Broadband Adoption & Use in America

Results from an FCC Survey

Presentation at the Brookings Institution

February 23, 2010

FCC's Survey of Broadband Adopters & Non-Adopters: Goals

- Understand broadband users & use
  - What they do
  - What is important to them
  - What triggers adoption
- Understand non-adoption
  - Barriers to access
  - Attitudes toward internet
  - Help frame policy approaches

Sample

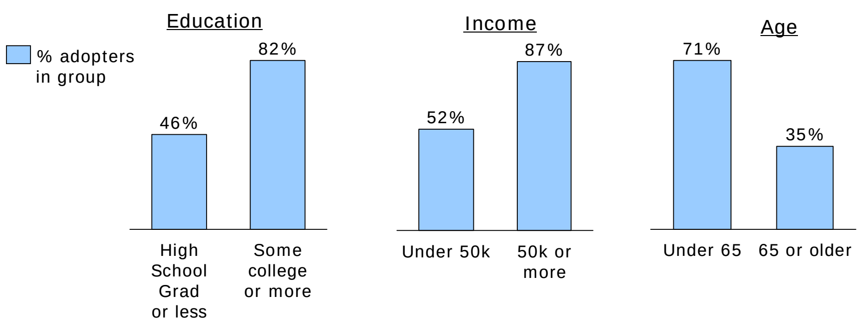
- 5,005 respondents
- Oversample of non-adopters = 2,334
- Spanish-speaking option
- Cell phones included
  - 30% of sample interviewed on cell phone
- Survey mandated by the Broadband Data Improvement Act (BDIA)

Adoption

Overview of findings

- 78% of Americans are internet users
- 67% of households contain a broadband user
- 65% of Americans are broadband users <u>at home</u>
- 86% of Americans have a cell phone
- 30% of Americans have used the internet on handheld
  - Among <u>all</u> non-adopters, 14% have accessed internet on cell
  - Among <u>African American</u> non-adopters, 20% have done this
  - Among <u>Hispanic</u> non-adopters, 25% have done this

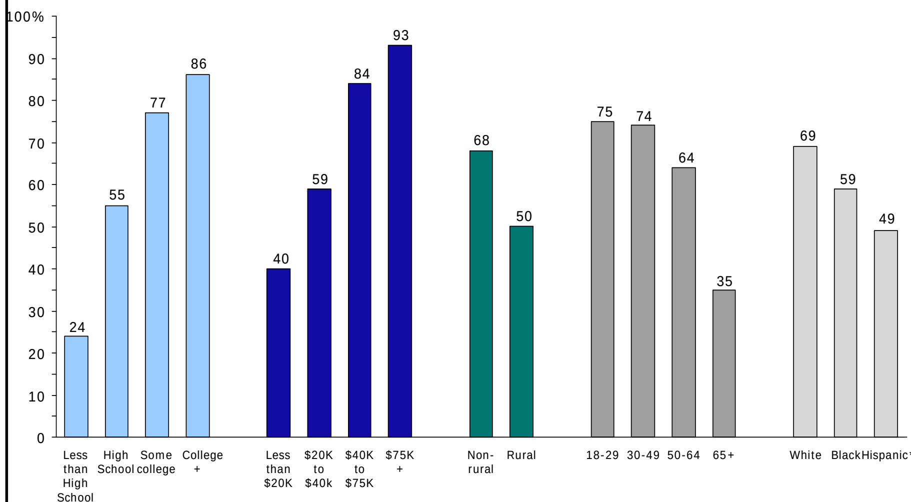
Main dividing lines on adoption



- People with disabilities (24% of sample): 42% with broadband at home

Adoption by demographic & socio-economic segment

Percent of American adults



*Hispanics includes both English and Spanish speaking Hispanics;

What people pay for broadband

- Average monthly bill (user reported) from FCC survey: $40.68
  - $46.25 for those whose service is not part of bundle
  - $37.70 for those whose service is part of bundle
- Other sources:
  - Pew (April 2009): $39
    - Self-reported from survey
  - TNS Telecoms: $34.50
    - Analysis of consumer bills – 90% bundled offerings, may include promotions
  - Telogical: $46
    - Providers' stand-alone (i.e., non-bundled) non-promotional offerings
- 70% of broadband users have broadband bill bundled with another service
- Trends:
  - Pew data show price increases from 2008 to 2009.
  - TNS data shows steady prices (for bundles) from 2008 to 2009.

What online activities are most important? (among broadband users)

Making it easy to communicate with friends and family, even if they are far away	68%
Keeping up with the news in my community	39%
Sharing content with others, such as photos, videos, or text	34%
Shopping online	23%
Watching TV shows, movies and other video online	10%
Playing games online	9%

What triggers adoption? (among those online two years or less)

- Most important reasons for getting access:
  - 31%: To email & stay in touch with family & friends
  - 19%: My children needed it for school
  - 10%: I needed it for school
  - 9%: To gain access to music, movies, entertainment
  - 7%: My children wanted internet access
  - 6%: My job required online access
  - 3%: To share photos or videos with families and friends
  - 2%: A provider made a special offer too good to pass up

Key points on adoption findings

- Remains a multi-faceted tool for adopters:
  - Communications
  - Socializing
  - Information gathering
  - Sharing → content & creativity
  - Problem solving → health care, job search, transactions
  - Personal enrichment → education
  - Leisure → entertainment, games
- Path dependence:
  - Late adopters value much the same thing as early adopters

Non-Adoption

Non-Adopters: 35% of adult population

- 3 baskets of non-adopters:
  - 22% -- non-internet users
  - 6% -- dial-up users at home
  - 6% -- online users who do not access the internet from home
- Most non-adopters can get service where they live:
  - 4% of adults cite lack of available infrastructure as reason for non-adoption.

Understanding the reasons for non-adoption

- Asked respondents to list the reasons for non-adoption from a menu:
  - Half of non-adopters list 3 or more reasons why they don't use the internet or broadband
- Follow-up question posed to pin respondent down on <u>most important</u> reason
- Probed general attitudes about broadband use

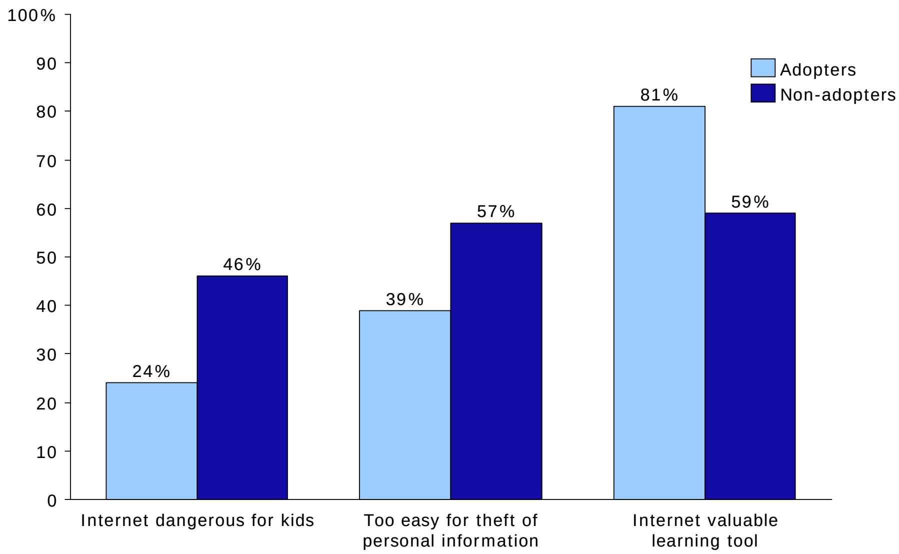
Types of barriers non-adopters asked about …

- Non-users (22%) & not-at-home users (6%)
  - Monthly cost too expensive
  - Not comfortable with computer
  - Worried about online hazards
  - Activation/installation fee too much
  - Cannot afford computer
  - Nothing online I want to see
  - Internet is a waste of time
  - Can access internet all I want at work
  - Not available where I live
- Dial-up at home (6%) [in addition to several listed above]
  - Happy with current service
  - Don't need additional speed
  - Don't want long-term contract
  - Don't use the internet that much

Main reasons people do not adopt

- **Cost** – 36% cite a reason pertaining to this:
  - 15% specifically point to monthly fee for service
  - 10% say they cannot afford a computer
  - 9% activation fee/reluctance to enter into long-term contract
- **Digital literacy** – 22% of non-adopters:
  - 12% say lack of comfort with computers
  - 10% cite hazards of online life (e.g., worries of "bad things that can happen" online)
- **Relevance** – 19% of non-adopters:
  - Content with current dial-up service/don't need more speed (5%)
  - Believe internet is a waste of time (5%)
  - Nothing they want to see online (4%)
  - Don't use internet much (4%)
- Remaining reasons:
  - 15% -- other or combination of several reasons
  - 5% -- not available where they live
  - 3% -- can use the internet all they want at work

Comparing attitudes about internet: broadband vs. non-broadband users



The information and communications goods & services among non-adopters

- 80% have cable or satellite TV at home
- 70% have cell phones:
  - Pay $73 for service (figure includes mulitple line service)
- 49% say they are computer users:
  - 34% **<u>very</u>** comfortable using a computer
  - 39% **<u>somewhat</u>** comfortable using a computer
- 42% have at least one working computer at home
- Among half who are non-computer users:
  - 35% have used a computer in the past
- 24% of all non-adopters have at some point used broadband (work, friends house, past at home service):
  - 8% of non-users “un-adopted” – they used to have broadband

Segments of non-adopters

- Where do non-adopters fall along 2 dimensions:
  - Proximity to information & communications technology (ICTs)
  - Attitudes toward ICTs
- Good chance to adopt:
  - High proximity, positive attitudes
- Low chance to adopt:
  - Low proximity, negative attitudes
- In between:
  - Low proximity, positive attitudes
  - High proximity, negative attitudes

Creating segments of non-adopters indicates potential conversion points

Proximity: digital support system (Low → High)

Attitude: comfort with technology (Low → High)

Attitude \ Proximity	Low	High
High	**"Digital Hopefuls"** **8% of population** Like idea of being online, but lack resources Cost and Digital Literacy are adoption barriers	**"Near Converts"** **10% of population** High rate of computer ownership & comfort with ICTs; positive attitudes Cost is main barrier to adoption
Low	**"Digitally Distant"** **10% of population** Lack of skills, resources, and negative attitudes toward cyberspace Cost, Digital Literacy, Relevance all barriers	**"Digitally Uncomfortable"** **7% of population** Have access means, but low comfort with ICT & tepid attitudes toward ICTs Cost and Relevance are adoption barriers

Implications

- Easiest-to-convert segment (Near Converts) need relief on level of monthly bill.
- Solving cost for non-adopters necessary but not sufficient:
  - Digital literacy and relevance typically a role for non-adopters
- Comprehensive approaches to address non-adoption needed:
  - Segment analysis shows at least three-quarters of non-adopters have more than one key issue
- Adoption is an individual decision that takes place in a social context:
  - Indicates solutions should be driven at local & community level to cultivate social infrastructure around adoption