History, part 3

Cable, Satellite and Internet
Cable

Ironically, cable was developed to extend reach of over-the-air TV.

CATV (Community Antenna TV)

Appeared in rural areas of Oregon and Pennsylvania, 1948; local/regional in concept.

Tall antenna (on a hill or building) would receive TV stations and transmit them to homes on a cable for a monthly fee (click image).

Early cable TV
Cable Regulation

By mid-1960s, broadcasters feared cable as a competitor; FCC protected broadcast TV.

FCC implemented “must-carry” rule.

Generally, cable less closely regulated than over-the-air broadcasting. Why?

Cable only enters your home if you want it to.
Cable As We Know It

Communications Satellites
Telstar, 1962, first communication satellite.

HBO and Pay Cable
HBO went on satellite in 1975, pioneering cable-specific programs.

Ted Turner and Superstations
Ted Turner conceived of WTBS in Atlanta as a “superstation,” sent by satellite to U.S. cable systems.

Later, WGN, WOR, KTVT (Dallas), others.
Cable Programming After Turner

Cable basically “parasitic” until around 1980; repeated broadcast TV channels.

ESPN, 1979. [ESPN 1979]

CNN (founded by Ted Turner), 1980. [CNN 1980]

MTV, 1981. [MTV 1981]

Cable channels have taken a huge share of ratings away from broadcast TV, but broadcast TV still dominates the ratings (about 30% of U.S. has never subscribed to cable).
Direct Broadcast Satellite
FCC authorized DBS in 1982.
Telephone video
Verizon FiOS, AT&T U-Verse
Cable losing subscribers to DBS, telephone video.
Satellite Radio
Internet Origins

Origins, late ’50s with Department of Defense’s Advanced Research Projects Agency (ARPA); British, French agencies also contributed separately.


Tim Berners-Lee: inventor of World Wide Web, 1990. [First website](#)

Tim Berners-Lee (after start, advance to 3:35)

One million users by 1992, about 70% of U.S. on line, 2008.

[How the Internet works](#)

Steve Jobs & Apple drive a digital revolution.

[Steve Jobs](#)
Internet/World Wide Web does not require government license ... or large investment to become webcaster.

Net neutrality – government control?

Net neutrality
Tim Berners-Lee on Net Neutrality

September 2011, FCC released its final rules for “Preserving a Free and Open Internet.” Providers may not block lawful content, nor unreasonably discriminate in transmitting lawful network traffic.

Broadcasters are making programs available on-line.

CBS programs
Hulu
VCRs and DVDs

Betamax, 1975, $1,300 ($5,400 today).

Early VCR commercial

VCR led to “timeshifting” of viewing.

DVDs, DVRs have replaced VCRs.

By 2008, DVD players in 84% households.

Blu-Ray, 2006; streaming video threatens to make disks obsolete.

Video camcorders; cell-phone video.

Personal video makes America’s Funniest Home Videos, YouTube possible; social, political implications.