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THE BUSINESS OF MAKING MONEY WITH MOVIES

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Despite an ever-changing entertainment landscape, motion pictures are still the cornerstone of the U.S. entertainment industry with consumers spending nearly $50 billion in 2008 to watch U.S. movies in a variety of formats. In the February and March 2008 issues of *Strategic Finance*, we discussed the cost side of the motion picture industry, focusing on how films are produced and marketed. In 2008, the average feature film cost the major studios $72 million to produce and $37 million to promote.

In this article, we discuss how the major film studios are constantly changing their revenue-generating models to extend the economic life of a film by adapting to new competitive forces and technological changes. After all, studios need to think beyond the box office since more than four-fifths of a film's revenue typically comes from home video, pay TV, and other downstream sources. The Foundation for Applied Research (FAR) of the Institute of Management Accountants (IMA®) sponsored our research (see FAR Research Study, p. 39). Let's begin.

Until the early 1970s, consumers in the U.S. had only a few ways in which they could enjoy a movie: They could see it during its theatrical release, attend a film festival or revival, or view it long after theatrical release on one of the three major television networks (ABC, NBC, or CBS). During this era, the main sources of revenues for the studios came from theatrical release, international sales, and network television.

In 1972, the options for consumers increased when Home Box Office (HBO) became the first cable television network to offer a subscription service. HBO's offerings included recent and well-known films, sporting events, and original programming. A truly significant technological innovation occurred in 1975 when Sony Corporation introduced Betamax, the first home video system. The Victor Company of Japan (JVC) quickly entered the market, offering the VHS format (video home system) as an alternative. Ultimately, VHS became the industry standard. In 1977, the Video Club of America opened the first video store from which movies could be purchased, and George Atkinson opened the first video rental store. Home video provided new opportunities for the studios to generate more revenues from their existing film libraries.

Today the viewing options for consumers and, hence, the revenue streams for the studios have increased significantly as content delivery systems continue to evolve. Since studios rely on a variety of revenue streams, new technologies allow the industry to remain viable in turbulent times. Nevertheless, the theatrical release of a movie is still the single most important indicator of success and offers a critical means by which to evaluate industry trends. Table 1 shows the various revenue streams, beginning with the domestic box office. Let's now look at factors affecting the box office.

The Domestic Box Office

Without a doubt, opening box office performance (and cumulative box office receipts to a lesser extent) is still the critical indicator of a film's success. As we pointed out in "The Business of Selling Movies" in the March 2008 issue of *Strategic Finance*, the level at which the film performs on opening weekend (Friday through Sunday) influences all downstream contracts regarding digital versatile disk (DVD), international, network, satellite, and cable television, as well as Internet and mobile sales. Depending on ticket sales, movies stay at the box office from three weeks, like the movie *Gigli*, to eight months, like *Lord of the Rings: The Two Towers*.

According to Boxofficemojo.com, in 2009, overall box office performance reached an all-time high of $10.6 billion, thanks in large part to five huge blockbusters: *Transformers: Revenge of the Fallen*, *Harry Potter and the Half-Blood Prince*, *Up*, *The Twilight Saga: New Moon*, and *Avatar*. This is the first time ever that the domestic box office exceeded $10 billion. While this number is portrayed as good news, the studios are still concerned. These box office numbers mask several critical factors related to the current theater-going audience.

First, the studios are under enormous pressure to create blockbusters to obtain these kinds of results. It's no accident that the top three movies listed above cost between $210 million and $250 million, not including about

Table 1: Windows of Exhibition for Movies

SOURCES	WINDOW
Domestic Box Office (Theaters)	Initial theatrical release of three weeks to eight months
Home Video (VHS/DVD)	Exclusive window of only six weeks before pay-per-view
Pay-Per-View	Exclusive window of from two to six weeks before premium channels
Premium Pay Channels (Pay TV)	Exclusive window for up to 18 months before network and cable TV
Network (free) and Cable TV	Up to 12 to 18 months before syndication
Syndication	60 months on either network television or cable network

Note: *Omitted from the distribution channels and windows are foreign sales, hotels, airlines, college campuses, the video game sector, consumer products merchandising, and theme parks. Foreign sales usually begin after the initial theatrical release in the U.S. Each territory has different windows for different channels. Video games based on blockbuster movies sometimes earn equivalent revenues as the theatrical releases.*

The percentage of people who actually go to a movie theater has declined from a high of 65% of the population in 1930 (before television) to about 10% over the last several decades.

$100 million in marketing costs. If such movies had failed, the studios would be in dire straits. Also, over time, the percentage of people who actually go to a movie theater has declined from a high of 65% of the population in 1930 (before television) to about 10% over the last several decades and to 9.9% in 2009. In 2009, however, attendance was up by about 10% over the previous year, and some believe that the recession caused many to go to the movies as an escapist route. Box office attendance has been decreasing for several reasons—chief among them the smorgasbord of entertainment options, such as video games, music, movies, television, and user-generated content (as might be viewed on social network sites) in a variety of formats and through innovative methods of delivery that include online and mobile devices.

These easy-to-access options compete with the motion picture industry for consumer dollars—a scenario very different from that of the 1930s when consumers had no other option but to attend a theater if they wanted to see a movie. Today approximately three out of four people prefer to watch movies in locations other than a theater because their satisfaction with the movie theater experience has declined, citing high ticket prices, boring commercials, rude behavior among other patrons, and dirty theaters.

Second, box office revenues have reached this record level primarily because of the large increases in ticket prices. For instance, in 1930 the average ticket price was $0.24, in 1990 it was $4.25, and in 2008 it was $7.18. In major cities, the average movie ticket costs $11 on a weekday and $13 on weekends, so, at these prices, many consumers wait to see a film in DVD or on pay-per-view in the comfort of their own homes.

Third, movie piracy, especially illegal downloads from the Internet, affects revenue. The Motion Picture Association of America (MPAA) estimates that more than $6.1 billion of revenue was lost because of piracy. While most piracy occurs in China, Russia, and India, the U.S. has its fair share. Piracy takes many forms, the most common being the unlawful release of a stolen print that is then uploaded to a file-sharing site, such as Pirate Bay. The most recent high-profile case of piracy involved the film *X-Men Origins: Wolverine*. In early April 2009, an almost completed, illegal copy leaked onto the Internet, and approximately one million people illegally downloaded it. Fortunately for 20th Century Fox, the film had a very strong box office weekend opening of $85 million. Nevertheless, while hard to estimate, a great deal of revenue was still lost because of piracy.

Assessing Different Formats and Revenue Streams

Faced with a decline in patrons at the box office, increased competition from other entertainment options, and piracy of its content, the major studios are constantly assessing new revenue streams. The main goal for any entertainment company in these times is to develop content that can be distributed through as many channels as possible. Currently, the major sources of revenue outside theater releases come from home video, network, satellite and cable television, international distribution, the Internet, and mobile devices. In the following sections, we'll discuss the development and growth or decline of each of these market segments.

Home Video

The development of home video in the mid-1970s as a highly profitable post-theatrical release option fundamentally altered the economic structure of the film industry and its market practices. Initially, the studios priced their video releases for sale to video rental outlets rather than to consumers. At $100 or more each, few individuals could afford to purchase them. By 1986, the major studios earned more revenue in the domestic home video market through sales and rentals than they did from theatrical release.

By 1990, movies were either rented or sold at much more reasonable prices directly to consumers (known as sell-through). Video rentals reached a plateau, but video sell-through sales continued to grow. By 1992, the value of video sell-through sales exceeded the domestic theatrical box office for the first time. Home video caused a significant downward shift in the box office; for instance, the domestic box office represented 80% of studio revenues in 1980, but by 1992 it decreased to no more than 25%.

In 1997, the first DVD players were sold in the U.S. DVDs quickly became the industry standard, and today VHS tapes are no longer produced for new films. In 2006, *A History of Violence* was the last VHS tape made of a major feature film. According to Standard & Poor's, DVD sales in 2008 accounted for $16.2 billion, and DVD rentals generated revenues of $7.5 billion. But DVD sales are on the decline. Based on a 9% drop in 2008, Adams Media Research projects that DVD sales will decline 8% in 2009. The decline is attributed to the high price of DVDs, the downturn in the economy, and the popularity of DVD rental sites.

Industry analysts suggest that Blu-ray discs will replace DVDs once the prices of Blu-ray players and Blu-ray discs drop significantly. Yet market penetration of Blu-ray has been much slower than anticipated. Some suggest that all discs will be phased out and consumers will then obtain their films by direct streaming from Internet sources like Netflix, iTunes, and movielink or via satellite, thereby avoiding any physical discs. No one knows if physical discs will actually be completely phased out, though. For years, LP records became obsolete as CDs became the standard, but LPs are making a comeback as many consumers believe the sound quality of records is more authentic and pleasing.

Television

When television was born in the 1940s, the Hollywood studios initially viewed it more as a threat than an opportunity, but eventually they discovered that it was quite profitable to license movies to television. The six major studios earned revenues of about $17.7 billion in 2005 by licensing their movies and TV series to television networks and stations.

To maximize their television license revenue, studios divide the licensing of their movies into discrete time periods, known as "windows of exhibition." Table 1 describes the six major windows, including four television windows (pay-per-view, premium pay channels, network and cable TV, and syndicated TV).

Video/DVD

As Table 1 shows, after the initial theatrical run, which typically lasts from two weeks to six months, the next window is for home video, which lasts up to six weeks with guaranteed exclusivity. According to Larry Gerbrandt, senior analyst at Paul Kagan & Associates, a little-known secret in the home video rental market is that the video rental companies make their largest profits from late fees.

Pay-Per-View (PPV)

The next window is pay-per-view (PPV), which allows subscribers to cable and satellite television to order movies directly through a joint venture that licenses the films from all the major studios. Initially this window was timed to open about seven months after the theatrical release to avoid delaying or competing with the video release. But when studios began releasing the DVDs in the late 1990s and their popularity soared, the window had to be moved up when cable and satellite suppliers complained that they received their movies too late to compete with DVDs. Despite claims that PPV would provide another strong cash stream, the six studios' revenues from it have remained relatively modest.

Premium Pay Channels

The next window, which opens one year after the movie appears in theaters, is premium pay channels. The three major pay TV channels are HBO, Showtime, and Starz. This window remains open for up to 18 months. The licensing fee to show a major studio movie over a one-year period is based on domestic box office performance and can be as high as $20 million to $25 million for a blockbuster, although the average is more like $7 million per film.

FAR Research Study

The research we conducted for FAR involved two stages. In the first stage, we gathered information about the various revenue streams from published sources as well as in-depth interviews with a number of professionals working in the motion picture industry. This research forms the foundation of the current article. In the second stage, we conducted an empirical study to determine which variables had the greatest effect on cumulative box office. We found that two variables, movie critics' reviews as an indicator of product quality and the amount of money spent on advertising the film, were the two most important factors affecting the total (cumulative) box office receipts over the theatrical run of the film. Our research also found that cumulative domestic box office revenues positively affect international box office revenues as well as home video sales and rentals. Of note, the effects of the domestic box office revenues on each downstream revenue stream decrease as the time interval between the theatrical release window and downstream windows increases. Consistent with findings in the box office revenue analysis, critics' reviews have very strong positive effects on all three downstream revenues.

We used a sample of 1,276 films from 1997 to 2003 and obtained film critic reviews from *Entertainment Weekly* (*EW*), which publishes its own film critic reviews, film opinion results from an online survey, and critic reviews from other sources. *EW* reports eight or nine critic reviews of the same film in one place over three or more weeks. We calculated an overall indicator of each week's critic reviews collected from *EW*. Merging the critic review data with the theatrical box office data reduced our sample size to 856 films, which we used to perform the domestic box office revenue analyses.

We also collected advertising and production costs on the films in our sample from the *Motion Picture Investor*—a motion picture industry publication by Paul Kagan & Associates that publishes these cost data shortly after a film is released and then updates them in the next year. We collected foreign box office revenues and DVD/VHS rental revenues from various Internet sources, including www.worldwideboxoffice.com. We were able to obtain a proprietary database on DVD/VHS sales under confidentiality conditions from one of the six major motion picture studios. We also used a large set of control variables, including film production cost, actor and director star power, genre, original or sequel, distributor, rating, and season and size of release. Many of these variables are publicly observable features of the film and thus may influence filmgoers' expectations, such as their perceptions of the film's quality.

Network or Cable TV

The fifth window, which lasts between 12 and 18 months, is network or free television. The networks and cable stations compete to determine who will obtain the rights to broadcast each film and typically pay from $3 million to $15 million for a movie, depending on the title's box office success and number of runs.

Syndicated TV

The final window is syndicated television stations, which means that local stations can bid for the right to show the movie and can air it for up to five years. In the largest TV markets, studios may charge up to $5 million for syndicated television rights to a strong film.

International Distribution

The international box office has accounted for slightly less than half of the major studios' total income from theatrical markets since the 1960s. The international market for U.S. films continues to grow. Standard & Poor's estimates that, in 2008, foreign consumers spent nearly $18 billion watching U.S. movies (the worldwide box office is $28 billion, including nearly $10 billion of domestic box office revenue). The largest foreign consumers of films are those in the U.K., Japan, Germany, France, Spain, and Australia/New Zealand. Of course, not all of the $18 billion in revenues went to U.S. studios because the exhibitors kept approximately 50% of box office receipts.

Television licensing is equally profitable overseas. Studios typically sell their movies in blocks of six to 10 films to foreign television networks. The license fee for the package is then allocated across the movies at the studio's discretion. In 2003, overseas TV licensing was valued at approximately $1.76 billion, half from conventional broadcast stations and networks and the other half from pay TV.

The overseas nontheatrical market grew in the late 1980s as a result of growth of cable and video, making the home video market a larger source of overseas revenue for Hollywood studios than the overseas theatrical market in the 1990s. Standard & Poor's predicts that the overseas revenue from U.S. movies will increase to $41.6 billion by 2011.

Internet and Mobile Technology

As has been the case historically, new technology will pave the way for perhaps the most significant revenue streams yet to come. The rate at which the new technology (such as smart phones) penetrates the market is the limiting factor for new product proliferation, such as downloadable movies. Hollywood has taken note of how file sharing almost destroyed the music industry, and it is now preparing to deal with a similar threat. Like their experience with television, VHS, and DVD, the film industry is trying to determine a new revenue-generating model to exploit the Internet as a new revenue source.

The greatest concern is protecting copyright. Studios fear that once they release a film online in digital format, they will lose all control over its subsequent use and distribution. In one effort to maintain control over online content, the studios are working with the computer industry to build copy-protection technology into hard drives. For instance, Microsoft's Windows Vista contains a DRM (digital rights management) system called the Protected Media Path, which contains the Protected Video Path (PVP). PVP tries to stop DRM-restricted content from playing while unsigned software is running in order to prevent the unsigned software from accessing the content.

DVD rental companies and studios have come up with a new business model, although it will take some time before digital downloading and video-on-demand (VOD) become significant revenue streams. Netflix and Blockbuster, through an alliance with TiVo, the digital video recording service, are creating a digital entertainment service that reportedly will allow customers to order a movie online, which will then be loaded onto their TiVo sets, providing DVD-quality movies on demand. Walt Disney recently joined News Group and Universal Studios to finance and supply content to Hulu.com, which Hulu operates on a revenue-sharing basis with its content partners. Walt Disney will not only supply archived TV programs but also titles from Disney's movie library.

Consumers already can download films directly to their iPods, BlackBerries, and other mobile devices. It's estimated that the number of those so-called smart phones will reach 2.6 billion worldwide by 2011, so movie downloads potentially offer a significant revenue source for the studios, assuming they can put in place the right business models. Predictions are hard to make, but *Screen Digest* has estimated a potential $1.3 billion of revenues from Internet movie downloads in the U.S. and Western Europe in the next couple of years.

Exploiting Intellectual Property

Through analysis of the movie industry, we've illustrated the roles of costs and revenues in a setting distinct from traditional goods and service industries. Motion pictures are just one of the information industries in which value is created through knowledge and intellectual property. Firms generate revenues by developing, selling, and reselling the same content using different formats and in different markets. For professionals in accounting and finance, understanding and managing lifecycle costs and revenues in knowledge-based industries such as motion pictures can help them create value by exploiting intellectual property. **SF**

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