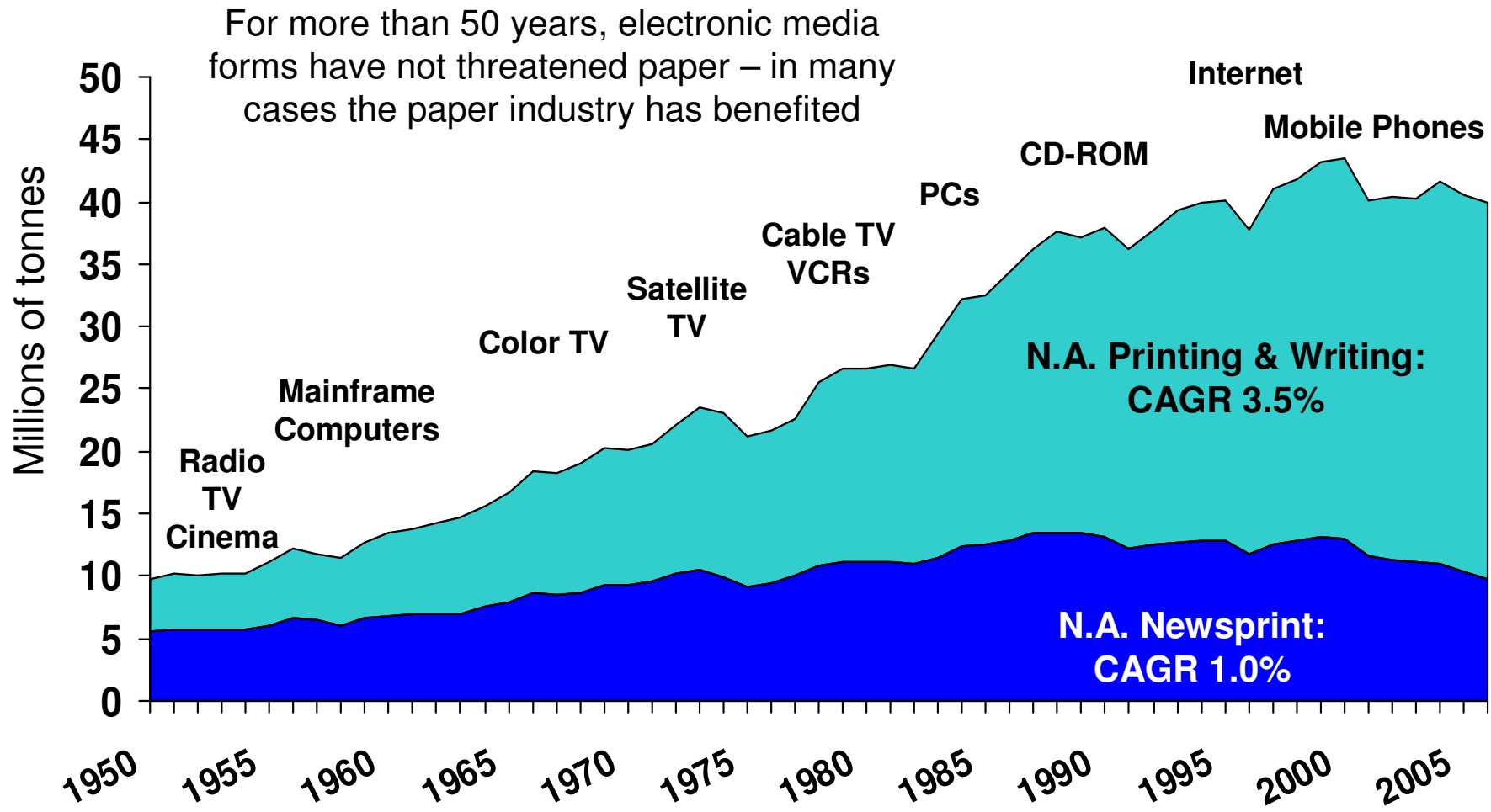


The New Media and Graphic Paper Demand

**International Pulp Week
May 9, 2007**

**Roman Hohol
AMEC – Forest Industry Consulting**

How many times have you seen a slide similar to this one?

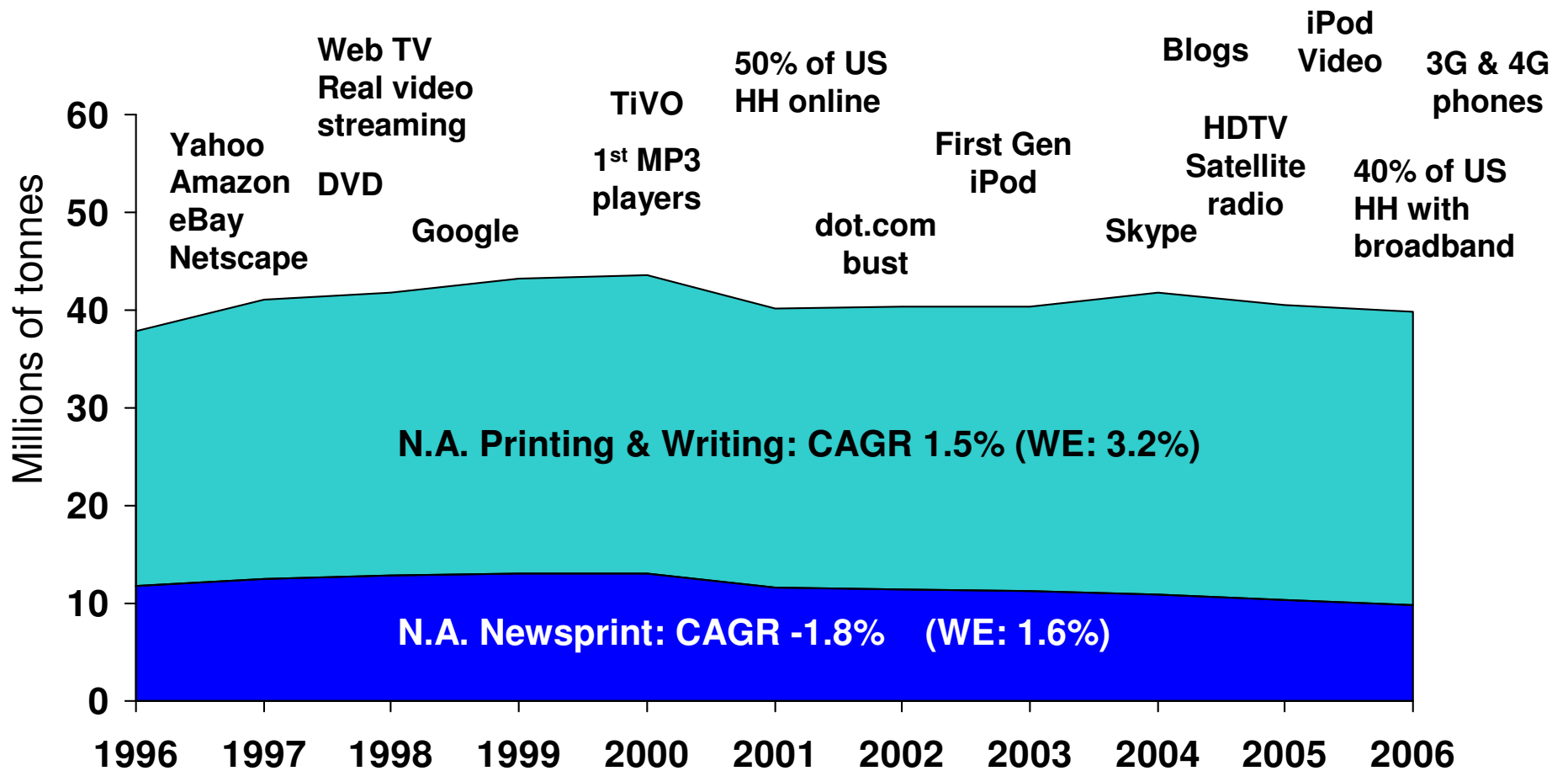


Source: RISI; Jaakko Poyry

But this is the new reality and explains my theme today



Since the late 1990s, the pace of new media development has intensified dramatically, while graphic paper demand has stopped growing




Source: PPPC

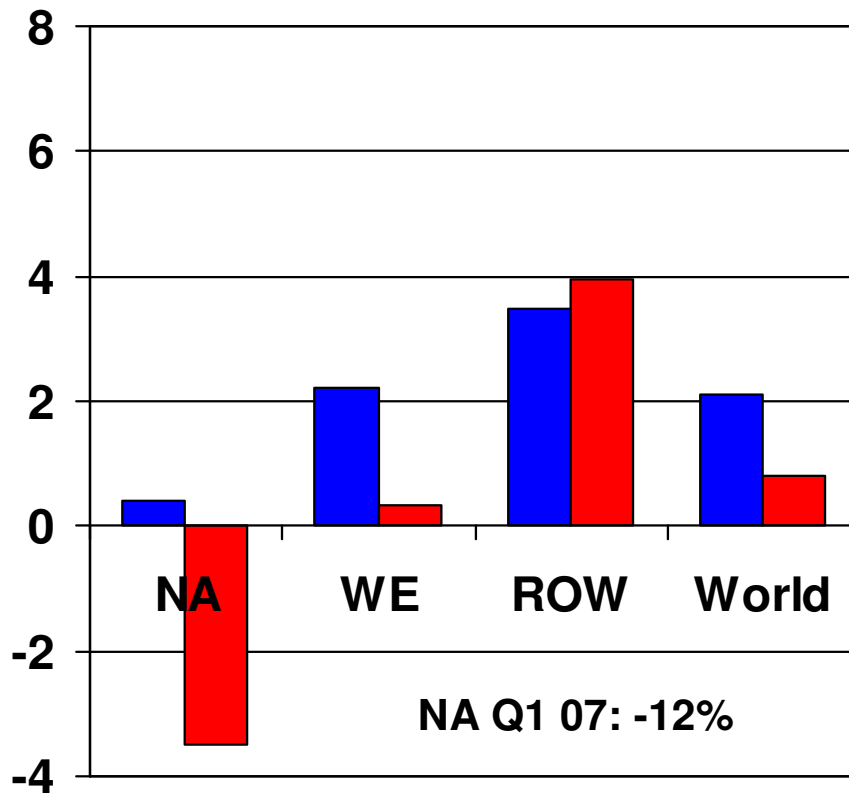
The new media's rise is extraordinary; consider that in less than 5 years:

- Global Internet users have doubled to 1.1 billion
- Global broadband subscribers have quintupled to 290 million
- Global mobile phone users have doubled to 2.3 billion
- The number of blogs has grown from zero to 80 million
- 100 million iPods sold globally (nearly 60% in 2006)
- Google's revenues have increased 24-fold from \$440 million in 2002 to \$10.6 billion in 2006



At the same time, global graphic paper demand has slowed down considerably, especially in the two largest consuming regions 

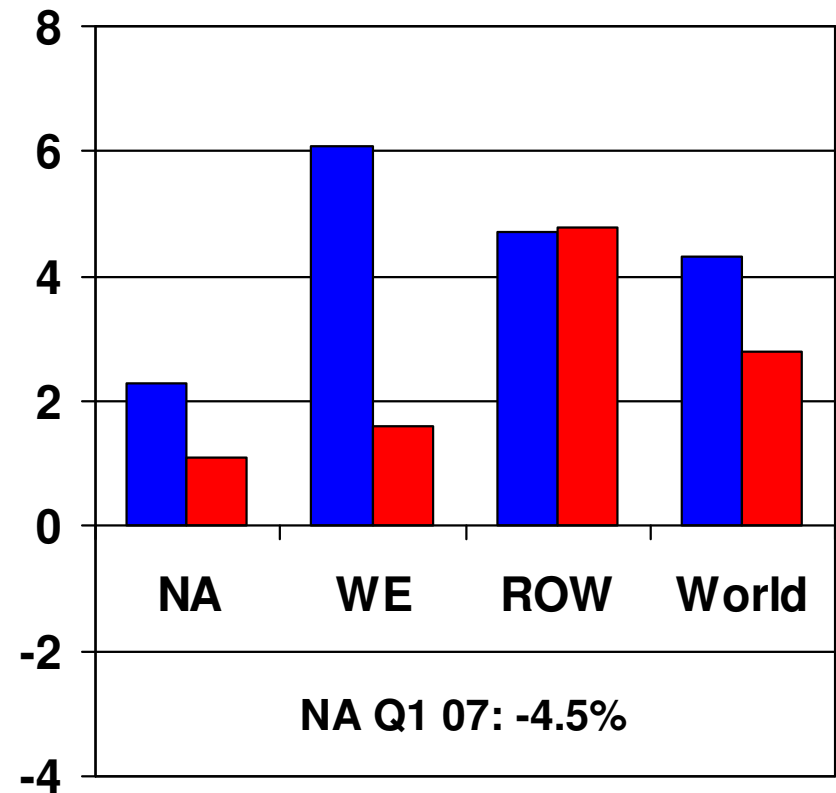
Newsprint Demand (% CAGR)



■ 1995-2000 ■ 2001-2006

Source: PPC

P/W Paper Demand (% CAGR)



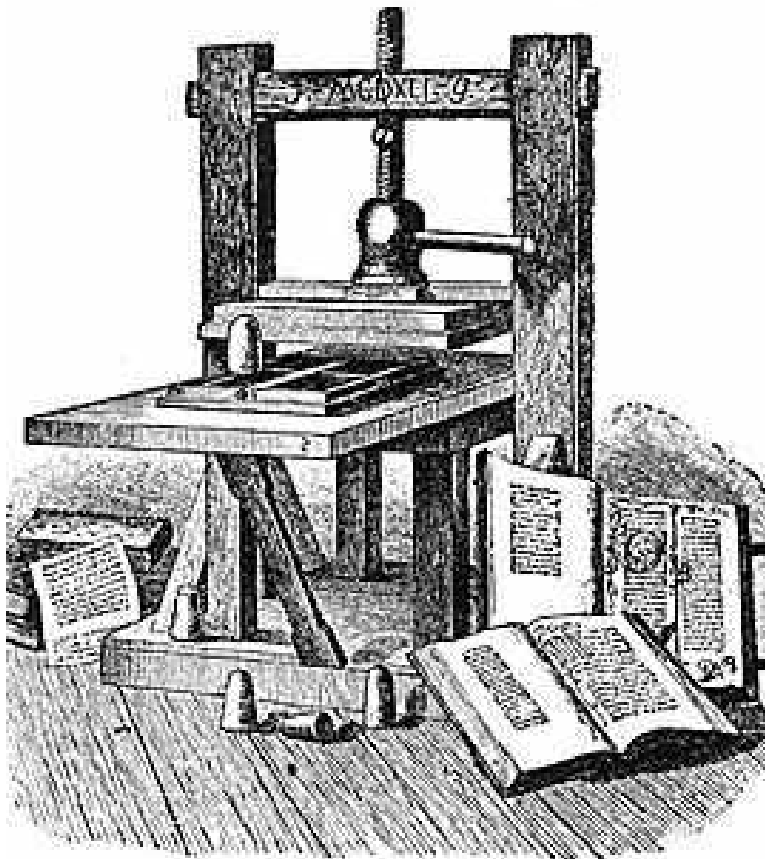
■ 1995-2000 ■ 2001-2006

Coincidence or not? There is clearly a link between rapid rise of the new media & recent graphic paper demand



- Certain print media in danger
- Others face years of struggle followed by decline
- New media forcing justification of print media's business model
- Important implications for future graphic paper demand

Driven by new technologies & shifting consumer habits, the media landscape is changing at an unprecedented pace



- We are at the beginning of a fundamental transformation in the connection between people and information
- The impact is likely to be as far-reaching as that of Gutenberg's Movable Type and mass literacy
- Traditional media companies are scrambling for new services, strategies, alliances and acquisitions

The new reality: Information at any time and any place!



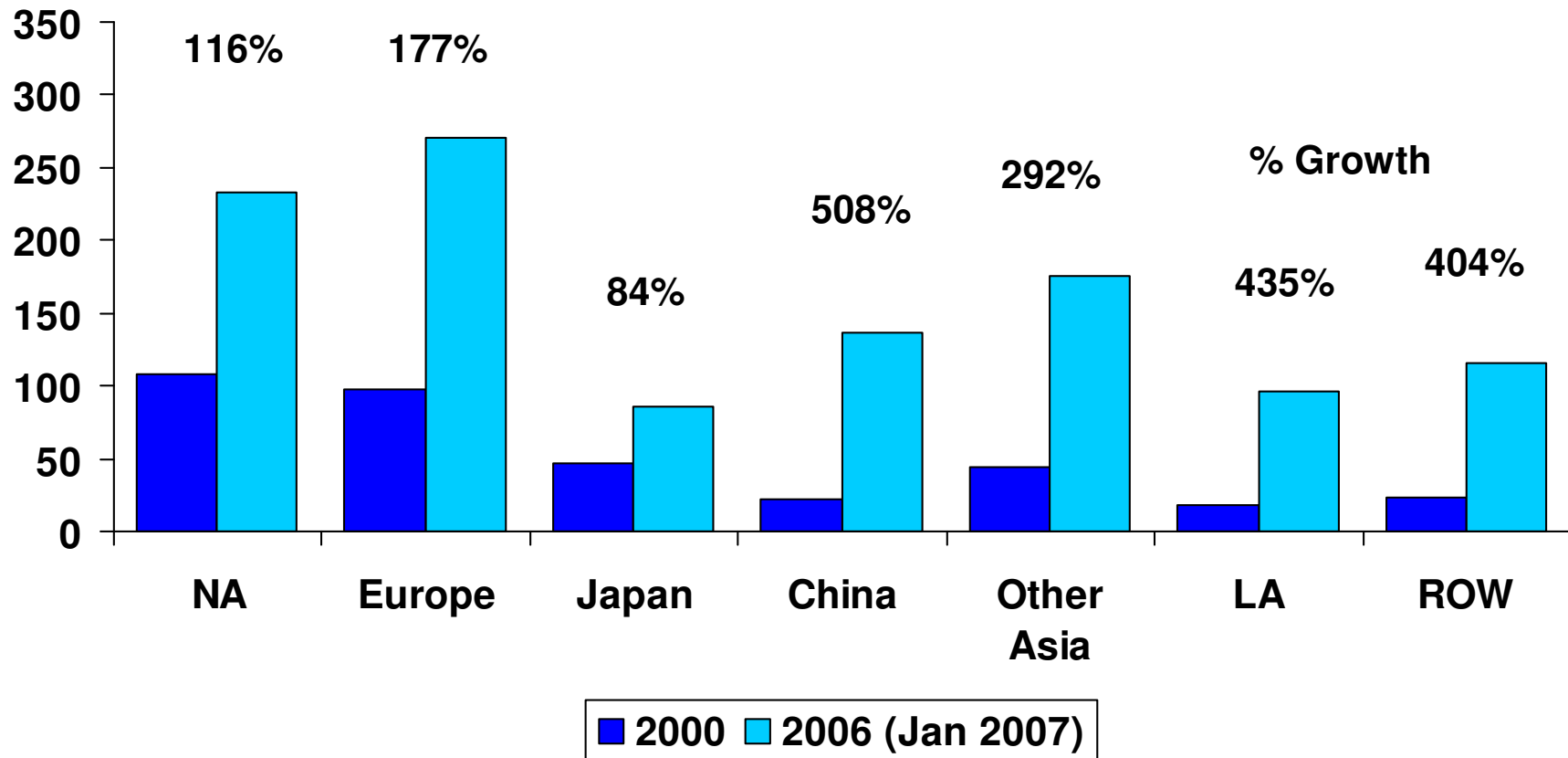
- Everything available all the time
- Free content becomes universal
- Virtually infinite individual choice
- Users choose and create
- Search becomes a basic behaviour
- Mass audiences splinter
- Virtual communities form without limits of time or distance
- Users time-shift all media at will
- Lines between media blur/disappear

Source: American Press Institute N2 Report

The New Media

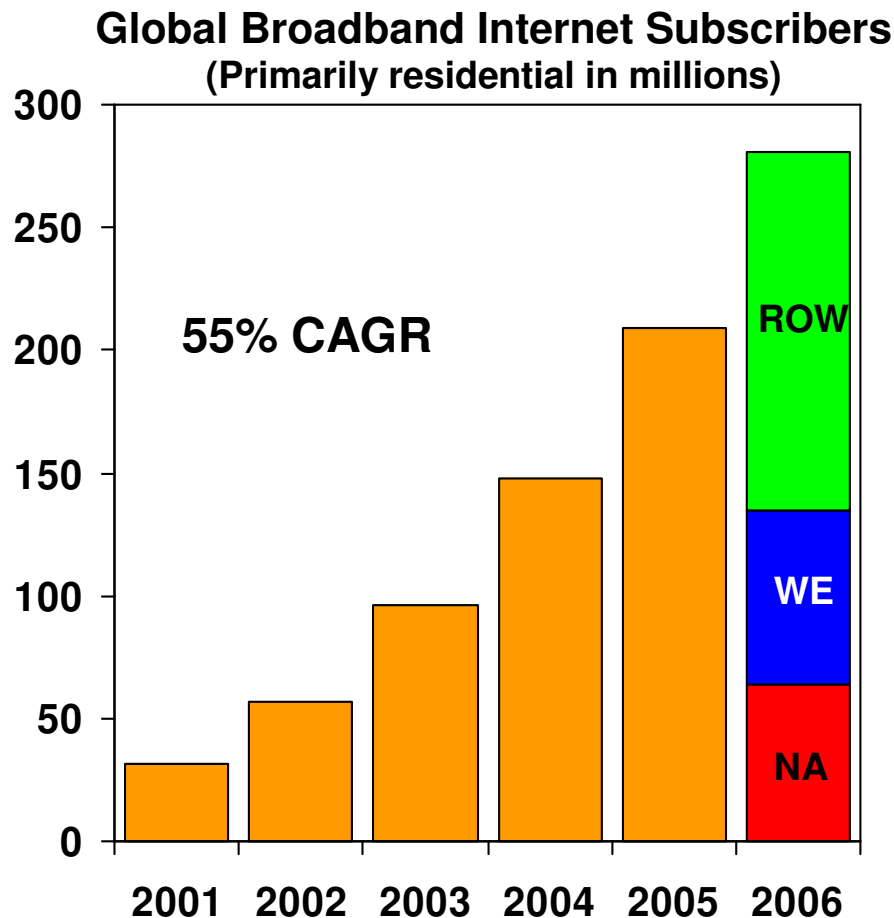
Internet usage continues to grow, especially in the developing world; global users have trebled since 2000 to 1.1 billion

Internet users (millions of people)



Source: www.internetworldstats.com

25% of global Web users have high-speed BB, making the Internet the premier information & distribution channel



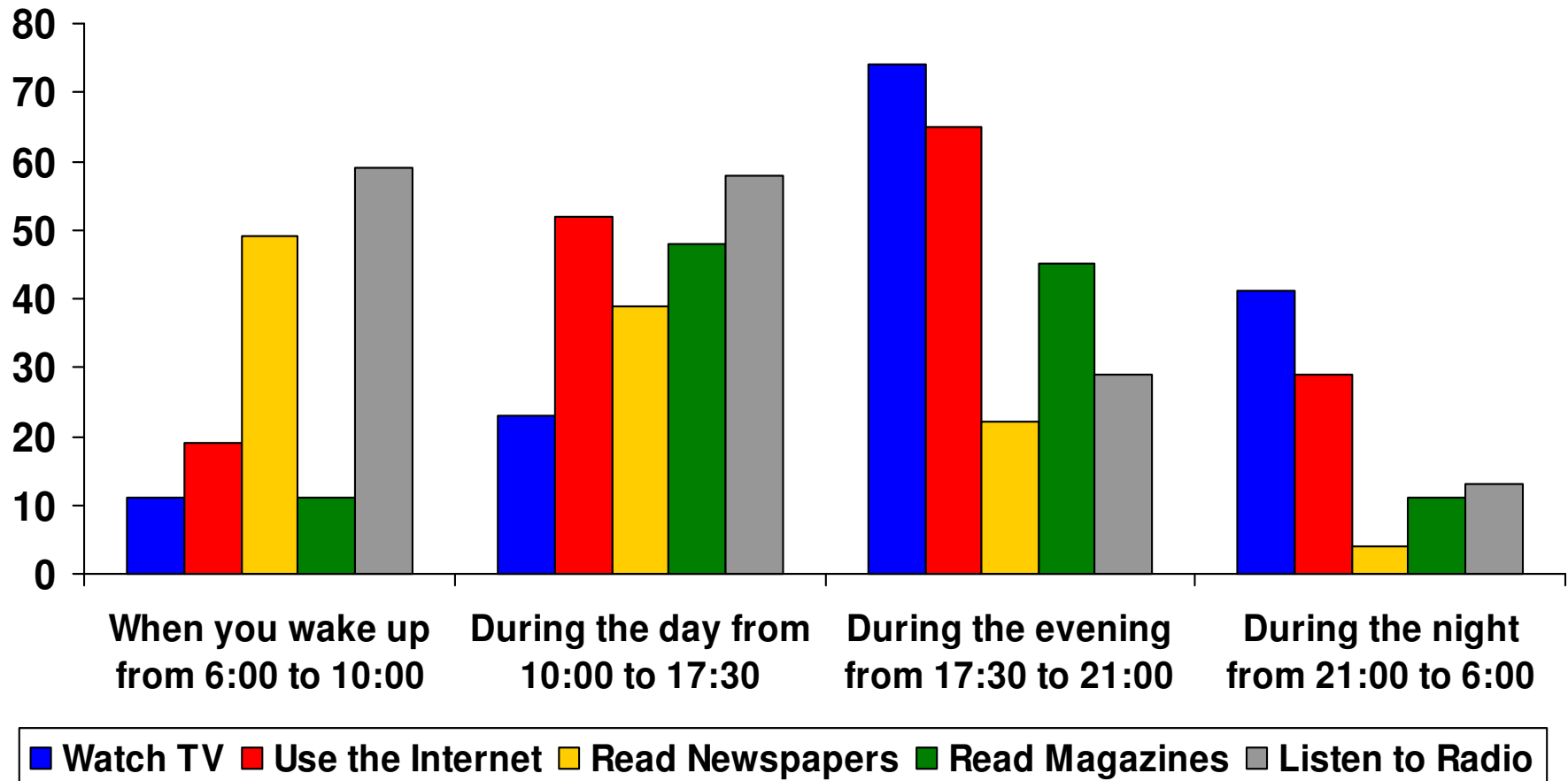
- In NA & WE, broadband subscribers have increased more than **six-fold** in just five years, from 22 million to 141 million
- Despite very rapid growth since 2000, broadband usage still in its early stage in other regions
- Morgan Stanley expects 20%-30% growth in next several years

Source: Morgan Stanley

The Internet is now the second most used medium in Europe* for 20 hours/day



At what time of the day do you usually ... during the week?



Source: EIAA Mediascope Study Europe

* EU + Norway

In 2007, we are just at the beginning of the second Internet generation (Web 2.0)

Web 1.0 (1994-2001)

“Long on vision but short on execution.”

- Dial-up
- Basic email
- Chat rooms
- Homepages
- Rudimentary surfing
- Hard to search
- Advertising failed to reach critical mass

Web 2.0 (2002-)

“Long on execution, even longer on vision.”

- Cable, DSL, much faster
- Email, blogging, podcasting
- Social networks, communities
- Homepages and much more
- Sophisticated surfing
- Search dominates
- Real business models
- Advertising growing rapidly

What exactly is Web 2.0?



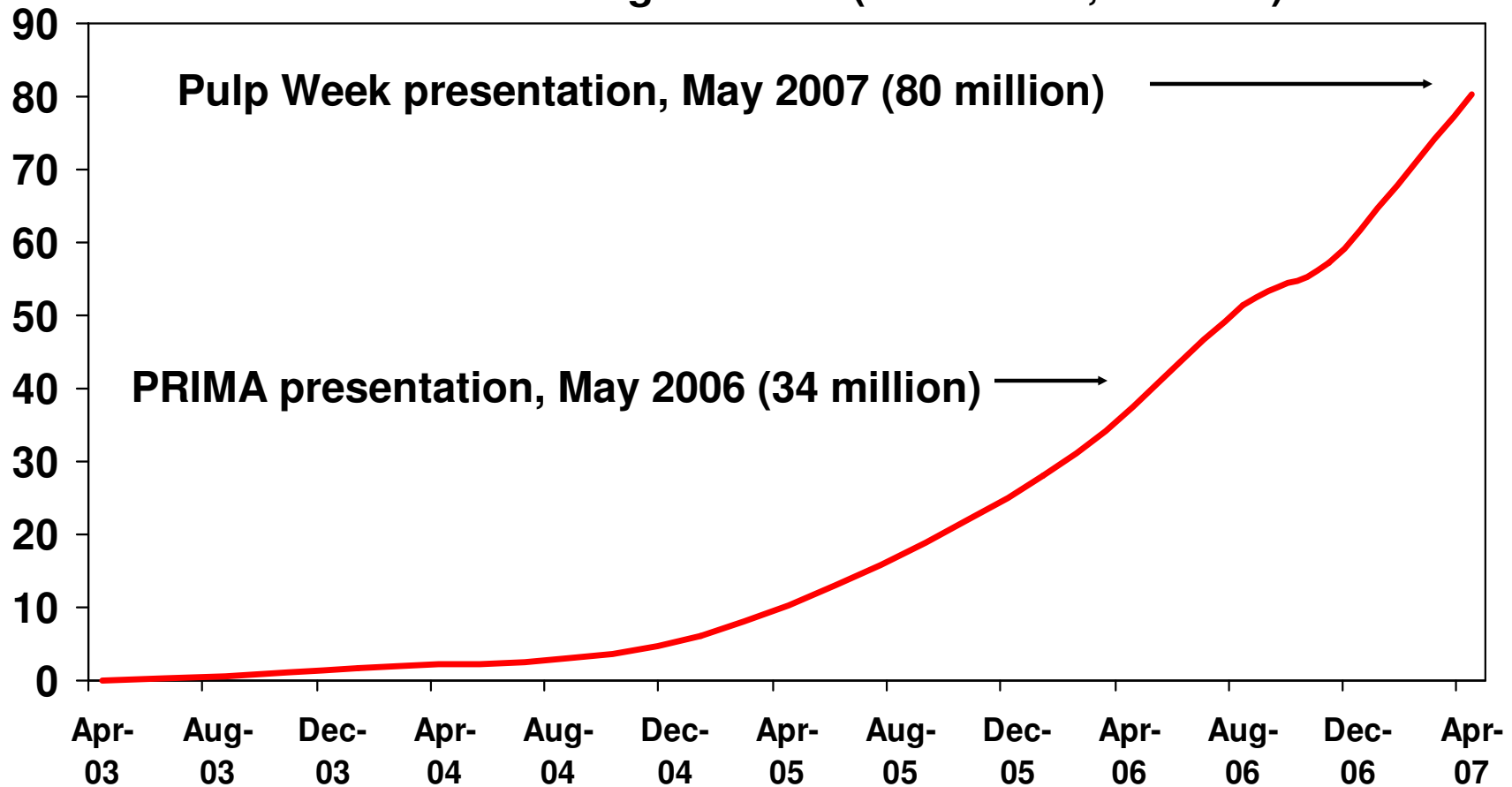
- It refers to web-based services – **most of them free** – that focus on interactivity and community, and let users generate and contribute content with the help of various new web tools.
- It enables individuals to get and give information, create and sustain relationships, be part of a community, buy and sell things, find and compare choices, and be entertained.



One of Web 2.0's most impressive tools are blogs; note the most recent growth



Global weblogs tracked (cumulative, millions)

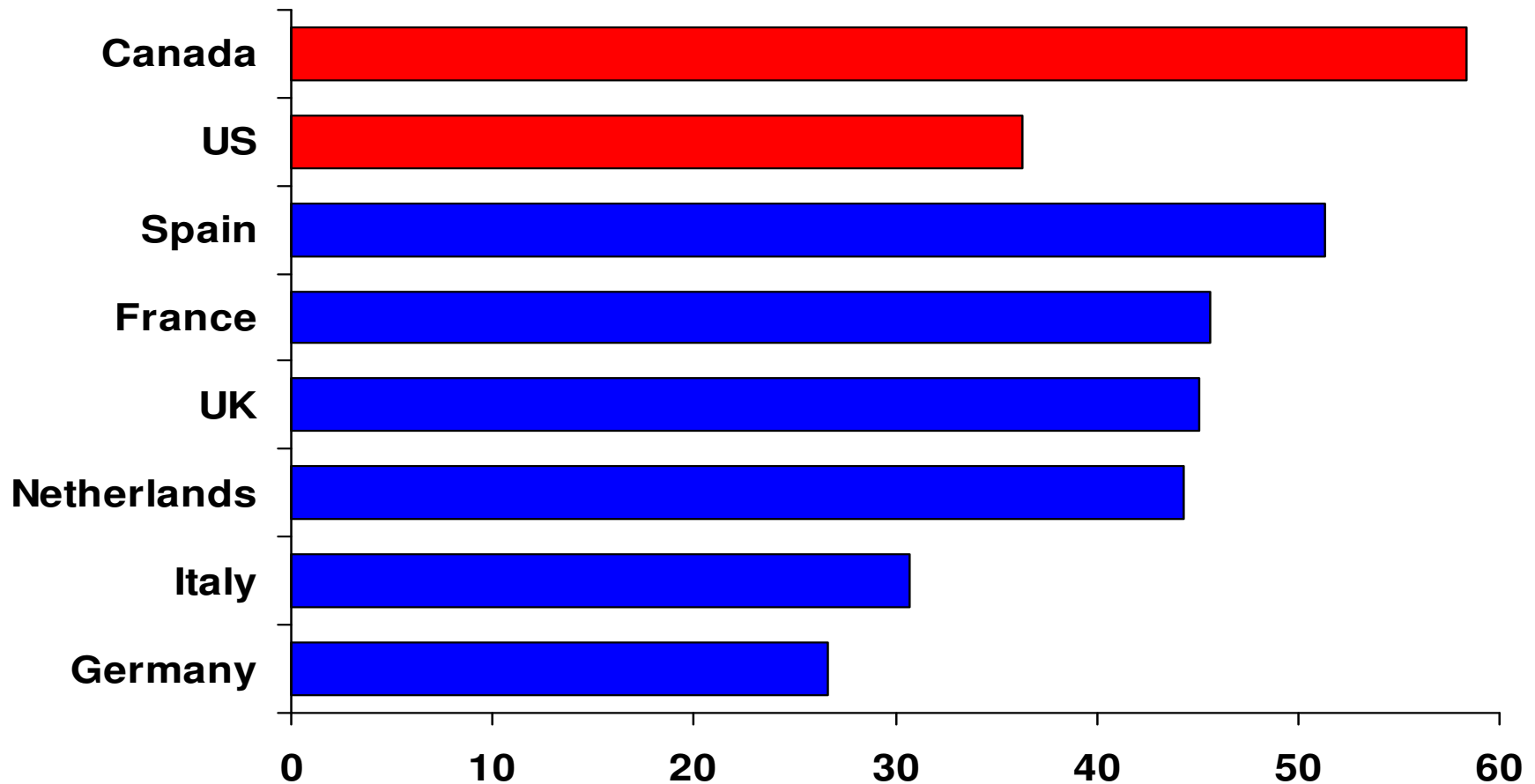


Source: Technorati.com

Visiting blogs has become a mainstream Internet activity



% Online Population Accessing Blogs (October 2006)



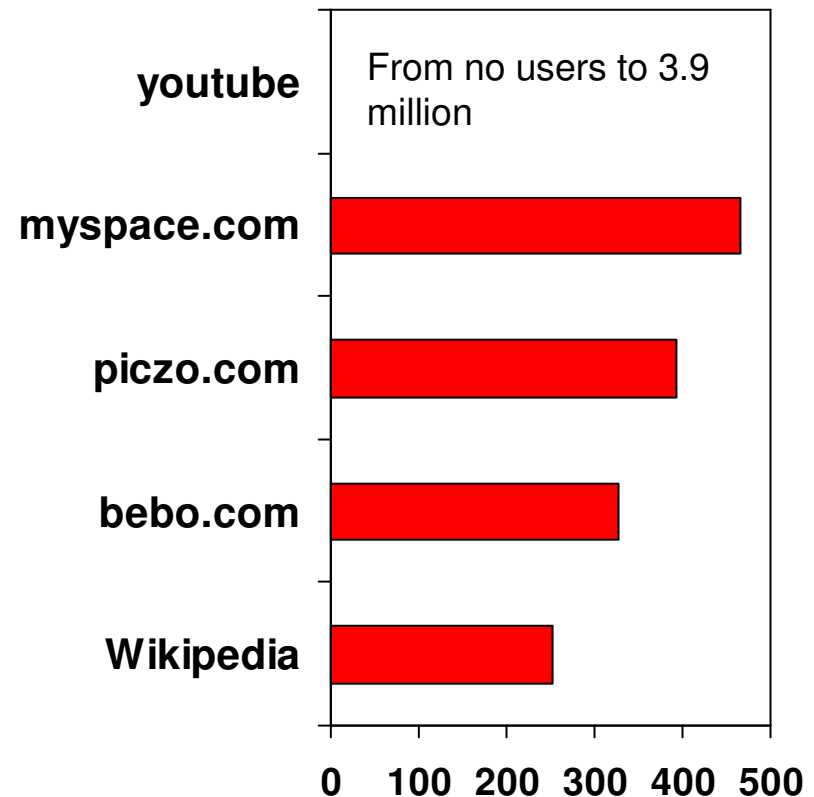
Source: comScore Media Matrix

Another key feature of Web 2.0 is user-generated content; recent growth has been phenomenal



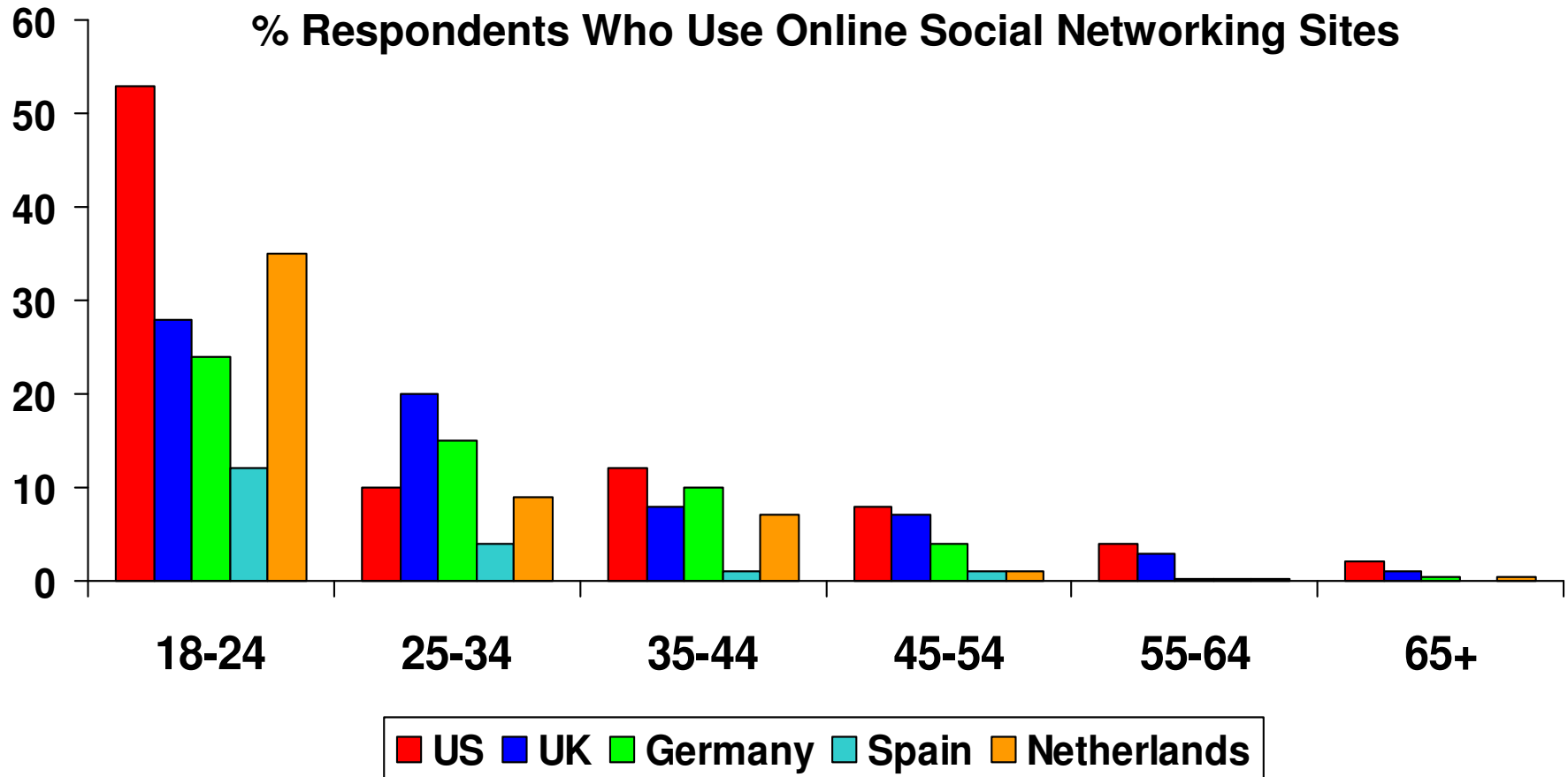
- Rapid growth in number of blogs
- Increased usage of premium online video content
- Continued growth in online music usage & podcasting
- Huge surge in online interactive gaming
- Increased personalization and localization

**% Change in unique monthly visitors
July 2006 vs. July 2005 (UK only)**



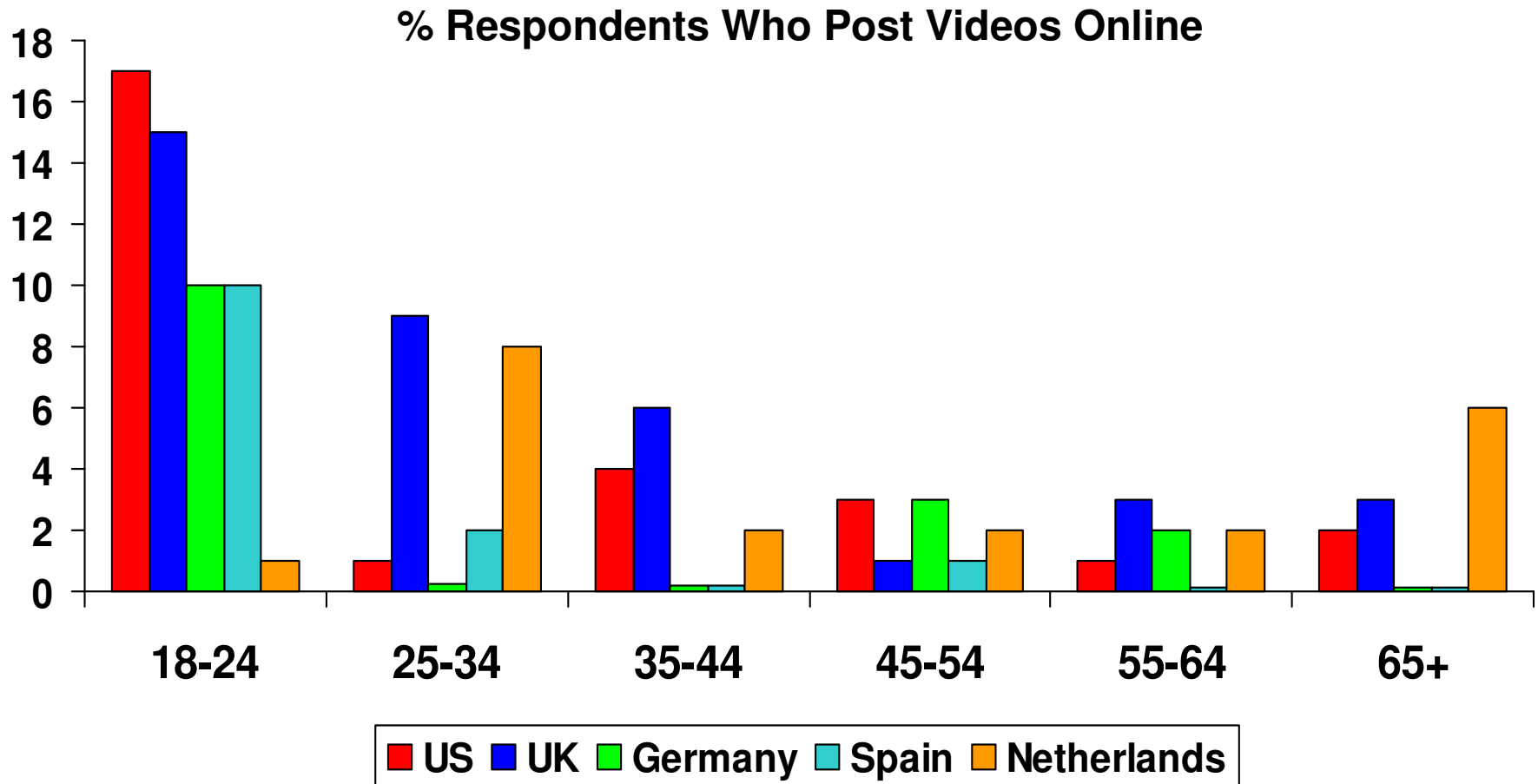
Source: comScore Media Matrix

Web 2.0 activities such as social networking sites have engaged today's youth



Source: KPMG survey of 3,000 consumers, March 2007

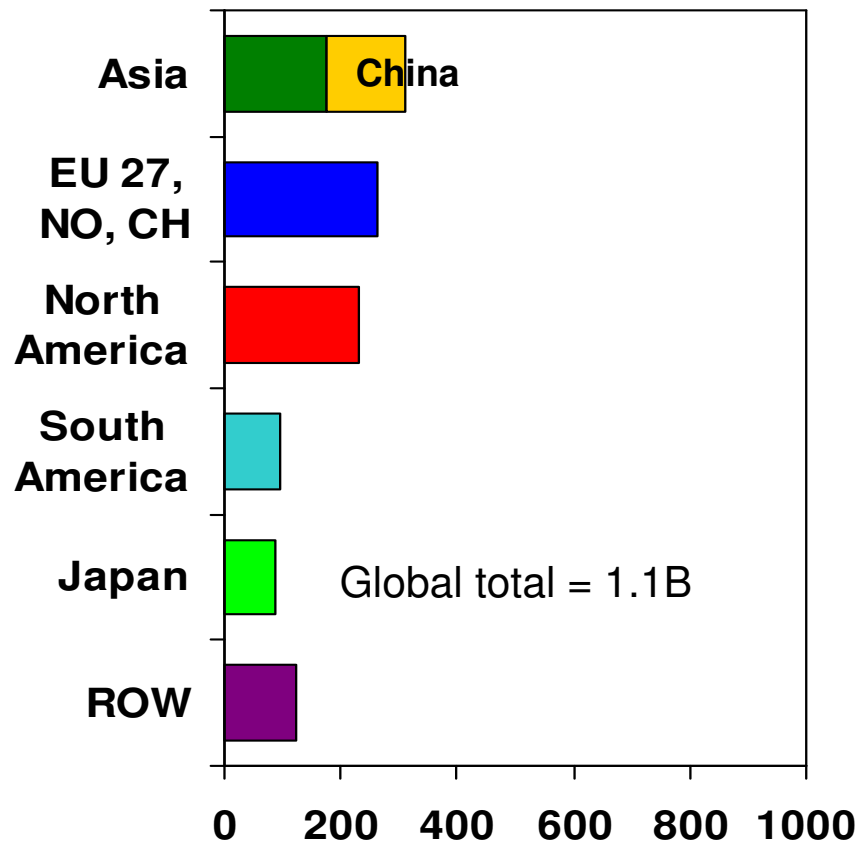
It is tomorrow's print media users who are most comfortable with the new media



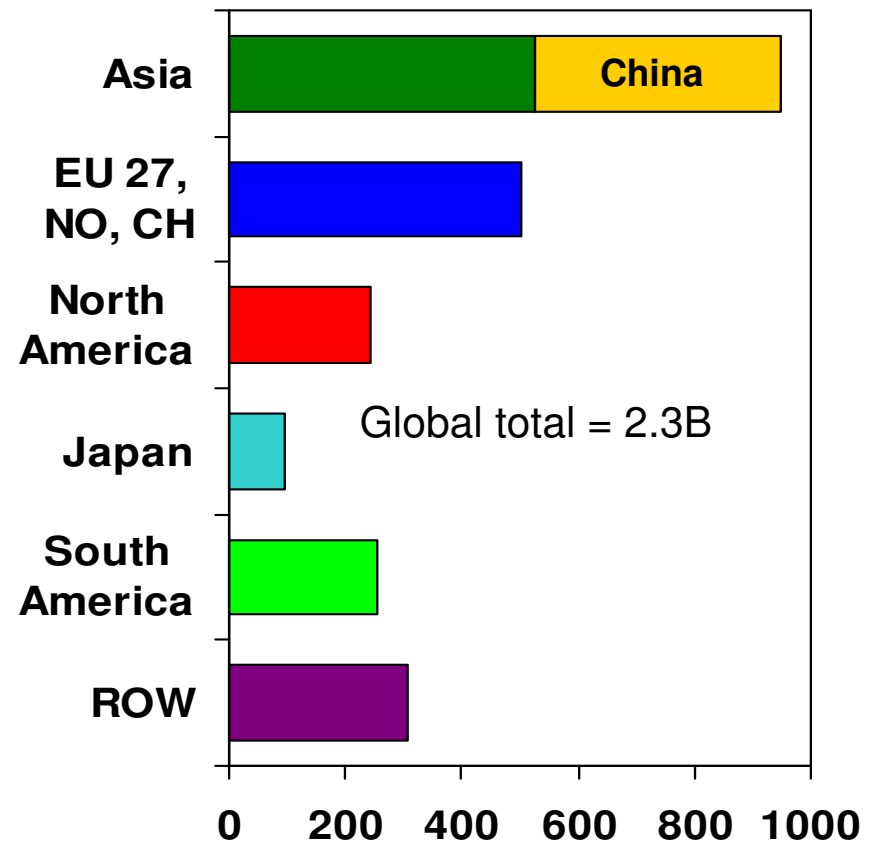
Source: KPMG survey of 3,000 consumers, March 2007

While interest in the Internet is high, there are twice as many mobile phone subscribers as Web users

Global Internet Users 2006
(millions)



Global Mobile Phone Users 2006
(millions)

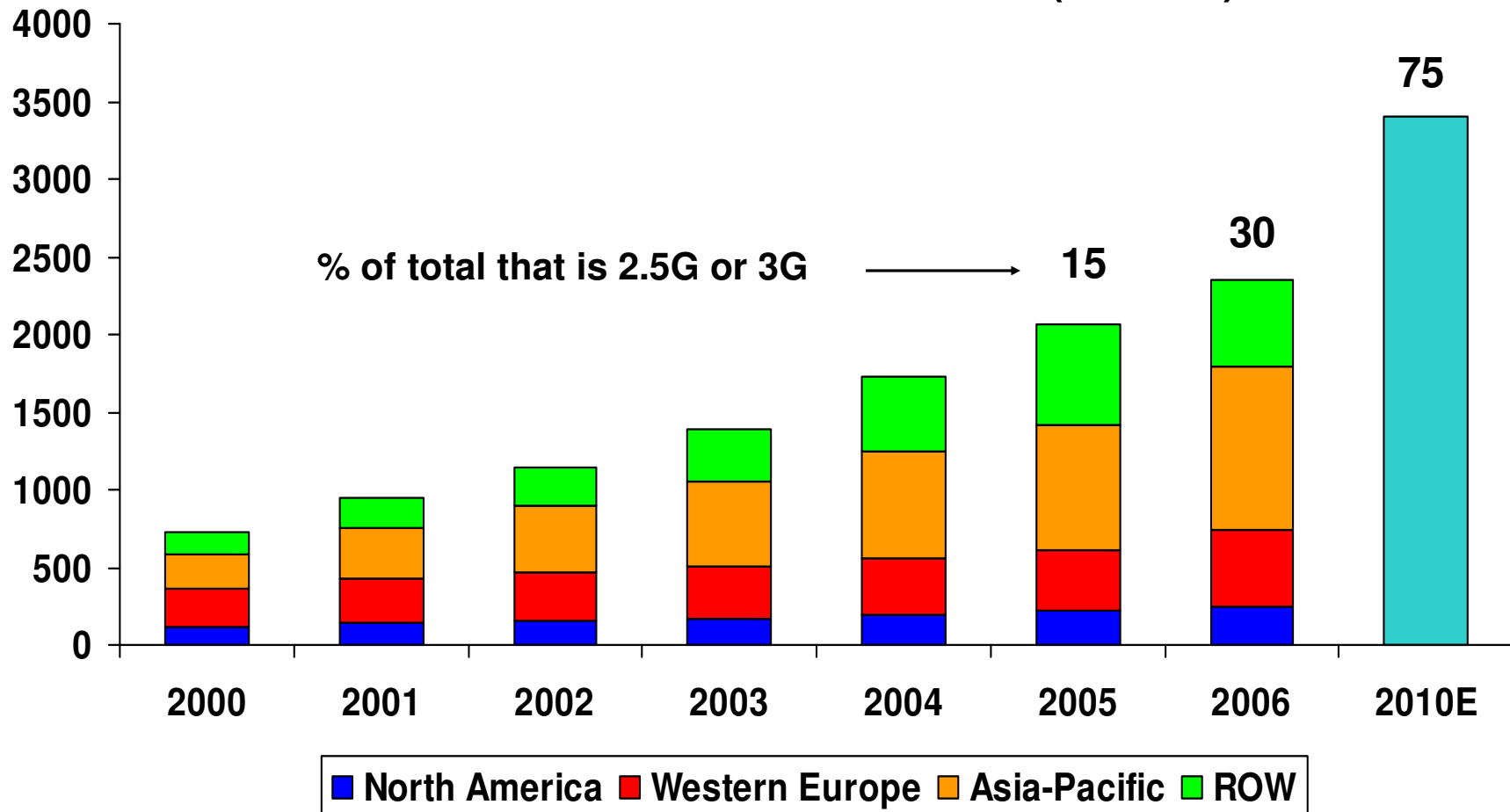


Source: Neilson Net Ratings; Morgan Stanley

Mobile phone use growing rapidly; especially the newer 2.5G/3G units



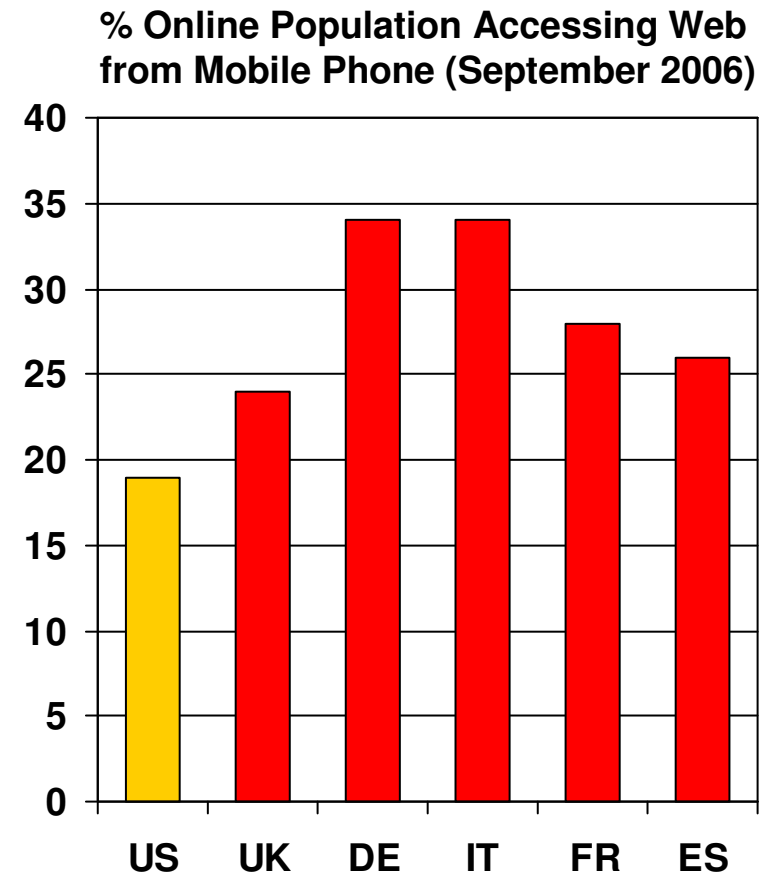
Global Wireless Subscribers (millions)



Source: Morgan Stanley

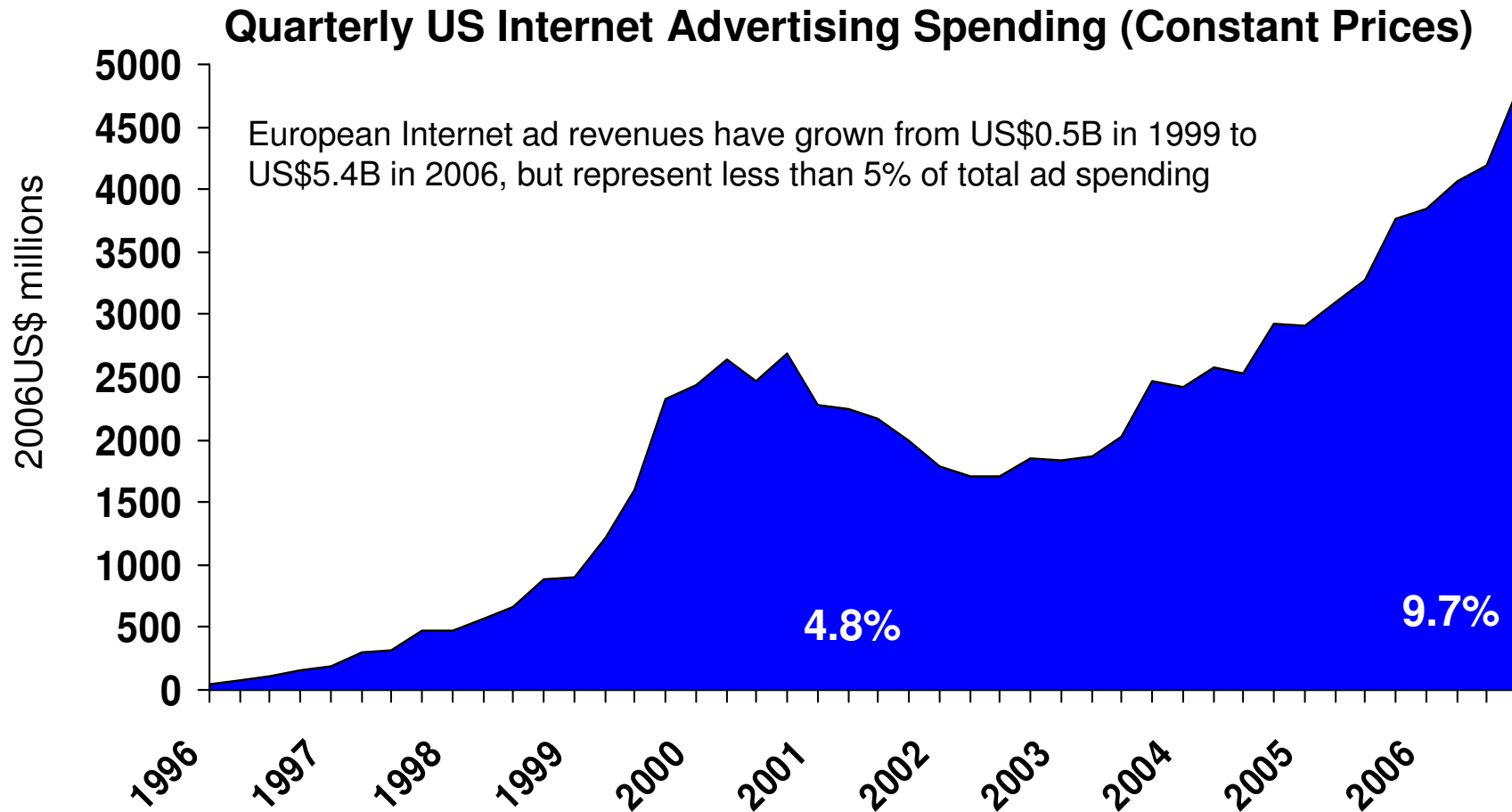
Why is this important? Because today's mobile phones are multimedia devices

	Average Speeds	Common Data Applications
2G	9.6-21 Kbps	SMS, multi-media games
2.5G	30-130 Kbps	Email, Web infotainment, access to Internet
3G	220-700 Kbps	Streaming video, movie & MP3 downloads
4G	1.5 Mbps +	Streaming video, movie & MP3 downloads



Source: comScore Media Matrix

Advertising spending on the Internet has bounced back from its 2001-02 bust

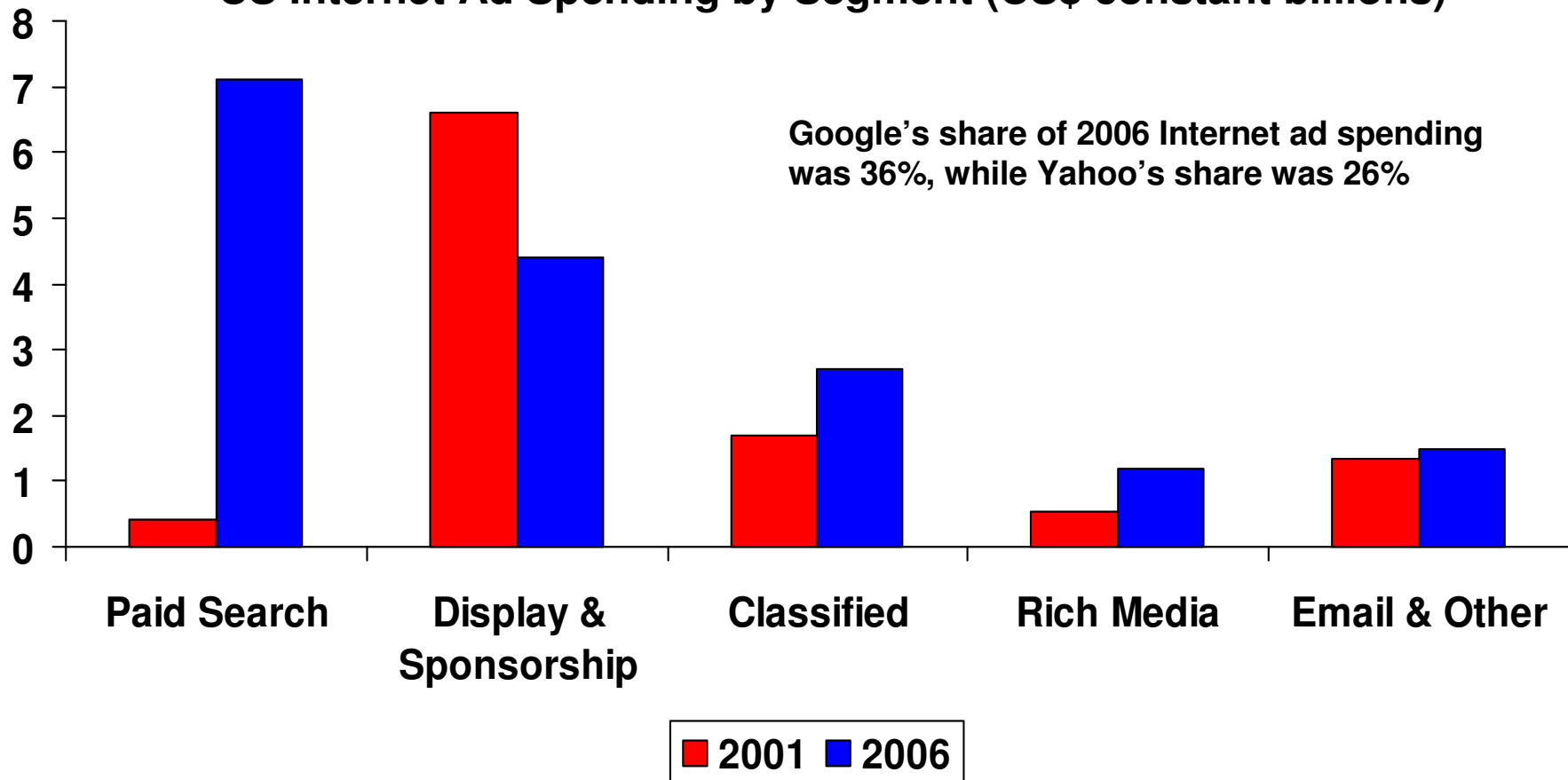


Source: Interactive Advertising Bureau

Paid search is the largest and fastest-growing Internet advertising segment

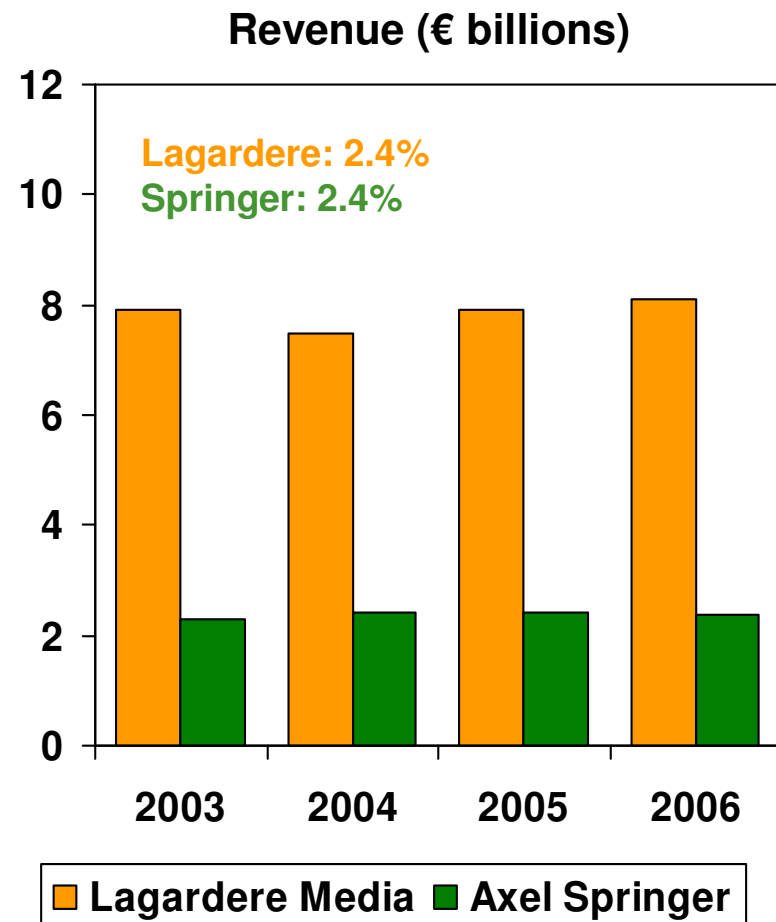
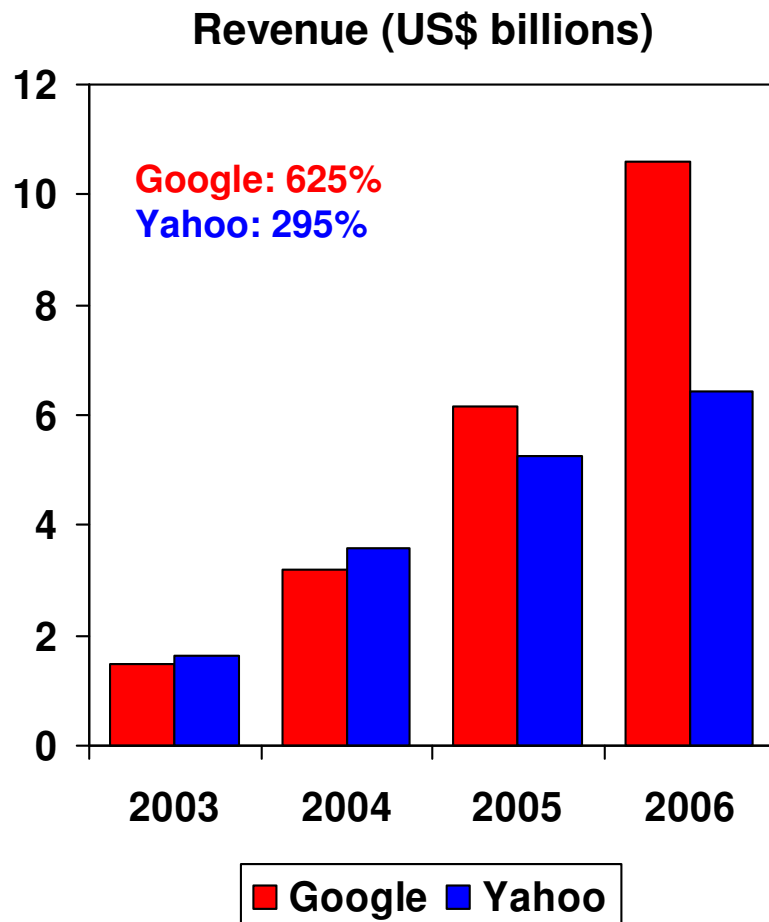


US Internet Ad Spending by Segment (US\$ constant billions)



Source: IAB; Morgan Stanley

The new media has spawned powerful and rapidly growing new media companies



Source: Company Reports

Google is rapidly becoming the elite media company in the Internet world



Graphic courtesy of www.economist.com

- Q1/2007 profit rose 69% to US\$1B on revenues of US\$3.6B
- \$3.1B acquisition of Double Click announced April 13
- Moving rapidly to dominate ad market
- Forcing old media companies to scramble and make alliances

Mission is to build biggest footprint through mobile and Internet in all languages and in all countries with partners

Traditional Media Company Strategies

The most important determinant for future graphic paper demand is how traditional print media companies respond



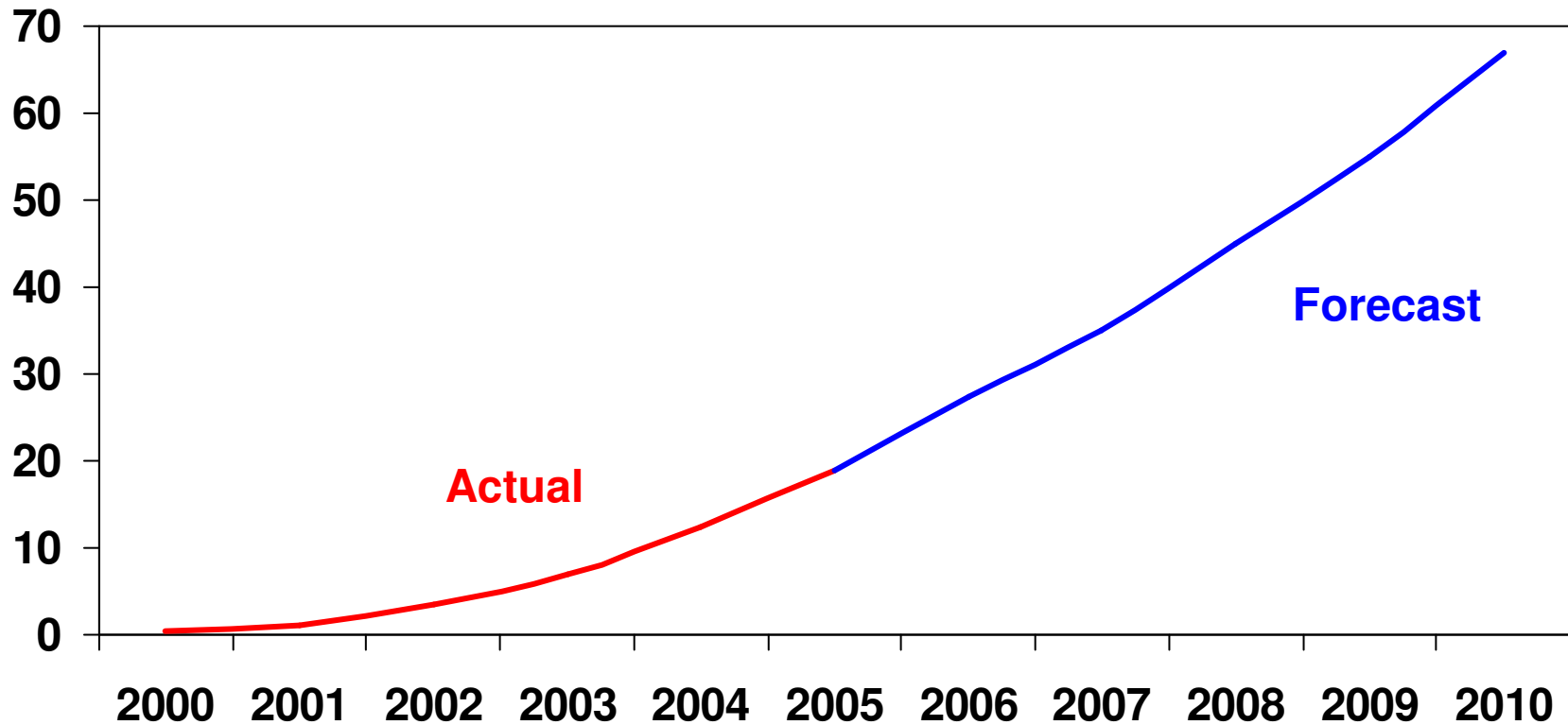
- They have been the first to feel the impact of this new revolution in information distribution.
- Seen by them as both a serious threat and major new opportunity
- Many companies see Google as the new enemy



But make no mistake: many print media firms have embraced the new media and are moving away from *'ink on paper'*



Global Spending on Content Distributed Online and to Wireless Devices (US\$ billions)



Source: PWC



COURTESY: TIME WARNER

- “I am confident that the biggest brands in print, with our expertise and support, will develop into the biggest brands online.”
- “We need to continue to evolve to meet the cost pressures and challenges presented by our rapidly shifting industry.”

Ann Moore, Chairman and CEO, Time Inc. Magazines, quoted in the New York Times, January 15, 2007



- “The press has ten years left as production costs become unsustainable”
- “Our adaptation to the new media will not consist of making a systematic and mechanical transfer of our press to the Internet. That would be a mistake. Our advantage will remain in the richness of our content.”

Arnaud Lagardère, owner of Hachette-Filipacchi Medias, in an interview with Journal du Dimanche, September 18, 2006



- “Printing will not go away, but I do not plan to open a single new printing plant. We now concentrate on using social software to build closer relations with the communities of readers around our magazines.”
- “Content alone can no longer win. You must build and interact with audiences.”

**Dr. Hubert Burda quoted in the International Herald-Tribune,
November 13, 2005**

How will your customer base position itself in the future in response to the continuing proliferation of new media?





Thank you for your attention!

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