Chapter 3. selection

Cable Television

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Historical Overview

Cable television is wired communication to the home. Cable television (also called community antenna television or CATV) was first developed in the late 1940s in communities unable to receive conventional broadcast television signals due to distance or geographic factors. Cable systems located their antennas in areas having poor reception, picked up broadcast signals, and then distributed them by means of coaxial cable to subscribers for a fee. The cities of Mahoney City, Pennsylvania, and Astoria, Oregon, are credited with having been the first two communities in the U.S. to offer CATV service to their residents.

One of the first CATV systems was started in 1948 in Mahanoy City, Pennsylvania, to cope with the problem of poor television reception. In Mahanoy City, a coal mining town of 10,000 people in the Appalachians, reception from the three TV networks eighty-six miles away in Philadelphia was all but nonexistent. An appliance store owner by the name of John Walson could not sell any TV sets to local residents. The lack of reception prevented Walson from demonstrating his TV sets.

During the summer of 1947, Walson erected an antenna on a high ridge of a nearby mountain. Later that year, Walson strung electrical ribbon wire from the mountain antenna down to his appliance warehouse, which was a few blocks from his store. He was then able to demonstrate for visitors a dim video image and a weak audio signal. In the spring of 1948, he erected a larger antenna on top of the mountain and replaced the ribbon wire with a more efficient army surplus twin lead wire. Walson placed three TV sets in the window of his store.

The display caused a local sensation. People gathered outside the store window to watch the programs being brought in from Philadelphia.[1]

Walson next arranged to run leads (wires) for a fee between his warehouse and store to the homes of several residents living along the route. Many of them were neighbors that he had sold television sets with the promise that they would be connected to his service. The demand for television sets and for inclusion in the system jumped substantially in Mahanoy City. The service was soon established as an on-going business.[2] Another early CATV system was developed by L. E. (Ed) Parsons in Astoria, Oregon, who began experimenting with distant reception of television signals after attending the National Association of Broadcasters convention in Chicago in 1948. Parsons ran the local Astoria radio station, KAST, and had some training in electrical engineering. He was deeply impressed with the possibilities of TV. The most immediate problem was television reception. The nearest TV station was KRSC in Seattle, 125 miles away. Parsons rigged an antenna on the roof of the Astoria Hotel and then ran a line to his apartment, which was a short distance away.

The public responded enthusiastically and the wire was extended to several bars in town and then eventually to private customers. What is important about the Mahanoy City, Astoria, Oregon (and later Lansford, Pennsylvania) examples is that such early CATV systems provide a basic blueprint of how cable television started in the U.S., as a practical solution to the problem of poor television reception. All three CATV systems would later evolve into successful business ventures. The same basic pattern would repeat itself in community after community during the next several years.

HBO: A Case Study Analysis

The real move to modern cable television began on November 8, 1972, when a fledgling company named Home Box Office (HBO) began supplying movies to 365 subscribers on the Service Electric Cable TV system in Wilkes Barre, Pennsylvania.[3] That night, Jerry Levin, then Vice-President for Programming (and future CEO of Time Warner), introduced viewers to the debut of HBO. The feature programming for that inaugural night was a hockey game between New York and Vancouver and a film prophetically entitled, *Sometimes a Great Notion*.

From the beginning, HBO developed two important strategies that helped promote its rapid growth and development. First, HBO introduced the principle of premium television. Specifically, HBO achieved what no other television program provider had accomplished up until that point; namely, getting people to pay for television. The principle of advertiser-supported "free" television was firmly engrained in the minds of the American public. What HBO did was change public perception about the nature of television entertainment. HBO offered a uniquely innovative service emphasizing recently released movies and other specialized entertainment that could not be found elsewhere on the general airwaves. While HBO was not the first company to introduce a monthly per channel fee service, they were the first to make it work successfully. This marked the beginning of premium television entertainment.[4]

Second, as Gershon & Wirth point out, HBO utilized microwave and later satellite communications for the transmission of programming, rather than distribution by videotape. Prior to HBO, there was no precedent for the extensive use of satellite-delivered programming in the U.S. HBO's 1975 decision to use satellite communications was significant in two ways. First, it demonstrated the feasibility of using satellite communication for long-haul television distribution. As a consequence, HBO was able to create an efficient distribution network for the delivery of its programming to cable operators. Second, the development of the satellite–cable interface would usher in a whole new era of cable programmers that were equally capable of leasing satellite time and delivering their programs directly to cable operating systems, including: WTBS (1976), ESPN (1979), CNN (1980) and MTV (1981). This set into motion the principle of cable networking; that is, television programming designed exclusively for cable operating (and later, direct broadcast satellite, DBS) systems.[5]

ESPN: A Case Study Analysis

ESPN is an American based cable and satellite television programming service that specializes in sports related programming. In mid-1978, after having lost his job as Communications Director for the New England Whalers (now the Carolina Hurricanes), Bill Rasmussen founded ESPN with his son, Scott Rasmussen and Aetna insurance agent and friend Ed Eagan. Soon after his firing, Ed Eagan approached Rasmussen with the idea of creating a monthly cable television sports program that would cover Connecticut sports. Rasmussesn's firing became a triggering event for a more expanded conversation about all sports. Later that summer, Rasmussen, Eagan and business associate Bob Beyus (who owned a video production company) began pitching their idea to various Connecticut based cable operators with a program concept called the Entertainment and Sports Programming (ESP) channel.[6]

Cable television interest in their proposed sports programming idea was limited at first.
RCA's Al Parinello explained to Rasmussen that satellite communication would enable his sports programming channel to achieve a national distribution reach and achieve greater efficiency at less cost than leasing telephone land lines to reach Connecticut and the surrounding states.[7] For Rasmussen, what started out as a discussion about developing a regional sports and entertainment channel soon turned into to a conversation about the possibilities of creating a national sports network. Rasmussen and his son Scott began to reinvision the concept with the goal of creating an all sports channel, 24 hours a day. Their future sports network would include nightly sports shows as well as the hiring of sports announcers to cover various sporting events throughout the country. In addition, they sought financial support from various investors including Getty Oil who would eventually become their principle backer.[8]

The main challenge for the company was obtaining television rights from the right kind of sports franchises. Rasmussen felt that that the National Collegiate Athletic Association (NCAA) would be a good place to start, given the NCAA's desire to publicize and expand college sports in all regions of the country. Both college footballand basketball were established sports franchises that possessed immediate name recognition which would help to advance the soon-to-be launched ESP Network (ESPN). In particular, college basketball offered great opportunities in terms of attracting new viewers.[9] For the NCAA, a future contract with ESPN gave them a platform for televising multiple college sporting events. In addition, the televising of mid-week games gave lesser known schools increased exposure and viewership of their sports programs.

By July 1979, Getty Getty Oil executive, Stuart Evey, started to play a more prominent role in terms of strategic planning and helping to guide the company's future. This included the hiring of Chet Simmons to serve as Sports Director who at the time was running NBC sports. The formal launch of ESPN took place on September 7,1979 with the debut of Sports Center with anchors Lee Leonard and George Grande. The first reported sports score was Chris Evert's tennis victory over Billie Jean King at the U.S. Open. The Sports Center telecast lasted a half-hour, consisting mainly of videotaped highlights.

The successful launch of ESPN created an internal power struggle between founder Bill Rasmussen, Stuart Evey and Chet Simmons. As researchers McGuire and Armfield point out, there was measure of uncertainty, mistrust and tension between the different ESPN leadership figures. This became readily apparent as Evey arranged for Getty Oil to buy a majority stake in the fledgling network. As Getty's chief representative, Evey felt that Bill Rasmussen lacked the technical expertise to bring a national cable sports network to reality.[10] In time, Bill Rasmussen agreed to a settlement and left the company that he had founded.

It would take several years before ESPN achieved financial success. But given its quickly emerging sports brand, ESPN (along with the USA Network) became the most important television partner for the National Basketball Association (NBA). In 1987, ESPN acquired partial rights to the National Football League as well. In 1990, ESPN added Major League Baseball to its sports roster with the signing of a $400 million contract to televise the league's games. The contract was renewed and continued through to 2011. Jon Miller and Joe Morgan served as the longtime voices of the network's centerpiece Sunday Night Baseball broadcasts through the 2010 season.

Three major turning points for ESPN occurred when in 1984 the ABC television network reached a deal with Getty Oil to acquire ESPN. In May 1985 ABC was acquired by Capital Cities Communication for a purchase price of $3.5 billion. That deal, of course, included ESPN which was seen as one of ABC's most prized assets. In February 1996, the Walt Disney Company purchased Capital Cities/ABC for $19 billion, and assumed the latter company's 80% stake in ESPN.[11] After the Cap. Cities acquisition, ABC's sports and ESPN became more fully integrated, sharing the same sales staff.[12] The company's combined branding strategy and profitability was due in large measure to George Bodenheimer who served as the President of ESPN and ABC sports.

Today, ESPN has become the worldwide leader in sports entertainment that reaches more than 100 million households in the U.S. with its line up of ESPN, ESPN 2., ESPN U, ESPN Deportes as well as a new ESPN+ video streaming service. The ESPN brand has become more fully recognized with the development of its ESPN magazine, ESPN sports website, 30 for 30 documentary series as well as its annual ESPY awards celebrating yearly sports achievements. ESPN is by far the most expensive cable program service charging operators upwards of $9 per-subscriber per-month for the right to receive ESPN. ESPN has become synonymous with sports entertainment. The ESPN brand has ushered in a sports revolution in terms of media entertainment. ESPN is considered one of the most valuable media properties of its kind.[13] With this name and brand recognition, today's ESPN exercises a level of authority and control in all areas of professional and collegiate sports. This is especially true when it comes to collegiate sports where it exercises considerable influence in helping to determine college and football schedules, including specific sports match ups, days and times of the week. The ESPN business and programming model has proven so successful that it has been imitated by television sports entities around the world.

Cable Television: Standard Features

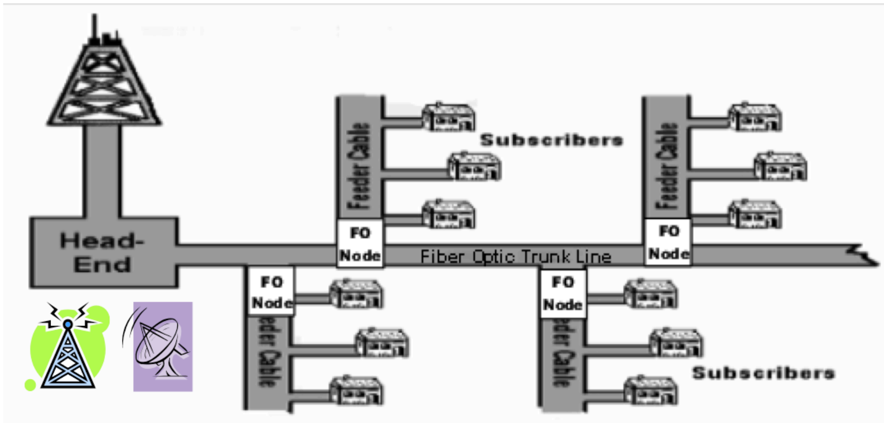
A cable television system is a communication system that distributes broadcast and satellite-delivered programming by means of coaxial and/or fiber optic cable to people's homes. The standard cable television system consists of three parts, including: the head-end point, the distribution network and the receiving equipment. The cable distribution network is patterned after a tree and branch architecture using a combination of fiber optic and coaxial cable. The head-end point is the cable system's master receiving site for all incoming broadcast and satellite-fed programming. The cable operator uses both over-the-air television antennas and satellite earth stations to receive, downconvert and process all incoming signals.

Today's cable television systems use coaxial cable as the primary transmission medium (or conduit) for television signals to the home. Coaxial cable's principal conductor is either a pure copper or copper-coated wire. The digital converter box performs several important functions.

1 It receives the incoming signal and reassigns that signal to a predetermined set of carrier frequencies.
2 It allows television users to access their cable television system (i.e., channel selection).
3 It manages internal security to the system (i.e., making sure that the viewer has access to only those program services that have been requested from the cable operator).

It is capable of providing smart feature elements, including digital video recording capability and providing access to video-on-demand programming.

Figure 3.1 Cable Television HFC Network Architecture



The Business of Cable Television

The business of cable television consists of two primary sets of players, including: the cable television operator and the cable program supplier.

The Cable Operator

The cable operator is responsible for providing cable television service to the community. The cable operator packages a diverse set
of program services and charges subscribers a fee accordingly. Comcast *Infinity*, Cox Cable and Charter *Spectrum* are all examples of multiple system operators (MSOs); that is, cable companies that own multiple systems nationwide.

The Cable Programmer

The cable programmer is responsible for delivering program services to the cable operator.
A program supplier can include both the broadcast television networks (ABC, CBS, NBC, FOX, etc.) and cable network suppliers (ESPN, CNN, Discovery, History Channel, USA, etc.). Program suppliers break down into two major categories, including advertiser-supported services (CBS, NBC, ESPN, CNN, etc.) and pay-supported services (HBO, Showtime, STARZ, etc.). The cable operator will typically pay a licensing fee for the better known and more established cable network services like ESPN, CNN and USA Network. The licensing fee is based on the popularity of the cable network service as well as viewership levels. In principle, the broadcast network (or local station) is given financial compensation in the form of cash payments and/or extra channel assignments to support various kinds of broadcast and cable television program initiatives.

Endnotes

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[1] Brian Lockman and Dan Sarvey, *Pioneers of Cable Television* (Jefferson NC: McFarland, 2005), 9–24.

[2] Patrick Parsons, "Two Tales of a City," *Journal of Broadcasting & Electronic Media*, 40(3) (1996): 354–365.

[3] The Service Electric Cable TV system was owned by John Walson, the same cable entrepreneur who started the first system in Mahanoy City, Pennsylvania. At the time, he was the largest cable operator in the state of Pennsylvania and the twelfth largest in the U.S. See Lockman and Sarvey, *Pioneers of Cable Television*, 21.

[4] Richard A Gershon, *Digital Media and Innovation: Management and Design Strategies in Communication* (Thousand Oaks, CA: Sage, 2017), 27-28.

[5] Richard A. Gershon and Michael Wirth, "Home Box Office: The Emergence of Pay Cable Television," in Robert Picard (ed.), *The Cable Networks Handbook* (Riverside, CA: Carpelan Press, 1993), 114–122.

[6] J. McGuire and G. Armfield, "In the Beginning: The Rasmussens and the Launch of ESPN," in J. McGuire, G. Armfield & A. Earnheardt (eds.), *The ESPN Effect: Exploring the Worldwide Leader in Sports* (NewYork: Peter Lang Publishing, 2015), 3-10.

[7] Bill Rasmussen, *Sports Junkies Rejoice: The Birth of ESPN*. (self published, 1983). 68-94.

[8] Travis Vogan, *ESPN: The Making of a Sports Media Empire* (Urbana, IL: University of Illinois Press, 2015).

[9] "How Bill Rasmussen Started ESPN and His Entrepreneurship Advice," *Forbes*, September 13, 2012, https://www.forbes.com/sites/danschawbel/2012/09/13/how-bill-rasmussen-started-espn-and-his-entrepreneurship-advice/#440d595c714e

[10] J. McGuire and G. Armfield, "In the Beginning: The Rasmussens and the Launch of ESPN,"

[11] Richard A. Gershon, *The Transnational Media Corporation: Global Messages and Free Market Competition* (Mahwah, NJ: Lawrence Erlbaum & Associates).

[12] Andy Stein, "The Mouse that Scored," in J. McGuire, G. Armfield & A. Earnheardt (eds.), *The ESPN Effect: Exploring the Worldwide Leader in Sports* (NewYork: Peter Lang

Publishing, 2015), 11-22.

[13] Vogan, *ESPN: The Making of a Sports Media Empire*