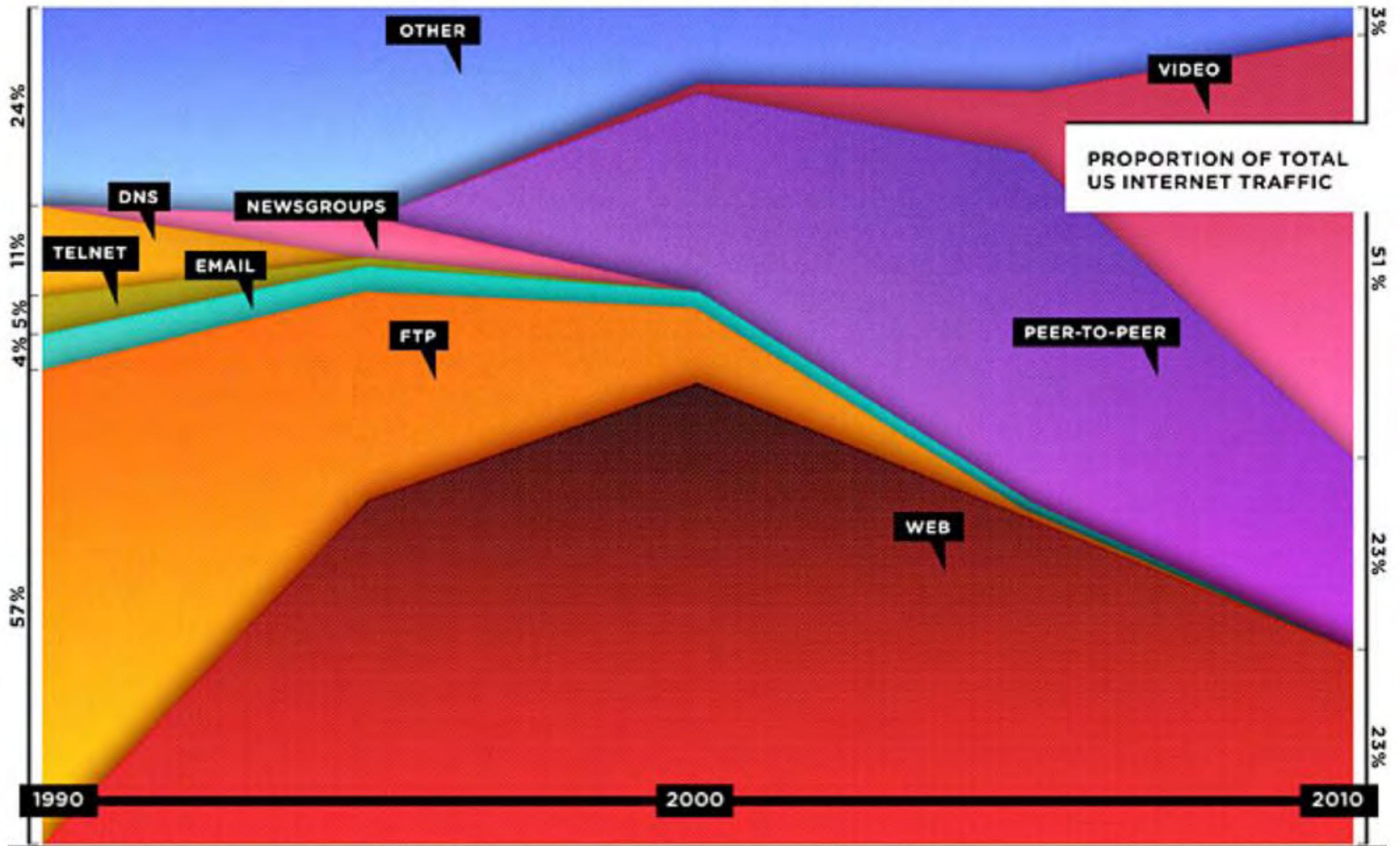


Mobile Technology and Scientific Communication

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The Web Is Dead. Long Live the Internet

By Chris Anderson and Michael Wolff  August 17, 2010 | 9:00 am | [Wired September 2010](#)



Sources: Cisco estimates based on CAIDA publications, Andrew Odlyzko

The Evolution of Content and Distribution

Journal subscriptions



1970s

Communication via **print articles**.

6 - 11 mo. delay between submission, acceptance and distribution

Subscription online services through BBS. Email starts to be accepted. Computerized Journal editorial process.



1980s

Initial efforts to distribute on **fixed media**. Initial experimentation with Internet and addition of digital video. PubMed and other **online resources** in progress.

Web-based Access to resources + subscriptions



1990s

Streaming video starts to come of age. Scientific meetings have started to distribute proceedings over Internet. Video broadcasts of meetings over Internet. Immediate availability of video proceedings.

Smart phones and pads...Mobile Apps, eBooks, eVideo, subscriptions, location-and social based media

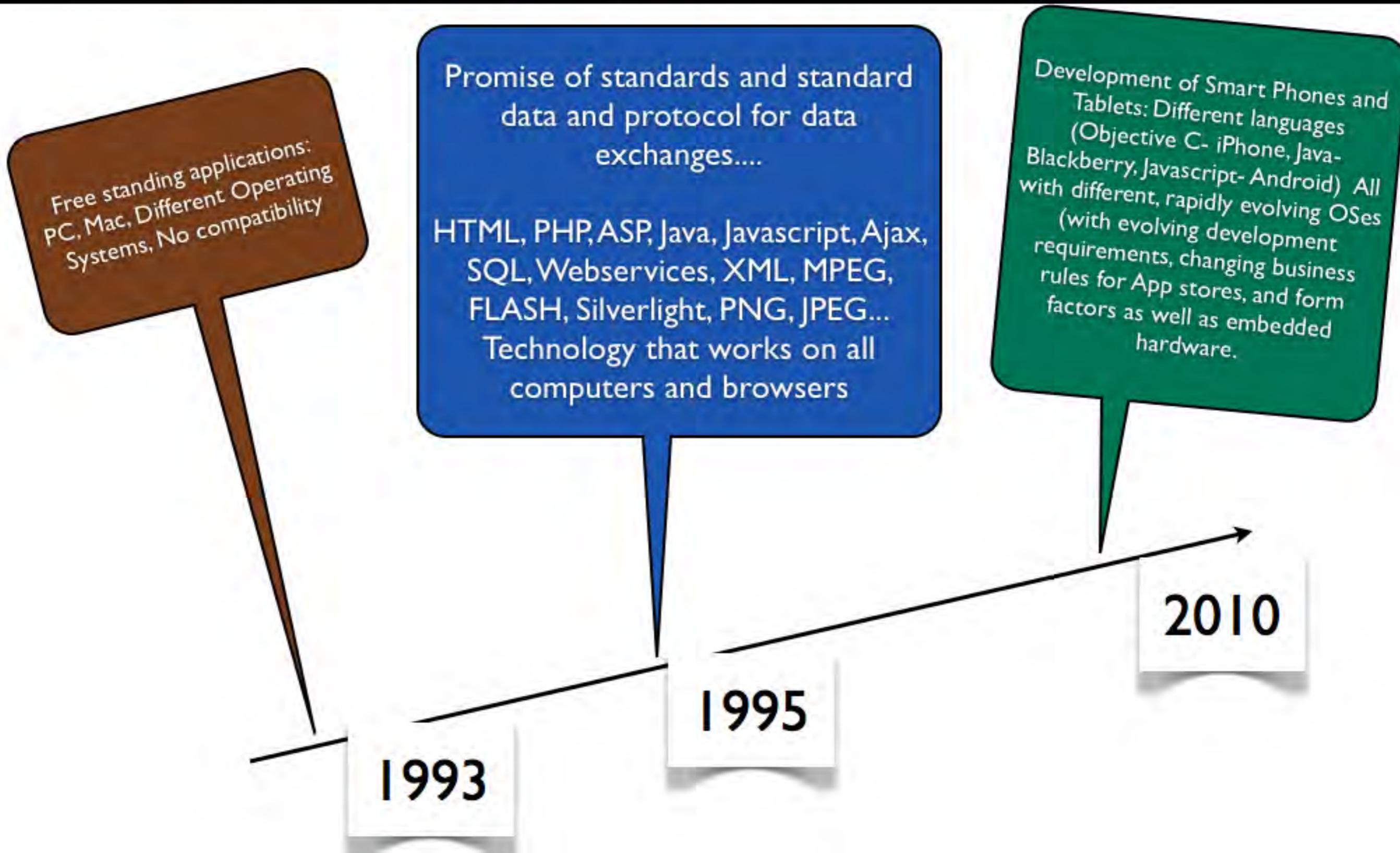


2000+

Mobile devices offer all features of past plus **always on** connectivity and mobility. **Social media** comes of age. **Location based content** comes available. **Apps** are the means by which new software is released. App store enables **focused content and technology is now widely available**.

The New Internet-

Round trip from multiple platforms to central standards to multiple platforms



The New Internet- Rapid Evolution of Mobile Devices and Services

- Within five years, the number of users accessing the Net from mobile devices will surpass the number who access it from PCs.



Replacement and upgrades in handsets are occurring in shorter spans of time- often less than one year. Newer OS and hardware upgrades are occurring in shorter spans and there are many more handsets than computers. **Higher bandwidth connection options, more processing power, more sophisticated apps, and enhanced displays are all part of the new tech landscape for the indefinite future...**

What mobile means for scientific communications

- **more rapid communications and availability of data;** driven by demand and expectation
- more readily notified community (with **device which is always on** and with the community)
- ability to **correspond with authors and build community around content**
- ability to **share content** (and annotate content) with others
- ability to **monetize content** in new ways
- ability to **share text, video, slides, posters**
- Integrated **search**
- **location sense-** ability to filter information by location- providing supplemental information to audience (slides, abstracts, poster supplements) based on when and where...
- **new revenue opportunity-** conference with PC, mobile versions, different content available by subscription

The New Mobile Internet-

Faster and wider distribution of diverse media

Pros

Diverse media support

Ability to stream and download video, view PDF and static images

Search

Ability to find in-depth, targeted information with Apps and sites as well as subscription services

Share

Ability to share content via email, text, Apps.
New intra-app community building

Ability to bridge between authors and audience

Video conferencing capability

E-commerce

Well-established e-commerce and transaction model for content/app purchase as well as subscription and upsell capability

Cons

New economics

Newspapers having difficulties surviving and reinventing themselves due to decreased readership, increased costs of materials, increased amount of freely available content

Journals challenged to maintain advertising

Increasing costs

The Web decreased the cost and promise of electronic publishing. The cost of building and maintaining (with different OS, hardware, data plans) infrastructure has increased

The New Internet-

Features that are expected now and in the future...

Mobile is Available and Tracks Where You Left Off

Expectation of rapid availability of content - no longer evening and weekend browsing; now more continuous, tracking where you left off

Game apps built this expectation

Now great chance of simulcast being used

Video conferencing is coming of age (e.g., Skype, Facetime)

Location-based: information can supplement what you are doing... when you need it...

Mobile is social- starting with phone calls, contacts, texting, and apps built in this venue...

Ability to view content on and off-line

The New Internet- Questions?

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Thank You!