

Factors Influencing Motion Picture Success: Empirical Review And Update¹

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ABSTRACT

This paper investigates the factors associated with the success of creative products and services, focusing specifically on motion pictures. The study offers a comprehensive examination of the factors influencing motion picture box office success, including quality and other product attributes, as well as marketing expenditures and film distribution patterns. Based on a thorough review of the literature, a model is developed and tested using a sample of 439 movies. Results suggest that the following factors are positively associated with motion picture success: quality, whether a movie is a sequel, marketing expenditures, the number of opening screens, and a favorable release date. Implications of these findings for both theory and management are suggested.

Keywords: Motion pictures; performance; creative products and services

INTRODUCTION

The current economic landscape is increasingly populated by industries providing products and services characterized by a high degree of creativity or knowledge content. The research reported in this paper focuses on the motion picture industry, which possesses characteristics common to many other post-industrial businesses and markets. Moreover, motion pictures represent one of the leading forms of popular culture, so an understanding of the factors associated with the success of films should be of interest not only to the film industry and those working with other forms of popular culture, but also to scholars interested in better understanding the economics of intangible products and services. Such products and services share a number of characteristics that make for interesting and unique challenges, including:

- *High risks and product development costs.* Film studios face significant risks and very high product development costs (Caves, 2000). A low-budget film will occasionally become a box office winner, but most motion pictures cost tens of millions of dollars to produce, and nearly all of this money is spent before a studio knows whether these films will be successful.
- *A short product life cycle.* Like the products and services of many industries today, a film's life cycle is very short, averaging a mere 9.6 weeks, and in some cases the complete life cycle can be as short as two weeks (Caves, 2000; Radas & Shugan, 1998). Moreover, movie life cycles are characterized by a peak in revenues at the time of initial release followed by exponential decay (Zufryden, 1996).
- *Very high advertising and marketing costs.* Because film life cycles are so short, the major studios spend millions of dollars to create awareness of their films and insure high attendance during opening weekends. Like pharmaceutical firms spending millions of dollars to market their new products or the Internet start-

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ups spending much of their venture capital on advertising to create a presence on the Web, massive amounts of money are spent by studios and film distributors to create awareness for their products. Average marketing costs are now \$20 million per film, and it is not uncommon for the major studios to spend as much as \$30 million to advertise the release of a new motion picture (Motion Picture Association of America, 1998).

- *A personal and intangible customer experience.* Motion pictures – like other forms of popular culture and the services of many contemporary industries – offer a highly personal customer experience. Different consumers may react very differently to the same motion picture, and the reasons that consumers provide for liking or not liking a film may be unique, intangible, and even difficult for them to articulate.

Yet despite these interesting characteristics and the significance of the film industry to the economy and society at large, motion pictures (specifically the factors associated with movie attendance and box office revenues) have received relatively little empirical study (Austin, 1983; Lampel & Shamsie, 2000). Some studies have examined the influence of rather limited sets of factors on box office success, while a few studies have focused specifically on the influence of marketing strategies on movie success. Very few studies have examined the factors associated with the box office performance in a comprehensive way, and significant gaps exist even among the more thorough studies. For example, Litman's (1983) study does not consider the influence of marketing costs or distribution strategy on movie success. Eliashberg and Shugan (1997) do not include casting or marketing expenditures. A more recent study by Lampel and Shamsie (2000) omits genre, the star power of the cast, and marketing expenditures. Prag and Casavant (1994) do not consider distribution strategy or release date. What emerges, then, is a rather small and uneven set of studies examining the important question of the factors associated with the success of popular films.

This paper seeks to fill these gaps by providing the most complete examination to date of the factors influencing the box office success of motion pictures. The study specifically considers the influence of a broad range of product attribute, marketing, and distribution variables. The paper begins by reviewing prior research, and uses the findings of past studies to develop a comprehensive model of the factors influencing box office success. This is followed by a description of this study's methodology, a summary of the findings, and a discussion of the study's broader implications. Beyond examining the variables that influence box office success, this research seeks to contribute to our understanding of the factors that contribute to success in other creative- and knowledge-based industries.

REVIEW OF LITERATURE

The literature can be divided into four meaningful categories of investigation: Quality, other product attributes, marketing/advertising, and distribution. Each is presented in the following brief sections.

Quality

A number of studies address the relationship of quality to the success of a work of popular culture. Quality became a mantra in many industries during the last decade, but researchers question the importance of, or even the meaning of, quality in relation to films and other forms of popular culture. How should quality be assessed when products and services are largely intangible and the evaluation of quality is based largely on the interpretation of individuals who interact with the products and services? In the case of works of popular culture, we know that some artists and authors can enjoy great success in spite of the misgivings critics may have of their work (Bloom, 2000; Guthmann, 1998).

In the case of motion pictures, previous studies report mixed findings on the importance of movie quality to box office success. For example, Dodds and Holbrook (1988) used Academy Award nominations and awards as indicators of movie quality and found that nominations and awards for best actor, best actress, and best picture are positively associated with box office revenues. In addition, Hennig-Thurau, Houston, and Walsh (2006) discovered that awards exert the strongest direct and total impact on a film's profitability in both the short and long run. Another study (Terry, Butler & De'Armond, 2005) found that Academy Award nominations are worth over \$6

million in film revenue per nomination. Smith and Smith (1986) contended, however, that these relationships are time dependent and that only in certain years do movies receiving awards enjoy higher box office revenues. Finally, a study by Austin (1984) reported no significant relationship between awards and overall box office success.

Other studies have used critics' reviews as a measure of movie quality, and most have reported positive associations between critics' reviews and movie success (Lampel & Shamsie, 2000; Litman, 1983; Prag & Casavant, 1994; Sawhney & Eliashberg, 1996; Terry, Butler, & De'Armond, 2005; Wyatt & Badger, 1984). Most of these studies view critics as credible sources of information about the quality of films (Cameron, 1995; Lampel & Shamsie, 2000). For example, Eliashberg and Shugan (1997), who concluded that critics' reviews are a good predictor of box office performance, cited a *Wall Street Journal* article noting that one-third of all moviegoers see movies based primarily on favorable reviews by critics. Thus, prior research provides a basis for hypothesizing that quality, as measured by movie reviews, will be an important influence on box office success.

Other Product Attributes

A second area of empirical investigation looks at other product attributes, including genre, casting, ratings, and sequels. In a number of studies, the motion picture market is segmented by genre or movie type. Mayer (1973) suggested that a wide variety of genres can succeed, including sentimental movies appealing to moviegoers' emotions, action films that provide moviegoers with a sense of escape, and violent or other movies that have the ability to shock their audiences. Mayer concluded that box office success is most likely a function of content and timing – producing the right genre or movie content at the right time. Palmgreen and colleagues (1988) examined the factors motivating movie attendance and identified opportunities for mood control and enhancement as the key reason why people attend movies. Presumably, a variety of genres can provide these satisfactions, and no one genre would seem to have inherent advantages at meeting these desires. Perhaps the influence of genre is time dependent – certain genres, popular at one point in time, may be less popular at another, although some themes – the celebration of individualism, for example – appear to be timeless (Gabler, 2002).

These rationalizations may explain why the few studies exploring the influence of movie genre on box office success have reported such mixed findings. Anast (1967) found that movies featuring violence, mishaps, luxury, or eroticism are positively associated with attendance, while adventure movies and movies emphasizing achievement are negatively associated with attendance. Similarly, Ravid and Basuroy (2004) found that not only do very violent films open better than other films, but also that very violent films and films containing sex and violence tend to provide significantly higher revenues than films of other genres. Litman (1983) included story type (i.e., drama, action-adventure, science fiction-horror, comedy, and musical) in his study, but only found science fiction and horror genres to be positively associated with movie revenues. A more recent study by Zufryden (1996) concluded that action movies are negatively associated with consumers' intentions to see a movie. On the other hand, Sawhney and Eliashberg (1996) reported that action movies are positively associated with attendance decisions, while dramas are negatively associated with attendance decisions. Prag and Casavant (1994) also found a negative association between dramas and box office success.

This mixed set of empirical findings does suggest a few tentative observations. Past studies, conducted over different time periods, find action and horror movies positively associated with movie attendance, while adventure films and dramas are negatively associated with attendance. In addition, given the wealth of animated films released over the last decade and the considerable anecdotal evidence attesting to their box office appeal, it is possible that animated films also enjoy higher box office revenues (Brown, 2000). Based on previous studies and more recent developments, it seems reasonable to hypothesize that action, animated, horror, and science fiction movies will enjoy greater box office success.

A far less studied attribute of motion pictures is the influence of casting. Litman (1983) argued that casting would have a very limited influence on box office success:

As for stars, it appears that they are not as important as in previous years. In the past, moviegoers would frequent shows simply to watch their favorite actors and actresses... The storyline was subservient to the cast... The movie-

going audience seems more discerning today. They expect more than mere diversion from the motion picture industry. In short, there appears to be no “bankable” stars anymore (p. 160).

Litman’s results supported this logic, as he found no significant correlation between star ratings and movie success. And, for certain time periods, Smith and Smith (1986) found a negative relationship between movies that had received Academy Awards for best actor or best actress and box office revenues. Studies by De Vany and Walls (1999), Hennig-Thurau, Houston, and Walsh (2006), and Ravid (1999) concluded that only a very limited number of stars have the ability to significantly influence motion picture success, and that even those stars do not guarantee success.

In spite of these findings, a number of reasons remain for believing that the cast may have an important influence on box office success. Casting the right actor or actress in the right part is important to the artistic success of any movie. A recognized actor or actress will also bring instant awareness to a film, and any advantage in capturing consumer awareness can be critical to success. Some stars also appear to be remarkably popular abroad as well. On average, films starring Brad Pitt generate \$48 million more abroad than they do here in the U.S. Leonardo DiCaprio’s films also generate on average over twice the revenue abroad as they do in the U.S. (Lippman, 2004).

Supporting such arguments, Pokorny and Sedgwick (2001) examined whether the practices of Warner Brothers, which invested heavily in previously successful stars, were effective at increasing the studio’s returns on its motion pictures. Distinguishing among high-, medium-, and low-budget movies, Pokorny and Sedgwick found that only in the case of medium- to low-budget movies was Warner’s strategy successful. Focusing on a more recent time frame, Dodds and Holbrook (1988) found that Academy Awards for best actor and best actress are positively associated with box office revenues. Wallace and colleagues (1993) found that, for some of the time periods they examined, certain stars contributed to box office success. Studies by Prag and Casavant (1994) and Sawhney and Eliashberg (1996) have also reported that the presence of major stars is associated with higher box office revenues. Desai and Basuroy (2005) found that star power has a positive effect on total revenue for comedies and dramas, but that it has no effect on the revenues of films with less familiar genres. Albert (1998; 1999) made an even stronger argument for an association between major stars and successful motion pictures, concluding that stars are important not only for their ability to attract audiences, but also because directors’ casting decisions send a powerful signal to producers about the probability of their films being successful. Thus, casting is likely to be a significant influence on box office success.

The influence of motion picture ratings as assigned by the Motion Picture Association of America (MPAA) has been the focus of a very limited number of studies. Litman (1983) found that motion picture ratings are not a significant influence on box office success when controlling for other factors. Prag and Casavant (1994) also reported that ratings have little impact on motion picture success. On the other hand, Sawhney and Eliashberg (1996) used a continuous scale (i.e., G = 1, PG = 2, PG-13 = 3, R = 4) to code MPAA ratings and found ratings to be negatively associated with box office success. Such a finding is consistent with the logic that ratings of G, PG, and PG-13 are more desirable because they have the potential to attract the widest possible audiences from children to adults, while the audiences for movies with an R rating are necessarily more limited. Accepting this logic suggests that movies with MPAA ratings of R will be negatively associated with its box office revenues.

Finally, only a few studies have examined the impact of a movie’s being a sequel on box office success (Prag & Casavant, 1994; Sawhney & Eliashberg, 1996; Terry, Butler, & De’Armond, 2005), and all of these studies have reported that being a sequel is positively associated with box office success. It is certainly possible that a sequel might experience “audience fatigue,” but it also stands to reason that if a story, cast, and other movie attributes initially prove themselves, then a sequel based on these same attributes should do well at the box office. Within weeks of the initial success of *Spider-Man*, Sony announced the date for the movie’s first sequel, more than a year and one-half in advance (King, 2002)!

Marketing And Advertising

In addition to quality and the other product attributes reviewed above, researchers have investigated the role marketing and advertising play in motion picture success. Companies’ marketing and advertising efforts serve

many purposes. Among the most important objectives are creating consumer awareness, building a favorable impression of a product, and eliciting a sense of need to purchase a product or service. Previous research has shown that marketing and advertising can also help overcome poor product positioning and other companies' first mover advantages (Urban, Carter, Gaskin, & Mucha, 1986). In today's marketing-driven society, the typical consumer is bombarded by as many as 150 advertising messages a day but notices only between 11 and 20 (Lamb, Hair, & McDaniel, 1999). Therefore, companies' marketing efforts must break through the "clutter" and gain customer awareness of product and service offerings. Ironically, large advertising expenditures make necessary even larger advertising expenditures as companies seek to break through the "clutter" that they have helped to create. In the highly competitive motion picture industry, studios spend vast sums on advertising to capture the attention of the public (Sherman, 1999). The typical advertising campaign begins with trailers (two to three minute ads that typically include movie footage) or teasers (short trailers that last no more than 90 seconds) shown in theaters as much as a year before a movie's opening date (Goldberg, 1991). Trailers and teasers are designed to arouse interest in and inform moviegoers about upcoming movies while also creating favorable first impressions.

Most movie advertising campaigns begin to build momentum about two to six weeks prior to the opening date (Sherman, 1999), and three-fourths of a movie's advertising budget is spent in the five days prior to release ("The Won and Lost Weekend," 1997). Marketing campaigns typically include television and radio spots, national magazines and newspapers, billboards, trailers, and teasers, however, the vast majority of all advertising dollars are spent on network television (Lukk, 1997; Passell, 1997). In 1998, movie studios aired 886,735 television commercials costing \$1.5 billion (Burgi, 1999; Welkos, 1999). As a result, average marketing costs for a motion picture are now over \$20 million (Motion Picture Association of America, 1998).

Studies examining the relationship between advertising expenditures and motion picture revenue have reported mixed findings. While many studies have found a positive relationship between advertising and box office revenues (Prag & Casavant, 1994; Sawhney & Eliashberg, 1996), other articles raise doubts about the effectiveness of movie advertising. For example, King (2000a) noted that many highly advertised movies are not commercial successes, while some movies that are hardly advertised do surprisingly well at the box office. He concluded that advertising is often needed not to build interest in a movie but to counteract the advertising for other movies that will be released on the same date. Studies by Austin (1982) and Faber and O'Guinn (1984) found that movie attendance decisions are influenced more by interpersonal information, including the recommendations of friends, spouses, and others, than by advertisements. Hennig-Thurau, Houston, and Walsh (2006) found that advertising positively influences both the short- and long-term box office success of a movie by enhancing consumers' assessment of a film's quality. Faber and O'Guinn also found, however, that previews of movies are an important influence on the decision to attend movies and are seen as a more credible information source than media advertising. They highlight the paradox that individuals see previews as a more credible information source than television and other media advertising, even though both forms of advertising are directly controlled by the movie studios. In spite of some inconsistencies in the findings of prior research, the need for motion pictures to gain awareness from consumers suggests that advertising and marketing expenditures are almost certainly a positive influence on box office revenues.

Distribution

Finally, distribution can be a key success ingredient in many industries, and access to distribution channels – and especially access to retailers – can make or break a particular product. Distribution is certainly important to the success of motion pictures because a movie will never have an opportunity to become a box office success without adequate distribution to local movie screens. In the motion picture industry, distribution follows one of three formats: limited engagement, platform release, and wide release.

In a limited engagement, a movie opens in just a few theaters in a few major markets such as Los Angeles and New York and, as the critical and audience response builds, the distributor will add new markets (Sherman, 1999). *The Deer Hunter*, released in 1978, is an example of a highly successful limited release film. It opened on only a few screens, picked-up good word of mouth and critical acclaim, and was widely released several months later.

Until recently, the platform release was the dominant form of distribution. With a platform release, movies open in many major cities and then, over the next few weeks, they build on this initial “platform” by opening in other primary markets and key secondary markets. In the 1990s, a new distribution format, the wide release, supplanted the platform release as the dominant format (Wyatt, 1994). With wide release, movies open on as many screens as possible, typically 3,000 or more – some movies open on as many as 6,000 screens! The wide release format will result in the highest initial cash inflow, but the wide release is also very expensive, because it must include an extensive advertising campaign, and each film print costs approximately \$2,000. The rationale favoring wide release is straightforward. Studios aim to garner the largest possible share of the movie-going audience during the opening weekend through extensive nationwide advertising. After the opening weekend, studios hope for critical acclaim and positive word of mouth to maintain momentum. Previous research examining the relationship between release patterns and the film success has found that the number of screens is positively associated with box office revenues (Eliashberg & Shugan, 1997; Lampel & Shamsie, 2000; Terry, Butler, & De’Armond, 2005). It is therefore reasonable to hypothesize that the number of screens on which a motion picture opens will be positively associated with box office revenues.

In many consumer product markets, it is not only access to distribution channels, but also the position of the product or service within the distribution channel that can influence the ultimate success of a product or service. Similarly, the motion picture studios and distributors must select a release platform *and* determine the best possible release date. The motion picture industry is highly seasonal, with the Christmas holiday season and summer being the periods of peak attendance (Goldberg, 1991; Radas & Shugan, 1998; Sherman, 1999). Illustrating the importance of release date, *A Bug’s Life* opened during the five-day Thanksgiving weekend in 1998, during which it grossed \$46.5 million – a record at that time (Goldstein, 1998). Certain seasons are also targeted for the release of various types of films. Action and family-oriented films are generally released in the summer months (King, 2002). Studios also aim to release their best films late in the year so they will be “fresh in Academy members’ minds when Oscar nominations are due” (Caves, 2000:198).

Because the summer and holiday seasons are the peak attendance periods, it is not surprising that they are also the peak times for releasing new movies. With so many movies opening during the summer months and the holiday season, they can detract from each other and reduce revenues (Litman, 1983). In an attempt to avoid the loss of revenues, studios actively jockey their films’ release dates (King, 2000b). Litman’s study is one of the few that has specifically examined the relationship between release date and box office ticket sales, and his study confirmed that holiday release has a highly significant positive influence on box office revenues. It is therefore reasonable to hypothesize that a favorable summer or holiday season release date will be positively associated with box office revenues.

DATA AND METHODOLOGY

As suggested in the introduction, the aim of this study is to provide the most complete examination to date of the factors influencing the box office success of motion pictures. It specifically examines the influence of a broad range of product attribute (i.e., quality, genre, star power of the cast, rating, and whether a movie is a sequel), marketing expenditures, and distribution (i.e., the number of opening screens and release date) variables on box office revenues. This section describes our data and methodology.

The sample consists of 439 motion pictures released between 1998 and 2003 for which complete data on the variables were available. The sample includes movies released over several years to eliminate the undue influence of any single factor in one particular year. It also includes films released throughout each of the sample years to test the impact of seasonality on box office ticket sales.

ACNielsen ED, Inc. was the source of data for the dependent variable, box office revenues. Founded in 1976, ACNielsen is an integral part of the motion picture distribution industry, compiling data from thousands of theaters across the nation. Box office revenue data were coded in thousands of dollars and ranged from \$73,000 to over \$431 million, with a mean value of \$37.3 million.

Product quality was based on movie reviews. Reviews take into consideration many of the elements that contribute to the overall quality of a film including the screenplay, directing, acting, photography, and editing. Because previous research found a very high correlation across the reviews of motion picture critics (Buor, 1990) and to maintain consistency across all of the sample films, the reviews used by this study to measure quality were gathered from a single source, James Berardinelli’s *Reel Views Film Reviews and Criticism*. James Berardinelli is a highly respected critic offering a comprehensive archive of reviews based on a four-star rating system, with four being the highest accolade a film can receive. The sample’s mean review rating was just under 2.2 stars.

Movie genre data were also obtained from ACNielsen. Consistent with the logic developed earlier, action, animated, horror, and science fiction movies were dummy coded and expected to be positively associated with motion picture revenues.

The Hollywood Reporter, an important trade journal, provided star power ratings for actors and actresses. Only the ratings for a movie’s leading actor or actress were used. Ratings are based on a 100-point scale, with 100 being the highest and 0 being the lowest possible star power rating. The mean star power rating was 25.1.

Movie ratings were obtained from the Motion Picture Association of America, which assigns ratings to movies. Motion pictures with an R rating were dummy-coded and were expected to have lower revenues.

Data on film marketing costs, referred to in the industry as P&A costs, were obtained from ShowBizData, Inc., a movie and entertainment database. As with box office ticket sales, P&A costs were coded in thousands of dollars, and average P&A costs for the sample motion pictures were \$20.4 million.

Data for the two distribution variables – number of screens and release date – were also obtained from ACNielsen. Number of screens was simply the number of screens on which a film opened, ranging from 1 to 3,703 screens, with a mean of 1,570. Release date was coded as a dummy variable, being assigned a value of 1 if a film was released in the summer (Memorial Day weekend through the Labor Day weekend) or during the Christmas holiday season (Thanksgiving Day weekend through the weekend after Christmas) and 0 otherwise. The results are described in the following section.

RESULTS

Correlations of the dependent and independent variables for the 439 movies included in the sample are shown in Table 1; the regression results testing the hypothesized relationships are summarized in Table 2.

Table 1: Correlations among the Variables

	Revenue	Review	Genre	Star Power	R Rating	Sequel	P&A	Screens	Release Date
Revenue	1.000								
Quality	0.238	1.000							
Genre	0.006	-0.004	1.000						
Star Power	0.155	0.086	0.046	1.000					
R Rating	-0.142	-0.025	0.057	-0.048	1.000				
Sequel	0.332	-0.073	-0.004	0.069	-0.058	1.000			
P&A	0.167	-0.097	0.060	0.044	-0.010	-0.040	1.000		
Screens	0.460	-0.195	0.079	0.342	-0.330	0.309	0.057	1.000	
Release Date	0.185	-0.008	-0.069	0.130	-0.160	0.128	-0.000	0.111	1.000

These results offer support for most but not all of the hypothesized relationships. Quality is positively associated with box office revenues. Of the other product attributes, only the sequel variable is significant; it is

positively associated with motion picture revenues. As shown in the correlation matrix, the star power and R rating variables are correlated with box office revenues and the signs of their coefficients are in the hypothesized direction, but they and the remaining product attribute variable, genre, are not significantly associated with box office success in the regression analysis summarized in Table 2. P&A (marketing) expenditures and both of the study’s distribution variables (i.e., the number of screens on which a film opens, and holiday or summer release) demonstrate significant and positive influences on box office success.

Table 2: Results of Regression Analysis
(Dependent Variable is Box Office Revenues; t-statistics in parentheses)

Intercept	-19195.0**	(-2.98)
Quality	9797.0***	(4.66)
Genre	-4299.0	(-0.49)
Star Power	-69.13	(-1.01)
Rating	409.8	(0.09)
Sequel	46439.0***	(5.21)
P&A	0.2***	(3.63)
Opening Screens	16.4***	(7.53)
Release Date	13798.0**	(3.02)
R-square	0.32	
F-statistic	25.67***	
	*p<0.05	
	**p<0.01	
	***p<0.001	

DISCUSSION AND CONCLUSIONS

An important limitation of this study is its reliance on a single measure of movie success, box office revenues. Box office revenue does not include income earned from movie rentals or sales of DVDs, and while box office revenue is a key measure of audience appeal, it cannot capture other dimensions of movie success. Net profit or income earned by a motion picture after all expenses have been deducted from revenues is another important economic measure of success, but one that is difficult to calculate in the motion picture industry. In addition, quality, which is considered an independent variable in this study, could also be an important outcome variable. And, as indicated in the literature review, quality can be made operational in different ways, including critics’ reviews and Academy Award nominations and awards.

De Vany and Walls (1999) take exception to the type of modeling effort employed in this study. They argue “that it is impossible to attribute the success of a movie to individual causal factors”:

There are no formulas for success in Hollywood. We find that much conventional Hollywood wisdom is not valid. By making strategic choices ... a studio can position a movie to improve its chances of success. But after a movie opens, the audience decides its fate (p. 286).

Yet motion pictures are not unlike many other high-risk phenomena that have been successfully modeled by researchers working in a variety of fields. Moreover, the underlying objective of this study is not to identify a set of causal factors, but rather, to identify those strategic choices studios make to improve the chance their movie will enjoy a successful run at the box office. Albert also addresses this question of modeling box office success:

In a recent New Yorker article, industry executives were given the chance to reply to De Vany and Walls’ findings on the apparent chaotic structure of the film industry. Universal executive Frank Biondi believes that the film industry is not as chaotic as it seems. He claims, “there is a distribution of success in the movie business that can

be impacted by management” (1998: 265, emphasis added).

So what do our review of the literature and our own empirical study imply about the factors associated with motion picture success? To summarize, we place the findings of our own empirical study in the context of two earlier but also relatively comprehensive studies that have examined motion picture box office success. Table 3 summarizes the findings of nearly two decades of research by showing the results of this study as well as studies by

**Table 3. Findings of Three Studies
Examining the Factors Associated with Motion Picture Box Office Success**

	Litman (1983)	Prag & Casavant (1994)	Current Study
Quality	Positive	Positive	Positive
Genre	Science fiction and horror genres positively associated with motion picture success	Drama genre is negatively associated with motion picture success	Not significant
Star Power	Not significant	Positive	Not significant
Rating	Not significant	Not significant	Not significant
Sequel	Not considered	Positive	Positive
P&A	Not considered	Positive	Positive
Opening Screens	Not considered	Not considered	Positive
Release Date	Positive	Not considered	Positive

Litman (1983) and Prag and Casavant (1994). Comparing and contrasting the results of these three studies conducted over more than two decades reveals a number of similarities and one difference. All three found quality as measured by critics’ ratings to be positively associated with box office revenues. Thus, quality appears to be a consistently important determinant of movie success.

Litman’s study found the science fiction genre to be positively associated with movie success and Prag and Casavant found the drama genre to be negatively associated with box office performance. This study hypothesized that action, animated, horror, and science fiction movies would enjoy greater box office success, but this hypothesis was not supported. While these findings suggest that genre may have some influence on movie success, the inconsistencies in research findings also suggest that genre may be less important than producing the right movie at the right time (Mayer, 1973). While neither a science fiction nor an action film, *Titanic* succeeded by offering the right content at the right time, and the film had a special appeal among certain demographic groups. The story so successfully captured the imaginations of teenage girls that many of them saw the movie nine or ten times (Fitzpatrick, 1998). Similarly, over the last two decades, Disney and other studios have come to recognize the enormous value of developing animated films targeted at young children and their parents (Brown, 2000; Corliss & Ressler, 1997). And, the success of the *Spider-Man* movies has been attributed to the films’ ability to capture the teenage imagination (Gabler, 2002).

Like Litman’s findings, but unlike the study by Prag and Casavant, this study suggests that star power ratings are not an important influence on box office revenues. Logic suggests that R rated movies will necessarily have a smaller audience base and therefore be at a disadvantage relative to other motion pictures with respect to box office revenues; thus this study hypothesized that R rated movies would be associated with lower box office revenues. While the correlation matrix shows a fairly high and negative correlation between R rated movies and motion picture revenues, the variable had no significant association with motion picture success in the regression

results as shown in Table 3. Similarly, the studies by Litman and Prag and Casavant found no significant relationship between ratings and movie success, so again we may conclude that producing the right movie may be a more significant influence than the ratings that are assigned. The final product attribute considered in this study – whether a movie was a sequel – was also examined by Prag and Casavant, and both that study and the current one found this factor to be positively associated with box office success.

In addition to product attributes, this study also considered the influence of marketing and distribution variables, and all appear to be important factors in motion picture success. Prag and Casavant also considered P&A expenditures, and both studies found P&A to be positively associated with movie success. Neither Litman nor Prag and Casavant considered the number of screens on which a movie opens, but the current study did and found this variable to be positively associated with movie success, supporting the wisdom of using the wide release distribution platform. Finally, this study and Litman's study also considered the influence of a favorable release date (summer or Christmas holiday season), and both studies found a favorable release date to be positively associated with revenues.

One conclusion to be drawn from these three fairly comprehensive studies conducted over more than 20 years is that many of the factors that are important influences on motion picture success remain constant over time. To date, nearly all of the studies that have examined motion picture success have been cross sectional in nature. Even though these three studies conducted over three distinct time periods largely agree on the factors associated with motion picture success, perhaps future contributors to this stream of literature could examine the question of motion picture success in a longitudinal study to determine what factors remain important to success over time. Understanding what factors are "timeless," as well as the factors such as genre and casting that vary in their importance over time, would be an important contribution to the research literature and of interest to the major movie studios.

IMPLICATIONS OF THE FINDINGS FOR THEORY AND PRACTICE

It would be misleading to interpret the findings of this study or any other study as providing a list of factors that "guarantees" the success of a motion picture (Albert, 1998). If this were the case, we would probably see more highly successful movies and fewer box office failures. Considerable anecdotal evidence suggests that a film can "do everything right" and still fail at the box office (Orwall, 1998). On the other hand, some movies "do everything wrong" and are highly successful. In particular, anecdotal evidence suggests that marketing expenditures are frequently unable to guarantee a pay-off. Consider the impact of P&A on two films, both of which were successful: Warner Brothers spent \$23.9 million, or 31 percent of the movie's total box office revenues of \$77.8 million, to advertise *You've Got Mail*. On the other hand, Buena Vista needed to spend only slightly more in advertising – \$24.2 million – to generate a total gross of \$206.1 million for *Armageddon*. For *Armageddon*, P&A represented only 12 percent of the movie's total box office receipts.

A better interpretation of this study's results would be to conclude that a successful motion picture is the result of many factors that are combined in a unique way to produce a winning product. The study suggests that overall movie quality is important, but so too are other product characteristics and the way the movie is marketed and distributed. What ultimately matters is how these factors are combined by directors and producers to create a work of popular culture that enjoys broad commercial appeal.

Such a conclusion is consistent with much contemporary thinking in strategic management and marketing, that no single factor or set of factors is responsible for success or competitive advantage. If that were the case, competitors could quickly imitate what more successful firms are doing and achieve the same level of performance. Instead, it appears that the most successful firms enjoy a competitive edge by combining factors in ways that are difficult for competitors to discern and therefore much more difficult to imitate. Thus, the right story in the hands of the right director results in a work of high quality. Then, when combined with effective marketing and distribution, the work goes on to enjoy significant sales.

It is quite likely that such a scenario applies in almost any setting that is characterized by a high degree of creativity or knowledge. Good ideas or insights in the hands of artists, experts, or other knowledge workers produce

first-rate products and services. Effective business organizations then harness this creative work by developing and executing effective marketing and distribution plans. It is not that effective marketing cannot sell an inferior product or service or that a great product or service cannot sometimes compensate for poorly executed marketing and distribution plans. Certainly they sometimes do. More likely than not, however, is that firms achieve unparalleled success when all factors come together successfully.

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