CHAPTER 8

Cable and Other Multichannel Services

LEARNING OBJECTIVES

Many observers inside and outside the media industries believe that, before long, most media content will be delivered to us by cable or other multichannel provider such as a satellite company. The implications for the existing media industries, for us as their audiences, and for our culture could not be more profound. After studying this chapter you should

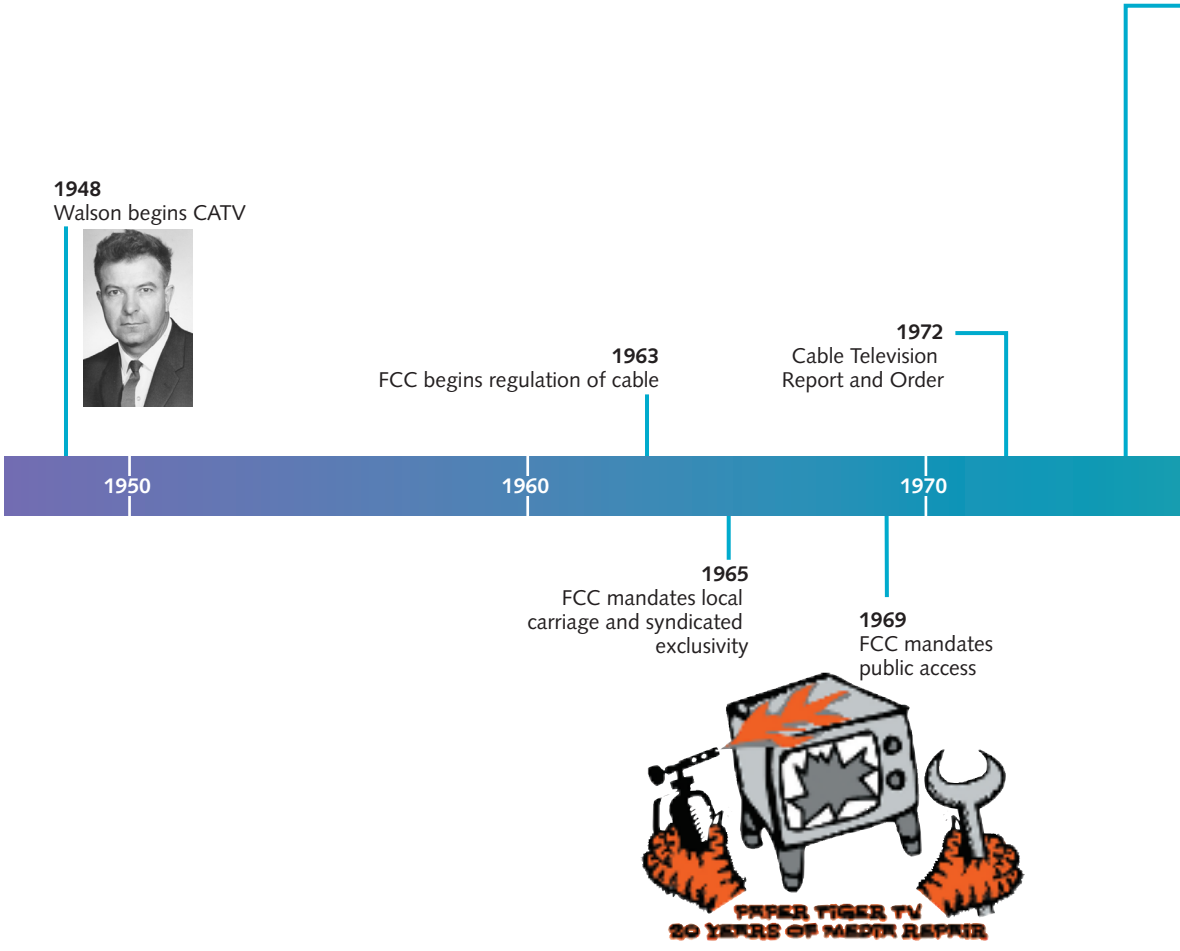
- be familiar with the history and development of the cable and other multichannel industries and with cable and DBS themselves as media.
- understand in detail how content moves from originator to home via multichannel services.
- recognize how the organizational, regulatory, and economic nature of the multichannel industries shapes their relationship with their viewers.
- be aware of new and emerging multichannel video technologies and their potential impact.
- understand the significant implications for the mass media industries, for us as audience members, for our democracy, and for the culture of the migration of media from a broadcast to a telecommunications orientation.
- possess improved cable, DBS, and other multichannel service media literacy skills, especially in understanding pricing strategies.

SOMETHING ON THE ON-SCREEN PROGRAM GUIDE GRABS YOUR ATTENTION. SUBSCRIBER ALERT! is on all 24 hours today on satellite channel 148. No doubt there are some new services coming on and the DBS provider wants to warn you and others in case their content might offend. Nice touch, you think. You click on and there it is . . . a warning that Congress is about to raise the cost of programming for satellite companies (but not for cable companies!) and this will result in higher costs for you. WRITE CONGRESS NOW! Or better yet, LINK TO OUR WEBSITE AND E-MAIL CONGRESS DIRECTLY! You think, "What's this about? The satellite company wants me to lobby Congress on its behalf?" Does this have anything to do with the fight between ESPN and some of

HBO's *Curb Your Enthusiasm,* one of cable's many original program hits.

the channel providers you've been reading about? Didn't you see some appeal in the paper about this just the other day? Or maybe it was that thing between baseball's Yankees and some cable providers? Or is it about how you can get local channels on your dish, but your sister back home can't? Or that big merger between DirecTV and some media conglomerate that the FCC approved but that has a lot of people riled up? Or whether your satellite company and cable companies have to make channels available for whatever the television stations want to send out? And all you wanted to do was watch some TV.

In this chapter we will look at the state of affairs for satellite and cable television that has produced this situation. We will also look at the future of these and other **multichannel services,** one that, of necessity, will include Internet service providers and the telephone companies, because the future of television viewing—indeed, all telecommunications—is in the delivery of multiple channels of content by fat wires, that is, broadband. But before we get there, we have to look back at how the cable television with which we are familiar and that is now undergoing so much change evolved into its current nature. We will examine cable's technological and economic development and how confusing and contradictory regulation stunted and shaped its growth. We will see how a modern cable company operates and learn about the different types of cable programming, including premium cable and public access.

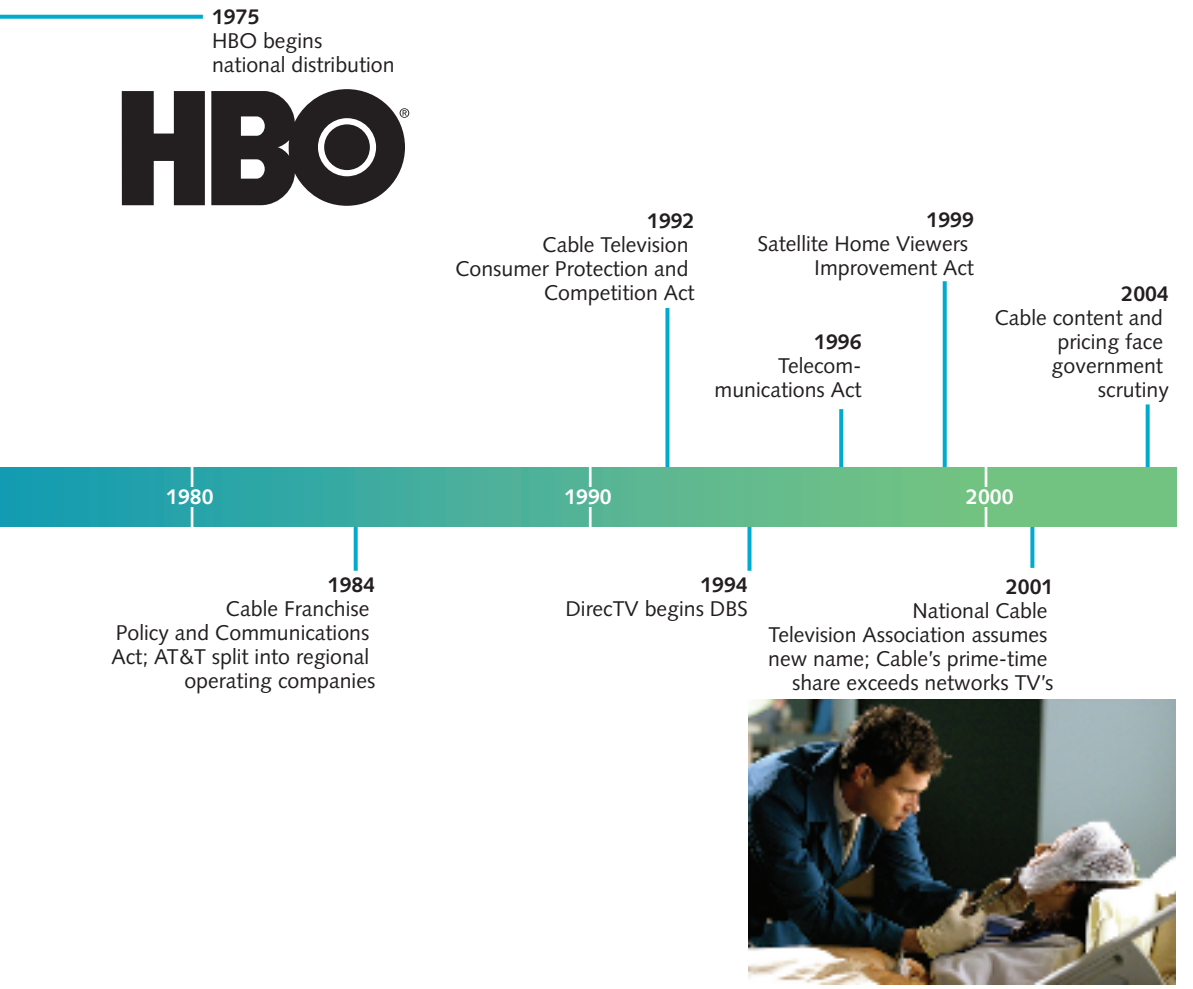


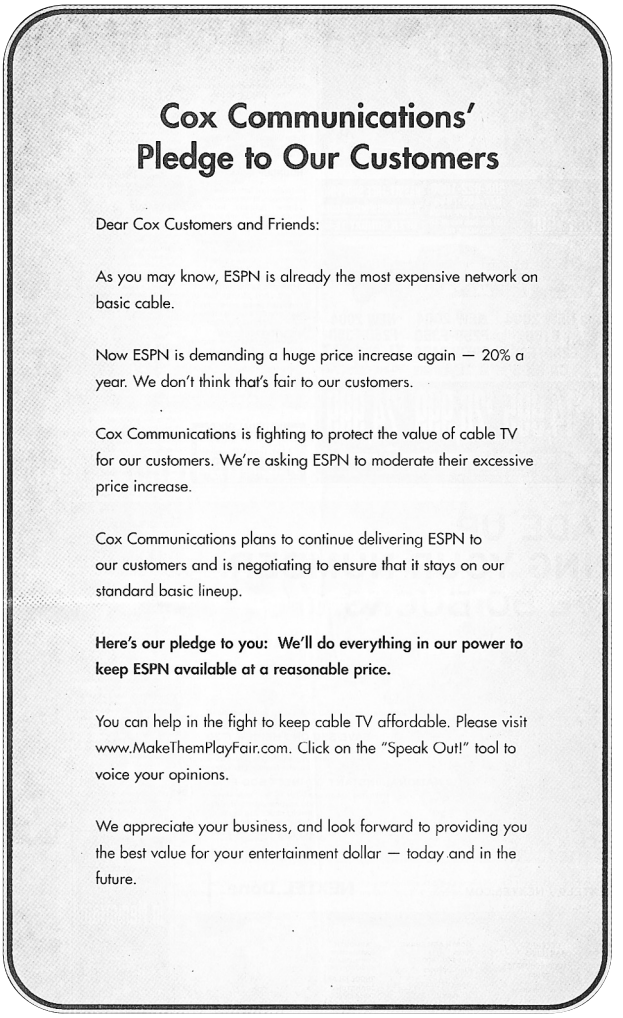
Because cable sits at the center of much of the convergence that we have been reading and will continue to read about, advances in cable technology that drive that convergence—fiber optics, digital cable, interactive cable, multiplexing, video compression, and video-on-demand—are presented in terms of both their current functioning and how they may shape the content we receive in the near future. Concentration of ownership, a factor in all our contemporary media, is an issue in cable, too. We study its various forms—**multiple system operators (MSOs),** vertical integration, and conglomeration—and the arguments for and against them. The interaction between the **telcos** (phone companies) and the cable industry promises even more convergence as telecommunications services are bundled into cable.

John Walson

A Short History of Cable and Other Multichannel Services

Mahanoy City, Pennsylvania, appliance salesman John Walson was having trouble selling televisions in 1948. The Pocono Mountains sat between his town and Philadelphia's three new stations. But Walson was also a power-line worker, so he convinced his bosses to let him run a wire from a tower





Cox Communications' Pledge to Our Customers

Dear Cox Customers and Friends:

As you may know, ESPN is already the most expensive network on basic cable.

Now ESPN is demanding a huge price increase again — 20% a year. We don't think that's fair to our customers.

Cox Communications is fighting to protect the value of cable TV for our customers. We're asking ESPN to moderate their excessive price increase.

Cox Communications plans to continue delivering ESPN to our customers and is negotiating to ensure that it stays on our standard basic lineup.

Here's our pledge to you: We'll do everything in our power to keep ESPN available at a reasonable price.

You can help in the fight to keep cable TV affordable. Please visit www.MakeThemPlayFair.com. Click on the "Speak Out!" tool to voice your opinions.

We appreciate your business, and look forward to providing you the best value for your entertainment dollar — today and in the future.

Subscriber alerts. Protest Web sites. Full-page ads. What is going on with cable and satellite?

he erected on New Boston Mountain to his store. As more and more people became aware of his system, he began wiring the homes of customers who bought his sets. In June of that year Walson had 727 subscribers for his **community antenna television (CATV)** system (Chin, 1978). Although no one calls it CATV anymore, cable television was born.

The cable Walson used was a twin-lead wire, much like the cord that connects a lamp to an outlet. To attract even more subscribers, he had to offer improved picture quality. He accomplished this by using *coaxial cable* and self-manufactured boosters (or amplifiers). Coaxial cable—copper-clad aluminum wire encased in plastic foam insulation, covered by an aluminum outer conductor, and then sheathed in plastic—had more bandwidth than did twin-lead wire. As a result, it allowed more of the original signal to pass and even permitted Walson to carry a greater number of channels.

As Walson continued to expand his CATV business, Milton Jerrold Shapp, later to become Pennsylvania's governor, noticed thousands of antennas cluttering the roofs of department stores and apartment buildings. Seeing Walson's success, he set up master antennas and connected the sets in these buildings to them, employing a signal booster he had developed. This was the start of **master antenna television (MATV).**

With expanded bandwidth and the new, powerful Jerrold boosters, these systems began experimenting with the importation of distant signals, using wires not only to provide improved reception but also to offer a wider variety of programming. They began delivering independent stations from as far away as New York to fill their then-amazing 7 to 10 channels. By 1962, 800 systems were providing cable television to more than 850,000 homes.

During cable's infancy, many over-the-air broadcasters saw it as something of a friend. It extended their reach, boosting both audience size and profits. Then, in November 1972, a company called Sterling Manhattan Cable launched a new channel, Home Box Office, or HBO. Only a handful of homes caught HBO's debut, but the broadcasters' mild concern over this development turned to outright antagonism toward cable in 1975, when new HBO owner Time, Inc., began distributing the movie channel by satellite. Now **premium cable** was eating into the broadcasters' audience by offering high-quality, nationally produced and distributed content. With the public's enthusiastic embrace of pay cable, the medium reached maturity.

HBO®

The national distribution by satellite of HBO in 1975 changed cable television, all television in fact, for all time.

CABLE RECEPTION AND DISTRIBUTION

The way cable systems receive and distribute programming has changed little since their earliest days. The process of getting a picture to a home screen begins at a receiving antenna, which includes microwave and satellite receiving equipment. The gathered signals are collected from these receivers at the

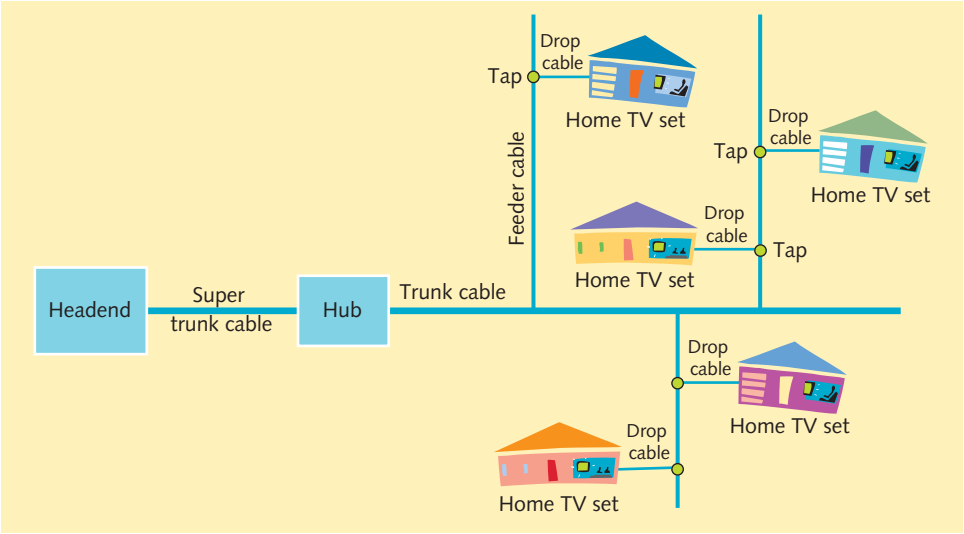


Figure 8.1 The Cable Signal—From Source to Home: A typical cable operation collects and distributes content in this manner from headend to homes.

headend. From there, they are sent over a **super trunk cable** to a **hub,** typically the cable system operation itself, at which they are processed and boosted for distribution. The cable that leads from the hub into the community is the **trunk cable,** which divides into **feeder cables** to access individual neighborhoods or areas. The line that runs from the feeder to our homes is a **drop cable.** The layout of a typical cable operation is presented in Figure 8.1.

CABLE'S ECONOMIC STRUCTURE

National Association of Minorities in Cable
www.
namic.com

The economics of the cable industry were established once cable became a medium of expanded viewing options (rather than one of improved reception). At the outset, potential cable operators must make a substantial investment in the construction of their systems, with little hope of a quick return on those expenditures. New franchise operators (those with authority to offer cable service) spend heavily for such things as facility construction, receiving and distribution equipment, and wiring neighborhoods and homes—all before a single subscriber pays a dime. Operators can gauge their likelihood of success by weighing a number of factors. The first is **pass-by rate**—that is, the number of homes passed by or with the potential to take cable. Closely related is **density,** the number of households per mile of cable. A mile of cable costs the same whether it passes 10 homes or 2,500 homes. Therefore, greater density offers the potential for greater **penetration**—the number of homes passed by that cable that actually subscribe. Increased penetration not only means more income from **basic cable** (the "free" channels provided automatically by virtue of subscription) but also offers the promise of added income from premium cable, **pay-per-view, video-on-demand (VOD),** and other add-on services such as home security, various forms of data delivery, Internet access, and local and long-distance phone service. In a reversal of the typical economic structure in television (in which over-the-air stations make 90% of their income from ad sales), the typical cable operation earns only 10% of its revenue from advertising, with 90% coming from subscribers.

National Cable and Telecommunications Association
www.
ncta.com

The promise of additional revenues from add-on subscriber services is so central to the future of the industry that in 2001 the National Cable Television Association changed its name to the National Cable and Telecommunications Association (NCTA), a move that reflects "cable's transformation from a one-way video service to supplier of a broad range of advanced, two-way services," according to the Association's president, Robert Sachs ("NCTA Name Change," 2001, p. 36). In addition, these advanced, two-way services are the factor that, more than any other, fuels the concentration and conglomeration rampant in contemporary cable. This is discussed in more detail later in the chapter.

Early Regulation of Cable

Federal Communications Commission
www.
fcc.gov

It is impossible to fully understand the development of cable without understanding the ups and downs of its regulatory history. The industry's size and shape and the content it offers have been variously limited and encouraged by frequently conflicting and shifting rules. As Joseph Fogarty and Marcia Spielholz (1985, p. 113) wrote in the *Federal Communications Law Journal,* "The history of FCC cable regulation is a complex interweaving of FCC opinions, court decisions, and technological advances, characterized by numerous shifts in opinion concerning both the source and scope of FCC cable jurisdiction and the value of new technology." This means that the FCC had to make the rules as it went along.

In the beginning the FCC ignored cable, seeing it as simply an aid to over-the-air television. But when cable operators began to import distant signals from outside their service areas, the commission—intent on fostering television diversity and local orientation—decided it was time to bring cable under its regulatory control. It did this in 1963 in a dispute between a microwave relay company, Carter Mountain Transmission Corporation, and a Wyoming television station. Station KWRB-TV objected to Carter Mountain picking up and delivering its signals to cable operators around the state. The FCC, concerned that cable would damage broadcasters' profitability, ruled that "when the impact of economic injury is such as to adversely affect the public interest . . . it is our duty to determine the ultimate effect . . . and act in a manner most advantageous to the public" (in Roman, 1983, p. 12).

Answering broadcasters' pleas for even more protection from the growing cable industry—there were now 1,325 systems operating nationally—the FCC in 1965 expanded its regulatory control over cable. For example, it imposed restrictions that outraged cable operators, such as **local carriage rules,** which required cable systems to carry the signal of every television station within a 60-mile radius. The FCC based the new rules on two facts of cable life. First, the commission had a stake in ensuring the successful operation of the nation's broadcast system; a technology as significant as cable would surely have an impact. Second, cable systems enjoyed virtual monopoly positions in the areas in which they operated, and therefore they, like other monopolies (public utilities, for example), were subject to official oversight. The commission even began an effort to limit cable's expansion into the top 100 markets by passing restrictive rules on the use of microwave relays to bring distant signals to operators wishing to serve those areas. The effect of these rules was to slow the growth of cable.

Still, the FCC was not done with the upstart medium. In 1969 it ruled that operators make available not only channels but equipment and studios for the production of locally originated programming. Many systems programmed little more than time and weather, but others began what we now know as **public access channels,** cable channels reserved on a first-come, first-served, nondiscriminatory basis for use by groups or individuals who maintain editorial control of their programming. This imposed a financial burden on many systems already struggling to make a profit under the commission's restrictive rules. Even among operators attempting to meet the spirit of the FCC rules, there was resentment that the federal government was telling them how to use their facilities.

Finally, recognizing the inevitability of cable television, the FCC produced the 1972 Cable Television Report and Order. Hoping to shape rather than stop the medium's development, the goal was to limit cable to a secondary role, a supplement to over-the-air television. To that end, systems had to submit to local community franchising authority control over their rates; they were forbidden from importing *all* distant network and syndicated programming; telephone companies, local broadcasters, and television networks were forbidden to own cable operations; and pay channels could show only one feature film per week (which had to be more than 2 but less than 10 years old). In exchange, cable was allowed full entry into the top 100 markets.

The cable industry fought mightily against the restrictions that limited its growth and profitability and, slowly, the FCC began to rescind many of the more onerous ones. But when local governments began to step up *their* demands on operators, the industry (ironically) turned to the commission for relief. It obliged with the Cable Franchise Policy and Communications Act of 1984, hoping to provide regulatory stability for the once-again-growing cable industry and to fix some of the problems created by the 1972 rules. Now, although operators still had to answer to municipal franchising authorities, the latter's control over rates and access programming was somewhat limited. In addition, it was now a federal offense to steal cable signals.

National Telecommunications and Information Administration
www.
ntia.doc.gov

Cable professionals celebrated the new rules, but the industry still faced other regulatory skirmishes, as we'll see throughout this chapter. Nonetheless, with the relief provided by the Cable Act of 1984, cable joined broadcasting and telephony as a telecommunications giant in its own right.

Cable and Telecommunications Association for Marketing
www.
ctam.com

Cable Today

Today that giant is composed of 9,520 individual cable systems serving 73.7 million homes subscribing to basic cable (68% of all television households). Seventy percent of these cable households, or 48% of all U.S. television homes, receive premium cable (see Figure 8.2). The industry employs nearly 131,000 people and generates annual revenues of $51.3 billion (NCTA, 2004).

PROGRAMMING

We saw in the previous chapter that cable's share of the prime time audience exceeded that of the Big Four broadcast networks for the first time in history in 2001. In 2002 its total share exceeded that of ABC, CBS, NBC, and

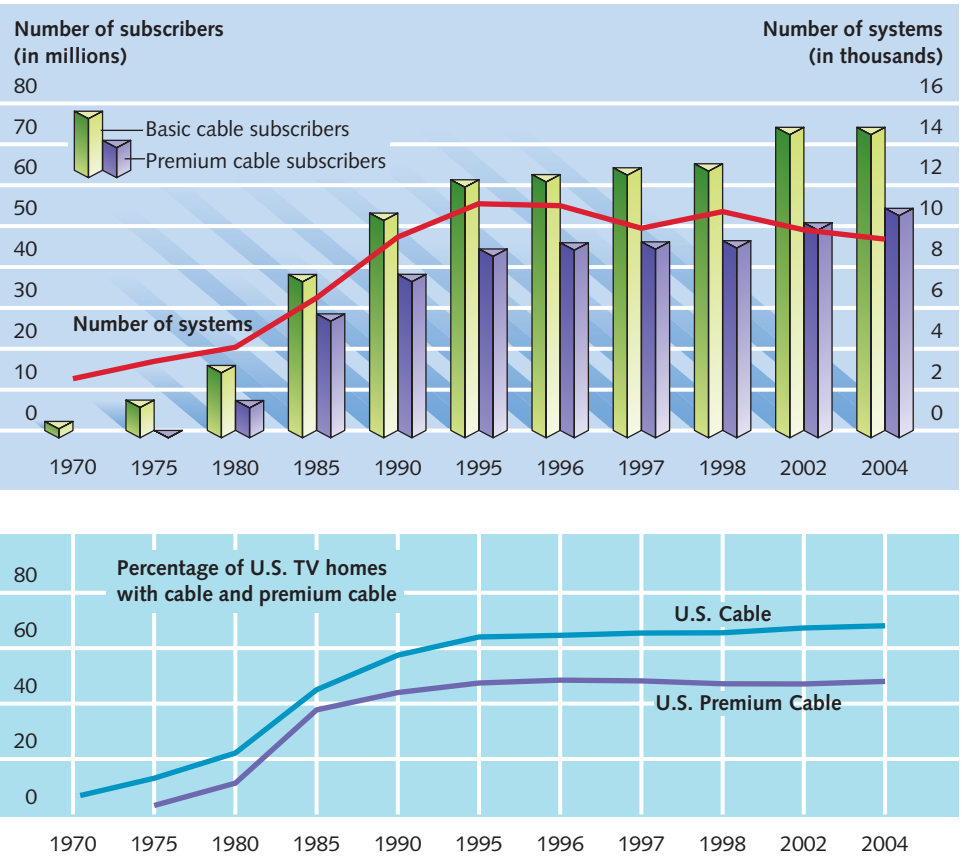


Figure 8.2 Cable Systems and Subscribers. *Source:* National Cable and Telecommunications Association, 2004.

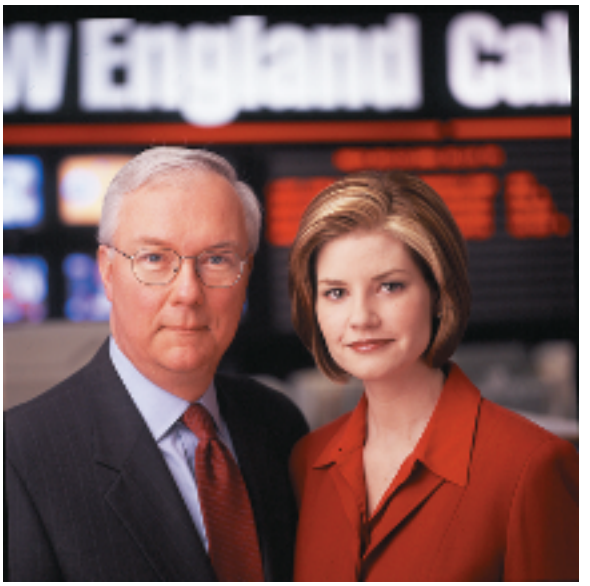
Women in Cable & Telecommunications

www.

wict.org

Fox. What attracted these viewers was programming, a fact highlighted by the tens of millions of viewers who tuned in to cable network CNN as the drama of the terrorist attacks unfolded on September 11, 2001, and the 45% of all Americans who turned first to cable news, rather than other media, for information on the 2003 war with Iraq ("Getting," 2003). But news is not cable's only programming success. Even home-shopping channels such as

Revenues of cable shopping networks such as QVC exceed those of the traditional television networks.



New England Cable News is one of the growing number of regional cable networks.

QVC (2004 revenues of $4.15 billion, exceeding that of traditional network ABC) and HSN ($1.88 billion) have made their mark (Rankings, 2004).

As we've seen, cable operators attract viewers through a combination of basic and premium channels, as well as with some programming of local origin. There are 339 national cable networks and 84 regional cable networks (Fabrikant, 2004). We all know national networks such as CNN, Lifetime, HBO, and the History Channel. Regional network NorthWest Cable News serves Washington, Oregon, Idaho, Montana, northern California, and parts of Alaska; New England Cable News serves the states that give it its name; and several regional sports-oriented channels serve different parts of the country. The financial support and targeted audiences for these program providers differ, as does their place on a system's **tiers,** groupings of channels made available to subscribers at varying prices.

Basic Cable Programming In recognition of the growing dependence of the public on cable delivery of broadcast service as cable penetration increased, Congress passed the Cable Television Consumer Protection and Competition Act of 1992. This law requires operators to offer a truly basic service composed of the broadcast stations in their area and their access channels. Cable operators also offer another form of basic service, **expanded basic cable,** composed primarily of local broadcast stations and services with broad appeal such as TBS, TNT, the USA Network, and the Family Channel. These networks offer a wide array of programming not unlike that found on the traditional, over-the-air broadcast networks. The cable networks with the largest number of subscribers appear in Figure 8.3.

Because of concentration, operators are increasingly choosing to carry a specific basic channel because their owners (who have a financial stake in that channel) insist that they do. Multiple system operators (MSOs) are companies that own several cable franchises. Time Warner, Liberty, and Cablevision own Court TV. Comcast has an interest in numerous prime channels. Viacom owns BET. Naturally, these networks are more likely to be carried by systems controlled by the MSOs that own them and less likely to be carried

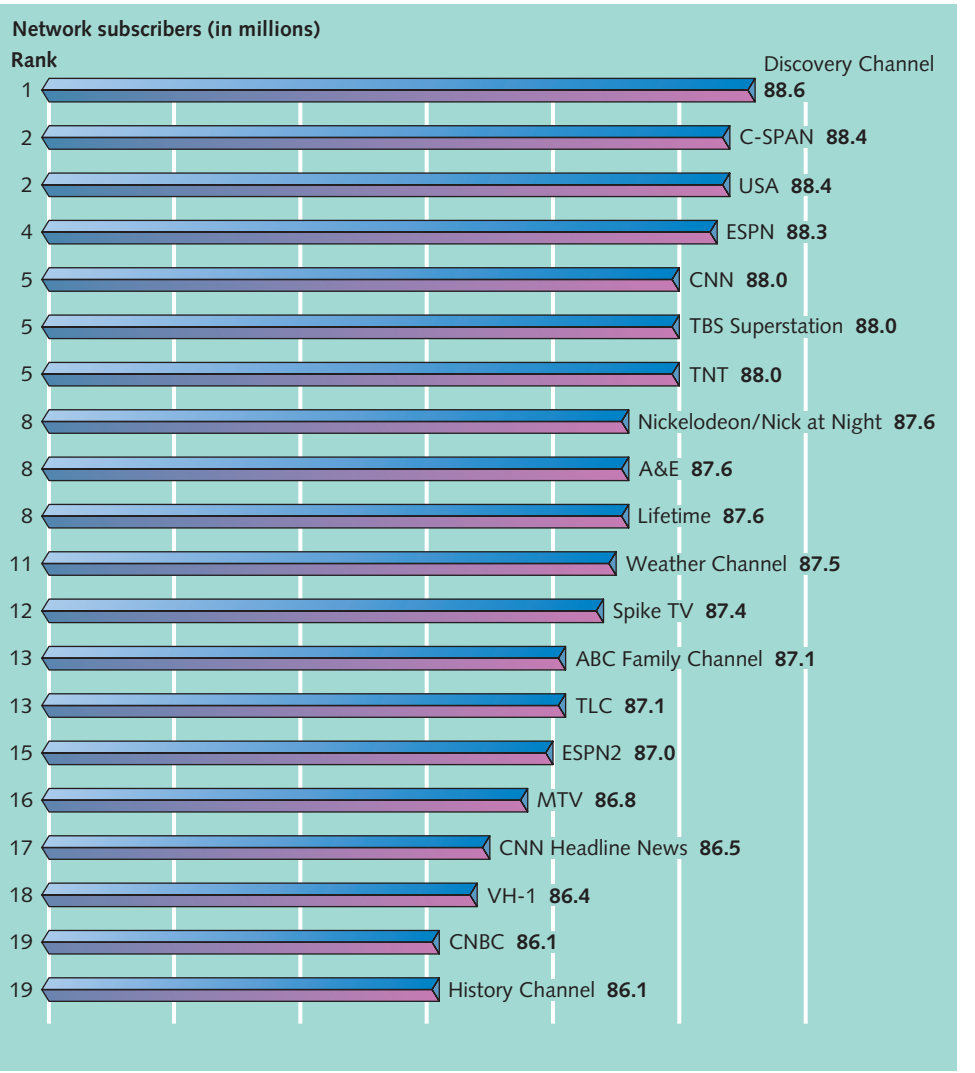


Figure 8.3 Top 20 Cable Networks, 2004. *Source:* NCTA, 2004.

by other systems. This pattern also holds true for MSO-owned premium channels such as HBO and Showtime.

Premium Cable As the FCC lifted restrictions on cable's freedom to import distant signals and to show current movies, HBO grew and was joined by a host of other satellite-delivered pay networks. Today, the most familiar and popular premium cable networks are HBO, Showtime, the Spice Channel, the Sundance Channel, and Cinemax.

In addition to freedom from regulatory constraint, two important programming discoveries ensured the success of the new premium channels. After television's early experiments with over-the-air **subscription TV** failed, many experts believed people simply would not pay for television. So the first crucial discovery was that viewers would indeed pay for packages of contemporary, premium movies. These movie packages could be sold more inexpensively than could films bought one at a time, and viewers were willing to be billed on a monthly basis for the whole package rather than pay for each viewing.

The second realization boosting the fortunes of the premium networks was the discovery that viewers not only did not mind repeats (as many did

Boxing is a premium-cable standard. Even the fighters themselves, here for example Mike Tyson and Lennox Lewis battling in 2002, are "owned" by different cable networks.

with over-the-air television) but welcomed them as a benefit of paying for the provider's slate of films. Premium channel owners were delighted. Replaying content reduced their programming costs and solved the problem of how to fill all those hours of operation.

Premium services come in two forms: movie channels (HBO, Starz!, and Encore, for example) that offer packages of new and old movies along with big sports and other special events—all available for one monthly fee—and pay-per-view channels, through which viewers choose from a menu of offerings (almost always of very new movies and very big sporting events) and pay a fee for the chosen viewing. In either case, the subscriber must have a set-top converter to receive the paid-for channel, although most cable systems offer **addressable technology,** which enables pay services to be switched on and off at the hub. Many cable services are also experimenting with **interdiction technology,** which descrambles the signal outside the viewer's home, doing away with the set-top converter and even enabling operators to sell premium services to homes that are not already basic cable subscribers.

People enjoy premium channels in the home for their ability to present unedited and uninterrupted movies and other content not usually found on broadcast channels—for example, adult fare and championship boxing and wrestling. Increasingly, however, that "content not usually found on broadcast channels" consists not of movies and sports but high-quality serial programming—content unencumbered by the need to attract the largest possible audience possessing a specific set of demographics. Premium cable series such as *The Sopranos, The Wire, Deadwood, Queer as Folk, Six Feet Under, Oz,* and *Soul Food* attract large and loyal followings. In fact, when the Academy of Television Arts and Sciences announced its 2004 prime-time Emmy nominations, original cable programming garnered 220 nominations, topping the broadcast networks' 206. HBO alone, nominated for 124 Emmy Awards, won in 32 different categories (Elber, 2004).

A typical set-top converter.

Keeping Subscribers But even this quality programming cannot satisfy all viewers. So one of the industry's largest ongoing problems is keeping subscribers once they have them, especially in the face of competition from other multichannel services, especially DBS. **Churn,** or turnover in subscribership whereby new subscriptions are offset by cancellations, is damaging to a system's financial well-being, and it is common. "Loyal cable subscribers may be an oxymoron," says cable industry consultant Dave Shepard (in Colman, 1998, p. 58). To keep customers, a variety of pricing strategies are promoted. For example, a cable system may offer certain highly attractive basic channels from a higher tier to lower tier subscribers on an à la carte basis. Others provide FM radio service for free with basic cable, piping local stations, even satellite radio, into subscribers' homes. Other strategies include free subscriptions to monthly cable guides and access to on-screen programming schedules that offer constantly scrolling program and channel information and samples of the content available on those channels. Still others offer specialty pay channels such as DMX (talk- and commercial-free audio channels; see Chapter 6) and highly specialized text-based data and information channels.

Other Multichannel Services

There are multichannel services other than cable. We've already read about MATV. **Satellite master antenna (SMATV)** operates in the same fashion, but the signals are captured, logically, by a satellite dish and then distributed throughout the structure. **Microwave multidistribution systems (MMDS)** employ a home microwave receiver to collect signals and then pipe them through the house via internal wiring. DBS (see Chapter 7), however, is the multichannel system—other than cable—used by most viewers (see Figure 8.4).

It is DBS that most concerns cable professionals—DBS "has virtually halted cable's subscriber growth," according to *Broadcasting & Cable* magazine

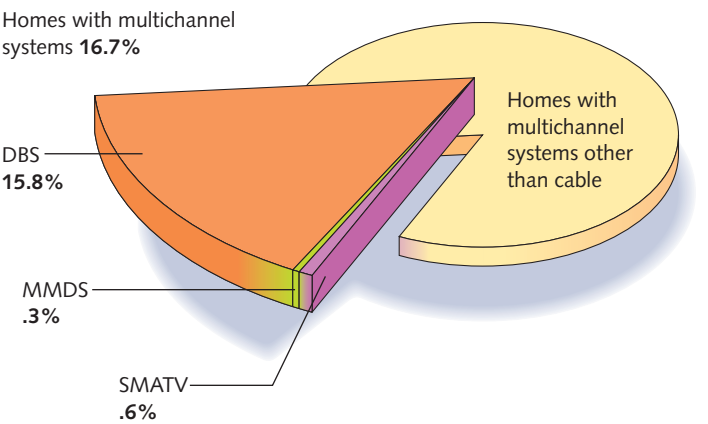


Figure 8.4 Percentage of U.S. Television Homes with Multichannel Systems Other Than Cable, 2004. *Source:* Television Bureau of Advertising, 2004.

Viewers and critics agree that much of television's most sophisticated (and enjoyable) programming is available primarily on pay cable. Unafraid of offending advertisers, cable networks can present challenging, often controversial content. Can you match the title with the image? *Oz*, *Soulfood*, *Six Feet Under*, *Deadwood*, *The Sopranos*, *Queer as Folk*, *Arli$$*.

(Higgins, 2001, p. 19). In fact, the relatively slow diffusion of DBS can be attributed to efforts by the cable industry to use its financial might (and therefore Congressional lobbying power) to thwart the medium. For example, federally mandated limitations on the importation by DBS of local over-the-air television stations were finally eliminated in 1999 with the passage of the Satellite Home Viewers Improvement Act, but even now, some restrictions remain. Still, from the viewer's perspective, what is on a DBS-supplied screen differs little from what is on a cable-supplied screen.

DBS in the United States is, for now, dominated by two companies, DirecTV, owned by Rupert Murdoch's News Corporation, and Dish Network (owned by EchoStar, a publicly traded company). DirecTV has 12.6 million subscribers, Dish Network 10 million. And these two companies, along with satellite start-up VOOM (owned by cable MSO Cablevision), have recently been taking subscribers away from cable at a furious pace. Now that satellite homes in 70% of the country can receive local stations, it is cable's ever-increasing monthly rates that are at the heart of the switch to DBS. Look at the list of the 10 largest cable MSOs on page 268 (Figure 8.6). Note that all but two have suffered declines in subscribers between 2003 and 2004, and if Dish and DirecTV were added to the list, they would be the country's second and fourth largest MSOs.

Trends and Convergence in Cable and Other Multichannel Services

Like all media, cable is experiencing convergence. DMX, for example, is radio plus cable. At the heart of much of the industry's convergence with other media is fiber optics, cable made of thin strands (less than one one-hundredth of an inch thick) of very pure glass fiber over which signals are carried by light beams. Because fiber optic wire offers a very wide bandwidth, permitting the passage of much more information, it can carry up to 600 times as much audio, video, or data information as the same size coaxial cable. Recent advances promise even more bandwidth—"1.6 trillion pieces of data on a single fiber optic strand with each tick of the clock" (Healey, 1999, p. 1F).

What is sent over fiber optics is pulses of light (Figure 8.5). Those pulses are the equivalent of a digital signal's binary on/off structure, making them perfectly suitable for carrying digital signals. As such, fiber optics sit at the very heart of the digital technologies that are reshaping cable.

One such advance is **digital cable television,** the delivery of digital images and other information to subscribers' homes. At present digital cable has more to do with the services a system can offer than with the picture subscribers receive, as we saw in Chapter 7's discussion of the public's unwillingness to buy expensive digital and HDTV receivers. Another impediment to more rapid diffusion of digital cable resides in cablecasters' dissatisfaction with digital must-carry rules, requirements that they carry both digital and analog channels offered by over-the-air broadcasters. Still, in 2004 there were 22.9 million digital cable subscribers in the United States (NCTA, 2004). Many digital cable subscribers also use their cable connections to access the Internet. Currently, there are 17.3 million users with **cable modems** connecting their computers to the Net via a specified Internet service provider,

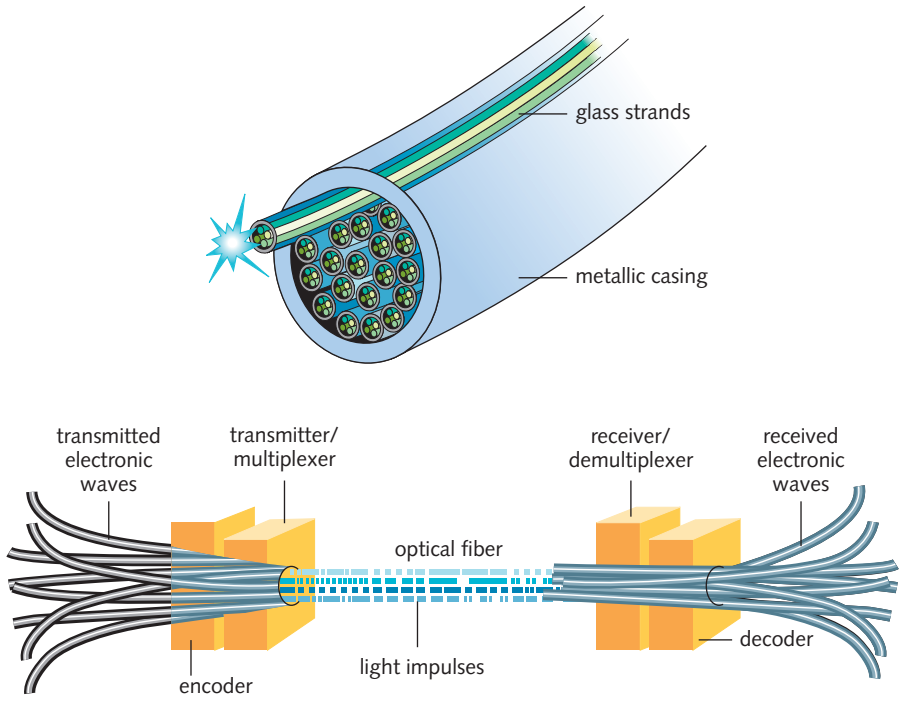


Figure 8.5 The Operation of a Fiber Optic Cable.

or ISP (NCTA, 2004). As a result, "must-carry" has taken on new meaning in the Internet age, as Congress and the courts debate whether cable is a "telecommunications service," a **common carrier** like a phone company required to carry the messages of others and with no power to restrict them, or an "information service" like a television network, maintaining control over what passes over its lines. Naturally, the cable industry sees itself as an information service and, as such, can control, limit, grant access, and charge whatever it wishes to whomever it wishes. Broadcasters, phone companies, and Internet businesses naturally want unrestricted carriage for a fair price.

INTERACTIVE CABLE

Cable's digital channels permit multiplexing, carrying two or more different signals over the same channel. This, in turn, is made possible by **digital compression,** which "squeezes" signals to permit multiple signals to be carried over one channel. Digital compression works by removing redundant information from the transmission of the signal. For example, the set behind two actors in a movie scene might not change for several minutes. So why transmit the information that the set is there? Simply transmit the digital data that indicate what has changed in the scene, not what has not.

Cable Positive
www.
cablepositive.org

The expanded carrying capacity produced by fiber optics and digital compression makes possible **interactive cable,** that is, the ability of subscribers to talk back to the system operator (extra space on the channel is used for this back talk). And *this* permits video-on-demand (VOD; see Chapter 7). Interactivity is most often seen in electronic programming guides—use your remote to select a program from an on-screen list, and you are instantly taken to that content. True interactivity, as in true video-on-demand—choosing what you want when you want it from huge, digitally compressed databases maintained by a content provider—is still years away.

Cultural Forum

Cable à la Carte or Undercutting Cable's Economic Model?

Two unrelated events combined to bring the issue of **à la carte cable pricing** into the cultural forum. The first was pop singer Janet Jackson's "wardrobe malfunction" during the 2004 Patriots–Panthers Super Bowl football broadcast. The brief flash of her right breast set off a firestorm of protest against television indecency. The second was the steady increase in monthly basic cable bills, reaching an average of over $40, up 56.4% since 1996 (Fabrikant, 2004). Advocates of à la carte pricing claim that it would allow people to pay only for those basic channels they wanted, having the dual benefit of keeping indecent content away from families not wishing to see it and reducing monthly bills. Opponents argue that this view is naïve, as it fails to understand the operation of cable's economic model.

> *"If you go to the 7-Eleven to buy a quart of milk, you are not forced to take a six-pack of beer, too."*

L. Brent Bozell, head of the Parents Television Council, doesn't want families to have to pay for basic cable programming such as FX's *Nip/Tuck*. "If you go to the 7-Eleven to buy a quart of milk, you are not forced to take a six-pack of beer, too," he argues (in Fabrikant, 2004, p. 1). Republican House Majority Leader Tom DeLay doesn't want families to have to see it as they channel surf: "The entertainment industry . . . has collectively decided the bad press they suffer for producing trash is worth the economic benefits they enjoy for hyperstimulating the imaginations of 7-year-olds with gratuitous sex and violence." He sat down to watch some television, he told members of the National Association of Broadcasters, and the first thing he tuned in was *Nip/Tuck*, "then pop, Howard Stern, then, pop, MTV, then, pop, BET. I couldn't believe my eyes. We need a technology so viewers can pick among cable channels" (quoted in Eggerton, 2004b, p. 1). Accepting these two arguments, Arizona Senator John McCain introduced legislation in the summer of 2004 that would mandate à la carte pricing, and the FCC simultaneously issued a call for public comment (typically a prelude to new rule-making).

Cable as we know it would cease to exist, argues Robert Sachs, president of the NCTA, because "the reality is most of cable's most-valued networks exist because they are packaged in 'tiers,' affording them the maximum number of potential viewers and the opportunity to generate revenue both from subscriptions and advertising" (2003, p. A10). Glenn Britt, Time Warner Cable CEO, explained, "We carry many channels that appeal just to niche groups and minorities. It's by no means clear those could survive in an à la carte regime. Cable isn't about having a few channels that appeal to everybody, it's about having a lot of channels that appeal to everybody. You may not watch C-Span every night, but it's good to know it's there. The myth is that if you pay $60 a month and get 100 channels, then you could buy 50 and cut your price in half. This isn't how the economics work; there are a lot of fixed costs. You'd most likely end up with people paying the same amount of money for fewer channels. It's analogous to a newspaper or magazine. Hardly anybody reads every article in the paper; you read selectively. But nobody says, 'Gee, you should only buy the sports section if that's all you want'" (in Graves, 2004, p. 88).

Enter your voice in the cultural forum. Are you satisfied with cable's current pricing scheme, or would you prefer à la carte? Do you agree with technology writer Lucas Graves that "cable TV is like a crumby pizza joint: You can order a small, medium, or large pie, but you can't design your own—and no slices" (2004, p. 88)? How much would you be willing to pay for ESPN, the Discovery Channel, Comedy Central, and BET?

Bandwidth is one obvious problem; the paucity of digital and HDTV television receivers is another (people won't watch full-length films and sports on their PCs, and the screens necessary to attractively display digitally compressed and stored video must have PC-like speed); and the cable industry itself, after years of experimenting with VOD, is "well past any point where it's a disappointment," according to Cablevision's head of digital services, Kristin Dolan. VOD, slowed by Hollywood/cable mutual distrust, lack of available bandwidth, and early consumer disinterest, may soon have "a positive impact on the (cable) business" (quoted in Higgins, 2003c, p. 20). Despite the early slow going, all the major MSOs are moving ahead with plans for eventual greater interactivity and true VOD.

PUBLIC ACCESS CABLE TELEVISION

Digitalization and compression have another effect on cable programming; they have renewed the debate over public access television.

Controversial cable programming like Nip/Tuck *helps fuel the à la carte pricing debate.*

Industry research says the Discovery Channel *alone* would cost $6.33 a month (Fabrikant, 2004). ESPN, BET, and Comedy Central, all with very loyal, demographically attractive followings, would certainly cost more; but even at that price, these four channels alone would cost you $25.20. And, says the cable industry, you would never have the option of watching anything else on basic cable; you might never chance into new programming that could delight or intrigue you. A small price to pay, say critics, to keep excessive sex and violence from homes that do not want it. But should the concerns of these folks produce a pricing scheme that makes other fare, even programming acceptable to almost everybody, more expensive than it otherwise would be? And keep in mind, this debate is being played out against the backdrop of general public dissatisfaction with *all* cable pricing.

We've already seen that public access channels were once required by the FCC, only to become negotiable between operators and their local franchising authorities. Media historian William Boddy (1994) wrote, "As the cable industry underwent a rapid consolidation from small owners to highly capitalized multiple systems operators in the late 1970s, the competition for large urban franchises became fierce. With channel capacity exceeding available programming services, cable operators looked at public access as an inexpensive bargaining chip with franchise officials" (p. 356). But that was then. Today, "the continuing consolidation of the cable industry into a handful of giant multiple system operators, and their moves into ownership in cable programming firms, has created a growing hostility toward public access from vertically-integrated cable operators dizzy at the prospect of increasingly lucrative commercial cable program services" (p. 357).

What digitalization and compression have added to this hostility is the question of what to do with all those "extra" channels. Local franchising authorities

Using Media to Make a Difference

Paper Tiger Television

Public access television has a bad reputation. Even the most committed local access devotee must admit that too much of what fills the nation's access channels is self-indulgent, infantile, or silly. There are too many amateurish skits, bad takeoffs on talk shows, and sophomoric *Star Trek* parodies.

Access also suffers from controversy. Its first-come, first-served nature, absence of censorship (other than restrictions on obscenity and libel), and almost full producer control leave public access television open to abuse by racists and other haters who have few other public outlets for their ideologies. But isn't this what public access is supposed to be about? Isn't it supposed to provide a forum for those whose message is either unwanted by, or unsuited for, the more mainstream media? In the 1990s, for example, local franchising authorities in Cincinnati, Ohio; Pocatello, Idaho; Jackson, Mississippi; and Kansas City, Missouri closed or attempted to close the access operations of their communities' cable providers rather than permit the cablecasting of a nationally distributed program by the Ku Klux Klan. But what of others who hold potentially unpopular opinions? What about animal rights activists? What about pro-choice organizations? What about pro-life groups? What about Chinese dissidents living on the West Coast? What about radicals on both the political right and left? You decide. Where would you draw the line? Or would you draw a line at all?

Now, read on and learn about one very successful public access producer whose message is invisible on commercial broadcast and cable television, not to mention offensive to many. Hoping to use access television to make a difference, Paper Tiger Television was founded in 1981 in New York City, and at that time issued its manifesto, which read in part:

> The power of mass culture rests on the trust of the public. This legitimacy is a paper tiger. Investigation into the corporate structures of the media and critical analysis of their content is one way to demystify the information industry. Developing a critical consciousness about the communications industry is a necessary first step toward democratic control of information resources ("Paper Tiger Manifesto," 2004).

Public access television has a bad reputation. Even the most committed local access devotee must admit that too much of what fills the nation's access channels is self-indulgent, infantile, or silly.

The hundreds of episodes produced by Paper Tiger's "volunteer collective of media producers, educators, and activists" have and do appear on hundreds of public access channels across the United States, as well as on satellite-delivered Free Speech TV. Through its Deep Dish TV project, Paper Tiger collects the work of scores of access producers from around the country, repackages it into 60-minute shows on common themes such as labor, housing, women's issues, and disarmament, and redistributes the shows as a means of helping local access operations diversify and improve their offerings. The collective's goal is to "provide a model and network for other progressive public access programmers." Its guiding philosophy is drawn from the political far left. "The group's name recalls Mao's guerilla stance against superpower hegemony, and the manifesto's assertion of the importance of the reproduction of ideology is compatible with the ideas of . . . economic Marxism and anarchy" (Boddy, 1994, pp. 357–358). So, what kinds of shows does Paper Tiger produce and distribute?

Cable in the Classroom
www.
ciconline.org

see growing channel capacity as the perfect argument for maintaining, or even expanding, public access service. Many cable operators see it as a way to meet a wide array of subscriber needs and interests, fortifying them in their battle for profits (and survival) against competing media. Confounding the debate is the operators' belief that no one is watching public access anyway. They point to the provision in the 1984 Cable Franchise Policy and Communications Act permitting them to reclaim "underused" public access channels.

The future of local access, then, comes down to whose perception will prevail. As the number of channels grows, franchising authorities argue that "underused" is defined downward; that is, a local channel that meets a public service function but draws a relatively small number of viewers is "well used" in a 500-channel environment. Many operators argue that the best use of these additional channels is to provide more sophisticated services to information- and programming-hungry subscribers. The box titled "Paper Tiger Television" details the work of one access champion.

Paper Tiger Television
www.
papertiger.org

Here are a few examples, including Paper Tiger's descriptions:

- *Turning Tragedy into War.* Counteracting the corporate media's war-driven and racist spin on the September 11 terrorist attacks on America, this show critiques the media's coverage while providing a background of the United States' involvement in the Middle East. It uncovers the ways in which media take advantage of the fear and confusion in U.S. public opinion and offers a look at the antiretaliation movement.
- *Operation Storm the Media.* In the media coverage of the Persian Gulf War, even the pretense of separation between the press and the state was abandoned. This show explores the relationship between corporate sponsorship and media censorship.
- *Mutiny on the Corporate Sponsorship.* This video looks at how mainstream media censor voices, not always through blatant censorship but sometimes through the rule of the status quo, which is dictated by the sponsors and mirrored by the corporate print and broadcasting elite.
- *How History Was Wounded: An Exclusive Report on Taiwanese Media.* This is an exclusive report from Taiwan investigating how Taiwanese news media covered the Tiananmen Square massacre. It compares coverage of the mainland clampdown with Taiwanese coverage of their own government's suppression of political movements.
- *A Cry for Freedom and Democracy.* Made in Chiapas, Mexico, this video follows human rights activists, journalists, and family members as they try to gain access to the region blockaded by the military. Residents of Chiapas who witnessed the Mexican army's indiscriminate brutality following the 1994 New Year's Day Zapatista uprising give their firsthand accounts.

Put yourself in the position of general manager of a public access channel. Do you air Paper Tiger on your channel? Why or why not? Now, imagine that you are a local franchising authority staff person. Do you welcome the series to the system under your authority? Why or why not? Now imagine that you are the owner of a large MSO. Do you fight to regain the access channel that's running Paper Tiger Television to put it to more profitable use, or do you support the access channel's use of its time for such programming? Why or why not?

Now consider this. Paper Tiger's far left ideology is offensive to many Americans. So, too, is the ideology of the KKK. How would you justify excluding Klan content (if you would) while accepting programming provided by Paper Tiger (if you did)?

CONCENTRATION

Gone are the days when systems were "mom and pop" operations. Changes in the nature of cable system ownership parallel those in other media we've examined. As cable pioneer and current Time Warner executive Ted Turner explained, "We do have just a few people controlling all the cable companies in this country" (quoted in "All Together Now," 1997, p. 14).

Concentration initially came to cable in the form of MSOs. As cable experienced its greatest period of growth in the 1970s, only the biggest and richest corporations could afford to build, buy, and improve operations in advance of the income they promised to generate. Today, five cable MSOs control 73% of all American cable households, and one MSO alone, Comcast, has 21.5 million subscribers in 41 states and systems in 17 of the top 20 television markets (NCTA, 2004). Figure 8.6 lists the 10 largest cable MSOs and the size of their subscribership.

Cable TV Public Affairs Association
www.
ctpaa.org

The second form of concentration in cable is vertical integration, wherein a company holds a financial interest in more than one aspect of the

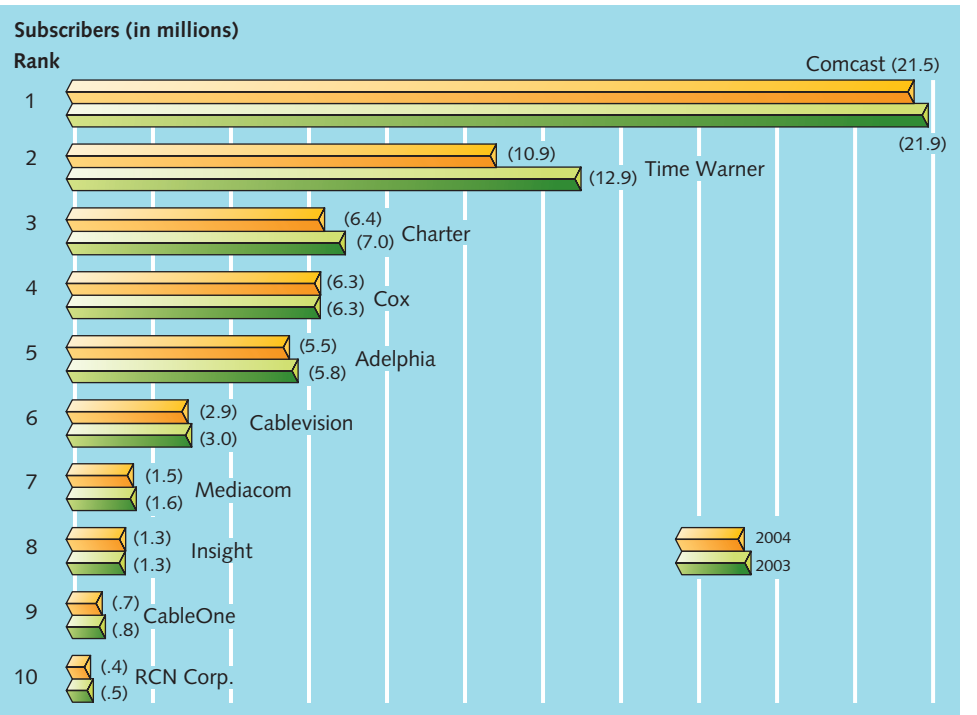


Figure 8.6 Top 10 Cable MSOs, 2004. *Source:* NCTA, 2004.

industry—production, distribution (the satellite service), and exhibition (local franchises). As we've seen, systems tend to carry cable networks owned by the MSOs that own them. Critics of cable concentration find this inherently unfair, limiting programming competition (and therefore variety). An MSO is more likely to initiate a new program service, because it has guaranteed channel space on at least its own systems. New, potentially innovative program services have no such guarantee. The counterargument, however, is that guaranteed channel availability encourages risk taking. MSOs point to innovative offerings such as BET, WE, Oxygen, and the Discovery Channel as examples of channels that never would have been developed without MSO investment. Still, the FCC is sufficiently wary of this concentration of power that it requires operators to dedicate no more than 40% of its first 75 channels to program services owned by their owners.

The third way in which concentration has come to cable is in the form of conglomeration, the ownership of large MSOs by even larger companies having both media and nonmedia holdings. General Electric, for example, not only owns NBC and its 14 O&Os, Telemundo and its 14 stations, and movie studio Universal, but it also owns outright or in part several cable television channels in the United States and abroad, including CNBC, MSNBC, Bravo, SciFi, Trio, and USA.

As we've seen in our discussions of other media, critics of conglomeration fear that the number of voices and variety of expression in the media (in this case, cable television) will be diminished as ownership is concentrated in fewer and fewer hands. Another fear is that the conglomerate's media holdings will become nothing more than profit centers, no different from its fruit-juice or diaper-supply businesses. Defenders of conglomeration argue that media companies will survive in the reality of today's world of converged telecommunications only if they are, in fact, parts of larger, integrated entities.

National Cable Television Center & Museum
www.
cablecenter.org

PHONE-OVER-CABLE AND BUNDLING

When the Telecommunications Act of 1996 made it legal for phone companies to enter the cable television business, there was a rush by the telcos to buy outright or strike partnerships with cable operations. Familiar names such as AT&T, Verizon, GTE, US West, and BellSouth entered the cable franchise business. But the telcos are interested in cable for reasons having little to do with television. Ever since 1984, when AT&T was forced to separate from the regional Bell operating companies (**BOCs,** often called "Baby Bells") to settle an antitrust suit brought by the federal government, it and other long-distance carriers such as MCI and Sprint have been barred from the local phone business. Likewise, the BOCs were barred from offering long-distance service.

In an effort to spur competition in the telecommunications industry, the 1996 Act opened all services to all comers. But because the BOCs owned the phone lines, companies wanting to provide local service had to find another way to enter people's homes. Cable, already in 73 million homes, offered the solution. Linking with a cable operation solved an additional problem for the long-distance companies. When they use a local carrier's lines to enter people's homes, they have to pay a connection fee to that local phone company for every call delivered over its lines. For a company such as AT&T, these fees can amount to $10 billion a year. Cable allows long-distance companies to avoid local phone networks entirely.

Despite this benefit to the telcos, phone-over-cable has spread very slowly. Currently there are only 2.5 million cable-delivered residential telephone subscribers (NCTA, 2004). There are two reasons. The first is technical—although the technology for quality phone-over-cable exists, the problem is getting manufacturers to agree on compatibility standards. The second reason that phone-over-cable is slow in coming is consumer resistance. Many people, already dissatisfied with the level of service provided by their cable companies, are wary of relying on them for phone service as well.

But there is another, even more important reason that the telcos are interested in hooking up with cable—convergence. If telephone service can be delivered by the same cable that brings television into the home, so too can the Internet. And what's more, if the cable line is fiber optic broadband capable of handling digitally compressed data, that Internet service can be even faster than the service provided over traditional phone lines. Cable, in other words, can become a one-stop communications provider: television, VOD, audio, high-speed Internet access, long-distance and local phone service, multiple phone lines, and fax. This is **bundling.**

How valuable is a bundle-receiving subscriber to a cable/telco combination? Add together the bills you're probably paying right now—basic or premium cable, your Internet service provider, and your phone bill. What does that total? Now speculate on how much pay-per-view and VOD you might buy now that you have broadband and a superfast cable modem. And what would you pay for home delivery of real-time sports or financial data? And the MSO would collect each time you accessed an interactive classified or commercial ad. That's how valuable a bundled subscriber will be.

Bundled services may be profitable for MSOs, but they raise the issue of concentration in a somewhat different form from that we've already discussed. Specifically, what risk for consumers does putting this much power

Cable Television Advertising Bureau
www.
cabletvadbureau.com

National Cable Television Cooperative
www.
cabletvco-op.org

Media Echoes

The Promise of Cable

As the medium was morphing from "CATV" to "cable" in the 1970s, "an ever expanding chorus of expert opinion [voiced] a new, hopeful view" for the medium (Streeter, 1997, p. 223), one echoed by today's Internet aficionados. As with the Internet, cable would make the United States a "wired nation"; cable would return television to the people—it would become the people's medium. Traditional television was the ill; cable television, the cure. With the coming of cable,

> television was no longer seen as an infant institution, and its problems were no longer interpreted as temporary foibles, amenable to correction with the existing overall structure. People in positions of authority and power were beginning to seek solutions to television's failings not in adjustments to the existing system, but in alternatives to the system itself. (Streeter, 1997, p. 232)

But by the early 1980s, talk had turned to the failed promise of cable. Cable had not become an alternative to dull, unchallenging, three-network-dominated television; rather, it had become simply more television: more movies, more sports, more commercials, more situation comedies.

But bundled cable service, providing all sorts of converged technologies, has rekindled what sociologist Thomas Streeter (1997) calls "utopian speculation" about cable's very near future. He samples contemporary comment:

- "Futurist" George Gilder predicts that, with the help of interactive television, "The human spirit—emancipated and thus allowed to reach its rarest talents and aspirations—will continue to amaze the world with heroic surprises" (Streeter, p. 238).
- Mitchell Kapor, cofounder of the Internet advocacy group Electronic Frontier Foundation, predicts that the convergence of Internet and cable will promote "grassroots democracy, diversity of users and manufacturers, true communications among the people, and all the dazzling goodies of home shopping, movies on demand, teleconferencing, and cheap, instant databases" (p. 239).
- The administration of President Bill Clinton predicted that the convergence of Internet and cable technologies would allow the arts and humanities to "play a vital role in creating a new sense of citizenship and community," would "bring new opportunities and resources to our nation's disadvantaged youth, allowing them to share their ideas, thoughts and creative energies, and to make new links with other young people throughout the nation," and would "give all Americans, of all races, ages, and locations, their cultural birthright: access to the highest quality thought and art of this and prior generations" (p. 238).

Will we really be better off when Americans are fragmented among 500 demographic, taste, and interest channels? Will we be better off when Americans are linked anonymously across fiber optic wires in virtual rather than actual communities, holding virtual rather than real conversations?

Maybe. Maybe not.

Despite all the criticism of television in the days of the Big Three (ABC, NBC, CBS), at least Americans shared a common culture (Chapter 1). Yes, it may have been a shallow culture of *I Love Lucy* and *My Favorite Martian,* but it was a widely shared culture. And it was also a culture boasting journalists of the caliber of Walter Cronkite and screenwriters the caliber of Rod Serling (*The Twilight Zone*). For better *and* for worse, precable television was the stock that helped flavor the American melting pot. So, will we really be better off when Americans are fragmented among 500 demographic, taste, and interest channels? Will we be better off when Americans are linked anonymously across fiber optic wires in virtual rather than actual communities, holding virtual rather than real conversations? This is not an argument against the new multichannel, bundled telecommunications universe, simply a reiteration of the classic warning, "Be careful what you wish for. You just may get it." Nor is it a warning specific to cable. It is echoed in the Internet chapter's discussion of technology haves and have-nots and the information and technology gaps.

What do you think? Have you considered what the future will really look like if "the promise of cable" is fulfilled? What kind of America will exist for all Americans, for the wired and the unwired, for those who look like you, for those who don't? Is it the kind of future you want to see? Or is all this concern simply an echo of the fears that have accompanied the introduction and diffusion of every new mass medium?

into the hands of one company pose? The chairperson of the U.S. Senate Antitrust Subcommittee, Herb Kohl, Democrat from Wisconsin, sees an ominous future for "average consumers." He said that people "may find almost all of their personal communications and information dominated by a very few, large media companies. Their phone, their movies, their Internet, their cable, their link to the outside world will be priced, processed, and

Living Media Literacy

Access Television

Cable or community access television offers the opportunity to make your media literacy a living enterprise. Most cable systems offer at least one access channel, and many offer two or more. Have you ever asked, "Why isn't there a show about . . . ?" Have you ever said, "You know what would make a great show?" Do you want to write for television? Or would you like to edit, direct, program, manage, moderate, act, or engage in any of the scores of activities that go into producing a television program? Cable access is specifically designed to allow nonbroadcast professionals the opportunity to "make television." And because it is not commercial television, there is no mandate to attract as large an audience as possible. Therefore, media literate people who are involved in access can put their values and beliefs about mass communication into action. Portland Cable Access TV, for example, calls itself "Your Community Media First Amendment Forum" (www.pcatv.org), and this is the philosophy that motivates and sustains most access operations.

Media literate people who are involved in access can put their values and beliefs about mass communication into action.

To get started, go to The Global Village CAT (www.openchannel.se/cat/linksus.htm), where you will find links to more than 600 different community access sites. Find one or more near you, either geographically, philosophically, or politically. Contact it (or them) to see how you can participate. Most access sites explain how to get involved as a volunteer and how to become a producer of an existing show or one of your own concept. Among the better sites for becoming acquainted with the potential of access are Chicago's CAN TV (www.cantv.org), Fairfax (Virginia) Public Access (www.fcac.org), and Burlington (Massachusetts) Cable Access Television (www.bcattv.org). Any one of these will show you the kinds of programs that are successful on access, so you can match your vision against that of those who are already involved. But no matter how you choose to proceed, there is no reason, if you are serious about testing your television/cable media literacy, to ignore access. It can give you what the commercial broadcasters will not, that is, access to a powerful medium of mass communication.

packaged for them by one company that faces virtually no competition" (quoted in Albiniak, 2002b, p. 7). You can develop your own thoughts on the potential of the "new cable" after reading the box titled "The Promise of Cable."

DEVELOPING MEDIA LITERACY SKILLS

Understanding Cable Pricing

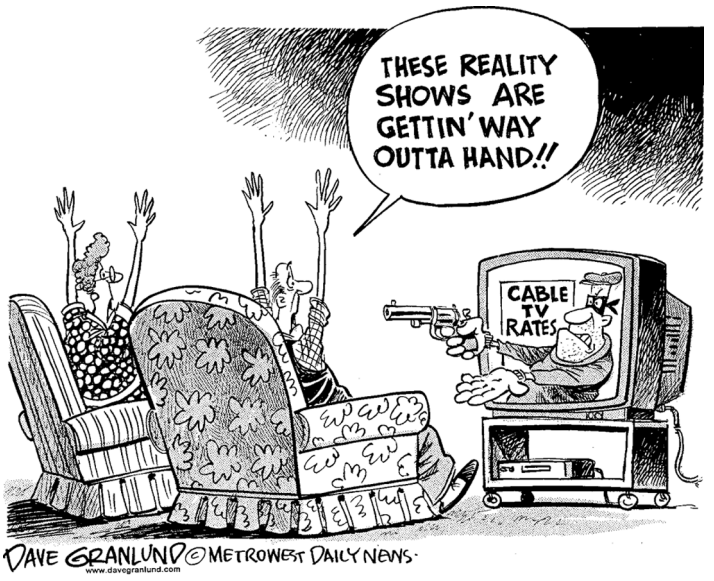
Cable rates are of interest to all cable viewers. In fact, when the first President Bush vetoed the Cable Television Consumer Protection and Competition Act of 1992, which would have deregulated cable rates, Congress overrode that action, the only time it successfully challenged one of that president's vetoes. Congress knew that viewers were angry about their rising cable bills.

We saw earlier in this chapter that operators offer a variety of tiers to their customers. The pricing of those tiers may sometimes seem confusing to viewers, but they make perfect business sense for the operator. By law, systems must offer truly basic cable. But all operators, as we've seen, offer expanded basic cable, a tier that includes broadcast-network-type general programming. But operators often include more demographically targeted fare in expanded basic, networks such as the kids-oriented Nickelodeon and the upscale A&E, as an inducement to get us to sign up. The Sci-Fi Channel, Weather Channel, and American Movie Classics (AMC) are often used this way, as are Black Entertainment Television (BET) and Spanish-language Galavision. The goal is not only to garner higher monthly fees and to attract new viewers but also to make the "distance" between basic, expanded basic, and the premium options smaller, encouraging viewers to take that next, and

National Cable Television Institute

www.

ncti.com



Dave Granlund, Metrowest Daily News.

next, and then that last step. For example, basic cable might cost you $28. Expanded basic, which might include the Discovery Channel and Disney ("Why not, they're good for the kids") and even a few more interesting options such as Comedy Central and E!, might cost "only" $10 more. Now, you're paying $38. The operator can now offer you a premium package that includes all the content from the lower tiers, as well as pay channels such as HBO and HBO Comedy, for $48. To you, that's "only $10 more," a seeming bargain. And then, for only $20 more, you can have digital cable, with DMX and on-screen program guide. Now you're at $68.

The media literate cable viewer needs to understand how quickly that bill can grow and just what value is received for what is now an average monthly basic cable price of $41 (Fabrikant, 2004). For example, when the Telecommunications Act of 1996 was being debated, Congress told voters that deregulating cable rates would create competition that would keep cable bills low. In fact, just the opposite happened, as rates have increased 50% since 1996, greatly outpacing inflation. The media literate viewer, who understands that the average cable user watches only about six of the scores of available channels, must ask if that increase has produced a commensurate rise in value from the medium.

Resources for Review and Discussion

Chapter Review

The visions of two Pennsylvanians, John Walson and Milton Shapp, eventually became the mass communication giant we now call cable television. Initially conceived of as a way to deliver clear signals to people in remote areas, the medium quickly became more than that. Now local and distant signals, as well as a variety of pay channels, come to people's homes on systems composed of a headend, supertrunk cable, hub, trunk cable, feeder cables, and drop cables.

The growth and development of cable has been shaped by often conflicting government regulation. The FCC entered cable oversight as a result of its Carter Mountain decision and regulated and reregulated to, at first, slow, then control, then free cable's growth. Nevertheless, rules governing local carriage, public access, and the power and operation of local franchising authorities remain today.

There are multichannel services other than cable. Satellite master antenna (SMATV) employs a satellite dish atop a building to capture signals and then distributes them throughout that structure. Microwave multidistribution systems (MMDS) employ a home microwave receiver to collect signals and then pipe them through the house via internal wiring. DBS, however, is the multichannel system other than cable used by most viewers. Its operation in the United States is controlled by two companies, DirecTV and the DISH Network.

Cable programming exists in several forms. Basic cable typically fills systems' lower tiers and premium cable its upper tiers, with expanded basic falling somewhere in between, depending on the operator's needs. This content and newer services are made possible by a variety of sophisticated technologies. Fiber optics have greatly increased the efficiency and bandwidth of the cables that enter people's homes. Digital cable, especially when combined with digital compression, makes possible *multiplexing,* carrying two or more different signals over the same channel. Multiplexing, in turn, permits interactive cable and VOD.

Concentration, in the form of MSOs, vertical integration, and conglomeration, is widespread and controversial in cable and increasingly involves the telcos, eager to enter people's homes over the same wires that deliver video signals. These same wires can be used for a host of bundled services, from local and long-distance telephone to fax to high-speed Internet access.

Key Terms

Use the text's CD-ROM and the Online Learning Center at www.mhhe.com/baran4 to further your understanding of the following terminology.

multichannel service, 248
multiple system operator (MSO), 249
telcos, 249
community antenna television (CATV), 250
master antenna television (MATV), 250
premium cable, 250
headend, 251
super trunk cable, 251
hub, 251
trunk cable, 251
feeder cables, 251
drop cable, 251
pass-by rate, 251
density, 251
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basic cable, 251
pay-per-view, 251
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local carriage rules, 252
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tier, 255
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subscription TV, 256
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interdiction technology, 257
churn, 258
satellite master antenna (SMATV), 258
microwave multidistribution systems (MMDS), 258
digital cable television, 260
cable modem, 260
common carrier, 261
digital compression, 261
interactive cable, 261
à la carte pricing, 262
BOC, 267
bundling, 267

Questions for Review

Go to the self-quizzes on the CD-ROM and the Online Learning Center to test your knowledge.

1. What were the contributions of John Walson and Milton Shapp to the development of cable television?
2. Differentiate between twin-lead, coaxial, and fiber optic cable.
3. What significance is there in the passage of the medium's name from CATV to cable television?
4. What are the elements involved in the reception and distribution of cable television signals?
5. What are pass-by rate, density, penetration, and churn?
6. What is the significance of the FCC's ruling in the Carter Mountain matter?
7. Explain the difference between basic cable, expanded basic cable, premium cable, and pay-per-view.
8. What are MATV, SMATV, MMDS, and DBS? How are they similar? How do they differ?
9. What are digital cable television, multiplexing, digital compression, and interactive cable, and how are they interrelated?
10. What are the three forms of concentration in cable television? What concerns are raised by each?
11. What are some of the factors leading to the telcos' interest in cable?
12. What is bundling? What is digital must-carry? What is their significance to cable's future?

Questions for Critical Thinking and Discussion

1. What do you think of digital must-carry rules? Why should a cable operator be forced to carry local stations' signals even if it doesn't want to? What gives the government the right to tell cable operators how to run their businesses?
2. Are you a cable subscriber? Why or why not? At what level? Why that level? Have you added to the industry's churn? Why or why not?
3. Does concentration in cable disturb you? Why or why not? What do you think of critics' fears? Are they realistic or overblown?
4. Have you ever watched public access cable? Have you seen programming that you thought was useful, or at least that was good television? Have you seen access content that was silly or offensive? Describe your cable access experience.
5. If you were a cable operator, how willing would you be to provide access to competitors? Why do you think it is proper (or improper) for the federal government to require open access should it do so?

Important Resources


Go to the Online Learning Center for additional readings.

Internet Resources

National Association of Minorities in Cable	zwww.namic.com
National Cable & Telecommunications Association	www.ncta.com
Cable and Telecommunications Association for Marketing	www.ctam.com
Federal Communications Commission	www.fcc.gov
National Telecommunications & Information Administration	www.ntia.doc.gov
Women in Cable & Telecommunications	www.wict.org
Society of Cable and Telecommunications Engineers	www.scte.org
Cable Positive	www.cablepositive.org
Cable in the Classroom	www.ciconline.org
Paper Tiger Television	www.papertiger.org
Cable TV Public Affairs Association	www.ctpaa.org
National Cable Television Center & Museum	www.cablecenter.org
Cable Television Advertising Bureau	www.cabletvadbureau.com
National Cable Television Cooperative	www.cabletvco-op.org
National Cable Television Institute	www.ncti.com