Piper strategy would prevail and that they themselves would soon enough be dancing to his tune.

The New System

February 29, 2004. A very different elite made their way along the red carpet into the newly built Kodak Theater for the seventy-sixth presentation of the Oscars. Many of the stars were now paid representatives for fashion and cosmetic companies, walking product placements for a worldwide broadcast that Hollywood publicists claimed, with their usual hyperbole, would reach 1 billion viewers. (In fact, according to the Nielsen rating, the event was seen that night in 43.5 million homes.) The lobby through which they passed contained a gauntlet of five-foot-high sepia-tinted photographs of stars—including Grace Kelly, Jack Nicholson, Marlon Brando, Halle Berry, Tom Hanks, and Julia Roberts—mounted on Plexiglas panels that hung in front of beaded white walls designed to suggest an old-time movie screen. These outsized images, like almost everything else in the meticulously planned ceremony, memorialized the past glory of Hollywood. Not that the glory of the present was being ignored—the auditorium itself had been specially outfitted to accommodate thirty-six strategically placed television cameras.

Although outwardly much of the 2004 awards ceremony seemed to resemble its predecessors from the days of the studio system—the statuettes, the celebrity presenters opening sealed envelopes, the acceptance speeches, the special awards, the self-deprecating jokes by the master of ceremonies—Hollywood was now a very different place, operating according to a very different logic. The physical plants of the great Hollywood studios, with their soundstages and back lots, still existed in somewhat diminished form, and most of the studios still bore the same names and logos, such as Paramount's mountain peak, Universal's globe, and Fox's searchlights. But beneath their outward appearance, they were radically different enterprises. They were now international corporate empires, with their shares traded on stock exchanges in New York, Tokyo, and Sydney and their debt managed by global banking syndicates. Movies now were just one of their many businesses.

Columbia Pictures was now owned by the Sony Corporation, a Japanese electronics conglomerate that manufactured everything from com-

puters to PlayStations and owned music, television-broadcasting, and insurance companies. Sony also owned TriStar Productions, CBS Records, and the studio in Culver City once owned by MGM. (In 2004, it would gain control of MGM itself—and its film library.)

The Warner Bros. studio was now owned by Time Warner, a giant conglomerate that contained the Internet assets of America Online; the media assets of Time, Inc., which included HBO; the cable and entertainment assets of Turner Entertainment, which included New Line Cinema; and the movie, television, and music assets of Warner Communications.

The Fox studio was now owned by News Corporation, an Australia-based media company whose properties included newspapers, magazines, a television network, cable networks, and satellite broadcasting in Europe, North America, South America, and Asia.

The Universal studio was now owned by General Electric, America's largest industrial company, in partnership with Vivendi Entertainment, a huge French conglomerate. Its properties included the NBC television network, the USA cable networks, USA Films, and the Universal theme parks.

The Paramount and RKO studios were now both owned by Viacom International, a media company that owned the CBS and UPN television networks; MTV, Nickelodeon and other cable networks; Blockbuster video stores; the Infinity radio networks; and Viacom Outdoor Advertising billboards.

And the Walt Disney animation studio had grown into the Walt Disney Company. It now owned—with its $19 billion acquisition in 1996 of CapitalCities/ABC Corporation—a television network, a radio network, cable networks, theme parks, cruise ships, and other assets, all of which made it, as its then-chairman Michael Eisner once put it, "a true full-service entertainment enterprise . . . in the vast entertainment firmament."

Despite the differences among them, the six entertainment giants still had three fundamental things in common.

First, whereas in the days of the studio system making movies for theaters had been the one and only business of studios, the movie business itself was now a relatively unimportant part of each conglomerate's financial picture. Even when all the earnings from movies' theatrical re-

leases, video and DVD sales, and television licensing—both domestic and international—were included in their movie businesses, they accounted for only a small part of each company's total earnings. In 2003 Viacom earned 7 percent of its total income from its movie business; Sony, 19 percent; Disney, 21 percent; News Corporation, 19 percent; Time Warner, 18 percent; and General Electric, if it had counted Universal Pictures as part of its conglomerate that year, less than 2 percent. So while the film business may have held great social, political, or strategic significance to each company, it was no longer the principal way any of them made their money.

Second, unlike their predecessors, who made their profits at the box office, all six companies now routinely lost money on theatrical release (or, as it is now called, "current production"). Consider, for example, the Disney film *Gone in 60 Seconds.* Although a not-otherwise-memorable car-theft movie starring Nicolas Cage, it had been singled out for its commercial success by Disney chairman Michael Eisner in the company's 2000 annual report, where it was described as one the company's biggest "hits." As far as the public—and shareholders—knew, the movie's impressive-sounding worldwide box-office gross of $242 million amounted to an immense profit. But the company's confidential financial statements, issued semiannually to the movie's profit participants over the next four years, tell a different story.

Disney paid $103.3 million to physically produce the movie—the so-called negative cost. Then, just to get the film physically into theaters in America and abroad, it had to pay another $23.2 million—$13 million for prints and $10.2 million for the insurance, local taxes, customs clearances, reediting for censors, and shipping fees. Next Disney spent $67.4 million on advertising worldwide. Finally, it had to pay $12.6 million in "residual fees" in accordance with agreements it had with various guilds and unions. Altogether, then, it cost the studio $206.5 million to get this film—and its audiences—into the theaters.

The so-called gross—a figure authoritatively reported in the media as if it was the amount a movie earned for its studio—also proved elusive. Most of the $242 million collected at the box offices never made it to Disney's coffers. Theaters kept $139.8 million. Disney's distribution arms—Buena Vista and Buena Vista International—collected only $102.2 million for a film on which it had spent $206.5 million. And this calculation does not include Disney's cost in paying its own employees in its production, distribution, and marketing arms or the interest on the millions it had laid out. When this overhead ($17.2 million) and interest ($41.8 million) were included, the loss on the theatrical release of this "hit" was over $160 million by 2003.

Nor was *Gone in 60 Seconds* an aberration. In 2003, a relatively good year, the six studios lost money on the worldwide theatrical release of most of their titles, or their current production. These losses stemmed not from malfeasance, mismanagement, or flawed decisions about the content of the films but from the economic realities of the new era.

The massive moviegoing audience that had nurtured the studio system simply no longer exists. In contrast to the 4.7 billion movie tickets sold in America in 1947, there were only 1.57 billion tickets sold in 2003. So, even though the population had almost doubled, movie theaters sold 3.1 billion fewer tickets than they had in 1947. Television, as well as other diversions, had so reduced the audience that less than 12 percent of the population bought a ticket in an average week. And the six studios could not count on getting even this small fraction of its former audience. To settle the federal antitrust suits in 1949, they had sold their own theaters and discontinued their block-booking contracts with the independent theaters. As a consequence, they had lost control over what was shown in theaters. The theater owners, not the studio heads, now decide which films to show and for how long. And the theater owners no longer restrict their bookings to only major studio releases. So the six studios now have to compete with studioless studios (such as MGM, DreamWorks, and Artisan Entertainment), as well as other independent filmmakers, for the desirable times and screens at the multiplexes. Indeed, the six major studios, including their subsidiaries, accounted for less than half of the 473 films released in the United States in 2003. As a result, their take from the American box office totaled only about $3.23 billion.

Just as in the old days, studios still have to pay the distribution expenses on their films. But now they also have to create a new audience for each and every movie. This requires creating and paying for intensive television advertising as well as making enough prints for simultaneous openings in thousands of theaters to take advantage of that advertising. In 2003, just the prints required for the opening of a studio film cost, on average, $4.2 million. The advertising averaged another $34.8 million a

title. But while the studios spent an average of $39 million per film just to get audiences and prints into American theaters, they recovered from the box office only $20.6 million on average per film. So in 2003 they wound up paying more to alert potential moviegoers and supply theaters with prints for an opening than they were getting back from those who bought tickets. (The story was similar with overseas theaters, for which, in addition to prints and advertising, the studios had to pay the cost of dubbing and additional editing to tailor the films to foreign audiences.) These new marketing costs had grown so large by 2003 that even if the studios had somehow managed to obtain all their movies for free, they would still have lost money on their American releases.

But studios, of course, did *not* make these movies for free. And, to make matters far worse, the costs of producing a film have also risen astronomically. At the end of the studio-system era, in 1947, the cost of producing an average studio film, or negative cost, was $732,000. In 2003 it was $63.8 million. To be sure, the dollar had decreased in value sevenfold between 1947 and 2003, but even after correcting for inflation, the cost of producing films had increased more than sixteen times since the collapse of the studio system.

Part of the studios' cost problem is the result of stars being freed from their control. Instead of being tethered to studios by seven-year contracts, stars are now auctioned off—with the help of savvy agents—to the highest bidder for each film. Since there are fewer desirable stars than film projects, they can command eight-digit fees. By 2003, the top stars were getting not only between $20 and $30 million a film in fixed compensation and perks but a percentage of the film's total revenue after repaying cash outlays.

For example, Arnold Schwarzenegger received, according to his contract, a $29.25 million fixed fee for his role in the 2003 film *Terminator 3: Rise of the Machines*, as well as a $1.5 million perk package that included private jets, a fully equipped gym trailer, three-bedroom deluxe suites on locations, round-the-clock limousines, and personal bodyguards. In addition, once the film reached its cash break-even point, his contract guaranteed him 20 percent of the gross receipts from all sources worldwide (including video, DVD, theatrical box office, television, and licensing). Under any scenario—whether the film failed, broke even, or made a profit—the star was assured of making more money than the studio itself. In this new era, stars, not studios, reap the profit their brand names bring to a film.

In 2003 the six studios—Paramount, Fox, Sony, Warner Bros., Disney, and Universal—spent $11.3 billion to produce, publicize, and distribute to theaters around the world 80 films under their own imprints. They spent another $6.7 billion on 105 films produced by their so-called independent subsidiaries, such as Miramax, New Line, Fox Searchlight, and Sony Classic. Of this $18 billion in expenditures (which did not include the cost of abandoned projects), the studios recovered only $6.4 billion from their share of the world box office, leaving them with a deficit of more than $11 billion after their movies had played in all the theaters in the world.

In the days of the studio system, numbers like this would have meant bankruptcy. But the studios in the new system no longer expect to earn their profits from showing their products in movie theaters. As Frank Biondi, who served as studio chief at both Paramount and Universal, put it, "Studios nowadays almost always lose money on current production."

This brings us to the third, and probably most significant, feature that the six studios now have in common. They all make the bulk of their profits from licensing their filmed entertainment for home viewing. Even as late as 1980, most of the studios' worldwide revenues still came from movie theaters. At that point, no matter how large the success of hits such as *Love Story, Jaws,* or *Star Wars* proved to be, all the studios were losing money on their overall movie business. The deus ex machina that transformed the movie business, as shown in Table 1, was not the selection of better movies—as studio chiefs would later claim—but the prodigious expansion in home viewing that came as a result of the video player, cable networks, pay TV, and the DVD. By 2003 the studios were taking in almost five times as much revenue from home entertainment as from theaters.

As the studios' profit center shifted from movie theaters to retail stores, they all made a further adjustment in their business strategies. Since the six major studios now produced relatively few films, they needed to increase their "throw weight," as one Paramount executive termed it, to persuade merchandisers like Wal-Mart to cede them the strategic shelf space for their videos. So, beginning in the 1990s, they either bought existing independent distributors—such as Miramax, Di-

TABLE 1. MAJOR STUDIO WORLDWIDE REVENUES, 1948–2003
INFLATION ADJUSTED IN 2003 DOLLARS (BILLIONS)

Year	Theater	Video/DVD	Pay TV	TV, Free	Total	Theater Share (%)
1948	6.9	0	0	0	6.9	100
1980	4.4	0.2	0.38	3.26	8.2	53
1985	2.96	2.34	1.041	5.59	11.9	25
1990	4.9	5.87	1.62	7.41	19.8	25
1995	5.57	10.6	2.34	7.92	26.43	21
2000	5.87	11.67	3.12	10.75	31.4	19
2003	7.48	18.9	3.36	11.4	41.1	18

mension New Line Cinema, October Films, Gramercy Pictures, Focus Features, and USA Films—or created their own "independent" subsidiaries—such as Sony Pictures Classics, Paramount Classics, and Warner Independent Pictures—to acquire the rights to foreign movies and low-budget movies made outside of Hollywood's purview. As a result of their search for "throw weight," the studios came to dominate much, if not all, of the independent film business as well.

By 2003, the home-entertainment share had, thanks in large part to the sales of more than a billion DVDs, reached $33 billion. Since the advertising and other marketing costs associated with them are minimal, these sales provided a veritable ocean of bottom-line profits, which the studios now count on to offset the massive losses from their films' theatrical releases. Theatrical releases now serve essentially as launching platforms for licensing rights, much like the runways at haute couture fashion shows.

Part of what makes the shift to the home-entertainment market so significant is the shift in audiences that goes along with it. By far the most important segment of the studios' home-entertainment audience in 2003 was children and teens, who use television sets for hours on end, either to watch programs on cable channels and networks or to play movie videos, music videos, and games. These younger consumers, prized by advertisers since they heavily influence their parents' purchases, also buy

many of the toys and much of the clothing and other paraphernalia licensed by the studios.

The six entertainment companies' sway over—and interest in—this young audience goes beyond the home-television market. They publish most of the books read by children, they record most of the music listened to by children—Disney alone accounting for 60 percent—they own most of the theme parks visited by children on their vacations, and they license most of the characters whose images appear in the toys, clothes, and games consumed by children. To capture this valuable audience, studios no longer focus on making films that appeal mainly to grown-ups, as their predecessors from the studio-system days did. By 2003, all six Hollywood studios had adopted the strategy first foreshadowed by Walt Disney sixty-six years earlier, when *Snow White and the Seven Dwarfs* appeared—making films specifically aimed at youth.

While Disney's animation process cleared the first path to this young audience, the digital revolution of the new millennium has widened that path to a thoroughfare. The new elite of computer-graphic establishments includes Industrial Light & Magic (the postproduction house owned by George Lucas, director-producer of the *Star Wars* movies), Lightstorm Entertainment (the company owned by James Cameron, director of *Titanic*), and Pixar Animation Studios (led by Steve Jobs, founder of Apple Computer). With its proprietary computer programs and loose networks of computer wonks, this new generation of technology consumes an increasingly large share of the studios' budgets. Beyond the financial implications, the new division of labor between the camera and the computer is also changing, for better or worse, the aesthetics of movies themselves.

Consider the movie that won eleven Oscars that night in 2004, including the one for the Best Motion Picture of 2003: *The Lord of the Rings: The Return of the King.* The celebration that the studios had invented for their own validation was now dominated by a children's fantasy movie. Time Warner's wholly owned subsidiary, New Line Cinema, had produced it not as a single entity but as part of a franchise, a trilogy with *The Lord of the Rings: The Two Towers* and *The Lord of the Rings: The Fellowship of the Ring,* all of which had been shot simultaneously in New Zealand in

late 1999 and early 2000 and then released separately in 2001, 2002, and 2003. The triple production cost $281 million. Unlike *Gentleman's Agreement*, which, like almost all other films in the studio system, was created by camera operators photographing actors, *The Lord of the Rings: The Return of the King* was created mainly by computer animators. More than one thousand separate shots in the film—over 70 percent of the total number of shots—were not filmed by a camera at all. These parts of the movie were created by digital technicians working for autonomous computer-graphics houses in far-flung parts of the world. Some shots were created from scratch, while others combined live acting with digitally created layers. Unlike the single crew—thirty-nine technicians in all—who filmed the actors in *Gentleman's Agreement* in close enough proximity to see and hear them on the set, most of the digital compositors, inferno artists, rotoscope artists, digital modelers, digital wranglers, software developers, and motion-capture coordinators working on *The Lord of the Rings: The Return of the King* were separated in both time and space from the action on the set and had virtually no personal contact with the actors, director, production staff, or even one another. While the process in this case yielded stunning results—attested to by those eleven Oscars—it also augured a future for Hollywood that would be much more dependent on the manipulations of the computer than on those of the camera.

This shift has not gone unnoticed by outside critics, who berate the studios for wasting money on lavish productions and extravagant advertising campaigns, suggesting that Hollywood's studios fail to appreciate the "logic" of their own industry. But the studios may understand more than their critics give them credit for. Even though they lost more than $11 billion in 2003 on movies shown in theaters, they more than made up that deficit from licensing products from those movies to the global home-entertainment market. They have now all come to realize—as Disney did a half century earlier—that the value they create lies not in the tickets they sell at the box office but in the licensable products they create for future generations of consumers.

F. Scott Fitzgerald noted, in his final, unfinished novel, *The Last Tycoon*, that most people in Hollywood had at best only a fragmentary understanding of the movie business; "not a half dozen men," he wrote, "have been able to keep the whole equation of pictures in their heads."

By the dawning of the third millennium, the "whole equation" of what had replaced the studio system had become even more complex. At the heart of it is a sexopoly: six global entertainment companies—Time Warner, Viacom, Fox, Sony, NBC Universal, and Disney—that collude and cooperate at different levels to dominate filmed entertainment. It is these six companies that choose the images that constitute a large part of the world's popular culture, and it is these six companies that will continue to shape the imagination of a universe of youth for generations to come. Nostalgia for the old studios notwithstanding, their Hollywood is the new Hollywood.

Not surprisingly, the decisions of these six companies about the movies they make—the logic of the new Hollywood—is largely driven by money. But economic considerations are not the whole story. Social and political logics—involving status, honor, solidarity with stars, and other, less tangible, considerations—also form a critical part of the equation. If the big picture continues to remain elusive to the outside world, shrouded in self-generated myths and misplaced nostalgia, that is not accidental. The major studios, for example, go to considerable lengths to conceal the revenues from their moviemaking enterprise from investors, financial analysts, and journalists—even though they make this data available to one another through their trade organization, the MPA (on condition that the MPA keep it secret from the public). They manage this concealment, even in their own financial reporting, by combining their movie earnings with those of unrelated businesses, such as licensing television programs (or even, in the case of Paramount, theme parks). The rationale given by one savvy top studio executive for this "blurring" is "to avoid showing Wall Street how volatile the movie business is and how tricky are its profit margins." Studios are willing to camouflage short-term losses on their movies because movies, not television sales or theme park operations, are their principal source of prestige and satisfaction in Hollywood. In more ways than one, today's movie business works to keep its audience—and, to some extent, its own players—in the dark.

2

The Creators

The original studio system was devised by a handful of turn-of-the-century entrepreneurs in the business of showing movies. They were all self-made men, and in building their studios, they followed a common path typified by Paramount founder Adolph Zukor.

Zukor left Hungary in 1889 at the age of sixteen, arriving in New York with $40 sewn inside his vest. He worked as a furrier, stitching pieces of hides into stoles; by the time he was twenty-seven, he had established his own successful fur business. The profits from this business he in turn invested in a string of amusement arcades that featured a new invention by Thomas Edison: a hand-cranked machine that, for the cost of a few pennies dropped in the slot, created the illusion of motion by rapidly repeating still pictures. By 1903, these "motion pictures," as Edison called them, had proved so immensely popular, especially among the largely illiterate immigrant population in New York, that they took in more than a million pennies annually. Since there were many competitors in the arcade business, Zukor soon moved on to small movie theaters—called nickelodeons because they charged five cents—in which a projectionist rather than the patron generated the il-

lusion. To keep the theater seats filled, the movies were changed every week.

Rather than depend on other producers to supply new movies, Zukor eventually began producing them himself in New York. There was, however, an obstacle to expanding this production in the East: Thomas Edison's Motion Picture Patents Company. Edison, it will be recalled, held patents on both the camera and the projector, and (along with a company called American Mutoscope, which had patented similar devices) had formed what came to be called the Trust. Not only did the Trust have patents on the hardware necessary for filmmaking, but it had contractually bound the Eastman Kodak Company, the principal manufacturer of raw stock, not to sell film to any producer that it did not license. When independent producers in New York, Boston, and other major filmmaking centers tried to buy raw film stock and cameras elsewhere, the Trust aggressively threatened litigation, reinforced by cooperative police involvement, to harass if not outright prohibit them. To evade the Trust's lawyers, these nascent studios had to resort to constant deception. For example, some producers had their cameramen hide the real cameras in the back of trucks while displaying out front dummy cameras that were not covered by the Trust's patents.

However, as Neal Gabler astutely points out in his history of the early film moguls, *An Empire of Their Own*, the conflict between the Trust and the independent producers went beyond patent rights and the profits that flowed from them. The battle also concerned "cultural, philosophical [and] religious" issues. The men who ran the Trust were mainly Anglo-Saxon, Protestant Americans, with positions in the traditional business establishment; the independent producers, of which Zukor was one of the largest, were Jewish immigrant outsiders. In the face of this cultural divide and the Trust's strong-arm tactics, Zukor decided to move his production to the other side of the continent, where the Trust would find less sympathetic courts, politicians, and police. Hollywood, it turned out, was just the escape he was looking for.

Hollywood had been little more than barley fields and orange groves until 1903, when a real-estate syndicate headed by Harry Chandler, the future newspaper tycoon, and General Moses Sherman, a railroad millionaire, bought the rural acreage and, connecting it to Los Angeles by a one-track trolley line, managed to incorporate it as a municipality. Then they built the Hollywood Hotel on Hollywood Boulevard and began pitching lots to prospective buyers in the East. Zukor, on the lookout for cheap real estate, was happy to buy. By 1916 he had consolidated the theater, distribution exchanges, and production facilities he controlled into a single studio, and Paramount Pictures was born.

The stories of the other studio founders are remarkably similar. Carl Laemmle, who began in America as an errand boy, founded Universal Pictures in 1912. William Fox, who began as a street peddler, founded Fox in 1915. Warner Bros. was founded eight years later by Jack and Harry Warner, who began as butchers. Louis B. Mayer, a onetime ragpicker, organized Metro-Goldwyn-Mayer in 1924. That same year, Harry Cohn, who got his start as a sheet-music salesman, founded Columbia Pictures.

Not all the founders remained in power until the end of the studio system (Carl Laemmle, the oldest among them, died in 1939 at the age of seventy-two, and William Fox went bankrupt in the Great Depression and saw his studio taken over by Darryl Zanuck, who had the distinction of being the only non-Jew among the studio-era moguls), but the studios remained basically personal fiefdoms, and they continued to fulfill the purpose for which the moguls had created them: providing theaters and exchanges in America with movies. When the moguls were finally replaced, it was by a very different group of men. Not only did they come from more varied backgrounds, but their focus was not limited to making a single product. They were empire builders.

Walt Disney: The Genius of the New System (1901–1966)

Walter Elias Disney, even if he would not have cast himself in the role, was the principal architect of the new studio system. Born on December 5, 1901, to Protestant middle-class parents in Chicago, Disney was four years old when his family moved to a farm near Marceline, Missouri, where his fascination with barnyard animals began. When he was nine, the family moved to Kansas City, where Walt delivered newspapers, attended elementary school, and, on Saturdays, took drawing classes at the Kansas City Art Institute.

Shortly after America went to war with Germany in 1917, the sixteen-year-old Disney used his artistic skills to forge an earlier date on his birth certificate so he could enlist. He spent one year in France as a Red

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Cross ambulance driver. After returning to Kansas City in 1919, he worked briefly as an artist for an advertising agency, where he met Ub Iwerks, an extraordinary animator of Dutch origin. The two men decided to go into business together producing humorous trailers—called "Laugh-O-Grams"—for local movie theaters. Since neither man had much interest in the business side of things, however, the venture quickly ran out of money.

In 1923 Disney left Kansas to join his brother Roy in California. He had no job, references, or savings, but he had an idea: he wanted to animate cartoons for the movies. Although Roy had very little money himself, he managed to loan his twenty-one-year-old brother the $50 he needed to go into the animated-movie business.

With that stake, Walt Disney opened a small workshop on Hollywood's Kingswell Avenue in October 1923. The rent was $10 a month. He bought a used camera, built an animation table out of discarded lumber, and officially opened for business, making shorts that combined live action and animation. It was a one-man operation. He wrote the scripts. He drew the pictures. He photographed them, one by one, and edited the results.

After working around the clock for two months, Disney managed to complete his first film, *Alice's Day at Sea*. It was eleven minutes long and told the story of a young girl, Alice, dreaming of fish in the sea. Alice was played by a child; the fish were animated. In December he sold the film to a small distributor, Winkler Films, for $1,500. He was on his way.

By the spring of 1924, after he had produced four more Alice films, Disney persuaded his mentor, Ub Iwerks, to come to Hollywood and become the chief animator of Walt Disney Films. In 1928, based on an idea suggested by Disney, Iwerks drew the anthropomorphic rodent who would make history. Disney soon hit on the name Mickey Mouse, which almost immediately caught the public's imagination.

To establish his new hero, Disney took full advantage of the new technology of sound. At that point animation was easier to synchronize to sound than live action was, with less artificial results, so the new cartoons were especially impressive and theaters were eager to rent them to demonstrate the new technology. Within a year, Mickey Mouse "talkies" were playing in thousands of theaters across the nation and proved an immense success.

As money poured in for the Mickey Mouse cartoons, Disney could have chosen to take the path of the major studios. He was already using actors and camera crews in some semianimated shorts, such as the Alice films. With his growing resources, he could have signed actors to long-term contracts and created a stable of stars, purchased showcase theaters, and formed a distribution arm. He could have competed at the box office for the broad audience, and he could have established a full-fledged studio. But he chose not to become part of the studio system or even to join the Motion Picture Association.

Disney preferred to remain an outsider. As a Protestant from the Midwest, he had no connection with, or affinity for, the Jewish immigrant culture that ran the major studios, or the moguls themselves, whom he referred to as "those Jews." Further, he had no association with the stars, producers, directors, agents, and writers who constituted the Hollywood colony by that time. And unlike men such as Adolph Zukor, Louis Mayer, Jack Warner, or the other studio moguls of the time, he lacked the hawkeyed business temperament to churn out films on an assembly line. Equally significant, Disney, even more than the studio moguls, sought a level of personal control that could not be exerted over live stars, no matter how ironclad their contracts. Animation, on the other hand, gave him

nearly total control, and he exercised it, insisting that his artists continue to draw—and redraw—characters until they met with his approval.

Ironically, in bypassing the Hollywood system, Disney chose a route that, though he could not have foreseen it at the time, would not only ultimately create greater wealth than that amassed by all the moguls combined but would replace their studio system altogether.

With Mickey Mouse, Disney had discovered the source for a vast universe of profits that extended well beyond the American box office: children at home and play around the world. He began exploiting this vast market by extracting the characters created by his movies and licensing them to other industries. As early as 1932, he licensed Mickey Mouse to watch manufacturers—the character's gloved hands pointing to the time—and then to book publishers, clothing companies, and toy manufacturers.

Nor was the boon of character licensing limited to America; since anthropomorphic animals required little, if any, verbal exposition, they easily crossed language and cultural barriers. In Japan, Mickey Mouse became Miki Kuchi and the second-most popular figure in Japan (behind only the emperor). In France he became Michel Souris, in Spain Miguel Ratoncito, and so on. Eventually, local fan clubs were established for Mickey Mouse products in more than thirty countries.

By the mid-1930s, Disney, unlike the moguls at the major studios, was well on his way to creating universal properties—not restricted by timeliness, cultural barriers, or nationality—that could be licensed to every enterprise that appealed to children. By 1935, at the height of the Great Depression, Disney's royalties from his characters were providing considerably more profits than the movies in which they starred. (A single Disney-created character, Mickey Mouse, would eventually earn more from licensing fees and theme-park admissions than the total profits of all the studios combined during that decade.)

To expand his array of extractable characters, Disney began producing feature-length animated films, beginning with *Snow White and the Seven Dwarfs* in the mid-1930s. Since drawing each and every frame of a full-length movie would be prohibitively expensive, he used, as he had in previous cartoons, transparent sheets called "cels"—short for *celluloids*—which contained the various moving parts of characters. By overlaying different cels on top of one another, Disney's animators could achieve different permutations of motions without redrawing each frame. Like the computer programs that would come a half century later, these cels enabled artwork to be done mechanically by technicians.

With the phenomenal success of the *Snow White and the Seven Dwarfs* soundtrack—the first soundtrack to become a record—Disney realized the Pied Piper power of music to attract young audiences to his products. In 1940, he produced *Fantasia*, which combined classical music with his animated characters. For its opening, he devised a sound system called Fantasound, which not only introduced stereophonic sound in films but, with its ninety speakers and sonic legerdemain, created the illusion for the audience of being surrounded by the movie. (Such surround sound was merely an adumbrating of the three-dimensional entertainment illusion that would become the hallmark of Disney's later theme parks.)

As his empire expanded, Walt Disney found that he could no longer depend on RKO, which had been taken over by the multimillionaire Howard Hughes, to satisfactorily distribute his films. He was especially disappointed at its handling of his feature-length nature documentaries, such as *The Living Desert*, and in the early 1950s he ended the long-term relationship and established his own distribution arm, Buena Vista International. In doing so, Disney finally became a full-service studio.

Because his company's main profits came from the children who bought the products he licensed, the new medium of television did not pose the sort of threat to Disney that it did to the major studio heads. In fact, where the moguls saw only crises, Disney saw a golden opportunity: television could bring his licensees' products directly into the homes of families. While the major studios were boycotting the new technology, Disney began selling the networks his *Mickey Mouse Club* and other programs. Not only did the networks pay him for these programs, but almost every minute of them functioned as free advertising for his licensed characters.

In 1954, Disney also managed to get ABC, the newest of the three television networks, to help him finance an even more permanent platform for his characters: Disneyland, in Anaheim, California. Here was a mass-entertainment form that went beyond the two-dimensional limits of movies, television, and comic strips and allowed children to interact with three-dimensional simulacrums of Mickey Mouse, Donald Duck, Dumbo, and other Disney characters (all played by costumed park employees called "cast members"). The park would occupy 160 acres and

would feature only Disney-approved products. In exchange for a one-third interest in the park and Disney's commitment to produce a weekly television series, ABC guaranteed a $4.5 million loan for the theme park and contributed $500,000 in cash. The television series, *Disneyland* (later *Walt Disney Presents* and then *Walt Disney's Wonderful World of Color*), essentially served as a weekly advertisement—in prime time on Sunday night—for Disney's products, including the theme park itself.

Disney's choice of a television network as his initial partner in Disneyland proved a brilliant success: in its first year 3 million visitors passed through the theme park's gates. (In 1962 ABC sold back to Disney its share in the park.) Since Disney insisted on maintaining a private apartment over the firehouse on Main Street in Disneyland—a street designed after the main street in Marceline, Missouri, where he had lived as a boy—some observers saw the theme park as Disney's personal indulgence or, as one observer put it, "the world's biggest toy for the world's biggest boy." But Disneyland was far more than a personal indulgence; it was the logical extension of the strategy that Disney had devised for bypassing the Hollywood studios and building an empire of the mind—or, at least, of children's minds. Every structure in the enclosed park—including rides, restaurants, parking lots, and even rest rooms—was designed to reinforce the imagery of Disney characters in the minds of children. At its opening on July 18, 1955, Disney vowed that "Disneyland will never be completed, as long as there is imagination left in the world."

In keeping with this effort to stir children's fertile imaginations with Disney-branded rides, exhibits, and characters, Disney recruited a permanent design team called Imagineers, which continued under his successors. In this quest, Disney also acquired the licensing rights in 1961 to the popular children's book *Winnie the Pooh,* whose characters alone would generate nearly $6 billion a year in retail sales by 2003.

While the major studios were waging a losing battle to hold on to the remnants of the movie-theater audience by whatever means they could—producing epic three-hour films such as *Ben-Hur* and elongating theater screens with technologies such as CinemaScope—Disney was thriving by embracing the new medium of television—and in the process expanding the presence of his characters in the places where children lived, played, and vacationed.

Walt Disney died of lung cancer in 1966, but his vision survived. His brother Roy, who succeeded him, continued the "Disney way" of using the theme parks, television programs, children's books, and movies to establish and enhance the value of the Disney characters. "*Integration* is the key word around here," he explained. "We don't do anything in one line without giving a thought to its likely profitability in our other lines."

Even though Michael Eisner, who became Disney's chairman in 1984, greatly expanded the company by buying the ABC network, the ESPN network, and other assets, he insisted that the company's "key objective" remain the same as Walt Disney's: developing "powerful brand and character franchises." He reassured shareholders in 2000, "Once you're inside Disneyland's gates, the outside world disappears." By now, Hollywood—as well as Wall Street—understood that marketing licensable characters to audiences of children was a serious business.

COURTESY OF CORBIS

Lew Wasserman: The Insider (1913–2002)

Louis Wasserman was born on the ides of March, 1913 in Cleveland, the son of Orthodox Jews from Russia. After graduating from Glenville High School in 1930 and changing his first name to Lew, he began his career in show business, working as a publicist for vaudeville acts.

At the age of twenty-three, Wasserman took a job in the mail room of the Music Corporation of America's office in Chicago. It was menial work, but MCA, as it was called, was a company that fit his ambitions. MCA had been founded in 1924 by Jules Stein, then still a medical student. By 1935, it had become one of the leading bookers of bands, singers, and musical acts. Through its connections with radio stations, musicians' unions, and nightclubs, it was at the heart of the entertainment business, which is where Wasserman wanted to be.

Alert, shrewd, and enthusiastic, Wasserman quickly moved from the mail room to Stein's outer office. By the time he was twenty-five, he had become not only a go-getting agent but Stein's protégé. In 1938 Stein sent Wasserman to Los Angeles to expand MCA's client list in Hollywood. For Wasserman, who had immersed himself in Hollywood movies since he was a child, it was a dream assignment. With the imprimatur of Stein, who was on a first-name basis with the studio moguls, he had no trouble blending into the Hollywood colony. Unlike Disney, who was a born outsider, the articulate, politically artful, and socially adept Wasserman gravitated toward the inner sanctums of power.

By 1946, although Dr. Stein remained chairman, Wasserman had become president of MCA. While not a visionary like Disney, Wasserman had great business acumen and focused it on an issue of great interest to the directors, producers, actors, and lawyers in his community: compensation. He saw that the then-current star system, in which the stars contractually agreed to a fixed salary for seven years, was the mechanism by which the studios captured for themselves the earnings that stars' public recognition added to their films. Stars, including the ones he represented, understandably wanted a larger share of these earnings, but Wasserman—and other agents—had virtually no leverage in negotiations as long as the studios maintained their effective monopoly over the theaters. If stars did not renew their studio contracts, or broke them, they had nowhere else to turn. But Wasserman foresaw that if the Department of Justice succeeded in its suit to break that monopoly, the stars' position would be greatly strengthened, as would the talent agencies that got 10 percent of their fees.

So, as president, Wasserman aggressively expanded MCA's movie business, both by signing stars and by acquiring other talent agencies. By 1948, MCA represented almost half of the stars under contract to studios, and Wasserman himself represented such top stars as Bette Davis, Errol Flynn, James Stewart, and director Alfred Hitchcock.

Later that year, when the Justice Department finally prevailed in *U.S. v. Paramount* and one studio after another signed consent decrees that ended their domination of theater bookings, the door opened to independent producers, who could finally begin to compete with the studios for mass audiences—and the stars who attracted them. This development left Wasserman in a powerful position to renegotiate the contracts of the leading stars that MCA represented. In 1950 he arranged a percentage deal for the actor James Stewart. Instead of the $50,000 Stewart had received just two years earlier from Fox for his starring role in *Call Northside 777*, Stewart would get half of the profits of his next movie, *Winchester 73*, from Universal.

Wasserman devised the percentage deal not as part of any grand vision but as a practical way to get more money for MCA's clients and, through its 10 percent agent's cut, for MCA itself. But the percentage deal forever changed the relationship between the studios and the stars, producers, and directors. Wasserman did not single-handedly cause this seismic change—with the disintegration of the studio system, it was inevitable that stars would recapture a large part, if not all, of the value that they had been deprived of under the star system—but he took full advantage of it by supplying the studios with stars, directors, producers, and writers (all of whom were MCA clients) who were tied together in what were called "packages." In an ironic twist, this arrangement bore a similarity to the now banned studio practice of block booking: if a studio wanted the star, it also had to accept the other clients in the package. For example, when Columbia wanted the actor Dean Martin, whom MCA represented, for the film *Who Was That Lady?* Wasserman "packaged" him with the rights to the play it was based on and the actors Tony Curtis and Janet Leigh, whom MCA also represented. MCA then took a 10 percent commission on the entire package, which included the star's pay.

The new arrangement that Wasserman pioneered helped to redefine the function of studios. Instead of being factories that employed their own capital and contractual labor to turn raw materials into movies, they became service organizations that arranged for others with capital, both financial and artistic, to participate in movies and share in the profits. Under this new system, talent agencies like MCA often packaged the tal-

ent, including script, director, and actors. Then independent production companies, such as Sam Spiegel's Horizon Films, produced the movies. And studios provided the physical facilities, distribution, marketing, and part or all of the financing. The proceeds from the box office, and whatever other rights could be sold around the world, belonged no longer solely to the studio but to the various participants in the alliance, including stars, directors, and producers.

Like Disney, Wasserman also saw the enormous opportunities presented by the new medium of television. For Disney, television was a means of extending his imagery, and licensable brand, to children. For Wasserman, it was an opportunity to make money for MCA and consolidate its position in Hollywood. He saw that the initial unwillingness of the studios to license their film libraries and rent their production facilities to a competing medium had resulted in an enormous need for television programming. So with the aid of MCA's subsidiary, Revue Productions, which had originally been established to film live bands, he helped to satisfy this demand by producing low-budget game shows, such as *Truth or Consequences*, and other "telefilm" programs, such as *General Electric Theater* (which MCA client Ronald Reagan hosted).

Before Wasserman could use MCA's pool of talent for these telefilms, he had to persuade the Screen Actors Guild (SAG) to waive its prohibition against talent agencies acting as producers. The issue was the conflict of interest posed by a talent agency having to choose between the maximum compensation for the talent it represented and the minimum expenses for the film it was producing. In 1952, with the help of Ronald Reagan and Walter Pidgeon, president and vice president, respectively, of SAG, Wasserman negotiated a secret ten-year waiver. Under it, MCA was able to use its own roster of celebrity talent in telefilm series.

To appreciate the tremendous impact of Wasserman's decision to involve MCA in television, consider his packaging of the series *Alfred Hitchcock Presents*. Even though Hitchcock himself was fully occupied directing feature movies at Paramount and considered television an inferior medium, Wasserman proposed that the well-known director lend his name to the series that would be aired by the CBS network and paid for in advance by a single sponsor, Bristol-Myers. Revue would do all the actual work, including writing, casting, and directing the half-hour episodes. All Hitchcock would have to do was appear in a one-minute teaser that would

begin and end each episode. In return for this minimal involvement, he would own part of the rerun rights (which he then signed over to MCA in exchange for stock in the company). Eventually, the deal was completed and MCA went on to produce 268 episodes of the hit series, which were sold over and over again to local television stations in syndication. (As a result of MCA buying back the rights for shares, Hitchcock became MCA's third-largest shareholder, behind Dr. Stein and Wasserman himself.)

By 1959, MCA, which had already become the principal provider of talent for all the movie studios, had also become the dominant force in providing television with programming, which included everything from *The Ed Sullivan Show*, Ted Mack's *Original Amateur Hour*, and *The Jackie Gleason Show* to *The Millionaire*, *The Liberace Show*, and *KTLA Wrestling*. With the stunning acquisition of Paramount's entire film library, it could now also license old movies to television stations.

Even with this library—and Revue—MCA could not fully satisfy the prodigious appetite of the television industry for filmed entertainment—especially after color television was introduced in 1957. For that, Wasserman needed a full-fledged studio. So in 1959 he set his sights on what had become the long-standing sick man of Hollywood: Universal.

The fortunes of Universal, Hollywood's first film factory, had begun to decline in the mid-1930s, along with the health of its founder, Carl Laemmle. Laemmle's appointment of his son, Junior—as a gift on his twenty-first birthday—to head the studio brought it to the verge of collapse. In 1936 he had no choice but to cede control to a Wall Street group that had been lending Universal money; they in turn sold control of the studio to British movie tycoon J. Arthur Rank.

Like his American counterparts, Rank had put together a vertically integrated studio in Britain that, with the help of British import and censorship regulations, controlled most of the country's movie business. Rank bought Universal not because he needed its production facilities but because he needed a foothold in America. Since Universal—along with the other Hollywood studios—used block booking to get its films into theaters, he assumed that it could include his British films, along with Hollywood films, in the blocks it offered theaters in the United States. Since by this time Universal was making mainly B movies, he first merged it with a production company called International Pictures, which was producing A features, creating Universal International Pictures.

As it turned out, Rank had won a battle but not the war. His plan to join Universal with his British company foundered when the Department of Justice made it clear that it would no longer allow the block booking that had been the rationale for the entire acquisition in the first place. So in 1952 Rank and the other investors sold Universal International to Decca Records, a music company headed by Milton Rackmil.

In 1959 Wasserman, who had developed a previous relationship with Rackmil through supplying talent that MCA represented to Decca's music business, offered to buy just the soundstages and back lots of Universal Studios for its television production. Rackmil, desperately short of capital, accepted the deal.

After modernizing the new studio and using MCA's contract clients, Wasserman began mass-producing telefilm programs with the same efficiency that the defunct studio system had once mass-produced films.

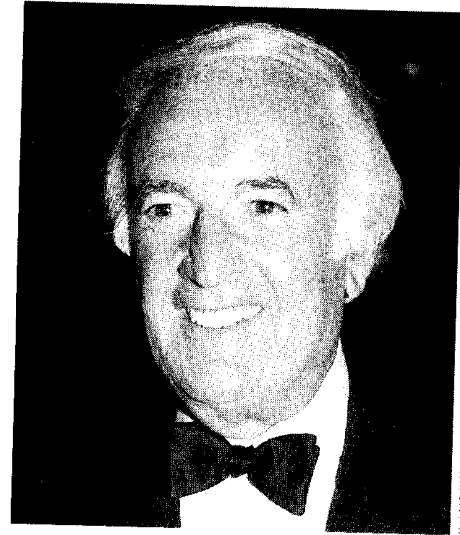
The licensing of the television shows MCA owned to local stations—the process known as syndication—also produced a burgeoning stream of cash, since the networks had already paid most, if not all, the production costs. Wasserman used this huge influx of money to buy the rest of Universal—and its corporate parent, Decca Records—for $160 million in 1962. With its newly acquired assets—including a film-distribution arm, a music-publishing company, and a library of thousands of feature and short films—MCA was now a full-fledged studio as well as a talent agency.

MCA could not remain in both businesses, however. For one thing, its SAG waiver was due to expire at the end of 1962. But far more important, the Justice Department, concerned about MCA's growing power over the entertainment industry, was threatening a potentially disastrous antitrust suit. Under this pressure, Wasserman decided that MCA's future lay in producing programs and films, not representing stars. Stein concurred, and MCA abruptly closed down the talent agency. All of MCA's clients received a terse letter releasing them from their contracts.

Even though he was no longer their agent, Wasserman remained an informal advisor, if not a godfather, to many of Hollywood's stars, directors, writers, and producers. He also maintained working relationships with the many lawyers, politicians, and studio executives he had dealt with behind the scenes for decades, not only in negotiating deals for Hollywood talent but in finding mutually acceptable ways to resolve sensitive

issues in the film industry, ranging from congressional investigations into Communist influence to Hollywood disputes with unions. With the connections he had assiduously cultivated throughout the community, he had become Hollywood's consummate insider.

After Dr. Stein retired as chairman of MCA in 1973, Wasserman assumed full control and went on to turn MCA into an immensely successful studio. Finally, in 1990, fifty-five years after his first day on the job as a mail clerk, he decided to sell the company. At that point, the Matsushita Electric Industrial Company of Japan—the world's largest manufacturer of video recorders under the Panasonic brand—was, like Sony, preparing for the digital DVD player that would eventually replace the VCR, and it offered $6.59 billion for the studio and its library. In accepting this offer, Wasserman launched Universal on an international odyssey.


COURTESY OF GLOBE AGENCY

Steve Ross: The Magician (1927–1992)

Steven J. Ross was born in Brooklyn in 1927. When he was three, his father, Max, changed the family name from Rechnitz to Ross in the hope that the more easily pronounced name would help to build his contracting business. It didn't. Max Ross went bankrupt during the Depression and lost whatever money he had earned.

Steve Ross understood very early that he would have to make his own

way in the world. At the age of thirteen, already six feet tall, he began hanging around illusion shops on Montague Street in Brooklyn, fascinated by the magic tricks they offered. While these tricks dazzled and confused other patrons, he intuitively grasped the principles of deception behind each trick. One of these principles was the so-called "card force," which operated by giving the "mark," who in those days was usually a relative or friend, the illusion of free choice when, in reality, he had no choice. It could be done by asking a mark to pick from a deck that, unbeknownst to him, had all the same cards, or by maneuvering a selected card into the mark's hand. When skillfully applied, the principle of card force, or false choice, had many uses beyond the world of magic. Years later, sitting in his private Gulfstream jet, Ross recalled jokingly, "It always worked with cards, it sometimes worked with women, and it usually worked in business."

By playing cards—especially gin rummy and poker—for money, Ross earned enough to put himself through Paul Smith Junior College. Belying the old adage "Lucky at cards, unlucky at love," with women he also did well, courting and winning eighteen-year-old Carol Rosenthal. She was not only vivacious and beautiful, but her father, Edward Rosenthal, owned Riverside Chapel, a lucrative funeral home. After they were married in 1954, Ross went to work as a funeral director for his father-in-law.

Before long, Ross was applying his powers of persuasion to convince his father-in-law to diversify. At his urging, the Rosenthal business merged with Kinney Services, a small conglomerate that owned parking lots, rental cars, office-cleaning services, and real estate. In 1962 Ross became Kinney's head.

In the mid-1960s, Ross, still fascinated by illusion, used shares of Kinney stock to acquire more than a dozen entertainment companies, among them National Periodicals, the publisher of *Mad* magazine; Licensing Corporation of America, which licensed characters to toy companies; and Ashley Famous, the second-largest talent agency in America after the William Morris Agency. While his new publishing, licensing, and talent businesses were not particularly profitable, they were the means to an end: creating an entertainment conglomerate. For this, Ross knew he would need a studio. He set his sights on Warner Bros.

Warner Bros., like the other major studios, had been unable to make money from its movies after most of its audience abandoned theaters for

television. Its record company, Reprise (a joint venture with Frank Sinatra), was making some money but was still not profitable enough to keep the studio, with its high fixed costs, afloat. Jack Warner, the last surviving founding brother of the studio, had sold his shares in the mid-sixties to Seven Arts Productions, a Canadian television distributor, which itself was on shaky financial ground. The new company, Warner Bros.–Seven Arts, still unable to finance its capital needs, finally put itself up for sale to the highest bidder. Ross bought it in 1969 for $400 million in Kinney stock.

Ross was not concerned with Warner Bros.' short-term operating losses. Like Disney, he conceived of a studio as a reservoir of licensable material, or "intellectual property" as it is called in the legal world, and the Warner Bros. library had more than three thousand titles.

With his studio in place, Ross now split his company into two separate entities: Kinney National, which his father-in-law would run (and which would include the funeral homes, parking lots, and other nonentertainment businesses), and Warner Communications International, which Ross himself would lead.

Unlike Disney, who had shunned the Hollywood culture as if it was some alien life-form, Ross reveled in it. He may have been less well connected to the community leaders than Wasserman was, but he made every effort to accommodate them. He flew stars in his corporate jet to gatherings at Las Brisas in Acapulco, the San Pietro Hotel in Positano, and his summer home on Georgica Pond in East Hampton. He could be extremely generous with his guests. In 1976, for example, he flew a dozen of them from New York to Las Vegas in his corporate jet, provided luxurious rooms for them adjacent to the Frank Sinatra suite at the Caesars Palace hotel, and, after offering to use his skills at magic to win money for them on the condition that they remain in the suite for one hour, returned with $70,000 in Caesars Palace chips. These chips he then divided among his guests as "their share of his winnings."

It was not merely that he enjoyed the company of such luminaries as Steven Spielberg, Barbra Streisand, and Clint Eastwood; this purposeful socializing was part of his strategy for transforming the corporate image of a New York–based holding company into one befitting a worldwide entertainment conglomerate.

Ross used his skills, charm, and magic to persuade other entertainment companies to merge with Warner Communications, eventually

acquiring three major record labels—Atlantic, Asylum, and Elektra Records—and making Warner Communications one of the world's five largest music companies. He also acquired DC Comics, the comic-book giant (thereby providing the studio with access to characters like Batman and Superman), and Atari, an electronic-game maker, for its arcade and home-entertainment interests.

Like Disney and Wasserman, Ross made moviemaking part of a broader entertainment strategy, but unlike them, he was not satisfied owning just content—in the form of films, music rights, television programs, and books—and the means to produce it. He also wanted to own the means to deliver entertainment to people's homes. Cable offered such a capability.

Originally, in the 1950s, cables had been strung up from jerry-built antennas by local entrepreneurs, often without any municipal regulations, to enable rural audiences to get better reception of over-the-air television in their homes. By the late 1970s, aided by federal regulations requiring stations to provide their programs free to cable users, cable had penetrated over half of American homes.

Most of the smaller cable operators by this point had been taken over by larger telecommunications companies. Such companies, even though they had large numbers of subscribers, typically lost money, at least on their balance sheets, because of an accounting practice that required them to deduct from their earnings a fixed percentage of the cost of their cables and other fixed assets for their "depreciation," since, in theory, they would have to be periodically replaced (even if, in fact, cables lasted generations). Ross sought to relieve the telecommunications companies of this bookkeeping embarrassment. He bought the cable businesses of Continental Telephone Corporation, Television Communications Corporation, and Cypress Communications Corporation. Together they had about 400,000 subscribers. Although it was a business that required a large investment to connect cables to homes, Ross deemed the risk a worthwhile one and borrowed the money to add to their existing cable systems.

To Ross, cable was much more than an alternative to broadcast television. For one thing, since there was room on cables for hundreds of different channels, it offered the potential of creating cable networks that segregated audiences by their particular interests for advertisers. In Atlanta, Robert Edward "Ted" Turner III, a flamboyant entrepreneur, had already demonstrated that a small UHF television station with an audience of fewer than 100,000 viewers could be transformed into a cable network by leasing interconnections from telephone companies and licensing old movies. Taking advantage of a loophole in its movie-licensing agreement with the studios, Turner's "superstation" supplied these movies to cable systems throughout America. If Turner could create a cable network "out of thin air," Ross proposed that executives at Warner Communications, with all its resources, could do the same.

To this end, Warner Bros. formed a partnership with American Express—Warner Amex Satellite Entertainment Company—which, in the 1980s, launched such cable networks as Nickelodeon (mainly for children over nine) and MTV (for teenagers).

Another major application of cable, in Ross's view, was as a means of delivering Warner Bros.' movies into homes. When he had first been briefed by Warner Bros. executives about the plan to sell his company's films to independent video stores, which would then rent them to customers for $2 a night, he shook his head in disbelief, according to an executive at the briefing. He asked: "Can we really expect millions of busy people to get in their car, drive to a store, pick out a movie, stand in line, fill out a rental agreement, pay a deposit, drive home, play it on their VCR, and then, the next day, repeat the procedure in reverse to return it?" Even if all that happened, Warner Bros. would have to yield control of its films to, and split the revenues with, video stores. At best, he saw video rentals as a stopgap measure.

Ross saw the cable system he was assembling piece by piece as a far more efficient way of delivering films into homes on demand. But what most excited him was a project that Warners had begun in 1977 in Columbus, Ohio, called Qube Television. It was the first commercial experiment in what would come to be known as interactive television. Unlike over-the-air (including satellite) broadcasting, cable wiring could be used to send as well as receive signals. It could allow viewers, while watching programs on one channel, to signal back on another channel by clicking on their remote control. With cable, "people could vote for the ending they wanted," Ross explained.

Indeed, voting for a preferred ending was only one of the myriad possibilities promised by the new technology. Viewers could also vote in a poll, respond to an advertising offer, or order a movie that would be shown over their television. While the customer base in Columbus was too small for it to

be economically feasible, Ross remained convinced that such an interactive cable service represented a future in which there would be no videotapes, no video stores, no returns, no inventory, and, most important, no intermediaries. The studios would directly provide consumers with the films, concerts, and sports they wanted to see and charge them on their monthly cable bill. Ross assigned Dr. Peter Goldmark, the former head of CBS's research laboratory, the task of developing such an interactive system. Always an optimist, Ross assumed that the technology would emerge and borrowed heavily to accelerate Warners' acquisition of cable companies.

Next he set his sights on Time, Inc., the publishing empire founded in 1923 by Henry Luce. Aside from owning dozens of magazines, including its flagship, *Time*, the company owned the second-largest cable system in America (after John Malone's cable giant TCI). In addition, Time, Inc., owned Home Box Office (HBO), the principal pay-television channel in America. In engineering a merger of the two companies in 1989, Ross also fused two disparate corporate cultures: "a WASPy blue-chip institution" and a "swinging pop-entertainment conglomerate," in the words of a Time executive. The potential clash notwithstanding, the "beauty of the deal" for Ross was expressed in a single word: cable.

Although the resulting company, Time Warner, became a media company without peer in America, Ross was determined to provide it with a powerful base in Japan—the second-largest economy in the world. In 1991 he met in Los Angeles with Joichi Aoi, chairman of Toshiba and, having been briefed on progress that the Japanese electronics giant was making on a digital disc for video, proposed that their companies join together in a strategic alliance. According to Toshiba executives, he suggested that "a simple disc available for, say, $26, the equivalent of a theater ticket, plus parking and a tub of popcorn," could prove immensely successful with American audiences.

The following year Toshiba became a minority partner in Time Warner Entertainment, a newly organized entity that contained all of Time Warner's movie, television, and cable interests. One of the first orders of business was to create a cartel-like partnership to develop the DVD.

Although Ross did not live to see it (he died of prostate cancer in 1992), his instincts about the future were right: cable connections and that "simple disc"—the DVD—have proven to be key elements in the entertainment economy.

Akio Morita: The Engineer (1921–1999)

Akio Morita, the eldest son of Kyuzaemon Morita, was born wealthy. For fourteen generations, a Kyuzaemon Morita had ruled the House of Morita and its sake brewery in Osaka, Japan, and Akio was expected, on his father's death, to take the name Kyuzaemon and assume his rightful place. From the time he was six, he had sat by his father's side at family gatherings, the heir apparent. At the age of ten he joined the board of directors and was taught to taste and sample the sake.

But Morita, who had studied physics at Osaka University, aspired to more than continuing a three-hundred-year-old sake empire. By the time he graduated in 1944, an American firebombing campaign had decimated much of the imperial Japan of his ancestors. He received a draft notice and went to work during the final year of the war for the Naval Office of Aviation Technology at Yokosuda on Tokyo Bay.

When the war ended in 1945, Morita decided to break with his family's long-standing tradition and not to go into the sake business. Instead, he asked his father's permission to go to Tokyo, which was in ruins, to build an engineering company with Masaru Ibuka, an extraordinary inventor whom Morita had met at the naval lab. His father not only gave him permission but agreed to finance the new company. Tokyo Telecommunications Engineering Corporation, the company that would eventu-

ally become Sony Electronics, began in a bombed-out basement, and the partnership of the two men who started it was to continue for the rest of their lives.

Morita's first undertaking was to manufacture rice cookers for a malnourished Japanese population. He was, as he described himself, a passionate tweaker of gadgets. He had grown up in Nagoya surrounded by foreign-made appliances and enjoyed dismantling them to see how they worked and whether he could reassemble them. Now he wanted to improve the rudimentary appliances available to the Japanese survivors of the war. In addition to rice cookers, the new company made portable lights, heating pads, and other much-needed devices in his ravaged country.

The American occupation authorities had granted Japanese companies a special export quota for the American market to encourage the rebuilding of Japanese industry. To take advantage of that, Morita sought electronic products that could be manufactured with cheap Japanese labor and exported to America. The most promising of these was a sound recorder. The then-current design for these machines used thin strands of wire to record sound on, but wire was difficult to obtain in postwar Japan, so Morita began looking into machines that could record on a tape made of paper.

His research efforts paid off when he discovered that in the 1930s a German company, AEG, had devised a technology called AC biasing for using AC current to record sound on tape. After the defeat of Germany, an American army unit had commandeered a prototype machine that used this technology, and one of the soldiers in the unit, John Mullin, had become interested enough in the process to patent it in America. In 1949 Morita bought the Japanese license for AC biasing from Mullin for $2,500 and began manufacturing tape recorders.

Morita made his first trip to America in 1953. He was relatively small by American standards, and ghostly thin, with delicate features and jet black hair. But what most impressed those he met on his trip was an intense focus, expressed with unblinking eyes; he had a look that projected unmistakable confidence and strength.

In New York he befriended Adolph Gross, a Jewish businessman, and through this and other relationships fostered what was to become a lifelong affinity for the Jewish culture. He was struck by the similarity between the Jews and the Japanese. According to Irving Sagor, the first of a long line of Jewish executives hired to run Sony's American operations, Morita "felt Jews were smart, imaginative, and very compatible with the Japanese in temperament and ways of looking at the world." John Nathan, in his biography of Sony, suggests that Morita's Judeaphilea proceeded from seeing Jews sharing with the Japanese "the sense of being foreign" to the American business culture. In any case, on his return to Japan, he told his executives to recruit Jews whenever possible—and they did. (In the decades that followed, the top executives of Sony included Edward Rosinay, Ernest Schwartzenbach, Harvey Schein, Ron Sommer, Walter Yetnikoff, and Michael Schulhof, all of whom were Jewish.)

By the mid-1950s, Morita's company was the world's largest exporter of tape recorders to the United States. As the world's appetite for Japanese electronics expanded, so did the fortunes of the company now called Sony, a name Morita derived from the transliteration in Japanese of the Latin word for sound, *sonus.* (Morita believed *Sony* had an international ring to it, and he wanted to build an international company.) Because Sony had the license in Japan for the AC-biasing process, its profits extended even beyond its prodigious output: all other Japanese manufacturers who subsequently made tape recorders were required to pay Sony a royalty.

With the phenomenal success of its tape recorders, Sony firmly established its niche: global home entertainment. Morita meanwhile began searching for other electronics to sell under the Sony brand. In many cases, especially where existing products were too complex to be operated by average consumers, he had his engineers redesign them, making whatever compromises were necessary, so that the public could learn to work them. By the late 1950s, Sony was the world's leading exporter of color televisions, radios, and other home-entertainment devices.

Then, in the early 1980s, Morita's company enjoyed another breakthrough. With its European partner, Philips Electronics, Sony had developed and patented a radically new system for encoding sound—one that converted sound from the analog form in which it occurred, and was heard, into a digital stream of just two characters: zeroes and ones. The advantage this revolutionary system offered was reusable storage, and its development had been prompted, in part, by a personal whim. Morita, an aficionado of Western classical music, had wanted to be able to hear a

seventy-minute symphony—Beethoven's Ninth—without interruption. With the new technology, the entire symphony could be fitted onto a six-inch plastic disc.

This system, introduced in 1982, begat the now ubiquitous compact disc, or CD (on the sale of every one of which Sony and Philips continue to receive a royalty). It also provided the basis for the digital sound now used in movies, satellite television, and computers.

Morita had already revolutionized global entertainment with the Walkman, another invention with a casual beginning. Morita's founding partner, Ibuka, now nearing eighty, mentioned one day that he greatly missed being able to listen to classical music in stereo on long international flights. In a matter of days, Morita had Sony's engineers modify a small, monaural tape recorder (called a Pressman because it had been developed for traveling journalists) into an even smaller stereo player connected to a pair of headphones. Morita then took the "portable stereo" to his golf club on the weekend and demonstrated it to his friends. A month later the Walkman was rushed into production. Morita was convinced, even if his marketing executives had reservations, that the Walkman, with its extreme portability, would appeal to teenagers who wanted to listen to music while they bicycled, skateboarded, and played games. Like Walt Disney, Morita never underestimated the power of youth at play.

Even before Morita changed the way the public heard music, he and his engineering staff realized the possibility of changing the way people watched television by developing a home video recorder. Up until the mid-1970s, viewers had to watch programs when they were aired, in what is called real time. A videotape recorder would change all that by enabling people to view programs when it was convenient for them to do so. Morita called it "time shifting." A video recorder for commercial applications, such as studio recording, had already been developed by Ampex, a California engineering company. But that machine weighed a half ton, cost $800,000, recorded only twenty minutes of programming on expensive two-inch-wide tape, and needed a two-man crew to operate it. Morita bought the rights to it, as he had done previously with the audio recorder, and set out to redesign it for home use. He ordered his engineers to make it small enough to fit on top of a television set and to redesign it so it could record an hour-long program on relatively inexpensive

quarter-inch-wide tape, could be sold for less than a $1,000, and could be operated by any consumer (especially children, who adapt easily to new things).

As daunting as the task sounded, Sony's engineers managed, bit by bit, to accomplish it. They reduced the thickness of the tape by 25 percent. They reduced the width of each track from eighty-five to sixty microns by using a different magnetic powder on the tape. By using a different recording angle and recording only half the signal, they extended the running time by 75 percent. The resulting product, the Betamax (which means "brushstroke painting" in Japanese), went on sale in New York in February 1976 for $1,295.

Not surprisingly, this device enormously increased the potential for home entertainment. Not only did viewers no longer have to be at home at the time programs were broadcast to watch them but they could buy or rent programs, including movies, self-improvement tapes, and pornography, to view on their own television. With this device they could now, as Morita called it, time-shift programs that had been broadcast when they were at work, school, or watching another program. He reasoned it would vastly increase television viewing. As one Betamax ad proclaimed in 1976, "NOW YOU DON'T HAVE TO MISS KOJAK BECAUSE YOU ARE WATCHING COLUMBO (OR VICE VERSA)."

Meanwhile, at MCA/Universal, Lew Wasserman was watching these developments and taking a decidedly less sanguine view. He saw the Betamax as a direct challenge to what was then the studios' single most valuable asset—their libraries of movies and television programs. If the public could freely make copies of *Kojak* and *Columbo*, they could make copies of anything that appeared on television for themselves and their friends. The result would be that the studios would make less money from the thousands of titles in their libraries, since there would be less demand from television stations to rebroadcast them. Wasserman was not opposed to the concept of selling films to the public (MCA itself had under development a device called Discovision, which would allow consumers to buy prerecorded movies from the studios), but he did not want consumers to be able to freely record them. So he made an appointment to see Morita at Sony's New York headquarters on the pretext of discussing a possible business relation between Sony and MCA/Universal.

After much banter, he suddenly announced that he planned to sue Sony unless Morita withdrew the Betamax from the market, explaining that all the studios would back him and that Sony would surely be defeated.

Morita was taken aback, not so much by the ultimatum but by the breach of traditional business etiquette. According to James Lardner's authoritative book on the video issue, Morita told Wasserman that in Japan it is not traditional to call a meeting to discuss business and then threaten a lawsuit. He reportedly said, "When we shake hands, we will not hit you with the other hand." Moreover, even though Morita was told by his American advisors that Wasserman would carry out his threat, he was not about to give up the machine that his engineers had so ingeniously perfected. While the breach may have added insult to injury, the video recorder had the potential to create a vast new home audience for Sony products.

The ensuing court battle over the legality of the video recorder, *Universal* v. *Sony*, lasted almost eight years before it was finally decided in 1984 in Sony's favor. Paradoxically, even though Wasserman had to abandon Discovision, the court defeat would turn out to be a great, if unforeseen, victory for the Hollywood studios, especially for Disney (which had joined Wasserman in the litigation in 1977). Just months after the case was lost, Roy E. Disney, Jr., Walt's nephew, brought in a new management team headed by Michael D. Eisner, a tall, articulate New Yorker who had previously helped revitalize both movie and television production at Paramount. Although many executives at Disney still opposed releasing the studio's library of animated movies on video on the grounds that it would diminish, if not kill, their value as rereleases in movie houses, Eisner overrode this objection, pointing out that the success of Walt Disney, dating back to his use of "synchronous sound" in cartoons, had always been based on embracing the possibilities of new technology. The Disney classics consequently were issued as videos and, within a decade, accounted for seven of the ten top-selling videos of all time, providing a new El Dorado of profits.

A further unexpected twist to Sony's victory in court was that even while it made possible an enormously profitable video market for the Hollywood studios, it turned out to be a bittersweet one for Morita. His willingness to litigate American-style had established the legality of the home video recorder, but in doing so, he had paved the way for Sony's rival, Matsushita, to establish its own format, called VHS. After having fought the Hollywood studios in court, Morita was unable to persuade them to put out a sufficient number of titles in the Betamax format to compete with VHS. In addition, although the VHS had far inferior quality to the Betamax, it provided almost twice the running time, which allowed users to record an entire movie without changing the cassette. By the time Sony engineers were able to increase the running time of the Betamax, it had already lost the format war. (The only silver lining was that Matsushita had to pay Sony a small royalty on every video it sold for the use of the digital sound.)

This defeat made it clear to Morita that technologically superior hardware and patents were not by themselves enough to dominate the home-entertainment business; he also needed control over the software—in this case, the films and television programs—to ensure a format's success with consumers and against its competitors. The principal architect that Morita depended on to realize this strategy was Norio Ohga. Morita had recruited Ohga as his protégé while Ohga was still pursuing an extraordinary career as an opera singer and symphony conductor. When he joined Sony in 1959 at the age of twenty-nine, Morita promised him he would succeed him—a promise he kept. After entering into a joint venture with CBS—CBS/Sony Records—Ohga convinced Morita to buy the record division of CBS for $2 billion in 1986 by persuading Morita that "software and hardware are like the two front wheels of a car," and that without both wheels, a car cannot be steered. The acquisition not only made Sony the third-largest music company in the world overnight but helped assure the success of the CD launch. "If I owned a movie studio, Betamax would not have come out second-best," Morita concluded. In accepting Ohga's "automobile wheel" analogy, Morita not only steered a new course for Sony but helped alter the direction of Hollywood.

The technology that would radically transform movies as a home entertainment was the digital disc. By the late 1980s, it had become clear to Sony—as well as its principal rivals in Japan—that the same digital technology that had resulted in the CD could also be applied to movies. Indeed, there was no conceptual difference between the ones and zeroes that represented the information in a Beethoven symphony and those that represented the picture element, or "pixels," in a Hollywood movie. For movies, the digital disc would not only provide a much higher quality

viewing experience than was then possible from videotape but would also permit instant navigation to any part of the movie. The practical difficulty came in fitting the digits for both sound and picture on a six-inch disc, which required using computer circuitry to compress the information. By early 1988, Sony's competitor Toshiba already had on its drawing boards a prototype of what would become the digital versatile disc or DVD, and its other traditional rival, Matsushita, was not far behind. If Morita's analysis of Sony's Betamax failure applied prospectively, victory in the crucial race to develop the digital format would go not to the fleetest or even the most technically competent electronics manufacturer, but to the one that controlled a Hollywood studio with a vast library of movies. In 1988, after Ohga assessed the prospects in Hollywood, Morita set his sights on the studio Columbia Tristar Pictures.

Columbia had never recovered from the collapse of the studio system. Plagued by financial scandals, such as the one involving embezzled funds and fake checks in 1977, it had hovered on the verge of bankruptcy until it was temporarily rescued by the New York merchant bank Allen & Company. Then, in 1982, Allen & Company sold a controlling interest to Coca-Cola for $700 million. Coca-Cola then attempted to broaden its base by buying all of TriStar Productions (a combined venture of CBS, Time Inc.'s Home Box Office, and Columbia). Columbia TriStar, as the company was now called, vastly expanded its television capabilities by acquiring Screen Gems, Embassy, and Merv Griffin Productions. These companies not only produced new television shows and series, but their past episodes constituted a library of thousands of programs that could be rented to local television stations in syndication. By the mid-1980s, virtually all of the studio's profit was coming from its library of twenty-two thousand television programs. Its movie production, which Coca-Cola had counted on to elevate its standing as an entertainment company, was consistently losing money.

Consequently, Coca-Cola, a premier marketing company in its own right, saw little future in remaining involved in the Hollywood venture. In 1989 Morita offered the starting price of $3.4 billion, a relatively high price, and Coca-Cola accepted his offer.

Morita was willing to pay Coca-Cola a premium price for Columbia because his vision had now gone beyond the conventional business of producing movies. The future he saw for Sony was in home entertainment, not theaters, and he reasoned that ownership of a Hollywood studio and its library would provide the software "wheel" that would be necessary to launch the digital format that would come to dominate home entertainment. Sony thus became the first Japanese company to acquire a Hollywood studio, a move not lost on its principal rivals in the race to control the hardware for the digital revolution. Matsushita and Toshiba followed suit, Matsushita buying MCA-Universal in 1991 for $6.1 billion, and Toshiba ponying up $1 billion to become a minority partner in Time Warner Entertainment in 1992.

As Sony moved into Hollywood, Morita came to the realization that controlling a single studio, even one with a library of titles as extensive Columbia Tristar's, would not provide the critical mass needed to assure the success of establishing the digital revolution. Morita therefore set out to find a powerful corporate ally in Hollywood.

In Japan, the tradition of *zaibatsu* encourages corporations to work together to achieve their goals, but in the United States, antitrust laws often discourage such collaborations. So Morita had to find a way of arranging an alliance that did not conflict with the American antitrust laws. Ironically, a pending lawsuit that was being brought against Sony by Warner Bros. for hiring away two Warner Bros. executives, Peter Guber and Jon Peters, provided Morita with the opening he was looking for.

To end the dispute, Steve Ross was demanding that Warner Bros. be compensated in three ways. First, he wanted Sony to swap Columbia's studio in Burbank, which was adjacent to the Warner Bros. studio, for a larger studio in Culver City that had once belonged to MGM, which Ross had acquired when he bought the Lorimar television-production company. Ross did not need two studios in different parts of Los Angeles. Second, Ross wanted Sony to allow Warner Bros. to act as a sales agent for selling Columbia's huge library of television programs to cable channels, charging it a 15 percent sales commission. He suggested that this arrangement would greatly enhance the leverage the Warners sales force had over cable stations and, in doing so, benefit Sony because the Warners sales force was, according to the analysis he presented, getting more than twice what the Sony sales force was getting for similar material. Moreover, each sale would be contingent on Sony's approval, and if Sony could get a better price for any program, it could sell it itself. So, as Ross put it, Sony had "nothing to lose."

Third, Ross wanted a half interest in Columbia House, the music and video mail-order business that Sony had acquired from CBS. Warner Music had been one of Columbia House's vendors, selling them records at wholesale prices, which Columbia House used to attract new subscribers to its mail-order club. But Warner Music was threatening to withdraw as a vendor—a move that, since it was supplying over one third of Columbia House's music, would greatly weaken the club's appeal. Ross, using his well-honed card-force technique, made the case that instead of withdrawing, Warner Music should become a full-fledged partner (and therefore not charge Columbia House for the records it was supplying). He reasoned that by combining the music labels of Warner with those of Sony, Columbia House would greatly increase its sales—and value (even though Sony would only own half of it).

To Ross's surprise, Morita agreed to all his terms. Ross was now able to consolidate Warner Bros. into a single studio, gain great leverage over cable stations by marketing both the Columbia and Warner Bros. television libraries, and become a 50/50 partner in Sony's mail-order music and video business. The settlement was reported in the press as a great victory for the American companies over their Japanese rivals, with an article in *Vanity Fair* going so far as to suggest that it was considered in Hollywood to be "Pearl Harbor Revenged."

But Morita had his own reasons for agreeing to Ross's deal, and being intimidated by the threat of Warner Bros. suing Sony was not one of them. Morita, raised as a prince in an Osaka dynasty, was anything but timid. After all, when Sony's Betamax technology had been at stake in 1976, he had tenaciously stood his ground against Lew Wasserman, and all the other Hollywood studio heads, for eight years in American courts, and prevailed. But Sony's technology was not at stake this time—at least not directly.

From Morita's perspective, the only cost to Sony was money. The proposed deal would give Warner Bros. a more geographically convenient studio, and Sony would get one that required modernizing—a project that, though expensive, fit in well with Morita's plan to build a facility capable of state-of-the-art digital work. As for the joint-marketing television deal, it simply involved, as in all *zaibatsu* arrangements, the junior partner in an area deferring to the senior partner. In cable television, Warner Bros. was clearly the senior partner, and as such, it had good reason to coordinate the sales, especially since its much more powerful marketing arm could get better prices from cable stations. So, even with the 15 percent sales commission, Sony might make more money by deferring to Warner Bros. If not, it could return to selling its own films.

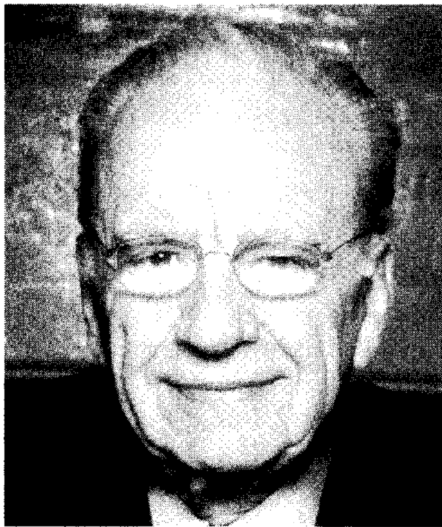
But as Morita saw it, the real benefit for Sony, in the best *zaibatsu* tradition, was to be found in the Columbia House alliance, because he needed an ally, though for different reasons. Giving Ross the half interest in Columbia House was, to be sure, a costly concession, but he saw it as a necessary one. Columbia House was already planning to expand its mail-order business beyond CDs to videos and DVDs. With Warner Bros.' library of 6,500 movie titles of its own and 2,500 pre-1986 MGM titles, along with Columbia TriStar's almost equally formidable library, Sony would definitely have the critical mass needed to make the DVD launch successful.

Morita also needed to reach agreement on a common format for the DVD with Toshiba, another Japanese electronics giant, which by then was a strategic partner (and part owner) of Warner Bros., as well as with Philips, which had been a long-term strategic partner of Sony's on the CD. Warner Bros. had meanwhile had the other studios, except for Fox, meet together to work out "disc specifications that would satisfy them as major producers of movies," according to the then-head of Warner Bros. home entertainment. "These were not requirements—just a perfectly legal 'wish list.' " After some wrangling, Sony accepted these proposed standards. Once that accommodation was reached in the late 1990s, the DVD, backed by the joint resources of Warner Bros. and Sony, would quickly establish itself in world markets.

Morita, who died in 1999, rarely set foot in Hollywood. Unlike Ross and Wasserman, he had almost no contact with stars, directors, and producers and was not familiar with many of their Hollywood movies. Indeed, like Disney, he found its celebrity culture alien. Yet, by engineering the digital platform for the DVD, digital television, and the game console, he helped usher in the new Hollywood.

In the tradition of a prince, he organized his succession well, beginning with Norio Ohga, the extraordinary renaissance man he had lured out of classical music. When Ohga retired in 1995 to return to his career

as a symphony conductor, Nobuyuki Idei, who had fittingly led the home video division, took his place. Both men followed Morita's lead in transforming Sony from a conventional manufacturer of hardware to a company that delivers to consumers a wide range of digitalized entertainment. In the 2000 annual report, Idei noted that despite the company's proven success in adapting inventions—such as color television sets, CDs, video recorders, Walkmen, camcorders, and PlayStations—Sony now seeks to "revolutionize itself." The goal is, as the company's leaders described it, to embed "our intellectual assets into products." They look forward to a time when Sony will earn the bulk of its money not from manufacturing products but from the playing, and replaying, of proprietary digital versions of the entertainment itself. It is a transformation very much in the spirit of Morita himself.



Rupert Murdoch: The Revolutionary (1931–)

Keith Rupert Murdoch was born in Melbourne, Australia, at the height of the Great Depression in 1931. Like Akio Morita, he came from a wealthy family, and like Morita, he came to the movie business relatively late in life. His first pursuit was newspapers.

Murdoch's father, Sir Keith, the son of a clergyman, had built a chain

of newspapers, opened Australia's first radio station, and owned a vast forest in Tasmania before dying a multimillionaire in 1952. At that time Rupert was in his final year at Worcester College, Oxford.

When his father died, most of his assets went to his wife. Rupert Murdoch's inheritance was limited to a single small Australian newspaper, the *Adelaide News*. That, as well as a dose of extraordinary self-confidence, was all Murdoch needed to form News Corporation. Until that time, Australian newspapers had always been local operations based on local advertising, but Murdoch broke that pattern in 1964 by creating Australia's first national newspaper, *The Australian*. In addition, he began acquiring other newspapers, television stations, and, most lucrative of all, the Australian syndication rights for several American television programs. Lack of ready capital did not deter his insatiable appetite for expansion; he fearlessly mortgaged the newspapers and television stations he already owned to buy new ones. Nor did opposition from established owners discourage him; he enjoyed overcoming opposition and winning. As William Shawcross wrote, describing Murdoch's life from a later vantage point, "His life had been an unending assault upon the world. One battle had followed another. More newspapers, more television, more power."

By the late 1960s, Murdoch had become the most powerful media owner in Australia, and by then, Australia was no longer enough. In 1969 he began expanding his realm to Britain by buying newspapers there. First he bought the *News of the World*, a raunchy, cheaply run tabloid with a Sunday circulation of 6 million readers, followed by *The Sun*, another tabloid with a circulation just under a million. He subsequently bought two papers at the heart of the establishment: the *Sunday Times*, which had a circulation of 3 million, and the daily *Times*, which was the oldest and most respected newspaper in the British commonwealth.

Although these holdings represented enormous power, Murdoch, like all the other press lords in Britain, still had to acquiesce to two powerful unions, the National Graphical Association (NGA) and the Society of Graphical and Allied Trades (SOGAT), which for over a century had had what appeared to be an unbreakable stranglehold over printing and delivering newspapers. They, not the press lords, determined the staffing levels and the employment rules that stipulated, in large measure, who

did what at the newspapers. If a press lord, no matter how powerful, attempted to oppose their dictates, his newspapers would either not get printed or—if they were printed elsewhere—not get delivered.

In the mid-1980s, Murdoch decided to do what no other press lord had ever tried: break both unions. It required stealth, deception, new technology, and incredible nerve.

He needed stealth to keep the unions from learning of his plan to move all four of his newspapers to Wapping in London's Docklands. If they found out, they would surely shut down all the papers, killing his cash cows before he had prepared an alternative. The loss could bankrupt his empire. Deception was required to mislead the unions as to why he was constructing a new facility in Wapping. His cover story was that it was to publish a new newspaper called the *London Post.* In fact, the *London Post* would never actually be published. Like Patton's nonexistent First Army in the Allies' deception plan to conceal D day in World War II, the *London Post* was a decoy.

Murdoch needed new technology to bypass the job of hard typing on hot metal Mergenthaler linotypes—or, in the case of headlines, handsetting the type—a process that required more than two thousand NGA union members. To this end, he contracted with Kodak in America to secretly build him a state-of-the-art computerized printing system called Atex, from which journalists on their consoles could do the work of the unionized typesetters. He also bought a fleet of eight hundred delivery trucks in Australia and had two thousand drivers secretly trained to deliver his newspapers throughout the United Kingdom.

Finally, to carry out his audacious plan, he needed steel nerves as well as miles of razor wire and hundreds of armed guards to prevent the unions from attacking the plant at Wapping once it was up and running. If they broke through his perimeter, he might never be able to put his plan into effect.

On January 24, 1986, without any prior warning, Murdoch's four newspapers moved in the middle of the night from historic Fleet Street—London's newspaper center for more than one hundred years—to Wapping. The unions, still not realizing that Murdoch had the technology to publish all four papers without union typesetters and delivery men, called a strike. The strike, which violated their contract, allowed Murdoch to fire all the union members without giving them any severance pay.

Within a month, Murdoch had defeated the unions. By doing so, he revolutionized British newspaper publishing, to say nothing of British politics. Not incidentally, the value of his four newspapers more than tripled as a result.

The man who once told an interviewer that his life consisted of "a series of interlocking wars" was now ready to launch his next offensive—this time on a global scale.

Murdoch had already bought a number of American publications—so many of them, in fact, that by 1977 *Time* ran a cover of him standing astride the towers of the World Trade Center, looking like King Kong, above the caption "Aussie Press Lord Terrifies Gotham." At that point he owned the *San Antonio Express News, New York Post, National Star, New York* magazine, and *The Village Voice.* In the 1980s he bought *TV Guide,* as well as book publishers on both sides of the Atlantic—Harper & Row in New York and Collins in London—which he merged into a single entity, HarperCollins. But these investments in conventional publishing, as substantial as they were, were just his means of gathering the credentials, political influence, and financial resources for his more far-reaching global goal: to build a home-entertainment empire that would literally span the world. Like his Wapping operation, it would be based on new technology that bypassed established institutions, even the restrictions of local governments. Its means of delivery would not even be limited to the terrestrial confines of earth; it would be in outer space.

Murdoch had in his sights the Clarke Ring, named after the science fiction writer Arthur C. Clarke. Clarke had predicted that in this ring, located precisely 22,300 miles above the earth, manmade satellites could move around the earth in a geosynchronous orbit that would enable them to remain over any chosen city or area. In such an orbit, they could serve as a network of broadcasting platforms.

Unlike cable systems, satellites could not be used for two-way communications such as the interactive television that had captured Steve Ross's imagination. But Murdoch was not disturbed by this. He firmly believed in one-way communications: that those who own the media should control, and take responsibility for, all its content. He assumed

such control when he published his newspapers, and he would later favor for the Internet a system called "push technology," whereby content, rather than being sought after, was "pushed" into selected computers. Satellites, in any case, had an overriding advantage for Murdoch: unlike cable, which was essentially local, they were truly global. Not only could they cover every important market in the world, but their orbits in the Clarke Ring were free of the constraints of national law. In one technological leap, Murdoch would be able to bypass the need for television stations and licenses and be able to beam programming to the entire world.

In pursuit of this bold vision, in 1983 Murdoch bought a controlling interest in Britain's Sky Television, a company that through the European Space Agency already had access to a satellite in the Clarke Ring. With it, he began broadcasting to Europe. Unlike conventional networks, which allowed free reception of their programs (and charged advertisers for access to the audience), Sky Television required viewers to pay to subscribe to its service.

Murdoch realized that without paying customers, the entire extraterrestrial concept would fail. So he created a think tank of researchers to find out how to persuade people around the world to pay to receive television, a medium they were accustomed to getting for free. The answer Murdoch found was movies. He decided that he needed to buy a Hollywood studio. Like Morita, Murdoch envisioned a studio not as an end in itself but as a convenient means to an end.

Later that same year Murdoch tried to buy Warner Bros. But in Steve Ross he had met his match. Ross blocked his bid by arranging in a complicated exchange to buy the television stations owned by the Chris-Craft Corporation. Since Murdoch was not yet an American citizen, he was not allowed to own television stations in the United States. Stymied by Ross's legerdemain, he next turned his attention to Twentieth Century–Fox.

The Fox studio had fallen on hard times. After the studio system fell apart, Twentieth Century–Fox had sold a large portion of its real estate to the developers who created Century City and had invested in new projection technologies, such as its CinemaScope, in an attempt to attract an audience for epic-sized films, such as *Cleopatra.* Despite three decades of such heroic effort, it now found itself unable to compete with home entertainment and had put itself up for sale.

In 1981 Marvin Davis, a billionaire oil and gas driller, and Marc Rich, an immensely successful oil trader, joined forces to buy Fox for $703 million. They hired Barry Diller, then head of Paramount, to run it. Soon afterward, however, Rich, a target of a federal investigation into his oil-trading activities with Iran, fled the country.

Rich's sudden departure gave Murdoch the opening he was seeking. He first bought Rich's half share in 1985. Two years later he bought the remainder from Davis at a premium price. As the sole owner of Fox, Murdoch now had a dependable source for films.

Murdoch then bought the holding company Metromedia for some $2 billion. Metromedia owned a group of ten television stations in New York, Los Angeles, and other large markets. To accommodate the prohibition against foreigners owning American television stations, Murdoch now gave up his Australian citizenship and became an American. He also bought a residence befitting an entertainment mogul: the Beverly Hills mansion of Jules Stein, the founder of MCA.

Murdoch next turned his attention to creating a grander structure for his newly acquired television stations. Seven of his ten stations, although they were located in some of the largest markets, did not have network affiliations and could not get them because other stations in those markets had long-standing affiliations with CBS, NBC, and ABC. Since these three were the only national networks, Murdoch's unaffiliated stations were less desirable outlets for national advertisers and, consequently, less profitable.

Murdoch solved this problem—as he had done when he had broken the British trade unions and when he moved broadcasting into the Clarke Ring—by bypassing the established order. He created a fourth network, called the Fox Television Network, which became the first new television network since CBS, NBC, and ABC had been created in the 1930s.

Murdoch reasoned that a network required nothing more than programming and outlets in major markets. With the Fox studio he could create the programming, and with the former Metromedia stations he had outlets in seven of the largest markets, reaching 22 percent of American homes. To these he would add stations either as affiliates or outright acquisitions. No major capital investment in technology was necessary, since the Fox programming could be sent over rented lines and satellites. It would broadcast fewer hours a week than ABC, CBS, and NBC, but it would be a full-fledged network that could attract national advertisers.

In addition to the Fox network, Murdoch assembled, through a string of other acquisitions, four cable networks—the Fox Children's Network, the Fox Sports Network, the Fox Family Network, and the Fox News Network. Meanwhile, he continued to globalize his satellite pay-television systems. In Asia he bought Star Television, whose satellites reached China, Japan, Australia, and India. In Latin America he created coventures to provide satellite service that covered most of its major cities. He also created strategic alliances with existing cable pay-television channels in Italy, Germany, Spain, and the United States.

This worldwide expansion was not without risks. By making these daring acquisitions, Murdoch had gravely strained the financial resources of News Corporation. Even the increased cash flow from his four automated newspapers at Wapping was not sufficient to pay the enormous start-up cost of global satellites. By December 1990, News Corporation had amassed a staggering $7.6 billion of debt, much of it in short-term bank loans, that had to be renewed—or "rolled over"—every month by borrowing new money to repay the expiring debt (and accumulated interest). This enormous debt had been parceled out to more than one hundred different banks around the world. On December 6, while meeting with one bank in Zurich, Murdoch learned that another bank in Pittsburgh had refused to roll over its share of the debt and was demanding repayment. Murdoch knew that if he repaid one bank, many others would follow with the same demand. The ensuing panic would almost certainly bankrupt his company and force him to liquidate the empire that he had spent twenty-five years building.

Murdoch, who had prided himself on controlling his own destiny, now had to put his fate in the hands of a banking consortium led by Citibank. He had a trump card, however. The banks could not *afford* to liquidate his empire. Many of his assets—such as the complex mosaic of satellite-systems pieces, the Fox network, *TV Guide,* and the Fox studio—were dependent for their value on his own vision of a global delivery system for entertainment and news. If the banks took them over they would probably suffer enormously, selling them piecemeal to parties lacking the totality of his vision. This was some consolation, but he also needed a backup plan. On December 20, 1990, he flew in his private Gulfstream jet from Aspen, where one of his top executives had just been badly injured in a skiing accident, to Cuixmala, Mexico, to the estate of the financier

Sir James Goldsmith. He meticulously explained his critical situation to Goldsmith in an effort to raise temporary financing in the event that the Citibank consortium failed. Goldsmith, despite his admiration of Murdoch, was not in a position to help.

As it turned out, Citibank did succeed in arranging the refinancing, and Murdoch, having avoided bankruptcy, decided to merge his Sky Television satellite company with its only real rival in Britain, BSB. Murdoch called it an "opportunistic" decision. By doing so, he eliminated the competition in Britain.

In 2003 Murdoch managed to get control of the final piece of his extraterrestrial design: the Hughes Electronic Company, whose DirecTV unit's satellites beamed television programs to American consumers. Founded in 1932 by the industrialist (and movie mogul) Howard Hughes to produce airplanes, bombs, and electronics, the company was acquired in 1985 by General Motors and transformed into a state-of-the-art communications company that pioneered satellite television in the United States and to which over half of the viewers with satellite receivers subscribed. When General Motors first put it up for sale in 2001, EchoStar, the only other satellite broadcaster in the United States, outbid Murdoch with an offer of $27 billion. But working behind the scenes in Washington, Murdoch's lobbyist argued successfully that a merger of DirecTV and EchoStar would create a monopoly in restraint of trade, and after the EchoStar bid was rejected, Murdoch bought control in a complicated deal for only $6.6 billion—a tribute to his political acumen, if not his connections.

With his acquisition of DirecTV, Rupert Murdoch was rapidly approaching the realization of a vision that had a decade earlier seemed quixotic, if not from the realm of science fiction: satellites orbiting in the Clarke Ring, seamlessly beaming movies, television, and sports events to a paying global audience. To be sure, it had taken tens of billions of dollars in precarious loans to rocket these satellites into space, build ground stations, supply consumers with antennas, and outmaneuver competitors; and because of the enormous debts incurred in the process, the company was still losing money. But Murdoch now had direct, unfettered access to audiences everywhere. He told financial analysts gathered at the annual Morgan Stanley Media and Communications Conference in 2003 that if "content is king," as fellow entertainment mogul Sumner Redstone liked

to say, distribution is queen. And his means of distribution included satellites orbiting the earth as well as terrestrial television networks and cable channels. In 2003 his satellite companies—now headed by his thirty-year-old son, James Murdoch—dominated pay television in Britain, Europe, Australia, Asia, and Latin America. In addition, his broadcast network, twenty-three television stations, and three cable networks in America gave him access to general audiences there. As for content, his Fox studio assured him of product for these networks. If Morita's efforts had created a digital form for entertainment, Murdoch's vision had created a means of delivering it to consumers on a global scale.

Sumner Redstone: The Lawyer (1923–)

Sumner M. Rothstein was born in the low-income West End of Boston in 1923. Like Ross, he grew up in the shadow of the Depression. "We didn't have a bathroom in our apartment, but I never felt deprived," he later recalled. As poor as his family was, he went to the movies every Saturday for the matinee and dreamed of someday owning a movie studio. His father, Mickey Rothstein, did what he needed to do to support his family during these lean years—selling linoleum floors, driving a truck, hauling garbage, and running restaurants. When Sumner was still in school, his

father anglicized the family name to Redstone to avoid any accidental confusion with the gangster Arnold Rothstein.

Redstone attended a public school, Boston Latin, that was one of the best schools in America. He proved to be an exceptional student and was accepted to Harvard at the age of sixteen. Earning credit for his wartime work with the elite group that broke the Japanese ciphers, he graduated in a near-record two and a half years. His father by this time had gone into the movie-theater business, buying theaters and opening one of the first drive-ins in America in Valley Stream, New York.

Sumner meanwhile went on to Harvard Law School. After graduating in 1947, he moved to Washington, D.C. There he worked as a special assistant at the Department of Justice, which was then pressing the antitrust case, *U.S.* v. *Paramount et al.*, that would end the studio system. Even though Redstone did not work on the case, he had an interest in its outcome. Not only had his family's chain of theaters grown, but he was still nursing his own dream of someday owning a Hollywood studio.

When he returned to Boston in 1954, Redstone took over the stewardship of the family company, the Northeast Theater Corporation. He was determined to expand the family holding company, which he renamed National Amusements Corporation, and he began driving around America looking for sites. He took with him, he later recalled, stacks of "blank contracts" so he could buy any promising property immediately. "Whatever cash flow National Amusements had we used for expansion," he notes in his autobiography.

Even with its armada of some fifty drive-in theaters by 1958, National Amusements could not compare in size with the major chains of indoor theaters, like Loews, which had hundreds of screens. Since the studios favored these larger chains by giving them their premier movies, National Amusements' drive-ins were often unable to get the first-run movies they needed to attract large audiences. So Redstone, whose tenure at the Justice Department had taught him how to wave the antitrust flag, decided to demand that the studios give his drive-ins their films at the same time that they played elsewhere. When they refused his request, he filed suit against them all—Paramount, Warner Bros., Columbia Pictures, Twentieth Century–Fox, and Universal. He knew that he was taking a grave risk, since these studios were his main suppliers, but he was confident that the law was on his side.

The studios, after all, had agreed not to discriminate against theaters

in the consent decree they had signed in the late 1940s. The problem was that a consent decree cannot be enforced in court by a private party; it can only be enforced by the government. Redstone, however, found a way around this limitation: conspiracy law. He alleged that the studios were acting in a broad conspiracy to circumvent the decree. Redstone brought the case to trial in Virginia, where one of his drive-ins had been denied a first-run film. He saw himself, as he would in later encounters, as David battling Goliaths. But he had, as he would later entitle his autobiography, "a passion to win," and he prevailed. He also so impressed the independent theater owners with his grit that they elected him president of the National Association of Theater Owners.

The fact that Redstone had identified the Hollywood studios as conspirators did not preclude him from later attempting to buy one. Coming to the conclusion in the late 1970s that there was little future in the theater business, he invested in two studios: Twentieth Century–Fox (buying roughly 5 percent of its shares) and Columbia Pictures (buying 10 percent). He had the idea of possibly making an offer for a controlling interest of one of them once he had the capital, but in the meantime Fox was taken over by the oilman Marvin Davis and Columbia was taken over by Coca-Cola. Although this delayed his dream of owning a studio, he made a profit of more than $26 million in the two sales.

Redstone was still buying theaters and biding his time when, in 1979, he had an experience that forever changed his life. He was at the Copley Plaza hotel in Boston when suddenly the room was engulfed in flames. The entire hotel was ablaze. Redstone suffered burns on more than half his body, and doctors predicted he would not survive.

But he did survive, and when he recovered he realized, as he later told an interviewer, that "success isn't built on success; it's built on failure, frustration, and sometimes catastrophe." Surviving when he was not expected to made him more determined than ever to realize his dream.

In 1987, at the age of sixty-three, Redstone finally found his route to Hollywood in the form of Viacom International, a company that had been created by CBS as a corporate structure for its library of syndicated programs and its cable systems. In 1970, in a move engineered by Lew Wasserman and other studio owners, the FCC had passed the Financial Interest and Syndication Rule, known as fin-syn, which effectively took the television networks out of the business of producing their own television series. So, in 1973, CBS spun off the stock in Viacom to its shareholders, cutting its ties with the now independent company.

Viacom then had an extraordinary piece of good fortune. At Warner Communications Steve Ross, who was buying cable systems, decided to buy American Express's cable-television business, but because his company was already heavily in debt, he had to raise a large part of the capital for the transaction by selling some of its assets. So he decided to sell three of his company's fledgling cable networks—MTV, Nickelodeon, and Showtime—since that divestment meant avoiding the legal problems that might arise from his company owning both cable systems and cable networks. Since Ross did not want to sell these networks to a competing studio, he offered them to Viacom, which was then still a tiny company, for $510 million.

To raise the money for the purchase, Viacom issued bonds, which caused its share price to fall precipitously, since the cable assets it was acquiring were not yet profitable. Seeing that its market price had fallen well below the value of its assets, Viacom's management offered to take the company "private" by buying it themselves from the stockholders for $1.8 billion.

Redstone, assessing that Viacom's management's bid was far too low, saw his opportunity. He bought about 20 percent of the stock and then offered $2.1 billion for the remaining 80 percent. A bidding war between him and management ensued, and he won—at a cost of $3.4 billion. By borrowing against the assets of National Amusements, of which he now owned two thirds, and the assets he would get from Viacom, he financed the deal.

On June 3, 1987, Redstone took control of Viacom and promptly sold off its local cable systems and some other assets to pay down the debt. What remained was the MTV, Nickelodeon, Showtime, and Movie Channel cable networks and the library of television programs. MTV and Nickelodeon not only collected fees both from advertisers and cable systems throughout America but were themselves brand names that, in the tradition established by Walt Disney, could be exploited to sell products throughout the world. The library contained thousands of television series that could be licensed in syndication, some for as much as $4 million an episode.

Showtime and The Movie Channel (TMC) were another matter, how-

ever. They both were pay-television channels that had not been able to acquire enough subscribers to cover their operating costs. Redstone quickly discovered that the problem lay not in Showtime and TMC's management but in the business strategy of their rival, Time, Inc.

Time, which was then in the process of merging with Warner Communications, owned both HBO, which had two thirds of the pay-TV subscribers in America, and many cable systems in major cities, including Manhattan Cable in New York, through which subscribers could receive pay-TV channels. Each of Time's cable systems constituted a natural monopoly in its area, allowing it to exclude pay-TV channels that otherwise would compete with HBO. Not surprisingly, both Showtime and TMC had been excluded from the areas in which Time was gatekeeper. "We were competing against HBO for movies and had to pay the same amount in licensing fees to the studios," Redstone writes, "but we were denied millions of potential viewers by Time's refusal to give us access to its cable systems." Time was already the second-largest owner of cable systems, and its impending merger with Warner Communications would mean that the resulting company, Time Warner, would have monopolistic sway over even more cable systems.

As he had done before in his David versus Goliath suit against the studios, Redstone sought redress in the courts. "He was a born litigator, and looked at every issue from the bottom up," a Viacom executive recalled. Redstone sued Time for $2.4 billion under the Sherman Anti-Trust Act, charging it with a conspiracy to monopolize the pay-television business in the United States. His timing proved brilliant. Time, concerned that the documents it would have to reveal in the discovery process could impede the merger with Warner Communications, came to terms with Redstone out of court. The settlement gave Viacom, aside from a significant cash payment, access to the viewers on the Time Warner cable systems for Showtime and TMC. In the process, in addition to turning pay TV into a profitable enterprise for Viacom, Redstone himself received a valuable education on the tacit ways in which giant conglomerates can use their power to stifle competition. "I learned that size matters," he reflected.

With the cash settlement in hand, Redstone could now move on to acquiring the studio he had dreamed of owning since he was a child. Ever since taking over Viacom, he notes in his autobiography, "I had my eye on Paramount Pictures."

Like the other original studios, Paramount had lost its independence. Gulf + Western Industries, an international conglomerate run by Charles Bluhdorn, had bought it in 1966 to take advantage of its tax losses in the movie business. After Bluhdorn died, his conglomerate got into financial trouble, and in 1993 Paramount, as well as the company's other assets, was put up for sale.

Redstone initially offered $8.2 billion for Paramount, 10 percent in cash and the balance in nonvoting Viacom stock. (Since Redstone would have two thirds of the voting stock in Viacom, he would still retain undisputed control.) But before Redstone could close the deal, Barry Diller, a former Paramount and Fox executive who now headed the QVC Home Shopping Network, made a superior offer of $9.9 billion. To secure the deal, Redstone realized he would have to make an immense cash offer that Diller could not meet. He knew this involved a risk, but as the fire in Boston had taught him, "to succeed, you have to live dangerously." He offered $10 billion in cash.

Since Viacom did not have that sum, it would have to borrow it, and even with its improved balance sheet, it did not have sufficient earnings to get a $10 billion loan. So Redstone needed a partner with enough cash flow to persuade the banks to make the huge loan. He found that partner in Blockbuster Entertainment. Blockbuster, which had once been a shabby string of video stores, had been acquired by H. Wayne Huizenga after he made a fortune in the waste-disposal business, and under his watch the company had grown to become a national chain of video stores that dominated the video-rental business. Concerned about competing video-distribution systems, such as pay-per-view, Huizenga had also acquired Spelling Entertainment, with its huge library of television programs, and Republic Pictures' library, which owned NBC's pre-1972 television shows.

By acquiring Blockbuster with Viacom stock, Redstone now had enough earnings to secure the bank loans he needed to buy Paramount, but at a cost that greatly diluted his ownership of Viacom. His holding company, National Amusements, which had previously owned 80 percent of Viacom's shares, now owned only 20 percent (although it still controlled the company through a separate class of voting shares). As a result, the value of Redstone's investment in Viacom fell sharply. Before the merger in July 1993, Viacom shares (including preferred) were worth $5.99 billion on the New York Stock Exchange, and Redstone's share of

that was valued at $4.8 billion. After the merger in March 1994, Viacom's shares were worth only $6.2 billion, and Redstone's share of that was worth $1.8 billion. Redstone accepted this $3 billion loss on paper philosophically as "the price for gaining a studio." He explained, "Not everything is about the bottom line." The Paramount studio represented a dream he had been pursuing for over half a century—a dream of power, status, and a sense of achievement.

Once the merger went through, Redstone's most immediate problem was the tenuous financial situation at Blockbuster. He found that each of its ten thousand stores was paying the studios $65 a copy for videos and at that price could not afford to buy more than twenty copies of even the most popular titles. Twenty copies of a single title per store cost $13 million and was still so far from satisfying customer demand that Redstone determined that about 30 percent of Blockbuster's potential customers were leaving the stores empty-handed on any given opening weekend. Worse, after the opening week, the demand for these copies greatly slackened, and Blockbuster could not return the copies. Redstone called the results "managed dissatisfaction," meaning that the price paid for not overordering copies was that a large number of customers were routinely disappointed each week. "What other business treats its customers like that?" he asked.

Redstone decided to use the power of his enlarged conglomerate to fundamentally change the relationship between the studios and the video stores, and in 1997 he came up with a radical scheme of "revenue sharing." The plan called on studios effectively to loan Blockbuster a hundred or more copies of new releases per store. These so-called "licensed copies" would satisfy the opening demand and allow Blockbuster to guarantee that titles would be in stock. Instead of paying $65 for these copies, Blockbuster would advance the studios only about $4 for the manufacturing costs of the video, and then pay them 40 percent of the rental money it collected from its customers. After the opening, copies they did not need for rentals would either be returned to the studios or sold to customers as "previously viewed" (which would cover the amount advanced for the manufacturing costs). Redstone further offered to hook up the computers in every Blockbuster store to those of the studios, or an intermediary, so that the studios could monitor all the transactions. In effect, instead of Blockbuster being the studios' customer, it would become their partner.

In addition to offering the studios the carrot of a 40 percent share of rental revenues, Redstone showed them a stick. If they refused to go along with his plan, he told them that the alternative was that Blockbuster might go out of business. And if they lost Blockbuster, they would lose a large share of the entire video-rental market. "We are not going to pay [$65 a tape]," he warned a Warner Bros. executive. "If we continue that way, we are going to destroy our business—and you will go down with us. The studios can't live without a video-rental business—we are your profit—and this business is going into the toilet."

Each studio had to weigh the possibility that if it rejected Redstone's ultimatum, other studios, including Paramount, might wind up with hundreds of copies of their movies in Blockbuster, while it alone would be shut out. All the major studios eventually acquiesced. They then offered the revenue-sharing plan to other video chains. But most of these chains lacked the sophisticated computer systems or otherwise did not qualify and thus lost many of their customers to Blockbuster (which increased its share of video rentals from under 40 percent in 1997 to over 50 percent in 2002).

With revenue sharing, the studios, for their part, got a far greater measure of control over their video releases. They could choose the titles they considered most profitable to sell and flood the stores with them. Also, as a side payment for accepting the change, Redstone agreed to give the studios so-called "output deals," in which Blockbuster agreed to buy outright a specified number of B titles not included in the revenue-sharing plan.

Not only had Redstone increased Blockbuster's profitability with his imaginative plan, but he had converted the rental business into a predominantly new-release business, with each store carrying hundreds of copies of a video during its opening week.

On the heels of this victory, Redstone, the onetime David who had now proven himself to be a Goliath able to dictate terms to the studios, began looking for further conquests. "The paradigm was Disney's acquisition of ABC," Redstone explained. It demonstrated that the government would permit the consolidation of a studio and a network. Redstone reasoned that since the various divisions of Viacom—including Paramount, MTV, and Spelling Entertainment—produced twenty-eight hours of television programming a week, which was roughly ten times its total feature-film production, owning a network would provide a very

profitable "fit," as he put it. In 1998 he found an immense one: the television giant CBS. He paid $34 billion in Viacom stock for the acquisition, which gave him two separate networks—CBS and United Paramount Network (UPN)—a dozen television stations in major markets, the largest group of radio stations in America, the largest billboard company in the world, and five cable networks.

Redstone estimated that with the acquisition of CBS, Viacom would control over a third of the audience through which national advertisers reach their customers and earn $10 billion a year in advertising revenue. To maintain these audiences, Viacom needed a continuing stream of new movies, TV programs, and other material. "We use our content to build these audiences," he explained. Selling these audiences to advertisers was now, as he put it, Viacom's "core business."

Redstone, like Ross and Murdoch, was an empire builder, with, if anything, an even more insatiable appetite for large acquisitions—witness Viacom, Paramount, Blockbuster, and CBS, followed then by the Nashville Network, Country Music Network, Black Entertainment Television, and Infinity Broadcasting. Through them, he had assembled an entertainment conglomerate that controlled many of the principal routes—including radio, television, cable, and billboards—that were of interest to national advertisers in America.

For Redstone, viewers were the means, and advertisers were the end. Movies, instead of merely attracting ambulatory audiences to movie theaters, as they had in the era of the studio system, now served to deliver home audiences to advertisers. He thus made studios integral parts of the vast advertising-entertainment complexes that manufacturers and merchants depended on to sell their products.

David Sarnoff: The Delivery Boy (1891–1971)

David Sarnoff, by creating both a movie studio and a television network, pioneered the link between movies and home entertainment that would become the backbone of the new system. Born in the Jewish ghetto of Uzlian, Russia, in 1891, Sarnoff emigrated to America with his family in 1900. His first job was as a newsboy. While hawking Yiddish newspapers on the streets of New York's Lower East Side, he taught himself English and, with the help of a telegraph key, the new international language of

COURTESY OF CORBIS

Morse code. Fascinated by wireless communications, a technology even newer than movies, he soon became a telegraph operator at the New York office of the Marconi Wireless Telegraph Company. One fateful day—April 14, 1912—he found an opportunity to use the technology in a way no one could have anticipated. He had been given the job of sitting in the show window of Wanamaker's Department Store in New York, demonstrating the telegraph to curious onlookers, when he intercepted the message from a ship at sea: "Titanic ran into iceberg, sinking fast." With a great presence of mind, he managed to telegraph a passing steamer that was picking up some of the HMS *Titanic*'s survivors. When it replied, he—and Marconi—became the prime news source on the disaster.

By 1916, Sarnoff had further impressed his superiors at Marconi with his resourcefulness in a memorandum describing how small radio receivers, then considered no more than novelty "music boxes," could become "a household utility." "The idea is to bring music into the house by wireless," he writes. The music could then be followed by news and other programming. With this memo, he was laying the conceptual foundation for what would become, some fifty years later, one of the largest consumer-based industries in America: home entertainment.

Marconi, seeing the potential in Sarnoff's idea, put him in charge of the project. Then, in 1919, as a result of World War I and other interna-

tional pressures, the company sold its American assets to the General Electric Company, the manufacturing giant—originally known as the Edison General Electric Company—that had grown out of Thomas Edison's patents. Though only twenty-eight, Sarnoff was put in charge of reorganizing the Marconi assets for General Electric into the Radio Corporation of America (RCA).

At RCA Sarnoff wasted no time in designing the means to send music over the air to the home radios he had envisioned. With the approval of General Electric, he secretly negotiated to buy the broadcasting technology of AT&T, then the telephone monopoly, and with it created NBC, with two radio networks, the Red and the Blue. The Red network went on the air in November 1926, with a four-hour demonstration that included performances by the New York Symphony Orchestra, opera soprano Mary Garden, comedian Will Rogers, and six dance bands.

Since he knew it would be years, if not decades, before NBC would be profitable, Sarnoff's next move was to turn to technology that could be immediately—and lucratively—exploited: talking movies. In 1927 there were more than twenty-one thousand silent-movie houses in America. But as *The Jazz Singer* had demonstrated that year, the "talkie" was the future of movies, and Sarnoff foresaw that soon all the silent-movie houses, as well as the Hollywood studios, would have to buy new sound equipment.

In hopes that RCA could capitalize on this coming trend, he licensed from GE, RCA's corporate parent, a process called Pallophotophone, which recorded sound on movie film.

To give his company a further edge, he also created a new movie studio—by combining RCA's recording equipment division with the Keith-Albee-Orpheum Circuit, then the largest independent theater and vaudeville chain, and the Film Booking Office, an independent studio and distributor owned by financier Joseph P. Kennedy. This merger resulted in the formation of the last major studio, Radio-Keith-Orpheum Pictures, or RKO, in 1928. Sarnoff insisted that the logo of the new studio be a radio tower radiating out signals—a harbinger of the broadcast technology still to come.

With RKO, and its theaters, as a wedge, RCA within a few years was dominating the sound-equipment business. By this time, General Electric, concerned that its control of RCA might put it at risk of being targeted in an antitrust suit, decided to spin off its growing communication empire to its shareholders. So in 1932 RCA—which now included the two NBC radio networks and a controlling interest in the RKO studio—became an independent company.

Sarnoff, now in full control of RCA, then decided to sell the company's interest in the RKO movie studio. As far as he was concerned, the movie studio had always been no more than a convenient means to an end—the establishment of RCA's sound technology. Since the conversion to talking movies was now complete, he was ready to move on to another promising technology: television.

While Sarnoff had been busy organizing the NBC radio networks, two scientists, J. L. Baird in England and C. F. Jenkins in the United States, had successfully demonstrated in the mid-1920s that both pictures and sound could be transmitted between distant points through electrical signals. This feat had opened Sarnoff's eyes to the potential of an enormously powerful new medium of mass communications that would operate with the simplicity of radio but provide visual as well as aural pictures of the world. Before television could become a reality, however, the technology would have to be developed for broadcasters to send the signals on a continuous basis and for the public to receive them. By the early 1930s, Sarnoff was convinced that his company had the wherewithal to develop these technologies in a way that was economically feasible. RCA would engineer and then manufacture the sets; NBC would develop the means to broadcast the programs.

Meanwhile, the political issue of just who would own and license the airwaves over which television would be transmitted was being raised in Washington. In the Communications Act of 1934, Congress declared the airwaves to be public property and established the Federal Communications Commission (FCC), a government agency whose members would be appointed by the president but responsible to Congress, to regulate access to them. In the mid-1930s, the FCC began by licensing television stations to local entities throughout the country for a six-year period on the condition that the stations serve the public interest—a mandate that included the requirement that stations provide news and other public-service programs to viewers free of charge.

Since television stations, unlike movie theaters, could not directly charge the audience for the programs they saw, they had to find another

means of support. The answer was advertising: stations would charge sponsors for access to their audience.

Television finally became a reality at the 1939 World's Fair in New York, when Franklin Delano Roosevelt became the first president to appear on a television broadcast. Immediately afterward Sarnoff made his grand announcement: RCA was introducing the first commercial TV set, which had a twelve-inch screen and cost $650 (then about half the price of an automobile). Sarnoff then had NBC launch the first commercial television station in New York City, WNBT, and arranged for General Electric and other advertisers to sponsor programs on it. Despite all his careful and farsighted plans, Sarnoff encountered an obstacle he could not control. In 1941, before television had a chance to take hold, World War II intervened.

Sarnoff, though he was fifty by this time, volunteered his services in 1942, and General Dwight D. Eisenhower, impressed with his grasp of technological issues, promoted him to the rank of brigadier general and made him his wartime communications advisor.

Despite General Sarnoff's patriotic contribution to the war effort, the FCC remained steadfast in its objection to his company's control of two of the three networks—NBC's Red Network and Blue Network—that were to become the backbone of television after the war. (The third network, the Columbia Broadcasting System [CBS], was owned by William Paley.) Sarnoff accommodated the FCC in 1943 by selling the smaller Blue Network, which became the American Broadcasting Company (ABC).

As the postwar television industry developed, NBC, CBS, and ABC each came to own outright five stations—the maximum allowed by the FCC—in major cities. To reach the rest of the country, each network made arrangements for its programs to be carried by stations it did not own, called affiliates, during the four hours in the evening that became known as "prime time." The affiliated stations, in turn, got the right to sell a limited amount of local advertising on the nationally sponsored programs. When, during the 1950s, networks could no longer find single sponsors for a given program—such as Philco for *The Philco Television Playhouse,* R. J. Reynolds Tobacco for the *Camel Caravan*, and General Electric for the *General Electric Theater*—they began producing their own programs and selling commercial time on them to multiple advertisers.

General Sarnoff remained the chairman of RCA until 1970. Asked once about the function of the broadcast networks he had been instrumental in establishing, he answered, "Basically, we're the delivery boys." Despite his modest formulation, it was the nationwide delivery system of broadcast television that Sarnoff pioneered that enabled those who followed him to build the enormous entertainment empires of today.

After Sarnoff died in 1971, the nonbroadcasting assets of RCA were sold off piece by piece, and in 1985, after the Justice Department relaxed its antitrust criteria, General Electric bought the final piece, NBC—the network it had been forced to divest fifty-three years earlier. Although NBC proved a profitable acquisition, General Electric's management became increasingly convinced, as all the other networks merged with movie studios in the 1990s, that NBC would find itself at a competitive disadvantage in acquiring movies and other programming. "The numbers made the case," an NBC executive explained. The enormous increase in network outlays for studio movies and programs during that decade are evident in Table 2.

Once merged together with studios, networks tended to buy a huge share, if not all, of their movies, cartoons, and programs from their corporate sibling. ABC, for example, bought more than 70 percent of its programs from its Disney units. While these in-house deals might not fit the theories of classical free-market economics, they gave studio-network combinations a larger share than they might otherwise have of the $5.07 billion network purchases in 2003. In addition, as network purchases established series for future sales, it gave the studios with networks an advantage in syndication and foreign markets, which amounted to another $5.48 billion in 2003. NBC, the only network without an in-house studio to supply it, decided to remedy the disparity by buying a movie studio. At that point, the best bet was Universal, which had undergone a wrenching sojourn of corporate upheavals after Wasserman had sold it to Matsushita in 1990.

In 1995, with the Japanese economy in a deep recession, Matsushita had decided it could not afford the financial burden of a Hollywood studio and sold a controlling interest in Universal to Seagram, a Canadian beverage company, for $5.7 billion.

Edgar Bronfman, Jr., whose family had founded and controlled Seagram, and who had dropped out of college to be a songwriter and music

TABLE 2. NETWORK CONTRACT PURCHASES FROM U.S. STUDIOS (MILLIONS)

Year	Movies and Cartoons	TV Programs	Total
1993	$259	$1,124	$1,383
1997	$978	$2,259	$3,237
2002	$1,329	$2,501	$3,830
2003	$1,759	$3,310	$5,069

producer, personally took charge of the movie studio. In 1998 Bronfman bought PolyGram NV for $10.4 billion and combined PolyGram and Universal's record labels, creating the world's largest music company.

The record business, which had been incidental to Wasserman's vision, became central to Bronfman's. Instead of an enterprise based on manufacturing, distributing, and selling products, as his family had done in their liquor business and Wasserman had done in the movie business, Bronfman envisioned one based heavily on licensing music, movies, and other properties. The Internet would play a critical role in distributing such licensed intellectual properties to consumers around the world.

While Wasserman had viewed television production as the heart of the studio's profitability, Bronfman decided to get out of the television-production business by selling most of Universal's domestic television and cable assets, including its library of programs. He did this in a roundabout way. Universal under Wasserman had jointly created the USA cable network with Paramount, and now Universal and Paramount's parent, Viacom, each owned half of it. Bronfman's perspective was different. On the theory that the cable interests owned by Viacom, including MTV and Nickelodeon, might influence the USA Networks programming, he had Universal sue in federal court to force Redstone to sell Viacom's half interest in USA to Universal. Redstone, a former antitrust lawyer, saw no gain in such litigation, and sold his company's share for $1.7 billion. Bronfman then merged the USA Networks, and, in addition, all of Universal's other domestic cable and television interests, into Barry Diller's company, Home Shopping Network, which owned home-shopping networks, radio stations, and electronic ticket-reservation services. For these assets, Universal got 46 percent of the stock of Home Shopping Network, which it agreed to vote in support of Diller's management. As a result of this complicated transaction, Universal effectively turned over its cable and television business, which for other studios provided a main engine of profit, to Diller's company, now renamed USA Networks.

Then, in 2000, the young Bronfman, under family pressure to make a profit, sold the entire company to the French corporate giant Vivendi, under the leadership of its forty-three-year-old chairman, Jean-Marie Messier. Less than three years later, forced to the brink of bankruptcy by its chairman's huge acquisitions, Vivendi fired Messier, then put Universal up for sale.

Enter General Electric, which offered to merge Universal and NBC into a new entertainment conglomerate of which it would own 80 percent and Vivendi 20 percent. In October 2003, when Vivendi accepted the offer, NBC Universal was created. The new vertically integrated giant would supply programs and movies from its studio and library to an immense audience through NBC, a television network that reached virtually the entire population in America; fourteen local television stations in New York, Los Angeles, Chicago, and other metropolitan areas; six cable networks (USA, Trio, Bravo, the Sci Fi Channel, CNBC, and, in partnership with Microsoft, MSNBC); and the leading Spanish-language network, Telemundo (which, with fifteen stations and thirty-two affiliates, reached over 90 percent of Hispanic homes in America). It would also own the Universal theme parks in Florida and California, which drew an audience second only to Disney's theme parks, and overseas, through its partnership with Viacom, major theater chains in Europe and Japan, as well as United International Pictures, the largest foreign distributor of movies and home-entertainment products. Meanwhile, Vivendi, the junior partner in the new conglomerate, would continue to control Canal Plus, with its global cable and pay-TV interests, and Vivendi Universal Music, the world's largest record company.

The merger of NBC and Universal also provided some measure of closure to the century-long shaping of Hollywood. The gap between moviemakers and industrial America that first emerged at the outset of

the twentieth century—when Universal Pictures fled to Hollywood to distance itself from the Edison interests, which later evolved into General Electric—had now closed. The television networks, once so feared by the moguls, had, with this final merger, become fully unified with the studios.

NBC Universal was not the only postmillennium consolidation. After the death of Steve Ross, Time Warner had also expanded its domain. First, it acquired Turner Entertainment—the $8 billion media empire created by the cable pioneer Ted Turner that included CNN, the all-news network; the Turner cable networks; Turner Network Television; the Cartoon Network; Turner Classic Movies; and New Line Cinema. Then, in 2000, it merged with the Internet behemoth AOL, which gave it a powerful presence on the Internet.

The six entertainment giants—Viacom, Time Warner, NBC Universal, Sony, Fox, and Disney—today rule the universe of entertainment. Between them, they own all six broadcast networks in America. These networks—NBC, CBS, ABC, Fox, UPN, and the Warner Bros. Network—establish the hit series that are eventually syndicated. They also own sixty-four cable networks whose reach accounts for most of the remainder of the prime-time television audience. Indeed, between over-the-air and cable networks, the big six control over 96 percent of the programs that carry commercial advertising during prime time. They also own the broadcast rights to all the sporting events prized by advertisers—including the Olympics, the Super Bowl, the Indianapolis 500, *Monday Night Football*, and the World Series—as well as the major commercial radio networks, making corporations that want to sell their products or establish their brands on a national scale heavily dependent on them for access.

These six companies further control the television networks depended on by advertisers to reach children under twelve—including the Disney Channel, Nickelodeon, Nick at Nite, the Cartoon Network, the ABC Family Network, and Fox Kids—and those designed for younger teens, including MTV, Fox Sports, ESPN, and the Warner Bros. Network.

The six companies also dominate the worldwide distribution of movies, a studio business Steve Ross once described, with considerable justification, as a "money machine." The studios' distribution arms, along with their subsidiaries, make the arrangements necessary for theaters

TABLE 3. THE SEXOPOLY: THE COMBINED MARKET SHARE HELD BY VIACOM, FOX, NBC UNIVERSAL, TIME WARNER, SONY, AND DISNEY

Category	Properties of All 6 Companies	Market Share
U.S. Film Distribution		96% of Total U.S. Rentals
Major Studio	Disney, Paramount Fox, Universal, Warner Bros., Sony	71%
Specialty Distributors	New Line, USA, Miramax, Fox Searchlight, Fine Line, HBO, Dimension, Sony Classic, Paramount Classic	25%
Prime Time Television		98% of U.S. Ad Revenues
Broadcast	NBC, ABC, CBS, FOX, WB, UPN	(70%)
Cable	USA, Comedy Channel, ESPN, CNN, TNT, BET, MTV, VH1, Nickelodeon, Disney, Fox Kids, ABC, Nick at Nite, Family Network, Sci Fi, Bravo, Fox Sports, Cartoon Network, TBS	(28%)
Non-Prime Time Television		75% of Local Ad Revenues
• Local Stations	63 Stations	(41%)
• Cable	More Than 100 Cable Networks	(34%)
Pay TV	HBO, Showtime, Cinemax	Share of Subscribers 80%
Radio	Infinity, NBC, ABC, Disney, CBS, Fox	Share of Advertising 65%

throughout the world to show both movies produced by their own studios and those licensed from independent American and foreign filmmakers, and, in return, levy a distribution fee that generally amounts to one third of all the revenue received from theaters.

In addition, they control a large part of the entertainment media, including magazines (such as *People*, *InStyle*, and *Entertainment Weekly*), TV and radio interview shows (such as *Today*, *The Tonight Show with Jay Leno*, and the *Late Show with David Letterman*), and cable channels that publicize movies (such as E!, VH1, and MTV).

The creators of this new system—Disney, Wasserman, Ross, Morita, Murdoch, Redstone, and Sarnoff—and their associates and successors had redefined Hollywood into a vast entertainment economy dominated by six corporate giants. These six companies now focused not on the moviegoers who had once driven the movie business but on the far more lucrative and ubiquitous home audience. And, like the modern Pied Pipers they are, they now reaped their greatest rewards from the children and teenagers in that audience.

But before the six companies could realize their full potential, they had one more challenge to overcome. They had to achieve true global reach by overcoming any barrier that might prevent their product from appealing to any audience in the world.