

Making information accessible through new media

Michael Bomford

March 25, 2008

Digital media offer new ways to share information rapidly

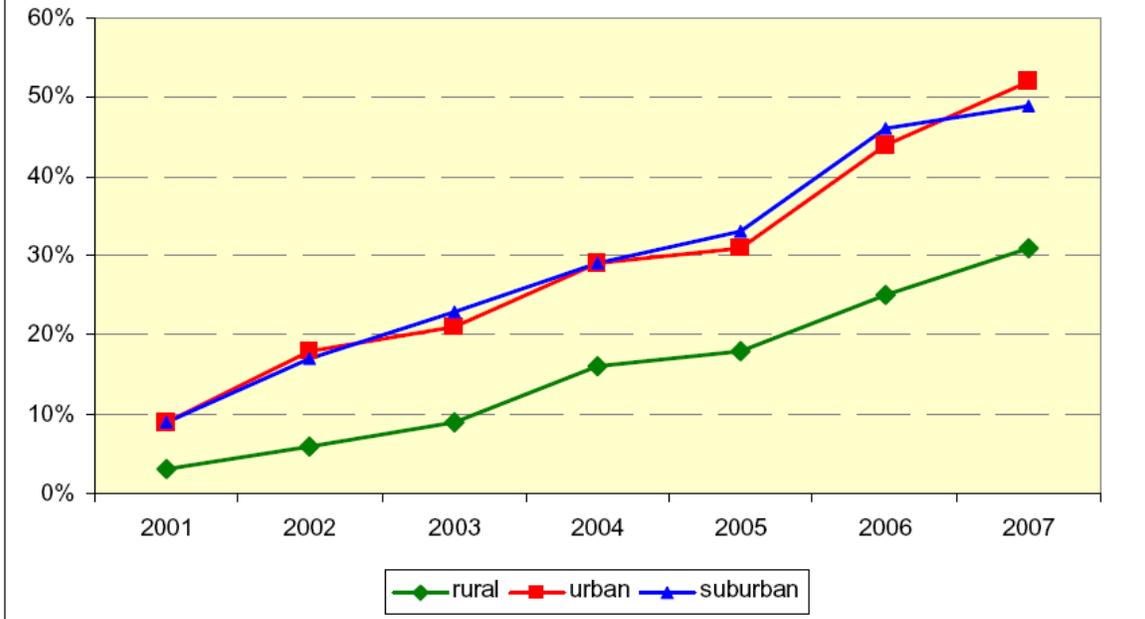
- **Email:** electronic messages transferred quickly from one computer to another. The most-used digital medium.
- **Website:** a coordinated collection of web pages, images, videos and other digital files hosted on a particular domain of the World Wide Web.
- **Blog:** a website consisting of a series of frequently updated posts in reverse chronological order.
- **Podcast:** a digital audio or video broadcast made available on the Internet for download to a personal media player.
- **Wiki:** a collection of web pages that can be edited by a group
 - o E.g. Wikipedia, eXtension
- **Open access research:** scholarly (peer-reviewed) publications available online without financial or other barriers other than access to the Internet.
- **User-generated content** or **user-created content:** content made publicly available over the Internet that is created outside of professional routines and practices.



Access to digital media is inequitable, but growing.

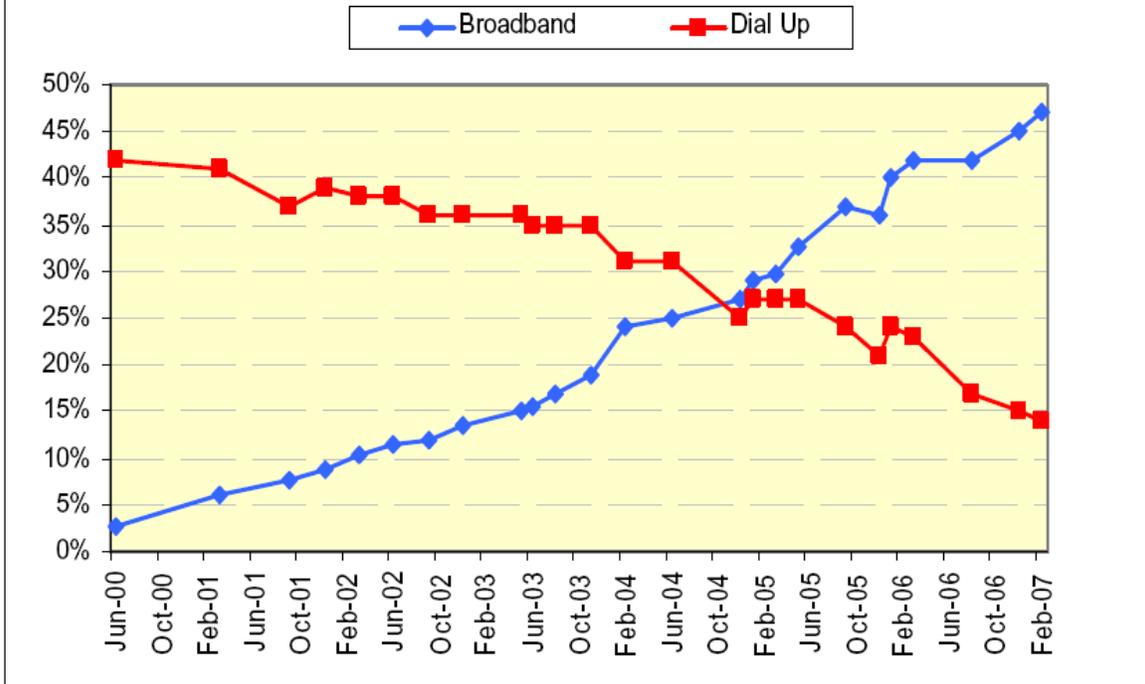
- Most Americans (71%) use the Internet. This proportion has grown rapidly over the past 15 years but growth has slowed with market saturation.
- About half of Americans have broadband connections, which make new media more accessible. This proportion is growing steadily and rapidly.
- Digital media are **less accessible** to traditionally-marginalized segments of the population, including many of those that the KSU Land Grant Program serves:
 - o African-Americans,
 - o rural Americans,
 - o older Americans,
 - o less educated Americans,
 - o lower income Americans.
- Growth in access is **most rapid** for these populations.
- Broadband adoption among rural Americans and African-Americans trails the general population by only 1-2 years.

Home broadband penetration by community type



Home Broadband & Dial-Up Penetration

(% of adult Americans)



Trends in Broadband Adoption Across Population Subgroups

	% with broadband at home (2005)	% with broadband at home (2006)	% with broadband at home (2007)
All adult Americans	30%	42%	47%
Gender			
Male	31	45	50
Female	27	38	44
Age			
18-29	38	55	63
30-49	36	50	59
50-64	27	38	40
65+	8	13	15
Race/Ethnicity			
White (not Hispanic)	31	42	48
Black (not Hispanic)	14	31	40
Education			
Less than high school	10	17	21
High school grad	20	31	34
Some college	35	47	58
College +	47	62	70
Income			
Under \$30K	15	21	30
\$30K-50K	27	43	46
\$50K-\$75K	35	48	58
Over \$75K	57	68	76
Community Type			
Urban	31	44	52
Suburban	33	46	49
Rural	18	25	31

Sources: 2005 data comes from the Pew Internet Project's combined January-March tracking survey of 4,402 adults; 1,265 were home broadband users. The margin of error for all respondents is +/- 1.6%.

2006 data comes from the Pew Internet Project's February 15 through April 6 survey of 4,001 adults; 1,562 were home broadband users. The margin of error for all respondents is +/- 1.7%.

2007 data comes from the Pew Internet Project's February-March survey of 2,200 adults; 966 were home broadband users. The margin of error for all respondents is +/- 2.3%.

Percent of internet users who <u>ever</u> engage in the following online activities (from any location)			
	All Internet Users	Home Dialup	Home Broadband
Send or read email	91%	90%	95%
Look for information about a hobby or interest	83	78	89
Get news	72	61	79
Do any type of research for your job	51	42	57
Look for information on Wikipedia	36	26	42
Look for religious or spiritual information	35	34	37
Read someone else's online journal or blog	29	21	34
Take material you find online and remix it into your own artistic creation	17	11	19
Create or work on your own online journal or blog	12	12	13
Make a phone call online	9	3	11
Create an avatar or online graphic representation of yourself	9	5	11

Source: Pew Internet Project February-March 2007 survey of 2,200 adults; 966 were home broadband users

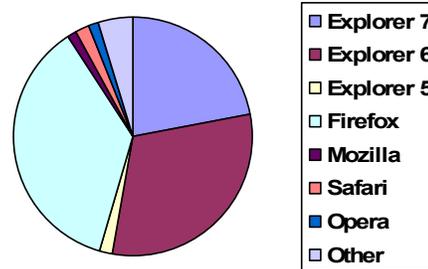
Effective Email

- Email is effective in providing **quick answers** to yes and no-type questions **BUT** it becomes **time-consuming** for answering complicated questions. The telephone is much better for providing detailed answers or if you feel that the question is not absolutely clear. Email can easily become **impersonal** or **misunderstood**.
- Email can **distribute information quickly** to many people **BUT** sensitive information can easily be spread accidentally. **Do not treat email as confidential.**
- Emails need **accurate subject lines** to allow busy readers to prioritize messages. Skimming emails is common, so make sure that the major point is handled first.
- Include a **description of any attachments** you send in the body of the email. Keep attachments small, particularly if you know messages will go to clients with dial-up connections.
- Email needs to be **personal** or else it will be regarded as spam. Use mailing lists with caution. Always ask clients if they want to be included on a mailing list before adding them. Treat clients as people, not numbers.
- Always **greet clients by name** and end using your name.
- Make sure your **contact details** are clearly displayed on the end of every email. These include your full name and address, your business phone number, fax number, and web site address.
- Terms like 'regards' or 'kind regards' are formal but friendly.

Good websites:

- **Easy to read**
 - o Simple language. (Use readability tests.)
 - o High contrast between text and background. Avoid textured or shaded backgrounds in body.
 - o Short and narrow columns of text
 - o Uncluttered
 - Avoid ‘under construction’ signs, hit meters, ads, frames within frames, horizontal scrolling
 - Avoid multiple fonts, flashing text, moving text, centered or justified text
 - o Compatible with all browsers
- **Load quickly**
 - o Small images (use Adobe Photoshop ‘Save for Web’ feature)
 - o Avoid images >300 pixels wide or tall
 - o Aim for page sizes <50K
- **Easy to navigate**
 - o Don’t bury information (no page should be more than three clicks away)
 - o Include search tool (particularly important for large sites)
 - o Make link text explicit
 - o Scan for broken links
 - o Keep menus consistent and easy to understand
 - o Use simple URLs
- **Easy to find**
 - o Google page rank is determined by how many other pages link to yours, and the page rank of those linking pages. Link to others and request links.
- **Updated**
- **Design tools**
 - o NVU (<http://nvudev.com>) is a free, open source alternative to Adobe Dreamweaver (\$399, <http://www.adobe.com/products/dreamweaver/>).

Browser use, Feb 2008



Good Blogs

- **Focused** and on-topic
- **Updated regularly**
- Hinge on community
- Use **descriptive headlines**
- Mention core ideas up front
- **Scan easily** (use lists, images, tables, subheadings)
- **Credit sources** with links

Youth-driven: Proportion (%) of population reading and writing blogs, by age, 2006		
Age	Reading	Writing
18-26	27	15
27-40	14	4
41-50	9	2.5
51-60	7	1
62+	5	.5

Podcasts

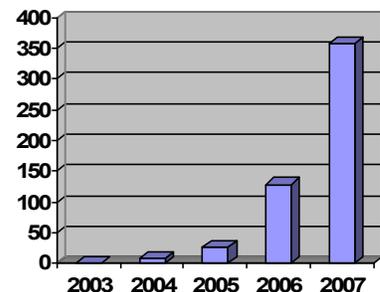
- Digital audio or video broadcasts made available on the Internet for download to personal media (MP3) players. MP3 player use is highly correlated with broadband access.
- **Public service**
 - o Audio tours of museums and parks
 - o News briefs (e.g. Wikinews, http://en.wikinews.org/wiki/Wikinews:Audio_Wikinews)
 - o Youth media (e.g. <http://www.youthradio.org/>)
 - o Spoken word alternative to text for visually impaired (e.g. <http://podcast.assistivemedia.org/>)
 - o Global Public Media (<http://globalpublicmedia.com/>)
- **Education and academia**
 - o Podcast lessons
 - o Tutorials
 - o Lectures and forums

- **Health, fitness, and wellness resources**
 - o Washington County hospital podcast, *Health Matters* (<http://www.washingtoncountyhospital.com/radio/index.asp>)
 - o Ohio University Center For Public Media podcast, *Family Health* (<http://www.fhradio.org/>)
- **Farm podcasting**
 - o USDA-ERS podcasts (<http://www.ers.usda.gov/Podcast/>)
 - o AgNet Online's Florida farm podcast, launched at the Florida Citrus Expo (<http://agnetonline.com/2006/08/24/first-florida-farm-podcast/>)
 - o Farming and simple living podcast: "Two geeks move to rural Indiana... what could go wrong?" (<http://geekfarmlife.com/>)

Wikis (Wikipedia and eXtension offer different models)

- **Wikipedia (www.wikipedia.org)**
 - o Anybody can edit, nobody gets credit
 - o Open access
 - o Sounds like a recipe for disaster but remarkably successful
 - >9 million articles in 253 languages (2.3 million in English)
 - Several studies have concluded that Wikipedia's science articles are as accurate and as complete as comparable articles in major conventional encyclopedias, but are often more poorly structured.
 - o Experienced users designated as administrators, with special powers.
 - o Easier to reverse vandalism than to commit it.

Wikipedia citations in articles in ScienceDirect database



- **eXtension (www.extension.org)**
 - o Content created and edited by authorities from land grant universities.
 - o Authorities can join ‘Communities of Practice’ related to their area of expertise. Must demonstrate knowledge of that area.
 - o Other communities are generating content but have not yet gone ‘live’ (E.g. eOrganic, eHightunnels etc.)
 - o Includes ‘ask an expert’ feature

Open-Access Research

- Full-text peer-reviewed research articles freely available online (increases citation impact)
 - o **Hybrid open access journal:** articles are open access if authors pay an additional publication fee (e.g. Journals published by the Entomological Society of America, Proceedings of the National Academy of Science)
 - o **Delayed open access journal:** articles become open access after several months (e.g. Journals published by Highwire Press)
 - o **Self-archiving:** researchers who publish in subscription journals can make their articles freely available online. Central repositories for this **self-archiving** include PubMed Central (www.pubmedcentral.nih.gov) and Organic ePrints (www.orgprints.org). More than 90% of non-OA journals endorse some form of self-archiving.
- About 2,500 open access journals (E.g. BioMed Central, Public Library of Science) out of about 25,000 total journals
- Some research funding agencies (e.g. NIH) now require open access publication
- The Alliance for Taxpayer Access in the US lobbies for publicly-funded research to be freely accessible

<p>eXtension communities of practice with live content:</p> <ul style="list-style-type: none"> - Community <ul style="list-style-type: none"> o Diversity Across Higher Education o Entrepreneurs & Their Communities o Gardens, Lawns & Landscapes (draws heavily on content created for GardenData.org, a Kentucky-based database) o Geospatial Technologies o Imported Fire Ants - Disaster Issues <ul style="list-style-type: none"> o Agrosecurity and Floods - Family <ul style="list-style-type: none"> o Family Caregiving o Parenting o Personal Finance - Farm <ul style="list-style-type: none"> o Beef Cattle o Cotton o Dairy o Horses o Livestock and Poultry Environmental Learning Centers - Pest Management <ul style="list-style-type: none"> o Wildlife Damage Management - Youth <ul style="list-style-type: none"> o Science, Engineering, and Technology for Youth
