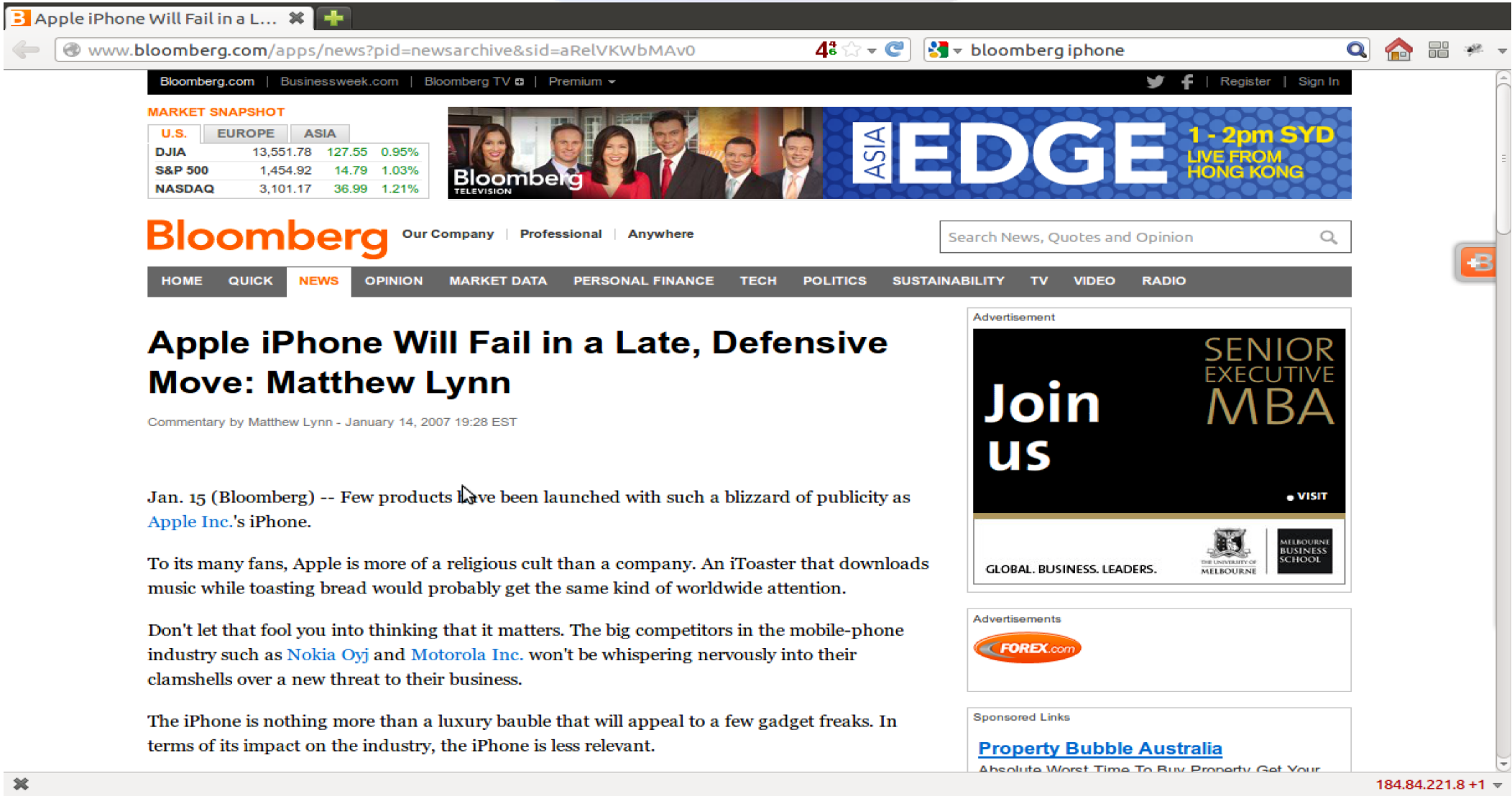
V6 Utilisation - Future



There are no new IPv6 Business Models

Bloomberg
January 14, 2007
Matthew Lynn
http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aRelVKWbMAv0

There are no new IPv6 Business Models



There are no new IPv6 Business Models

Studentnet

2008	***4,000 students/accounts***
2009	***6,000***
2010	***8,500***
2011	***12,000***
2012	***17,000***

Business Opportunity?

How do BYOD & Peer-Peer change the way a school works with its students?

What happens if we do nothing?

Will the sky fall in?

NO!

What will Happen?

- IPv4 address trading
- IPv4 address recovery
- NAT my NAT: Carrier grade NAT
- Lucky I've got those spare /24's!
- IPv4 will be with us for years to come

Phew – So we're safe!

Almost...

We're Safe – Technology

- Limited number of session states for NAT operation
- Best case: 65,536 max number of sessions, for a single IPv4 address
- 2,000 users, for 30 sessions each

But Web2(AJAX) sites.....

We're Safe – Technology

Yahoo top page	10-20
Googleimage search	30-60
iTunes	230-270
iGoogle	80-100
Amazon	90
YouTube	90

We're Safe – Markets

These aren't the 'Droids You're Looking For...

To all my competitors in the room...

There are NO Business Opportunities in IPv6!

Thank you

Kevin Karp
Managing Director
IPv6Now

kevin@ipv6now.com.au
www.ipv6now.com.au