

Appendix A

Profiles of the Mass Media Industries

This appendix presents a profile of each of the nine mass media industries illuminated in Part III of Media Literacy, 8th edition. Each profile begins with key indicators showing how that mass media industry has developed according to the life cycle metaphor as explained in Chapter 6. Notice that some of those industries have not gone through all five stages. The industries are treated in the following order, which roughly corresponds to their ages:

1. Books
2. Newspapers
3. Magazines
4. Film
5. Recording
6. Radio
7. Broadcast television
8. Cable television
9. Internet

Before we get started on these profiles, I need to clarify the distinction between a **vehicle** and a **company**. For example, *Time* magazine is one such vehicle. *Time* publishes 52 weekly issues each year, but the issues are not the same as the vehicle. Also, we need to make a distinction between the company that publishes the vehicle and the vehicle itself. Time Warner is the company that publishes *Time* magazine, but Time Warner also publishes many other magazine vehicles such as *Money*,

Discover, and *Fortune*. So when we talk about magazines, we must be clear about whether we are referring to the media channel (of all magazines), a vehicle (a title of a single magazine), an issue (the set of stapled pages laying on your coffee table), or the company (which usually owns and publishes several vehicles).

1. BOOKS

Innovation Stage

The key technological innovation for book publishing—as well as all of the print media—was the invention of moveable type by Gutenberg in the mid-1400s.

Book publishing was already well developed when the United States was first colonized. However, until the 19th century, books were not a mass medium because they were purchased and read by only the educated and the affluent.

During the late 1800s, some entrepreneurs recognized that the reading literacy rate was relatively high, given the effects of compulsory education. They began selling paperback books that were affordable to the masses.

Books really started developing into a mass medium about 1860, when the Beadle brothers (Irwin and Erastus) began publishing dime novels. Within 5 years of startup they had sold more than 4 million volumes. In the 1930s paperback books were introduced and now account for more than 1 million volumes sold per day.

Penetration Stage

By 1900, public schools were widespread, and reading literacy was commonplace. Large publishing houses were being established, so many more books were being published and marketed, thus bringing the unit price down so that books were affordable to more of the general population.

Peak Stage

The book publishing industry has never reached a peak; that is, it has yet to achieve dominance among the mass media.

Adaptation Stage

The book industry has adapted to competition from other mass media by becoming niche oriented. Many publishers sell books to only one niche, such as college-level science texts, library reference books, religious books, children's mystery novels, and so on.

Consolidation has been taking place in book publishing and book selling. As for publishing, in the mid-1990s, the Penguin Group acquired a U.S. subsidiary of MCA for \$336 million. The Penguin Group publishes primarily classics and reference-type books (Lyll, 1996). The Putnam Berkley Group is known for its successful best sellers from authors such as Tom Clancy, Dick Francis, Patricia Cornwell, and Amy Tan. The merged company accounted for about 12% of all book sales in the United States. There has also been a trend toward concentration in book selling, especially from the 1960s to the 1990s. In 1958, companies that owned more than one bookstore (chains) accounted for only 28% of all sales, and there were no chains with more than 50 stores. By the 1990s, chain-owned bookstores (such as Barnes & Noble and Borders) generated more than two thirds of all the revenue in the book industry.

Current Profile

The book industry is one of the healthier media industries today, mainly because it has taken advantage of the Internet rather than fighting against it. The Internet has made it possible for many more people to self-publish or set up their own publishing houses and thus participate in the long tail marketing trend. Booksellers have moved from brick-and-mortar stores with their limited floor space and high overhead to websites that offer unlimited selection and much lower overhead, especially with the sale of electronic books.

The number of book publishers has grown dramatically from about 20,000 in the later 1990s to more than 78,000 today. Almost all of these book publishers are small, putting out only one to four titles a year (Milliot, 2012). Each year, 450,000 self-published book titles and editions are produced. Almost all published books are registered and receive an ISBN. These ISBNs allow the industry to estimate the number of new book titles produced each year. In 2013, small publishers (publishers who registered fewer than 10 books) registered 46,654 ISBNs. Additionally, several large companies assist authors with the process of self-publication. Amazon's CreateSpace registered 186,926 ISBNs, Smashwords registered 85,000 ISBNs, Lulu registered 74,787 ISBNs, and Author Solutions registered 44,574 ISBNs (Milliot, 2014).

The Internet is changing the way books are published and distributed. Bookstores are going online. At their peak, there were about 20,000 bookstores in the United States, but this number has been decreasing as small independent bookstores go out of business with competition from the large chains (such as Barnes & Noble, Borders, and Books-A-Million). In 2010 Borders went bankrupt, and other large chains have been closing their brick-and-mortar stores. Amazon began in July 1995 and reached \$15 million in sales the next year;

however, its costs were \$20 million that year. By 2010, Amazon had become the largest seller of books in the United States (Rosenthal, 2012).

Now, when a publisher releases a new book, it is frequently offered in both paper and electronic form. E-book readers are electronic, handheld, battery-powered devices where the words appear on a screen rather than a paper page. E-books can be read on these dedicated electronic e-book readers. Booksellers like Amazon and Barnes and Noble provide e-book apps that allow users to read e-books on their tablets, smartphones, and other electronic devices. Introduced in 1998, fewer than 10,000 e-books were sold that first year. By the following year, there were more than 1,500 fiction and nonfiction titles available (Stroh, 1999). By 2011, Amazon was selling more e-books than paper books (Miller & Bosman, 2011). E-book sales now account for around 30% of all book sales (Bercovici, 2014).

For a relatively small price, an individual can publish his or her own book with desktop software, then market it through a website. Books that are published initially or exclusively online are called e-books. Some of these books are never printed by the publisher but instead are sold in electronic form to be downloaded by the buyer; these are called d-books. By 2013, the number of self-published titles reached 450,000, and it continues to grow as services such as Amazon make it easy for an individual to publish and market a book (Milliot, 2014).

The U.S. book and journal publishing industry now has an annual revenue of about \$27.98 billion in sales, with more than 2.7 billion books sold. Books in the trade category (hardbound and paperback books aimed at general readers, such as books on hobbies, travel, self-help, and fiction) comprised \$15.43 billion in revenue in 2014. In 2014, the market was segmented between paperback book sales (942 million sold), e-book sales (510 million sold), and hardcover sales (568 million sold). A small

but growing sector of the market is consumed by downloaded audio books (48 million units sold). While small, this market grew 26.8% in 2013 and 27.0% in 2014 (Bluestone, 2015).

Digital technologies give consumers more flexibility in how they read. Reading apps make it easy for people to sync books across many devices. Left your e-book reader at home? An app on your smartphone or tablet can sync your reading progress across devices so you can read your book anywhere. Amazon's Whispersync allow readers to save and sync reading progress, bookmarks, and notes across many devices and reading platforms. With technologies like Whispersync, you can save your reading progress across many devices. For example, you can pause an audiobook, then pick up where you left off with the e-book.

Book publishing remains a risky business, because only one book in five is successful, meaning it makes money for the publisher only after all the expenses and returns are subtracted from sales. The small number of successful books, in essence, subsidizes the industry and makes it possible for publishers to take chances on all sorts of "risky" books and new authors. Well under 1% of books published each year make it onto any best-seller list. For example, in 1997, only 88 fiction titles made the lists; 85% of these books were written by authors who had been on the list before (Gulbrandsen, 1998a). Because of the high risk, publishers aggressively use the marketing concept; that is, they search for books they think the public wants instead of books they think are the best from a writing or education point of view. Publishers believe the public likes books on scandal, celebrities, cooking, self-help, and dieting; this is why there are so many books published on these topics each year.

Although there are far more publishers of books than ever before, the industry is highly concentrated in terms of sales. For decades, the top seven firms have accounted for more than 80% of all sales. As for the best-seller list, six

major publishers (Random House, Simon & Schuster, Penguin Putnam, Bantam Doubleday and Dell, HarperCollins, Time Warner) typically account for about 85% of the hardcover slots and 83% of the paperback slots. If you add in the titles of six other smaller houses, you account for 98% of all best sellers (Gulbransen, 1998a, 1998b).

Book selling has always been a pyramid, with 80% of all book titles selling fewer than 100 copies and only 2% selling as many as 5,000 copies. In 2004, the average book title sold 500 copies (Anderson, 2006), and by 2012 that figure had dropped to 250 copies. This was mainly because of the growth in the number of titles produced each year rising with self-publishing, which has grown to almost 3 million titles each year, and most of these sell only a few copies, which brings the average down (Lofthouse, 2012).

2. NEWSPAPERS

Innovation Stage

The innovation stage of newspapers dates back to before the United States was formed. Some key technological developments took place in Europe beginning in the 1400s. Also, in the 1600s, entrepreneurs set up newspaper publishing businesses and home delivery distribution systems.

In the American colonies, publishers typically started newspapers not to make money but to shape political opinion. These early newspapers were more like propaganda leaflets, and each had very small circulation. By 1776, there were already 30 weekly newspapers in the colonies, and these newspapers went into a total of 40,000 homes. These newspapers were run by political parties, which dictated their content. The parties used their newspapers to present their own special version of the news.

Penetration Stage

By the 1830s, a big shift in the purpose of newspapers had taken place. Newspaper publishers shifted away from trying to influence the political opinions of their small subscriber bases; instead, publishers changed their content to appeal to the greatest number of people possible so that they could maximize their circulation and thereby maximize the rates they could charge advertisers. This change served to orient newspapers much more to a business model, and newspapers evolved into a mass medium by the 1870s.

Technological developments made it possible for newspapers to create a better product and to distribute that product faster and more widely. For example, newer printing presses were invented, and these newer presses made the printing of the papers faster and cheaper. The telegraph allowed reporters in locations away from the newspaper office to wire their stories to the newspaper. By 1900, improved transportation allowed distribution to a larger territory.

Newspapers were being run in a more business-like fashion. They used economies of scale to lower their unit costs. And even though they were selling copies for a penny apiece, their profits were increasing dramatically, because their volume was growing so fast.

With the decline of political partisanship, more and more readers found a broad range of newspapers interesting and useful. Advertisers also found the medium very useful.

Between 1880 and 1900, the number of newspaper businesses in America more than doubled from 850 to 1,967. In 1870, about 2.6 million copies were circulated daily to the 7.6 million households in America (1 out of every 3). By 1900, 93% of all households were subscribing.

Peak Stage

In 1919, newspapers reached a peak of penetration as the average household was receiving an average of 1.4 newspapers per day.

The number of daily newspaper organizations was at a peak at almost 2,500 firms.

Decline Stage

Newspapers began to decline as the most important mass medium in the 1930s and 1940s as radio, then television, took away newspapers' functions of providing information and entertainment.

Even more devastating was that the newer media eroded the base of advertising, especially among the national advertisers.

The number of daily newspapers declined to about 1,750 in 1945.

Adaptation Stage

Beginning in the 1950s, newspapers redefined their role as a local medium for audiences and advertisers.

Newspapers have changed their content to compete with other media. Now content is more sensationalized and entertainment oriented. There are shorter stories and more graphics and color.

To appeal to advertisers, newspapers have sectionalized their issues. Most newspapers now have clearly distinguished sections for sports, finances, home, cars, health, food, and lifestyles—each of which is designed to appeal to a different kind of reader and a different kind of advertiser.

With the rise of the Internet throughout the 1990s, newspapers experienced another decline in readership and advertising revenue. Newspapers began using websites to present news along with their traditional paper form of delivery.

Current Profile

After decades of successful adaptations, the newspaper industry has been in a serious

decline for the past two decades with the rise of the Internet. The number of daily print newspapers being published in the United States has declined from about 1,600 in 1990 to 1,300 today. Circulation has also declined during that time from 60 million in 2000 to 35 million today (Plunket Research, 2014). Advertising revenue, which peaked in the late 1990s at about \$50 billion, has dropped to about \$16.4 billion today (Barthel, 2015). Employment of full-time professional editorial staff peaked at 56,900 in 1989 then steadily fell to about 40,000 (Edmonds, Guskin, Rosenstiel, & Mitchell, 2012).

Print newspapers have been trying to adapt by moving to the Internet. Most of these print newspapers have created websites and apps in addition to their print versions in order to win back those readers and advertisers. However, the newspaper industry has not yet become successful in reversing these losses. As of January 2015 only 6 of the top 20 Internet sites used by the public to get information were affiliated with newspapers, 7 were Internet-only news sites (Yahoo-ABC, Huffington Post, BuzzFeed, Bleacher Report, Business Insider, Elite Daily, and Cnet), and the 7 others were associated with cable or broadcast news channels (Pew Research Center, 2015). Many of America's leading newspapers have gone bankrupt, while others have downsized or become electronic only. Meanwhile, free daily or weekly newspapers and shopping guides have enjoyed substantial growth (Plunkett Research, 2013).

3. MAGAZINES

Innovation Stage

The same technological innovations that made the book and newspaper industries possible were essential to the beginning of the magazine industry.

The magazine industry began in the United States in the 1740s, but until 1800, no American magazine lasted more than 14 months. Advertising support was hard to find, so magazines struggled to stay in business.

Circulations were very small, with the average circulation for a magazine being about 500 copies and large-circulation magazines selling between 2,000 and 3,000 copies.

Penetration Stage

Magazines became a mass medium in the 1820s with the appearance of the *Saturday Evening Post* and others that were started to create a national audience that could be rented to advertisers. By the end of this decade there were more than 100 such magazines. By the middle of the century there were more than 700 such magazines, and by 1900 there were more than 3,000.

Throughout the late 1800s, the magazine industry continued to grow because of several factors that benefitted all of the print media: Literacy rates increased, household incomes grew so people had more money for discretionary spending, and people had more leisure time. Also, another factor that was especially helpful to the growth of the magazine industry was that in 1879 the U.S. Postal Service made low-cost mailing available.

Near the end of the 19th century, the magazine industry experienced a boom. By 1885, there were about 3,300 magazines, and by 1990, about 50 of those had become well-known national magazines, each with a circulation of more than 100,000.

In the 1890s, magazines cut their prices to below production costs to increase circulation. Thus, advertising revenue became essential to the survival of magazine companies.

Peak Stage

Magazines have never reached a “peak” in the sense that they became the dominant mass

medium. Magazines, however, exhibited some peak-like characteristics in the first few decades of the 1900s. They were the only mass medium with truly national circulation. Unlike newspapers, which had their circulations limited to small geographical areas in and around their home cities, magazines were mailed to subscribers all across the country. Advertisers who wanted to reach a national audience flocked to magazines.

Decline Stage

From 1930 to 1960, the magazine industry declined primarily because of heavy competition from radio, then television, for advertising revenue.

National magazines had the hardest time surviving not only because of the loss of advertising revenue but also because of steep rises in postal rates. In 1950, there were 40 magazines with a circulation of more than 1 million; within 25 years, all but 10 had gone out of business.

Adaptation Stage

To survive, magazines became more specialized. They changed from trying to construct very large audiences with content that had mass appeal and instead targeted narrow, specialized audiences. Some magazines focused on news only, some focused on young women, some focused on particular hobbies, and so forth.

There has been a generally steady growth in sales for more than 50 years. During that time, the price of subscriptions and newsstand sales have increased. Subscriptions, which average \$30.50 a year, are increasing in popularity because they are more convenient and more economical for consumers than buying individual issues at the store.

Current Profile

The U.S. magazine publishing industry includes about 6,500 companies; however,

fewer than 350 have circulation of more than 100,000 copies. Magazines compete with a variety of print, online, and broadcast media for consumer attention. The magazine industry has an annual revenue of about \$40 billion. The U.S. magazine industry is concentrated, with the 50 largest companies generating about 60% of revenue (First Research, 2015).

The magazine industry continues to be highly niche oriented as it has been for many decades. Competition takes place within niches rather than across niches. For example, *Sports Illustrated* does not compete with *Forbes*, and *Time* does not compete with *Cosmopolitan*. Instead, each magazine tries to create a distinct audience base that it can rent to its own special set of advertisers. Magazines are niche oriented as they aim less at *quantity* of circulation and more for a *quality* audience. Within a niche, there are usually a small number of magazines that do compete against one another. For example, *Time* competes against *U.S. News & World Report* for essentially the same readers and same national advertisers. The big niches are consumer magazines (such as *Reader's Digest*, *TV Guide*), news (*Time*), sports (*Sports Illustrated*, *Runner's World*), opinion (*National Review*, *New Republic*), intellectual (*Commentary*, *American Scholar*), men's interest (*Esquire*, *GQ*), women's interest (*Cosmopolitan*, *Better Homes and Gardens*), humor (*National Lampoon*, *Mad*), sex (*Playboy*, *Penthouse*), and business (*Forbes*, *Money*). Within each of these niche markets the magazine vehicles compete with one another for readers and for advertisers, but typically a small handful of magazines account for most of the circulation and ad dollars within a niche.

Magazines are rapidly adopting new formats and new technologies with the goal of making themselves highly relevant and readable for Internet users on PCs, and for mobile users on smartphones, tablets, e-book readers, and other digital devices. Magazines are being

published in new formats to make them easily accessible on digital devices. The number of digital magazine readers has grown. Indeed, between 2012 and 2013, the number of digital magazine readers increased by 83% (Plunkett Research, 2014). Many magazines have websites to support their paper copies. Also, there are now webzines such as *Slate*, *Salon*, and the *Onion* that appear only online.

4. FILM

Innovation Stage

The film camera and projector were invented in the 1880s by Thomas Edison, who owned the early patents and therefore had a monopoly. By 1900, there were three companies marketing film equipment. These three companies also provided films and sold them outright to users as a way to encourage the sale of equipment. Theaters began to be an alternative to live entertainment, especially the popular vaudeville shows.

Penetration Stage

In 1902, film exchanges were established so theaters could share films. Small producers consolidated their resources and formed studios for production and distribution. By 1905, there were more than 100 film exchanges, and the producer-wholesaler-retailer chain in the film industry became institutionalized. Five years later, there were 10,000 small theaters, each run by entrepreneurs who parlayed small investments into quick profits.

By 1912, producers were making full-length feature films. During this time, audiences began to regard movies less as a novelty and more as a habit.

The Hollywood star system was devised as a way to lure people to the movies by

attaching identifiable names to an otherwise unknown film and by merchandising the star as an important part of the distribution process. These stars were chosen not on their acting skill but on their ability to attract audiences.

Peak Stage

The peak of the film industry was reached in the 1920s and lasted into the late 1940s. In 1927, an average of 60 million people attended motion pictures *every week*. By 1929, this figure was more than 110 million people. Sound movies were introduced in 1927, and color was introduced in the late 1930s. The number of commercial films released to theaters grew to a peak of 497 films in 1941. The number of theaters in the 1940s was about 20,000. The number of movie seats, including car spaces at drive-ins, reached a peak of 11.1 million in 1935.

Decline Stage

Starting in the late 1940s, the industry went into a decline because of competition from television. The number of commercial films released to theaters decreased steadily from a peak of 497 in 1941 to a low of 203 films released in 1963. Costs skyrocketed. Massive advertising and marketing campaigns were necessary to build audience interest for each picture.

The federal government regarded some of the very large film companies as monopolies and forced them to sell parts of their operations. For example, it became illegal for a single film company to produce, distribute, and exhibit films. So the large film studios sold off their theaters. After divestiture, film production companies lost some of their incentive because they no longer owned their own theaters. Production of films dropped.

Adaptation Stage

Film studios adapted first by reducing their workforces and selling off their property. In 1965, film studios began making films primarily for television showing and have experienced steady growth since then.

Not until 1970 did the production-distribution sector turn around financially. For example, the exhibition sector adapted by creating multiscreen theater complexes.

Production costs skyrocketed through the 1980s but stabilized by the mid-1990s at about \$50 million per Hollywood picture; box office receipts went from about \$1.2 billion in 1980 to \$7.5 billion in 1999 (Albarran, 2002).

Current Profile

The U.S. motion picture production and video industry revenue exceeds \$80 billion. The industry includes about 13,600 production companies. In the United States and Canada, box office ticket receipts grossed \$10.4 billion in 2014. The film industry is divided into three distinct sectors: production, distribution, and exhibition. The top motion picture studios are generally part of larger media companies. Most companies in the industry engage in both production and distribution of motion pictures; about 500 companies are solely distributors. The exhibition sector is composed of the theaters, with their total of about 40,000 screens in 5,700 theaters. The film industry now releases about 700 films per year, and about 50 of these film titles are released in 3-D (U.S. Census Bureau, 2015).

About 200 of these are considered major films, and these cost about \$70 million to produce and another \$40 million to promote. Most do poorly at the box office and disappear from theaters within days of release (Noam, 2010). Both emerging and mature economies outside the United States are of prime importance to film revenues. There are now thousands of 3-D-capable screens in theaters around the

world. Some moviegoers are willing to pay premium ticket prices for 3-D films. However, receipts for 3-D have not met expectations. IMAX theaters have also seen large growth in number in recent years (Plunkett Research, 2013).

The production sector is the most risky for several reasons. First, a Hollywood feature film takes about 18 to 24 months between the inception of the idea and the actual theatrical release. In television, it is 3 months. Therefore, there is a danger that a film might miss the changing tastes of audiences. Second, the cost of making a feature film is very high, and it continues to escalate. The average film now costs \$50 million to make and another \$50 million to market. This means that a film must gross more than \$100 million at the box office to begin making money for the studio. However, the average movie makes only about \$33 million at the box office.

Each of the film industry's sectors (producers, distributors, and exhibitors) is very concentrated. Although there are many small independent producers, distributors, and exhibitors, power is concentrated in the hands of a few huge conglomerates that have diversified holdings beyond the film industry. The film industry is dominated by seven major film studios. These seven account for 75% of all distribution. Typically, the top 10 films each year account for one third to one half of the industry's total annual receipts. About one third of national admissions comes from nine major metropolitan areas. The 17 weeks of summer, Christmas, and Easter provide 40% to 50% of theater receipts.

The biggest challenge to the traditional model of film distribution is the Internet, where people can download movies. For example, Netflix allows subscribers to stream as many movies as they want for a flat fee of \$7.99 per month, which is less than the cost of a single ticket at a theater. Easy access to downloadable and/or streamable rental films from Netflix and

Amazon has also affected revenue from DVD sales (Plunkett Research, 2014). Also, Hollywood movies are experiencing severe competition for audience time from sites such as YouTube and Hulu that offer users hundreds of thousands of videos of all lengths and topics for free.

The traditional, storefront video rental business has lost market share due to alternatives, including Redbox, Netflix, TiVo, and video-on-demand services offered by Comcast and other firms. This led to the bankruptcy of the Blockbuster retail chain, which was acquired by satellite entertainment firm Dish Network (Plunkett Research, 2013).

5. RECORDING

Innovation Stage

Thomas Edison invented the original technology for recordings and playback of sound in the 1880s.

Penetration Stage

Technological advances have kept the industry growing and viable by continually improving the quality of the recordings and making playback more convenient. In 1925, Joseph Maxwell invented the jukebox, which allowed recordings to compete with radio music. In 1947, the long-playing record was marketed. Then, in the early 1950s, the sound quality of recordings was dramatically improved with high fidelity. In 1960, 34 million units were sold, and this climbed to almost 59 million in 1970.

Peak Stage

Like the book and magazine industries, the recording industry never became a dominant mass medium.

Adaptation

The delivery technology keeps changing for recordings; this requires consumers to buy new hardware. Records were replaced by tapes (first eight tracks, then cassettes), then with CDs (compact discs). Advances in recording techniques (digital) and playback (boom boxes, car stereos, Walkmans, portable CD players, MP3 players, etc.) keep people buying new equipment. And the fast turnover in music styles and recording artists keeps people buying new recordings.

Current Profile

The U.S. music production and distribution industry includes about 3,700 establishments (single-location companies and units of multi-location companies) with combined annual revenue of about \$15 billion. The industry is forecast to grow at a low rate over the next several years. Companies in this industry produce musical recordings, license rights to use musical compositions, and generate in-broadcast revenue (Plunkett Research, 2013).

The total value of the U.S. recording industry was \$15 billion in 2014. Music sales in physical formats constitute 46% of revenue, with digital sales making up another 46% of revenue. Subscription services have increased in popularity over the past few years. In 2010, 8 million people subscribed to a subscription music services. By 2015, that number increased fivefold to 41 million (International Federation of the Phonographic Industry, 2015).

The United States is the world's largest recorded music market by sales, followed by Japan and Germany. Competition from illegal downloads is a major challenge.

The industry is highly concentrated: The top eight companies account for 80% of industry revenue. Major companies include Universal Music Group, Sony Music Entertainment, and Warner Music Group.

The biggest challenge facing this industry is piracy of music that has been made very easy with the digitization of their recordings, compression of that information, and fairly easy downloading to personal devices (computers and smartphones) from the Internet. Sales of music in physical formats (CD) continue to drop while sales of digital music files and the use of Internet-based digital music players and streaming services have increased (Friedlander, 2015).

6. RADIO

Innovation Stage

Radio broadcasting began in 1920, when it combined a new technology with old content forms from vaudeville and the dramatic stage.

In 1921, there were only five AM radio stations, and only about 1% of all the households in the United States had a receiver.

Penetration Stage

Almost overnight, hundreds of radio stations sprang up. By 1923, there were more than 500 stations; almost half were owned by manufacturers of radio receivers that initiated the stations as a way of stimulating sales of receivers to the general public. Then, radio stations were started by other kinds of organizations, such as private businesses, local municipalities, and educational institutions.

Radio had evolved from a novelty into a business as it developed the concepts of station, sponsorship through commercial advertising, and network.

When radio began broadcasting, it received its income through the sale of home receivers. This continued to be a source of revenue to radio stations until the mid-1930s. Throughout the 1920s, stations realized that the sale of receivers would not bring in enough revenue to support the growing industry, so stations began

selling advertising. Advertising was first introduced in 1922 as a way of supporting an increasingly expensive industry. Initially, advertising was of an institutional nature, with price not being mentioned and the hard sell being avoided. More obtrusive types of advertising were not fully accepted until the late 1920s, when advertising moved toward dominance. In 1927, 20% of radio network time was sponsored, and by 1940, more than half was.

In the 1920s, the federal government favored localism when it awarded radio licenses to local owners. The local stations were mandated to serve the needs of the communities in which they were going to broadcast. But almost from the beginning, radio broadcasters began moving away from their mandate and instead made decisions that have primarily helped their businesses to function more profitably. They have done this mostly through network affiliation and group ownership.

Instead of generating local programming, most broadcasters have chosen to affiliate with one of the large commercial networks. These affiliates get their programming from these networks, and this programming is national in content. Network affiliation began in 1927, when 6% of available radio stations became affiliated with one of the four radio networks: ABC, CBS, MBS, and NBC. The peak period of affiliation was reached in 1947, when 97% of the country's 1,062 radio stations were affiliated with one of the four national radio networks.

Peak Stage

Radio reached its peak in the 1930s and 1940s. By 1936, there was an average of one receiver per household, and in 10 years, this had doubled. People were spending more time with radio than any other medium. Radio had a national orientation for both entertainment

and advertising. The radio networks played a crucial role in creating and maintaining this national orientation.

Decline Stage

Revenues increased each year until television began taking away advertisers in the late 1940s and early 1950s. Radio hit bottom in 1955, when revenues dropped to \$554 million with only 2,669 stations broadcasting.

Adaptation Stage

To survive, radio replaced its full-service, mass-oriented, family-type general entertainment format with specialized music formats designed to appeal to distinct target audiences.

Radio stations replaced their lost national advertising revenue with local ad revenue. Now, 80% of a station's revenue comes from local advertising. Thus, radio stations compete primarily in local markets with newspapers for advertisers. Also, to survive the competition with television, radio became more mobile. With car radios and portable radios, people could listen to music and news anywhere—especially where they could not take a television set. Between 1950 and 1970, radio set production almost doubled, whereas the U.S. population increased only by one third.

AM radio had a rough time in the 1970s and 1980s, when it lost a lot of its audience. But it adapted by airing a host of syndicated talk shows beginning in the 1990s (Howard Stern, Rush Limbaugh, Dr. Laura Schlesinger, Don Imus, G. Gordon Liddy, etc.). FM continues to hold its audience with a variety of music formats targeted to specific audiences.

By the early 1960s, more than 4,000 stations were broadcasting, and revenues were up to \$700 million per year. By 1980, total revenues had climbed to \$3.2 billion (U.S. Census Bureau, 2000).

Current Profile

The U.S. radio broadcasting and programming industry includes about 6,700 companies with combined annual revenue of about \$17 billion. Traditional radio broadcasting is hurting, finding it increasingly difficult to gather listeners for advertising-based radio programming due to such alternatives as satellite radio (Sirius XM had 23.9 million paid subscribers at the end of 2012), Internet-based radio, and digital music players (Plunkett Research, 2013).

The industry is concentrated, with the 50 largest companies accounting for about 75% of revenue. Major companies include the British Broadcasting Corporation, CBS Radio, iHeartCommunications (formerly Clear Channel Communications), Cumulus Media, Entercom Communications, NRJ Group (France), and Sirius XM Radio (First Research, 2015).

The majority of Americans still listen to radio. In 2012, 92% listened to AM/FM radio at least weekly, compared to 94% in 2002. In addition, online radio has continued to gain traction. In 2002, 12% of Americans listened to online radio. By 2012, that number more than doubled to 39% of Americans. Online companies such as Pandora and Spotify provide radio-like streaming services of digital-only audio content (Santhanam, Mitchell, & Olmstead, 2013).

Broadcast radio stations such as NPR have taken to uploading their programming as online podcasts that listeners can access online or through mobile devices. NPR lost about 3% of its on-air listeners in 2012. However, in 2012 NPR had 26 million average weekly listeners for on-air content. Downloads of NPR's app increased in 2012, expanding its digital audience to 19.2 million listeners (Santhanam et al., 2013). Podcasts are growing in popularity. In 2014, NPR listeners downloaded 53.5 million podcasts, up from nearly 38 million podcasts in 2013.

While stations like NPR make their content available online to listeners, many podcasts are online-only digital media. Podcasts provide a distribution platform with a low barrier to entry for producers. Individuals can easily publish podcasts through websites such as iTunes, or individuals can host podcasts through their own websites. Since they are easy to produce and distribute, the number of podcasts has grown. Indeed, the number of actively hosted podcasts nearly doubled from 12,000 in 2012 to 22,000 in 2014 (Vogt, 2015). Podcasts encompass a variety of topics, including news, comedy, technical and how-to information, serialized fiction, news, and nonfiction.

7. BROADCAST TELEVISION

Innovation Stage

By the 1930s, the technology had been developed to make the transmission and reception of television signals possible. The first television stations went on the air in 1941. These were commercial stations on the Very High Frequency (VHF) band.

The first receivers were marketed in the New York City area, where the first broadcast signals were available. As stations began broadcasting in other metropolitan areas of the country, receivers were marketed in those additional areas. By 1948, almost 3% of all households already owned a TV receiver.

Television broadcasting has followed the same pattern of development as radio. The Federal Communications Commission (FCC) attempted to reaffirm its perspective of localism as its guiding principle on licensing when it awarded television broadcasting licenses in the 1940s and 1950s. This decision led to the establishment of hundreds of local stations, and the FCC had to find new spectrum space to

provide these stations with their own broadcasting frequencies. As a result, the Ultra High Frequency (UHF) band (broadcast channels 14 through 83) was set aside for television use in addition to the already used VHF band (broadcast channels 2 through 13).

Commercial broadcast stations were licensed to provide service to local communities. But over the years, the FCC has done very little to ensure that the stations do, in fact, provide responsible service to their communities. Television stations have been permitted to affiliate with national networks and to buy syndicated services, both of which feature national programming.

From the beginning, local stations affiliated with national television networks. In 1954, network affiliates were already getting 50% of their total programming from networks. Within two decades, local stations were producing only about 10% of their own programming. There are strong economic incentives for networking. Affiliates are able to share the production costs as well as the risks of a program. If something was to be produced locally, it needed to be inexpensive and very popular compared to the alternative program from the network. Therefore, the affiliates aired most of the network programming, which was aimed at a national, not a local, audience.

Penetration Stage

By 1950, there were 107 television stations; all of these early stations were on the VHF band, and by 1953, the first UHF stations went on the air. The number of stations grew to more than 500 by 1960.

By 1953, 50% penetration was reached; that is, half of all the households in the country had a television set that could receive a broadcast TV signal. Television was catching on, even though few homes had much of a choice in viewing alternatives. Only one third

of television households could receive as many as four channels.

Peak Stage

By the early 1950s, television was reaching a peak. It quickly became *the* entertainment medium, thus reducing movie attendance and radio listenership. Over time, it also became a primary source of information, thus reducing readership of newspapers and magazines. The public accepted this medium so quickly, because television was seen as fulfilling the audience needs for entertainment as well as information better than any other medium.

Advertisers, especially national advertisers, realized this shifting media preference among audiences, and they too shifted their support to television. This resulted in severe reductions in national advertising support for magazines, newspapers, and radio.

By 1960, the average household owned at least one TV receiver; it could receive about seven channels. Television sets were turned on more than 5 hours per day in the average household. By 1980, 99.5% of all households had at least one television set, more than 90% had color sets, and over 50% had two or more sets. These household ownership rates are higher for television sets than for telephones or indoor plumbing.

Revenue for broadcast television came primarily through one stream: advertising. So broadcast television stations and networks had to attract large audiences if they wanted to generate large revenues. Each rating point for a television series could generate as much as \$90 million over the course of a season, so the competition among networks to increase ratings was very strong.

To maintain its peak, television had to generate the most revenue and attract the largest general audience, especially in prime time, which was from 7 to 11 p.m. each night.

Unless a prime-time program could generate an audience of at least 20 million viewers every week, it was canceled. To reach the widest audience possible, programmers adopted a policy of LOP (least objectionable programming). They need to avoid the risk of offending anyone, which would result in loss of audience or threat of governmental intervention. To determine what is least objectionable, television relied on proven formulas. This is why programming became less diversified and became more limited. When a particular program becomes very popular, programmers will try to develop similar shows in an effort to share the popularity. Because a popular show generates a great deal more revenue than an unpopular one, programmers are unwilling to take a chance on new types of shows for fear that they would be held responsible for losing money for the station or the network.

Developing new TV programs has always been highly risky. National TV networks look at about 4,000 proposals a year for new television series, and only about 100 of these proposals get funded to make a pilot episode. Of the pilots, only about 25 will make it onto the air; of these, only about a dozen will last a full broadcast season.

Up until the later days of the peak, television networks typically do not produce much of their own programming; instead, they license broadcast rights from independent producers. The fee that TV networks pay to producers for the first-run rights to broadcast their programs is not large enough to cover the producer's costs. A typical episode of a half-hour sitcom costs about \$800,000 to produce and the producer gets only about \$600,000 per episode for two airings (premiere and rerun), so the producer loses \$200,000 per episode. After 2 years of production (44 episodes), the producer is about \$8 million in debt. Producers of 1-hour drama series are about \$14 million in debt. The film studios finance this debt as

well as provide production facilities in a package deal. But if the show is successful and goes into rerun syndication, the producers and film studios get their money back and then some. Producers hope that the series will run long enough so that they can make about 100 episodes and then sell their series in syndication. When *The Cosby Show* went into syndication in 1988, the producers made more than \$800 million and since the episodes were already produced, this was almost clear profit. Newsmagazines and reality shows cost much less to produce, but then they are not attractive to program syndicators. Because of the expense and the risk, there are fewer independent television production studios. As of the fall of 2003, there was only one, Carsey-Werner-Mandabach, which had deep pockets from successes with *The Cosby Show* and *Roseanne*.

Up until 1995, broadcasters were prevented from owning their own shows; instead, they had to buy the rights from producers. Since 1995, they have been developing and producing their own programs. Typically, a 30-minute sitcom costs \$1 million an episode to produce, and an hour-long drama costs \$2.2 million per episode. By the fall of 2003, 77% of all prime-time shows were owned by the six major television networks (James, 2003a).

Concentration in station ownership was initially limited by FCC regulations, which restricted ownership to 7 television stations, but this limit was raised to 12 stations in the 1980s and now has been raised even more. By 1995, 75% of all TV stations in the top 100 markets were licensed to multiple owners. About one quarter of these were owned by publishers of newspapers, but it is rare for a newspaper and TV station in the same market to be owned by the same company. In total, there are 210 groups that own more than 1 TV station. Twelve of these groups own 10 or more stations each (Howard, 1995).

In the 1990s, broadcast television was in the latter days of its peak. It still had a higher reach than any other medium: TV was 88%; radio, 71%; newspapers, 56%; and magazines, 34%. There were about 1,600 broadcast television stations, and they generated revenue of more than \$21 billion each year.

Decline

Broadcast television is now in decline. The networks and stations are losing viewership. Until the late 1970s, over half of all households watched television during prime time, and the three big television networks commanded a combined share of 95—that is, 95% of the television viewing audience at any given time was tuned into one of the three broadcast networks. By 2011, the combined share of the then four major networks (ABC, CBS, NBC, and Fox) dropped to about 22 (Fitzgerald, 2011). The reason for the drop is not that people are watching less TV; in fact, they are watching more than ever. The reason is that now people have so many alternatives to network TV—hundreds of cable stations as well as all kinds of video-on-demand programming.

The survival of broadcast TV programs had always depended on reaching a large audience, which used to mean that a series had to consistently attract at least 15% of the population for each episode. Now the highest rated television series do not attract more than 4% of the population.

Current Profile

As the broadcast TV industry continues to adapt to the competition from cable TV and the Internet, it remains successful. Annual revenues keep increasing, although modestly to \$53 billion in 2012 (Grotticelli, 2012).

Because audiences for broadcast programming have been shrinking steadily over the

past few decades, broadcasters have had to abandon their strategy of trying to attract a large, heterogeneous audience and focus instead on attracting smaller niche audiences. No longer do mass audiences stay in front of their sets for appointment TV viewing. Now viewership is growing during the daylight hours due to video streaming to portable devices like iPods and smartphones along with office computers and laptops. This also has implications for programming principles because the audience is fragmenting by time. The TV networks will have to go to cheaper programs such as reality and game shows because no one can afford 3 hours of expensive programming every night (Roberts, 2006b).

In response to current challenges, broadcast television networks and stations have moved into HDTV quality picture and also made much of their programming available on websites so as to increase viewership of their programs. They also continue to bid high fees to get the rights to broadcast programs that appeal to larger audiences, such as certain sporting events, awards shows, and the like. 3-D technology may be appealing on TV as well. Satellite broadcaster DIRECTV launched HD, 3-D channels as well as video-on-demand 3-D content, but had to scale back its plans for a 24-hour channel due to lack of content in 2012. TV manufacturers unveiled new 3-D flat screen sets in early 2010; however, sales have been disappointing ever since. Meanwhile, more and more television sets are Internet-enabled, meaning viewers are able to connect directly to entertainment options on the Internet. This brings up an important question: Where will TV viewers of the future get their programming? Cable and satellite subscriptions are expensive. Broadcast TV is free, as is a lot of Internet-based programming, although online content is likely to become supported by subscription more and more. At the same time, online streaming of movies and

television shows is now mainstream, led by technology at Netflix. Netflix features entire seasons of television shows, allowing consumers to “binge-watch” shows continuously rather than waiting for shows to premier each week. While services such as Netflix have traditionally delivered content produced by other companies, in 2013 Netflix began streaming original content. Netflix produced the fourth season of *Arrested Development* (a series that had been canceled by Fox in 2006), the political drama *House of Cards*, and the comedy-drama *Orange Is the New Black*. Netflix has created a binge-watching culture. In line with this culture, Netflix releases entire seasons of its original programming to subscribers all at once. Hulu and Netflix allow consumers more flexibility in what, when, and how they watch television. Consumers have been dropping their paid TV subscriptions in large numbers, opting to watch free or low-cost programming on sites such as Hulu while dramatically impacting revenues at cable and satellite TV companies (Plunkett Research, 2013). In 2015, Netflix grew to 57.4 million subscribers (Gensler, 2015). From 2014 to 2015, Hulu doubled its subscriptions, reaching 9 million subscribers (Kastrenakes, 2015).

In 2014, 285 million viewers engaged with traditional television while 181 million viewers watched time-shifted television. Additionally, 146 million viewers watched video on the Internet and 122 million watched video from their smartphones (Nielsen, 2015).

8. CABLE TELEVISION

Innovation Stage

Cable television began in 1948 as a re-transmission service, that is, as a means of delivering television signals to areas unable to receive broadcast signals because of distance or interference. Until the 1950s, cable systems were

quite small; each had a few hundred homes as subscribers and carried only three to four broadcast signals from the closest stations. They were generally confined to mountainous areas, where people living in valleys had little or no broadcast TV reception.

The ownership of a cable system was typically a small local company often in some related primary line of business, such as selling TV receivers. They were marginally successful as businesses. By 1952, there were only 70 systems, and they served a combined total of 14,000 subscribers, which represented less than 0.1 % of all television households at the time. Growth was slow. Not until the late 1950s was 1 % of television households reached by cable.

Penetration Stage

By 1960, there were 640 systems with a total of 650,000 subscribers, which was 1.4 % of all households, for an average of 1,016 subscribers per system.

By the mid-1960s, cable began expanding into areas that already received clear broadcasting signals without help, such as the urban areas of Los Angeles and New York City. Also, cable systems began adding channels to make their service more attractive to potential subscribers. In 1970, 3 % of the systems offered more than 12 channels, and by 1976, 26 % of the systems did. By the late 1960s, some cable systems were even originating programming on their own.

Cable systems are treated as natural monopolies, like utilities such as electricity and water companies. They are franchised on the local level and must therefore meet the requirements of the local community, such as time requirements for wiring the community, control of rates, and profit margins. Entry is controlled by economic cost, which requires capital-intensive construction and franchise

requirements. However, once entry is achieved, the system typically has sole rights to the market for 10 to 15 years, and during that time it is a monopoly.

In the early years of cable, broadcasters welcomed cable systems as a means of extending their broadcast viewership into areas their signal could not reach. Cable systems then began using microwave relays to bring in more distant signals, such as broadcast stations from faraway markets and also signals from some superstations such as WTBS in Atlanta and WGN from Chicago. These new channels were in direct competition with local broadcasters, and the local broadcasters began resenting cable systems. Broadcasters began complaining that cable was receiving payment from subscribers but not giving any money to broadcasters that originated and paid for the production of the programs. Cable systems were no longer viewed by broadcasters as an expander of audiences but as direct competition. In 1962, the FCC began to regulate the selection of programming on cable systems. The FCC decided to allow cable systems to continue to use microwave relays and bring in distant signals. But if a cable system did this, it would also have to carry all the local signals; that is, it could not ignore a local broadcast affiliate and instead bring in a station in another market in its place. During the next decade, many other regulations were added, until 1972, when a period of deregulation began.

By 1985, there were 6,600 systems serving a total of 32 million subscribers, which represented 37.7 % of all television households. The 50 % penetration mark was reached in early 1988.

Peak Stage

Cable television is now in the peak stage. By 1992, cable revenue had surpassed broadcast

TV for the first time, with total revenues of more than \$21 billion from a combination of subscriber fees and advertising. Subscription revenues are now about \$25 billion per year, and ad revenues bring in another \$4 billion. Then in 2001, the cable TV share of the viewing audience exceeded that of broadcast TV for the first time.

The number of multiple system operators (MSOs) is growing, and some of the larger ones rival the commercial television networks in terms of the size of the audience controlled through programming.

The cable industry is taking steps to secure its position as the peak mass medium by heading off future challenges by computers. The cable TV industry has linked some computer technology with its existing services to offer what is called Smart TV. Smart TV is a collection of three types of services. First, there is Interactive TV, which allows viewers to interact with the shows they are watching. Second, there is Internet TV, which lets viewers use their sets to access the Internet. Third, there is Personalized TV, which acts like a VCR.

Current Profile

The cable TV industry now includes about 1,200 companies and employs over 130,000 people in its production, distribution, and exhibition sectors. There are 565 cable networks, such as ESPN, BET, Bravo, MTV, Syfy, TBS, USA Network, and Family Channel. The total revenue is now about \$94 billion a year, \$27 billion of which comes from advertising and the rest from subscriptions and fees (National Cable & Television Association, 2010).

There are no ownership limits on MSO size. In the past 30 years, the major MSOs have continued to consolidate so as to build efficient clusters. The top five MSOs control 73 % of all American cable households, up from a 38 % share in 1993.

There are signs that the cable TV industry may be entering a decline as it finds stronger and stronger competition from satellite TV and Internet. Viewership slid from a peak of 3 hours per person per day in 2009 down to 2 hours and 36 minutes per day in 2012 (“Daily Time Spent Watching Cable,” 2015). Cable TV’s biggest competitor is DBS (Direct Broadcast Satellite), which now takes about one quarter of the multi-channel video distribution market, with cable TV taking the other three quarters. Also, websites that provide many cable programs are creating serious competition for audiences.

Changes in viewing habits have prompted premium cable-subscription channels to adapt, too. Traditionally, channels such as HBO and Showtime were available only to consumers who paid for both a basic and premium cable subscription. While shows produced for premium channels remain popular, many consumers have dropped their cable television subscriptions. In 2015, HBO began offering HBO NOW, a monthly subscription service that provides access to HBO programming without a cable subscription. Showtime began offering a stand-alone streaming service in 2015.

9. INTERNET

Innovation Stage

The key innovations that are responsible for the Internet becoming a mass medium are the affordable personal computer and other mobile devices, the digitization of information, easy-to-use software, and the Internet’s interactive nature.

The computer as we know it was invented in the 1940s. ENIAC (Electronic Numerical Integrator and Calculator) weighed 30 tons and was several hundred times less powerful than the typical desktop computer of today. The first

computers were very large, slow, and expensive. They were also energy hogs. Only the government and large businesses could afford to buy and use one until the 1980s, when relatively low-cost desktop personal computers began to be marketed.

Another important innovation was the digitization of information; that is, all bits of information were reduced to a binary code. This digitization allowed for fast computations, and it also led to seamless sharing of information of all forms (data, words, sound, pictures, video, etc.) across all media.

The Internet is a network of computer networks designed to move information around among users. It has no centralized controlling body or mechanism. It was originally set up by the U.S. Department of Defense in 1969 in such a decentralized structure so as to make it resistant to breakdown by attack. A bit of information sent across the country has many alternative paths it can take, so if one path is blocked (or down), the information can take one of the other many alternatives and arrive just as quickly. Initially, the Internet was composed of computers owned by the U.S. government and universities across the country. Since that time, many other networks from all over the world have attached themselves to the Internet. Since 1975, its cost has been supported by the National Science Foundation, but now that responsibility is being turned over to businesses that want to use the Internet to advertise their products and services.

Now, anyone with a computer device (laptop, smartphone, etc.) can get access to the Internet through Internet service providers linked by wires, Wi-Fi, or Bluetooth. Once on the Internet, people can cruise around the hundreds of millions of websites, send e-mail to specific people, post messages on bulletin boards, enter chat rooms where interactive conversations take place on a particular topic, play games, and download information,

images, or software that others have made available. These services have become very popular and are constantly attracting new audience members.

The Internet is a fundamentally different type of medium from everything that came before. All media up to this point were channels to deliver messages from senders. Now, with a computerized device, each of us can use this medium not only to access the messages of others but also to create and disseminate our own messages. We can send those messages to one particular person or make them publically available to anyone on an open website where millions of people can come and visit your messages and even download them to their own computers.

Penetration Stage

The Internet is well into the penetration stage as computer use and connectivity to the Internet is now widespread. By the mid-1990s, there were 40 million personal computers in homes, and half of all home computers had a CD player (Maney, 1995). Every minute, 40 novices were logging on to the Internet for the first time. Every year, the number of users was doubling and had climbed to 40 million users worldwide by the mid-1990s. About 26% of adults in the United States (or 51 million people) had access to the Internet (Bimber, 1996). A new corporate or academic network was being added every 10 minutes. There were already 100,000 networks linked (Simons, 1996). More than 97% of U.S. schools had computers—one for every 11 students, which is up from one computer for every 63 students just 10 years earlier (Intelligence Infocorp, 1996). The World Wide Web became a popular part of the Internet. Any user can create his or her own Web page, which is usually a billboard with graphics. Many businesses created Web pages to display their services. The Internet

became a really commercial medium. In 1995, only about \$50 million was spent for online advertising in the United States out of a total of \$120 billion spent on all advertising across all media. In 2004, it was projected to be \$24 billion. Also, in the United States, e-commerce was about \$500 billion in 2000 and was projected to be seven times that by 2004 (Albarran, 2002). This includes business to business (B2B), business to consumers (B2C), and consumer to consumer (C2C).

This new industry was taking people and money away from other media. A 1998 survey reported that only 38% of young people had read the newspaper the day before, whereas 69% of seniors had. Those younger than age 30 were the heaviest users of Internet news sources (Pew Research Center, 1998). Newspapers had been losing readership, so they have been adapting to the Internet. An early adapter was the *San Jose Mercury News*, which began providing news summaries on America Online in 1994. It then created its own website and provided the full-text copy of its editions there, first free then for a fee (Dizard, 2000). Satisfaction with TV was declining among children. In 1970, 38% of sixth graders said they learned a lot most of the time when they watched TV; by 1999, the figure had dropped to 29%. Furthermore, when asked which one medium they would prefer to have if they could have only one, only 13% of children said TV, whereas 33% picked computers (Rideout, Foehr, Roberts, & Brodie, 1999). Some bookstores created a strong presence on the Internet to capture a slice of the \$3 billion annual market in college textbooks. Some sites advertised discounts of up to 40%. However, those who conducted systematic comparisons concluded that college bookstores offer prices just as low as—if not lower, on average than—the prices offered by e-bookstores (Terrell, 1999). By 1997, the Knight Ridder news service had 32 websites but was losing money. The cost of the websites was

\$27 million, whereas the revenue from them was only \$11 million. However, the company saw this as an investment that would pay off in the long run when more consumers log on to its sites to get their news (Dizard, 2000). Lin and Jeffres (2001) found that each medium (newspaper, radio station, and television station) had a relatively distinctive content emphasis in their websites, reflecting their strength of the primary medium. Radio stations were using the Web to complement their programming and promote their stations (Potter, 2002).

By 2000, 49% of America's households had a computer, and 89% of those computer households had a modem. Overall, 32% of America's households were considered frequent Internet users (Dizard, 2000). The primary reasons for going online were to get news/information and to use e-mail.

Three components were establishing themselves in the computer media industry. Each created its own stream of revenue. First, there was the hardware component of PCs and peripherals. This accounted for about \$100 billion per year. Second, there was software, which had sales of \$86 billion in 1995. Then there was online services, which accounted for about \$1 billion per year and were growing at an annual rate of 27% (Standard & Poor's, 1996, p. C102). Profit margins were running about 20% to 25% annually on software and about 10% to 15% on hardware (Standard & Poor's, 1996, p. C127). In 1999, the computer hardware sector of the industry accounted for \$229.2 billion in revenue, and the software sector accounted for an additional \$199.3 billion (U.S. Census Bureau, 2000).

Current Profile

The size of the World Wide Web has grown to about 48.1 billion indexed web pages (WorldWideWebSize.com, 2015). There are now 2.4 billion regular users of the Internet,

which is more than one third of the population of the planet. In the United States alone, 80% of all people are regular Internet users and 30% of them are considering dropping their cable access (Kleinman, 2013). This indicates that large numbers of people are shifting away from the more traditional way of accessing news and entertainment to a new way where they control their access more.

There is a lot of activity within this industry as it moves through the penetration stage and toward a peak. The major issues worth exploring in detail are new platforms, interactive media, creative commons, need for social networking, attraction of advertising support, and the growth of video games.

New Platforms. The competition among entertainment delivery platforms has intensified; all sectors face daunting challenges from alternative delivery methods. For example, online radio firm Pandora is disrupting the traditional radio industry. Another example: Telecommunications companies such as AT&T and Verizon are now delivering television programming to the home via ultra-high-speed Internet connections, battling cable and satellite TV firms for market share.

Today, electronic offerings such as advanced smartphones, digital video recorders (DVRs), video-on-demand (VOD), and digital music players have vastly altered the way consumers enjoy entertainment. People watch and listen according to their own desires and whims. Miss the finale to a favorite television show? Watch it online later, or plan in advance to record it to watch later. Interested in only one track from a recording artist's new album? Buy and download just the one song via Apple's iTunes. Love a prime-time drama on a major network but hate commercials? Skip over the commercials with a DVR (Plunkett Research, 2013).

The implications of these changes are staggering. The business models that most entertainment companies have traditionally used

are becoming obsolete. Revenue from traditional advertising is declining while revenue from subscription-based business models is increasing. Online advertising is growing very fast. Television programming schedules are losing relevance while electronic program guides are becoming more and more vital. Printed books are slipping in market share while e-books are soaring. The giant U.S. bookstore chain Borders closed its doors in 2011. Traditional media are losing share while newer digital media are becoming the norm. Entertainment and publishing companies are being forced to evolve in order to deal with new technologies and new demands from consumers.

Rapid changes in viewing habits are occurring. Network TV news, radio news, and newspapers all find that they have to compete fiercely against Internet-based options. A large portion of sports programming has migrated away from “free” broadcasts on TV and onto paid cable channels and pay-per-view systems, and many of the most popular TV shows are found on cable only.

Meanwhile, platforms and delivery methods are evolving quickly. Smartphones are now used more and more for entertainment purposes, including games, videos, and TV-like programming. Game machines are going multipurpose with the ability to connect to the Internet. Broadband to the home has matured into a true mass-market medium, while wireless broadband systems such as Wi-Fi are enhancing the mobility of entertainment and media access. A serious evolution of access and delivery methods will continue at a rapid-fire pace, and media companies will be forced to be more nimble than ever. Mobile TV is taking a large step forward thanks to new technologies and platforms that provide programming to cell phones, tablets, laptops, and other mobile devices. Hundreds of local broadcasters in the United States have joined in such

an effort, called Open Mobile Video Coalition (Plunkett Research, 2013).

Recommendation software that learns the habits and tastes of consumers will evolve and will do a better job of pushing appropriate entertainment choices toward audiences. Amazon has long been a leader in the use of such software. Netflix and Apple’s iTunes are also very sophisticated in recommending content to customers.

Apple launched its innovative mobile tablet-style entertainment device, personal computer and e-book reader, the iPad, in the spring of 2010. Sales have been outstanding. The rapidly growing variety of mobile entertainment, games and media “apps” available for smartphones and tablets is further revolutionizing the industry. New platforms evolve quickly as consumers seek greater control over media searches. The global audience for all these devices and services is growing globally, thanks to emerging middle classes in developing nations as well as the booming spread of cellphones and internet access (Plunkett Research, 2013).

Interactive Media. The internet allows for the construction of interactive platforms where users not only access messages provided by others but can also create their own messages. Interactive platforms have set off a trend of convergence, which has been a powerful force over the past two decades and it continues to get even more powerful. This convergence is both technological and psychological.

Technological convergence refers to the way that recent technological developments, particularly digitization of messages, has made it possible for content to move seamlessly across channels of communication, such that all channels have converged in their ability to present the same content. This technological convergence has led to a change in the role of audiences from being passive receivers of fully formed messages produced by the media and

into active receivers who interact with messages in an interactive fashion like being in a two-way conversation with the media and with other audience members. This audience change suggests a *psychological convergence* where audience members can break down the previous barriers between them and the mass media organizations and also between themselves and other audience members who were separated from them by geography or societal constraints. These ideas of convergence first arose in 1990 when Nicholas Negroponte published the best-selling book *Being Digital* in which he characterized the media up until that time as forcing the audience into a passive role; that is, people had to accept the messages as they were presented. While audiences could re-interpret the meaning of the messages, they could not change the messages themselves, nor could they interact with those messages. But gradually with the digitization of information, the old media were replaced by interactive new media. Negroponte took his argument in a technological direction showing how the interactive features of the newer media would attract audiences away from the older media and force those media organizations to adapt, because audience members could respond to messages much like in a conversation and this made audiences much more active; this required the rethinking of audience composition and audience motives. Also, people could take bits from many different messages and mash them together to form their own messages; this required the rethinking of the creative process, the nature of messages, and the ownership of those messages.

Convergence also has a profound psychological impact. For example, Jenkins (2006) argues that “convergence occurs within the brains of individual consumers and through their social interactions with others” (p. 3) and therefore it should be examined as a cultural shift rather than as merely a technological one.

Thus technological convergence forces people to think about themselves, their needs, and their place in society in a different way. With social networks, it is now much easier for people to converge with others and build networks that were not possible before.

Creative Commons. In *Viral Spiral: How the Commoners Built a Digital Republic of Their Own*, David Bollier (2008) explains that the Internet was initially designed as a creative commons where there is a great deal of sharing of resources for the common good. With free software in the 1980s and the rise of the World Wide Web in the 1990s, the Internet was created and is still maintained as an open source network that allows all people to interact freely in a wide variety of ways.

The term **viral spiral** means that the Internet provides for an upward spiral of innovation because of its open networking structure. By giving all people free access to ideas, the creators of those ideas can easily disseminate them widely and allow others to build on those ideas and extend them in creative ways. Threads of thinking radiate dynamically through countless nodes and influence all kinds of people in all kinds of ways to work collaboratively. Thus the Internet has been able to avoid the costly overhead that comes with centralized production and marketing and replaced it with a wide dispersion of vitality throughout the social commons. Therefore change is not planned, ordered, or mechanical; rather change is messy and serendipitous.

When the Internet is preserved as a “commons,” it allows all kinds of people to gather around an incredibly wide range of interests. People who cluster around a particular topic create a virtual community that is created and maintained by the collective of people with special regard for equitable access, use, and sustainability. The commons “is a means by which individuals can band together with

like-minded souls and express a sovereignty of their own” (Bollier, 2008, p. 4).

This idea of a shared commons is more evident in the so-called Web 2.0 companies. Coined in 2004 by technology industry veteran Tim O’Reilly, the term **Web 2.0** had a complicated meaning. At one level it was a catchall phrase for a generation of Internet companies such as Google, Microsoft, and YouTube, to distinguish them from the older Internet companies (**Web 1.0**) of Yahoo, AOL, and Netscape. Web 2.0 also referred to companies that use the Web as a platform; that is, they built technology to run on the Web the way that software companies like Microsoft built programs to run on operating systems such as Windows (Angwin, 2009, p. 214). But for many, the key idea of Web 2.0 is a perspective about the Internet that fosters a social dynamic where people have the freedom to share their work through all sorts of open websites. People are free to access all these sites, use what they want, create their own messages, and make their messages available to anyone. The easy availability of these collective resources celebrates open participation, and this results in an enormous increase in creative activity.

Need for Social Networking. There is a strong need among humans for **social networking** so they can experience social contact with other humans. This is why humans have created families, groups, organizations, and social institutions. Now with the widespread availability of the Internet, humans have a new tool to establish human contact and build ever larger networks.

Anthropologists who have studied all sorts of groups of people typically have found that as groups grow in size up to about 150 people, they can remain stable because the members can still achieve an acceptable degree of contact with one another, but that above this size, the group becomes unstable. However, with

the Internet and social networking sites, users can create networks of almost unlimited size. While many users of Internet sites create very large social networks, the average user builds a core network of only about 7 to 10 friends (Wolk, 2009).

The Internet allows people to not only maintain their strong ties with important people but also create a large network of weak social ties. Strong ties are the close relationships we have with the friends and family members who are the most important to us. Weak ties are the acquaintances we make. These weak ties are also highly valuable, because they open users up to new information and connect them with people who can give them expanded opportunities for jobs, hobbies, and so on.

Attraction of Advertising Support. Many of these interactive sites do not charge users a fee to use them, so they must support themselves through the selling of advertising. The largest of these sites have been very successful in attracting advertisers who want to appeal to their particular audiences. Over the past decade, advertising money has been shifting from the older media into the Internet. From 2002 to 2006 U.S. advertisers increased Internet advertising from \$6 billion to almost \$16 billion (Angwin, 2009, p. 238), and by 2014 it had reached nearly \$50 billion (Internet Advertising Revenue Report, 2015).

Growth of Video Games. The innovation stage for interactive media games began in the 1950s with the use of early mainframe computers being programmed for simple games such as tennis and tic-tac-toe. Electronic media games shifted into the penetration stage in the early 1970s when game consoles were marketed to the broad consumer market. The first commercial home video game

systems were launched in 1972 by Magnavox with its Odyssey game and by Atari with its game of Pong. Both of these were console systems where consumers had to buy a piece of hardware with controls. Players hooked the console up to their television sets and manipulated handheld controls to play the game that appeared on their television screens. Throughout the 1970s, these companies marketed other games in the form of software that could be plugged into their consoles. The most popular among these games were Space Invaders, Zork, Pacman, Asteroids, and Battlezone. These companies also created arcade versions of their games to grow the interest in their games. By 1981, arcade video games were bringing in \$5 billion in the United States and another billion was spent on home video gaming systems (Kirriemuir, 2006).

When IBM introduced the first desktop personal computer in 1981, video gaming took off with games such as Flight Simulator. People who bought a computer could use it as a console to play games on their screens when they bought the game software. Gaming consoles and their games also continued to sell well, attracting new gaming companies such as Nintendo with games like Super Mario Brothers.

Electronic gaming has shown steady growth for the past several decades and has evolved into an industry with three components that are distinguished by their delivery systems. The three components of digital gaming are TV console, handheld devices, and personal computers.

The TV console market is dominated by three companies: Sony, Microsoft, and Nintendo. Sony markets its PlayStation console. Sony's most popular games are Grand Theft Auto, Madden Football, and Gran Turismo. Microsoft has its Xbox consoles and markets games such as Halo. Nintendo sells its GameCube consoles that play its Mario and

Zelda games along with its Resident Evil series of games. The state of the art now is Nintendo's Wii U, which was introduced in November 2012. As an eighth-generation console, the Wii primarily competes with Microsoft's Xbox One and Sony's PlayStation 4. A distinguishing feature of the console is its wireless controller, the Wii Remote, which can be used as a handheld pointing device and detects movement in three dimensions. Another distinctive feature of the console is WiiConnect24, which enables it to receive messages and updates over the Internet while in standby mode. In 2011, Nintendo introduced Wii U, which has a controller with an embedded touch screen and produces 1080p high-definition graphics.

Electronic games continued growing throughout the penetration stage as companies developed more platforms and games to attract more and more audiences. Now cell phones also offer games that people can play by themselves or to connect to other players and compete with them (Kirriemuir, 2006). Indeed, the number of smartphone gamers has surpassed the number of gamers who use handheld devices, with 960 million gamers now playing on smartphones and mobile devices (Entertainment Software Association, 2015b). The top devices that most frequent gamers use to play games are personal computers (62%), dedicated game consoles (56%), smartphone (35%), wireless devices (31%), and dedicated handheld systems (21%; Entertainment Software Association, 2015b).

As electronic games have penetrated the culture, critics have speculated about their negative effects, especially on children. In response to this criticism, the video game industry established the Entertainment Software Ratings Board (ESRB) in 1994 to rate all games. The ESRB created an age-based system consisting of five levels of ratings: EC for Early Childhood (ages 3 and up), E for everyone (ages 6 and up), T for Teen (ages 13 and

up), M for Mature (ages 17 and up), and AO for Adults Only (ages 18 and up). However, researchers have found that the ratings have been poorly enforced. One study showed that 69% of children under the age of 17 were able to buy M-rated games (Meehan, 2004). Furthermore, 87% of boys and 46% of girls played M-rated games.

For the past 25 years, growth of digital games has been about 7% in a typical year. However, when a company introduces a new innovation, such as a new platform, growth can spike 20% in that one year. Globally, the gaming industry generated \$81.5 billion in revenue worldwide (Ohannessian, 2015). The gaming industry in the United States generated \$22.4 billion in revenue. This revenue is broken down into \$15.4 billion in game sales, \$5.1 in hardware sales and \$1.9 billion in sales of game accessories (Entertainment Software Association, 2015a).

Like all the other media, electronic game companies increase their overall income by developing multiple revenue streams. For example, Blizzard Software, the maker of World of Warcraft, has made more than \$300 million thus far from its multiple revenue streams, which include selling software, monthly access fees, merchandising (T-shirts, jackets, hats, and a non-digital board game), seven novels based on its games, and now a movie deal (Levy, 2006).

There is a good deal of vertical integration in the digital game industry. That means a company who owns the platform also develops the games and distributes them. The industry is controlled by Sony, Nintendo, and Microsoft, with about 20 independent publishers of games. Small independents are usually bought up by the larger companies, thus

increasing vertical integration (Kerr, 2006). Most publishers of games own their own distribution channels. When you buy a game at a retail store, about 30% of price goes to the retailer, 40% to the game developer/publisher, and 20% to the company that produced the hardware on which the game is played (Kerr, 2006). Some firms are producers of the games; some are publishers that manufacture the discs and distribute them through stores; some are operators of the games (control the servers and maintain the play). But the large companies perform all these functions (Sony, Electronic Arts, Mythic Entertainment, Disney).

According to data released by the NPD Group, a global market research company, the video game industry posted strong sales in 2011, generating nearly \$25 billion in revenue. Sales of game software and content, including games made for consoles, portable gaming devices and PCs, as well as digital full-game downloads, downloadable content, and social games, accounted for approximately \$16.6 billion of that total. The most popular video game genre in 2013 was strategy, while action was the most popular computer game genre, accounting for 28% of all games sold (Entertainment Software Association, 2015a).

The entertainment software industry also continues to grow as a source of employment. For the 5-year period of 2009–2014, direct employment for the industry grew at an annual rate of 10%. Currently, computer and video game companies directly and indirectly employ more than 146,000 people in 36 states. The average salary for direct employees is \$94,747, resulting in total national compensation of \$4 billion (Entertainment Software Association, 2015a).

