The Financial Success of Franchise Film Sequels: An Exploration of the Relationship of Budget, Personnel Factors, and Reviews with Sequel Return on Investment

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This thesis titled

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# ABSTRACT

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The Financial Success of Franchise Film Sequels: An Exploration of the Relationship of

Budget, Personnel Factors, and Reviews with Sequel Return on Investment

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This study attempted to examine the relationship that budget, personnel retention, and reviews have with the return on investment (ROI) of franchise film sequels. The film franchise was conceptualized as an experiential brand from which additional products of revenue, such as sequels, can come and the sequel was conceptualized as an experiential product that extends the brand. Various *t*-tests and correlations were run in a quantitative analysis of 314 franchise film sequels released between 1970 and 2014 and their corresponding parent films. Results suggested that budget and personnel retention may have no relationship with sequel ROI, while reviews may have a relationship with it.

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#### **CHAPTER 1: INTRODUCTION**

Why are some film sequels financially successful and others are not? Sequel production accrues substantial revenue. Since 1980, sequels have grossed over \$20 billion at the box office (Sood & Dreze, 2006). Terry et al. (2003) had 61 sequels in their 2001-2003 sample, and 22 broke the \$100 million mark at the domestic box office. They predicted that a film being a sequel (as opposed to an original film) added \$18 million to its domestic revenue. Terry et al. (2009) had 63 sequels in their 2006-2008 sample, and 22 passed the \$200 million foreign box office mark. They predicted that a film being a sequel (as opposed to an original film) added between \$31 million to \$36 million to its foreign revenue. The average annual box-office revenue for sequels more than doubled from \$718 million in the 1990s to \$1.9 billion in the mid-2000s (Sood & Dreze, 2006). Sequels are also an important studio strategy (Basuroy & Chatterjee, 2008). Studios not only consider sequels lower risk investments, but release them during the 18-week summer season in which they typically obtain 40% of their total annual box office. From 2003-2014, 71 percent of the top grossing films worldwide were sequels (McDuling, 2014). As successful as sequel production has become, there are also a number of them that are box office failures (Sood & Dreze, 2006). So with so much money being invested and sequels being released at an all-time rate (Terry et al., 2003; Terry et al., 2009), this study explored the relationship of budget, personnel factors, and reviews with the financial success of sequels.

In this study, a sequel is the second film in a film franchise which has a plot chronologically after that of the parent film, the franchise's first film. Familiar characters are reprised in new situations (Sood & Dreze, 2006). A film franchise begins with a film that spawns additional products of revenue such as sequels, television series, books, video games, toys, clothing, and other products (Thompson, 2007). Researchers view film franchises as brands and films as experiential products (Sood & Dreze, 2006; Basuroy & Chatterjee, 2008; Duan et al., 2008; Reinstein & Snyder, 2005; Chang & Ki, 2005). Therefore, a sequel is considered an experiential product that extends a brand. For example, the film *Shrek* would be considered the franchise/brand and all of its sequels are products which extend the franchise/brand.

Experiential products (more commonly known as experiential goods) are products of which quality is unknown prior to use (Reinstein & Snyder, 2005). One cannot know the value of experiential products until they experience them (Shapiro & Varian, 1999). For the experiential product consumer, experience is an end itself (Reddy et al., 1998). Music, literature, fashion, visual arts, and leisure can lie in the category of experiential products (Holbrook & Hirschman, 1982; Hirschman & Holbrook, 1982). In the case of films as experiential products, the purchase agreement is one where the consumer has little knowledge of the particular film and where its form may be familiar, although the content is not (Reddy et al., 1998).

Two consumer research perspectives are the basis for labeling products as experiential or utilitarian: information processing and experiential (Holbrook & Hirschman, 1982). The information processing perspective views the consumer as using logical thinking and problem solving to make purchasing decisions. The experiential perspective is phenomenological and considers consumption as primarily subjective with a variety of hedonic responses, esthetic criteria, and symbolic meanings. Consumer research is more fully understood using both perspectives, but many studies view products from just one.

Holbrook & Hirschman (1982) argued that whereas conventional products such as soft drinks, toothpaste, and cars can be purchased for their utility based on functional features such as calories, fluoride, and fuel efficiency, experiential products are perceived more symbolically based on subjective characteristics. Cooper-Martin (1992) defined experiential products as those where the consumption experience is the dominant emphasis and its main benefit is the hedonic value in its consumption. Utilitarian products are consumed with a dominant emphasis on function. A particular product may have both utilitarian and experiential value (Cooper-Martin, 1992). For example, shampoo has utilitarian value in that it cleans your hair but a peach-scented shampoo also has hedonic value in the fragrance it gives off. Another example is food, which has the utilitarian benefit of keeping a person alive, but has hedonic benefits at a first-class restaurant where its sight, aroma, texture, and taste are the reason it's purchased. Cooper-Martin (1991) argued that films are purely experiential with no utilitarian value and backed this argument by conducting a survey that found that consumers consider films to be experiential and their involvement with them is dominantly hedonic.

The researcher of this study is considering films as experiential products. They believe that if the experiential nature of films are emphasized, the study's results will provide a better understanding of the nature and dynamics of both franchise films sequels and experiential products. To leave out the experiential nature of films is to leave out a

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fundamental characteristic of film consumption. While there are ambiguities in the experiential/utilitarian dichotomy of consumer products which can limit the clarity of the duality, the researcher does not believe they apply to films since they are dominantly hedonic (Cooper-Martin, 1991). This study will improve on the understanding of experiential products.

Of the studies that have researched sequels, there are varying definitions for what is considered success. Sood and Dreze (2006) measured it as the likelihood that subsequent sequels will be released. They stated that a studio would only release third and fourth films if the second is successful. Basuroy and Chatterjee (2008) defined it as matching or succeeding the box office sales of the first film. In this study, financial sequel success is based on return on investment (ROI) and success is having a positive (above 0.00) ROI. ROI is a measure of success that is based on profitability and looks at the efficiency of an investment (WebFinance, Inc., 2015; Investopedia, LLC, 2015). In other words, how much is the company getting out of each dollar invested. In studies that examine financial success of films, revenue is often the measure of success as it is often the most popular measure in the media and scholarship (Ferari, 2008; Ravid, 1999). The author of the current study is using ROI to avoid confounding effects of factors such as budget size and inflation. Ravid (1999), who stated that the film industry is very concerned with revenue as a measure of success, argued that since ROI is sufficient for other industries and because there are films with high revenue that fail to make a profit, ROI should be the economic measure of success. Revenues have been increasing over the

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years, but the majority of films have had negative ROI (although in recent years the average ROI is positive) (Ferrari, 2008).

While few researchers have looked into the financial success of sequels, there are many studies about factors/elements that may contribute to the success of films (Litman, 1983; Litman & Kohl, 1989; Litman & Ahn, 1998; Prag & Casvant, 1994; Terry et al., 2003; Chang & Ki, 2005; Thorsten et al., 2007; Brewer et al., 2009). In this study, the researcher examined the relationship of budget, personnel retention, and film reviews with a sequel's ROI. The knowledge gained in the study may help in understanding the theoretical process and frameworks of people evaluating sequels and the studios which produce them. It may also help develop insights toward the application of brand extension theory (Aaker & Keller, 1990) and two-step flow (Katz, 1957) to experiential products.

#### CHAPTER 2: LITERATURE REVIEW

### Financial Success of Films in General

Many researchers have examined attributes of films that may contribute to their financial success. One of the most common factors is budget/production cost (Litman, 1998; Prag & Casavant, 1994; Terry et al., 2003; Chang & Ki, 2005; Brewer et al., 2009). Chang and Ki (2009) said that although their research found budget to be a significant contributor to film success and correlated with revenue, they didn't know if it matters to the audience when they're choosing a film. They inquire how audiences know what size budget was spent on a film and how audiences interpret the information that a film was produced with a particular budget size, stating there is little literature on the psychological approach to this issue.

A second frequent factor is critic ratings (Litman, 1998; Terry et al., 2003, Chang & Ki, 2005, Brewer et al. 2009). Researchers have explored whether critics are influencers or predictors of box office success (Eliashberg & Shugan, 1997; Basuroy et. al, 2003). Critics can be conceived as influencers when their reviews influence audiences to attend or not attend films, which affects the film's revenue, or they can be considered predictors when they more so represent the audience's opinion of the film and their reviews provide predictive information about how much the film will gross (Eliashberg & Shugan, 1997). Terry et al. (2003) found that a ten percent increase in critic approval rating adds approximately \$7 million to the box office revenue.

Other factors that are studied and frequently found significant to film success at the box office are being nominated or winning an Academy Award (an Oscar), number of theaters where the film is shown, and being a sequel (Litman, 1998; Prag & Casavant, 1994; Terry et al., 2003; Chang & Ki, 2005; Brewer et al., 2009).

## Financial Success of Film Sequels

Studies have also examined attributes that contribute to the financial success of sequels. Basuroy and Chatterjee (2008) used a generalized estimating equations method (a flexible generalization of linear regression in which they could account for how their film observations were spread over weeks) to test how strength of the parent brand (ability of parent film to leverage successful sequels and how the sequel's success compares to it), sequel timing (how quickly the sequel follows the parent), franchise length (number of intervening extensions of a brand), and sequel satiation (how similar the sequel is to the parent) affect sequel revenue. They found that sequels perform worse than the parent and they argued that this is because of the regression to the mean argument, which says statistically if a first measurement is extreme then the second measurement will more likely be closer to average. Secondly, they found that the shorter the gap between parent and sequel release, the better the sequel will perform. They also found that the current extension is positively impacted by franchise length. They argued this is because larger numbers generate more discussion and anticipation. Finally, they found that weekly box office revenues drop faster for sequels than non-sequels released at the same time.

Savova (2012) conducted a survey about film sequels that had consumers place the importance of key characteristics on a 7-point Likert scale (1 being "not important at all" and 7 being "very important"). Results showed that the most important factors for people were retention of lead actor, character development, retention of personal characteristics, retention of lead characters, continuous story, and consistent plot point.

The author also had the consumers explain in their own words what drove them towards and away from seeing a franchise (Savova, 2012). The responses fell in five categories for positive and negative drivers. Positive impression from the first film, and character and story development were the biggest positive drivers for people. The biggest negative drivers were negative impression from the first film and main characters missing.

The author gave the following as guidelines for an appealing sequel: continuous and consistent story and plot lines; retained quality of writing, directing, and special effects; retained lead characters and actors; story development; character development; and significant differentiation between the sequel and original (Savova, 2012).

There are many factors that can be studied in regards to the financial success of franchise film sequels. The researcher of this study will examine budget, personnel retention, and reviews.

#### Budget

Budget is shown to be positively correlated with film success (Prag & Casvant, 1994; Terry et. al, 2003). To the extent that film budgets mean greater production value, they should increase a film's quality and entertainment, and in turn, lead to more probable box office success (Litman, 1983; Litman & Ahn, 1998). Higher budgets would "enhance entertainment value by bringing more diverse and state-of-the-art techniques for production (e.g., special effects), more exotic locales, and more popular stars and directors, more lavish sets and clothing in the film" (Litman & Ahn, 1998, pg. 183). Litman (1998) found that \$1 million of production costs is predicted to add \$380,000 to the domestic box office revenue.

Based on previous literature, budget may be a significant predictor of revenue. Ravid (1999), who conducted one of the only studies that examined budget's relationship with ROI, found that higher budgets signal higher revenues, but not necessarily profitability. If anything, lower budget films have higher revenues and higher budgets may cause profit loss. The researcher of this study kept Ravid's (1999) study in mind, but hypothesized that budget is a positive driver for sequel ROI.

H1: Sequels with higher budgets would have higher ROI than sequels with lower budgets.

#### Personnel Retention

### Films as Brand Extensions

There is a diversity of perspectives as to whether franchise film sequels are brand extensions (Sood & Dreze, 2006) or line extensions (Moore, 2005). A brand extension is a brand entering a completely different product class and a line extension is when a brand creates a new market segment in a product class (Aaker & Keller, 1990). Line extensions vary from the parent product in size, flavor, or the like; consider Diet Coke or liquid Tide as compared to their progenitors (Aaker & Keller, 1990; Tauber, 1981). Another way of considering line extensions is that although Vanilla Coke has a vanilla taste, the original Coke taste must still be strong and recognizable for it to be considered a line extension. For films, that vanilla taste may be adding new plot lines to the franchise such as adding romantic elements to an action-adventure brand (Basuroy & Chatterjee; 2006). Factors of consistency from the parent film that would have to remain in the sequel for it to be a line extension are elements such as characters, plot lines, and surroundings (Savova, 2012).

In this study, sequels will be considered brand extensions. Sood and Dreze (2006) made the examination that sequels are brand extensions in light of them observing that Hollywood is now branding films in a similar way to consumer-packaged-goods. The researcher of this study believes the experiential difference between sequels and their parents gives the products a large amount of independence. They do not view sequels as a change in flavor or size, but rather its own product which adds its own unique power to the franchise.

#### Brand Extension Theory

A brand is a category in memory (Boush & Loken, 1991; Aaker & Keller, 1992). Every brand has attributes or characteristics that are associated with it (Aaker & Keller, 1992). When extending the brands, these associations will transfer with them and may have a positive influence on the success of the subsequent product. Beliefs about the transferred attributes can both help or hurt brand extension evaluations. For example, the taste of Crest was good for a mouthwash extension but bad for a chewing gum extension (Aaker & Keller, 1992). The associations also vary in strength. Well regarded brand names have less risk introducing new products because consumers are familiar with the brand. When the perceived similarity, or feature overlap, between the brand and its extension is high then the evaluation of the extension is high and if the similarity is low then the extension evaluation is also low. In the ideal brand extension, the consumer has positive beliefs and attitude towards the original brand, those positive associations facilitate positive beliefs toward the extension, and negative associations are not transferred to or created by the extension.

While brand affect (the transferal of attitudes from the original brand to the extension) and product category similarity (the similarity between original brand and the extension) influence brand extension evaluations, brand-specific associations also do. A brand-specific association is as "an attribute or benefit that differentiates a brand from competing brands" (Broniarczyk & Alba, 1994, pg. 215). For example, Apple products are associated with user friendliness, but other computer brands and computers in general do not have that association and could not use it for an extension (Broniarczyk & Alba, 1994). Fruit Loops can extend to lollipops because color is one of its brand-specific associations (Sood & Dreze, 2006).

Physical similarity between the original brand and its extension is less important to brand extension evaluations when there are conceptual similarities (Park et al., 1991). Concepts such as luxury, status, reliability, or fun, as a product feature may influence consumers' perception of fit of the brand extension. When consumers consider a new product, they look at brand concept consistency as well as product feature similarity. For example, although a kitchen timer and a watch are more similar than a watch and cuff links, Rolex is able to extend its brand to cuff links because of the concept of status (Sood & Dreze, 2006). Park et al. (1991) found concept consistency may more greatly influence brands that deal with a consumer's expression of self-concept or image (prestige) than brands that deal with product performance (functional). For example, their participants were able to attach concepts like luxury and status to prestige brands like Mercedes, Lenox, and Reebok, but not to functional brands like Sony, Xerox, and Honda. Since prestige brand names are more abstract they can be extended to objects that share fewer features than functional brand names.

Sood and Dreze (2006) argued that brand extensions that are experiential or intangible in nature, such as films, differ from physical ones. They found that the traditional pattern of brand extension reverses for experiential attributes: consumers favor dissimilarity over similarity for their film sequels. Too much of the same leads to experiential satiation. Their research results showed that people preferred a named sequel (*Daredevil: Taking It to the Streets*) to numbered sequels (*Daredevil 2*) because the named sequels were less likely to cause satiation.

Brand knowledge is conceptualized under the "associative network memory model," which views knowledge as a set of nodes and links which make up semantic memory (a portion of long-term memory not derived from personal experience) (Keller, 1993; Collins & Loftus, 1975; Raaijmakers & Shiffrin, 1981; Ratcliff & McKoon, 1988). The nodes, or stored information, are connected by links of varying strength. The extent of memory retrieval is determined by a "spreading activation" from node to node. Each node can be activated by the encoding or retrieval of information from long-term memory and the activation can spread to other linked nodes. In regards to branding, brands and brand extensions are the nodes and brand associations are the links. Different factors affect the favorability, strength, and uniqueness of the brand associations/links, which in turn affect brand extension evaluation. According to Mandler's discrepancy theory, people like congruity between product category schemas and their associated products because people like when objects are predictable and conform to their expectations (Meyers-Levy & Tybout, 1989; Mandler, 1982). When there is incongruity, frustration can occur. The researcher of this paper considers a brand to be both a node and a schema. Brand associations are links that connect the brand node to the brand extension nodes (Keller, 1993; Meyers-Levy & Tybout, 1989; Mandler, 1982). Congruity, which can vary in level, strengthens the links. Parent films, which are brands, have characteristics/attributes that associate it with a sequel and the connection is made via brand associations/links. When the characteristics/attributes do not appear in the sequel, it weakens the brand association/link and can cause frustration. This in turn, leads to less financial success because of the incongruity between parent and sequel.

Another factor of branding is equity or "the 'added value' with which a given brand endows a product" (Farquhar, 1989, pg. 24). This power or value is made of multiple components. Hennig-Thurau (2009) found that managers predict the sequel revenue by examining the impact of continuing or changing these film components, such as stars, Motion Picture Association of America (MPAA) ratings, and genre, between parents and their sequels. Therefore, understanding how individual branding components are associated with franchise film sequels may gain insight into the factors that contribute to a sequel's success.

The author of the current study hypothesizes that films are experiential products that have components, attributes, or characteristics that are associated with it, such as characters, environment, and genre. They can be transferred to sequels, which are brand extensions, and then be evaluated by the consumer. The transfer of these attributes may have a positive or negative influence on the success of the sequel. The researcher hypothesizes that the actors and directors of a parent film are a part of a film's brand and keeping that same personnel in the sequel will help financial success because people favor schema congruity and will experience frustration if the personnel is missing (Meyers-Levy & Tybout, 1989; Mandler, 1982).

While it has popularly and traditionally been believed that a film's cast influences its success, empirical findings have been inconsistent (Holbrook, 1999; Basuroy et al., 2003; Chang & Ki, 2005). The researcher of this study proposed the following hypothesis to explore the retention of a film's actors on a sequel's financial success.

H2a: Sequels with higher main cast retention would have higher ROI than sequels with lower main cast retention.

Amongst a film's cast, there are actors that are considered the stars and these actors are believed to have a particularly impactful effect on the film's success, as they are often superstars (Wallace et al., 1993). Hennig-Thurau et al. (2009) found that a sequel to *Spider-Man* without Tobey Maguire, but an actor with equal star power and salary, would decrease the sequel's revenue by \$181.8 million. So, Maguire's absence was predicted to make a negative difference in the financial success of the sequel. But findings about the influence of a film's star actors on revenue are inconsistent (Wallace et al., 1993). It may be that personnel retention has influence on ROI. The following hypothesis was proposed to explore the retention of a film's star actors on a sequel's financial success.

H2b: Sequels with higher star cast retention would have higher ROI than sequels with lower star cast retention.

Like actors, directors are also thought to be influential to the financial success of films since it is commonly believed they have the "primary responsibility for welding all the creative inputs into a final artistic product" (Litman, 1983, pg. 160). Empirical findings on their impact have been inconsistent (Holbrook, 1999; Basuroy et al., 2003). The following hypothesis was proposed to explore the retention of a film's director on a sequel's financial success.

H2c: Sequels with higher director retention would have higher ROI than sequels with lower director retention.

## Reviews

#### Overview of Two-Step Flow of Communication

The two-step flow says communication moves in two stages: from opinion leaders to the general populous, who spread the information by word of mouth (WOM) (Katz, 1957), which is "informal communication among consumers about products and services" (Liu, 2006, pg. 74). In the first stage, the opinion leaders directly interact with a presentation of information (Katz, 1957). Then in the second stage, the opinion leaders pass on the information, as they interpreted it, to the general populous. Opinion leaders have a sphere of influence, or an environment of common interest with a group which is also their area of expertise. They have been found to have more exposure to the information that concerns the group, or sphere, than its other members and it is their function to provide that information by the most appropriate means. Opinion leaders and

influencees can be anybody: family, friends and co-workers. Also, the opinion leaders and influencees can exchange roles depending on the particular sphere. It should be noted the opinion leaders get their information not only from media, but also from other people (Katz, 1957).

#### Franchise Film Sequels: A Two-Step Flow Perspective

To the best of the researcher's knowledge, two-step flow is typically not studied explicitly with regard to films. In this study, the researcher applies the theory to films by considering professional critics (or simply critics) and antecedent filmgoers as opinion leaders in the two-step flow. Professional critics are highly respected and circulated film reviewers. Antecedent filmgoers are the film audience which share their opinion with potential filmgoers by WOM.

Among researchers, there is a diversity of opinions on whether critics are influencers or predictors, or both, in regards to box office revenue. Findings have been inconsistent. Often, the question of reviewer impact has only been answered based on a particular time period of a film's theatrical run or on the type of film.

# Two-Step Flow: Professional Critics

Critic reviews tend to correlate with total box office revenue and the staying power of a film (Eliashberg & Shugan, 1997; Reinstein & Snyder, 2005). Basuroy et al. (2003) found a significant correlation between critic reviews and box office performance in the first eight weeks of a film release. They said their research results for these first eight weeks were consistent with the perspective that critics are both influencers and predictors. They also found that during that same time period, negative reviews hurt film revenue more than positive reviews helped it. Their findings led them to recommend that marketing teams incorporate critics if they foresee positive criticism for their film and avoid critics if they foresee negative criticism. They found that stars and budget size can moderate the impact of critical reviews. They recommend marketing teams use the film's stars in appearances to lessen the impact of negative reviews.

While some researchers conclude that critics are not influencers (Eliashberg & Shugan, 1997), Reinstein and Snyder (2005) did find slight evidence for critics as influencers. They found that a rating of two thumbs up accounts for 25 percent of the opening weekend revenue (which was marginally significant). Boatwright et al. (2007) also found critics to be influencers but said they are not predictors. Critics influence narrow release films and independent films more than wide-release films, the reasoning being that there is more available information for wide release films (Reinstein & Snyder, 2005; Boatwright et. al., 2007). Chang and Ki (2005) said their study's results could cautiously be interpreted as suggestion that critic evaluation could be a predictor of box office revenue, rather than an influencer.

In this study's proposed two-step flow, critics are opinion leaders (the first step). They are the ones learning and investigating the information/knowledge/experience at hand, which is film sequels. Then, they pass on their information/knowledge/experience, as they've interpreted it, to potential filmgoers (the second step). Potential filmgoers are the influencees.

Based on the two-step flow discussion above, the following hypothesis was proposed.

H3a: Sequels with more positive professional critic reviews would have higher ROI than sequels with less positive professional critic reviews.

#### Two-Step Flow: WOM

In regards to films, WOM is studied both for its content and volume. The more positive the attitude of the WOM, the more incentive viewers have to spread information about the film, and in turn that leads to more sales (Duan et. al, 2008). Additionally, higher box office sales also lead to higher volume of WOM, which leads to more box office sales. WOM is both a significant influencer and predictor of box office sales (Liu, 2006; Duan et al. 2008). Researchers found that forecasting box office revenue is more accurate if WOM is calculated in management's forecasting models (Dellarocas et al., 2007). There is a higher volume of WOM during pre-release periods and management tending to WOM communications during a film's early weeks is vital for box office revenue (Liu, 2006). Liu (2006) found that WOM volume matters more for box office revenue than WOM content. However, Duan et al. (2008) found that WOM readers are more influenced by WOM content than WOM ratings. In this study, WOM is considered to be spread by antecedent filmgoers (the film audience which shares their opinion with potential filmgoers).

Antecedent filmgoers are also opinion leaders (the first step) in this study's proposed two-step flow. They pass on their sequel information/knowledge/experience, as they've interpreted it, to potential filmgoers (the second step). The following hypothesis was proposed.

H3b: Sequels with more positive antecedent filmgoer reviews would have higher ROI than sequels with less positive antecedent filmgoer reviews.

## Two-Step Flow: Professional Critics and WOM

Wang (2005) looked at the effects of both expert and consumer endorsements of films. He concluded that both are important, particularly in experiential products such as films. He found that positive expert and consumer endorsements both enhance audience attitudes. If an audience already has interest in the product, their attitudes will be enhanced by "positive consumers' average ratings and higher perceived credibility of regular consumers' film ratings" (Wang, 2005, pg. 411). Audiences respond more favorably to positive consensus than they do to negative consensus and endorsement disagreement.

Chakravarty et al. (2010) also looked at both WOM and professional critics. They made a distinction between frequent and infrequent filmgoers. They found infrequent filmgoers to be more influenced by reviews than frequent ones, especially by negative reviews. When both WOM and professional reviews were present, negative WOM had a more lasting impact than positive professional reviews. They said their most noteworthy finding is that frequent filmgoers were more influenced by Professional reviews and infrequent filmgoers were more influenced by WOM. They argued this is because frequent filmgoers place more weight on comments from those who express "elite" taste and infrequent filmgoers place more weight on comments from those who express "mass" taste (Chakravarty et al., 2010; Holbrook, 2005).

All the literature reviewed above applies to films in general, but can be used as a foundation for examining how these factors apply to more specific categories of films, such as sequels.

#### CHAPTER 3: METHODOLOGY

The proposed methodology was a quantitative analysis of 314 film sequels released between 1970 and 2014 and their corresponding parent films. A sequel is the second film in a film franchise whose plot is chronologically after that of the first film. That definition excludes prequels. Revenue and production budget figures were retrieved from IMDB (imdb.com) and Box Office Mojo (boxofficemojo.com), an IMDB company. The researcher was unable to find complete budgets that included advertising and distribution costs because budget figures are difficult to obtain (Chang & Ki, 2005). The production budget figures on IMDB and Box Office Mojo refer to the negative cost of a film, which is "the cost of producing/shooting the film" (IMDB.com, Inc., 2015). ROI figures are also difficult to find (Ravid, 1999). The formula for ROI, which was the measure of success in this study, was worldwide revenue minus the production budget divided by the production budget. There is still much to be learned from calculating ROI from just production budgets. The equation can work because there is a correlation between production budget and advertising budgets (Prag & Casvant, 1994; Wasserman et al., 2014), which provided relative profitability figures.

For hypothesis H2a, the main cast was defined as all the actors named in the billing block at the bottom of a film's poster and DVD case. For hypothesis H2b, the star cast, which is the headlining stars or headliners, were the actors whose names appear in large text (or in a highlighted manner) on the poster and DVD cover. To attain retention figures for hypotheses H2a, H2b, and H2c, the researcher calculated the percentage of the main cast, star cast, and directors from the parent film that were in the sequel.

To test hypothesis H3a and H3b, the researcher used Metacritic (metacritic.com). For professional critic reviews, the researcher used the site's metascores, which range from 0-100 (CBS Interactive Inc., "About Metascores," 2015). The following is how metascores are calculated:

We carefully curate a large group of the world's most respected critics, assign scores to their reviews, and apply a weighted average to summarize the range of their opinions. The result is a single number that captures the essence of critical opinion in one Metascore. (CBS Interactive Inc., "About Metascores," 2015, para. 1).

For antecedent filmgoer reviews, the researcher used the average user scores on Metacritic. The site's users rate films on a scale of 0-10 and the scores are averaged to create an average user score figure (CBS Interactive., "About Metascores," 2015).

# CHAPTER 4: RESULTS

### Data

There were 314 film sequels and their corresponding parent films in the data set.

Sequel ROI was only calculated for 167 films because of missing data (budget, revenue,

or both). Table 1 displays the descriptive statistics for the financial and personnel factors.

# Table 1

	Sequel	Sequel	Main	Star Cast	Director	Parent	Parent Budget
	ROI	Budget	Cast	Retention	Retention	ROI	
			Retention				
Mean	2.66	57201248.89	.44	.70	.40	5.40	36363027.30
Median	2.11	38000000.00	.40	1.00	.00	4.20	19000000.00
Std.	2.49	54921178.77	.31	.36	.49	4.32	42161012.05
Deviation							
Minimum	-1.00	350000.00	.00	.00	.00	.51	27000.00
Maximum	11.77	225000000.00	1.00	1.00	1.00	23.06	230000000.00

Descriptive Statistics: Financial and Personnel Factors

There were 147 film sequels that were released after Metacritic was launched in January 2001 (CBS Interactive, "About Metacritic," 2015). For tests involving Metacritic, only these films and their corresponding parents were used. Sequel ROI was only calculated for 134 films because of missing data. Table 2 displays the statistics for Metacritic film ratings by critics and users.

# Table 2

Descriptive statistics. Metacritic Film Ratings by Critics and Osers							
	Sequel	Sequel	Sequel	Parent	Parent	Parent	
	ROI	Metascore	User	ROI	Metascore	User	
			Score			Score	
Mean	2.47	47.91	6.10	4.62	54.99	6.97	
Median	2.05	47.00	6.20	3.59	57.00	7.10	
Std.	2.25	16.58	1.42	3.94	16.28	1.16	
Deviation							
Minimum	-1.00	9.00	1.80	.51	6.00	3.10	
Maximum	11.77	90.00	9.00	23.06	92.00	8.90	

Descriptive Statistics: Metacritic Film Ratings by Critics and Users

## Hypotheses Testing

H1: Sequels with higher budgets would have higher ROI than sequels with lower budgets.

An independent-samples *t*-test was conducted to test if there was a difference in sequel ROI based on sequel budget size. The median number for sequel budget, \$38,000,000, was used as the cut point for higher sequel budgets and lower sequel budgets. Higher budget (M = 2.39, SD = 2.19) and lower budget (M = 3.15, SD = 2.92) sequels did not differ significantly on ROI, but the results approached significance,

[t(94.33)= -1.74, p = 0.08]. Given these data, the hypothesis was not supported. Table 3 displays the comparison of ROI means for financial and personnel factors.

# Table 3

	Equal Variances	Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means		
		F	Sig.	t	df	Sig (2- tailed)
Sequel Budget	not assumed	9.94	.00	-1.74	94.33	.08
Main Cast Retention	assumed	.43	.51	.29	148.00	.77
Star Cast Retention	assumed	1.22	.27	.28	83.00	.78
Director Retention	assumed	.06	.80	.61	156.00	.54
Parent ROI	not assumed	28.76	.00	5.41	105.20	.00

Comparison of ROI Means: Financial and Personnel Factors

H2a: Sequels with higher main cast retention would have higher ROI than sequels with lower main cast retention.

An independent-samples *t*-test was conducted to test if there was a difference in sequel ROI based on main cast retention. The median number for main cast retention, 0.40, was used as the cut point for higher and lower main cast retention. Sequels with higher main cast retention (M = 2.63, SD = 2.56) and lower main cast retention (M = 2.51, SD = 2.38) did not differ significantly on ROI. Given these data, the hypothesis was not supported.

H2b: Sequels with higher star cast retention would have higher ROI than sequels with lower star cast retention.

An independent-samples *t*-test was conducted to test if there was a significant difference in sequel ROI based on star cast retention. The median number for star cast retention, 1.00, was used as the cut point for higher and lower star cast retention. Sequels with higher star cast retention (M = 2.55, SD = 2.07) and lower star cast retention (M = 2.41, SD = 2.46) did not differ significantly on ROI. Given these data, the hypothesis was not supported.

H2c: Sequels with higher director retention would have higher ROI than sequels with lower director retention.

An independent-samples *t*-test was conducted to test if there was a difference in sequel ROI based on director retention. The cut point for director retention was 0.5, the middle point of the director retention percentage scale, which runs from 0.00 to 1.00 percent (some parent films had two directors making a figure such as 0.50 percent possible for director retention if only one was retained). Sequels with higher director retention (M = 2.78, SD = 2.54) and lower director retention (M = 2.54, SD = 2.52) did not differ significantly on ROI. Given these data, the hypothesis was not supported.

H3a: Sequels with more positive professional critic reviews would have higher ROI than sequels with less positive professional critic reviews.

With the films released after Metacritic's launch, an independent-samples *t*-test was conducted to test if there was a significant difference in sequel ROI based on sequel metascores. The median number for main cast retention, 47, was used as the cut point for

higher and lower sequel metascores. There was a significant difference in ROI between sequels with higher metascores (M = 2.87, SD = 2.22) and lower metascores (M = 2.02, SD = 2.25), [t(131.00)= 2.20, p < 0.05]. Sequels with higher metascores had higher ROI than sequels with lower metascores. Given those data, the hypothesis was supported. Table 4 displays the comparison of ROI means for Metacritic ratings.

# Table 4

Comparison of ROI Means: Metacritic Ratings							
	Equal Variance	Equality		<i>t</i> -test for Equality of Means			
		Varianc F	Sig.	t	df	Sig (2- tailed)	
Sequel	assumed	.00	1.00	2.20	131.00	.03	
Metascore							
Sequel	assumed	3.50	.06	2.55	131.00	.01	
User							
Score							
Parent	assumed	.74	.39	1.92	129.00	.06	
Metascore							
Parent	not assumed	5.30	.02	3.44	124.35	.00	
User							
Score							

H3b: Sequels with more positive antecedent filmgoer reviews would have higher ROI than sequels with less positive antecedent filmgoer reviews.

With the films released after Metacritic's launch, an independent *t*-test was conducted to test if there was a significant difference in sequel ROI based on sequel user scores. The median number for sequel user scores, 6.2, was used as the cut point for higher and lower sequel user scores. There was a significant difference in ROI between sequels with higher user scores (M = 2.94, SD = 2.51) and lower user scores (M = 1.96, SD = 1.83), [t(131.00) = 2.55, p < 0.05]. Sequels with higher user scores had higher ROI than sequels with lower sequel user scores. Given those data, the hypothesis was supported.

# Additional t-tests: Financial Factors

The researcher ran additional t-tests to examine if parent elements such as ROI and budget had any influence or relation to the sequel and if there were clear differences in parent and sequel performance. The researcher predicted that these findings might be useful to further understanding of the financial success of sequels.

An independent-samples *t*-test was conducted to test if there was a significant difference in sequel ROI based on parent ROI. The median number for parent ROI, 4.20, was used as the cut point for higher and lower parent ROI. There was a significant difference between sequels with higher parent ROI (M = 3.79, SD = 2.83) and lower parent ROI (M = 1.78, SD = 1.49), [t(105.20) = 5.41, p < 0.05]. Sequels with higher parent ROI had higher ROI than sequels with lower parent ROI.

A paired-samples *t*-test was conducted to see if there was a significant difference between sequel and parent ROI within the same franchise. There was a significant difference between sequel ROI (M = 2.74, SD = 2.44) and parent ROI (M = 5.39, SD =4.52), [t(150.00) = -8.63, p < 0.05]. Parent ROI was higher than Sequel ROI. Table 5 displays the paired *t*-test differences between parent films and sequels on budget and ROI.

	t	df	Sig. (2-tailed)
Sequel ROI – Parent ROI	-8.63	150.00	.00
Sequel Budget – Parent Budget	8.30	214.00	.00

Paired t-tests: Differences between Parent Films and Sequels on Budget and ROI

A paired-samples *t*-test was conducted to test if there was a significant difference between sequel and parent budget within the same franchise. There was a significant difference between sequel budget (M = 59,214,795.35, SD = 55,319,462.86) and parent budget (M = 41,575,230.13, SD = 44,056,941.37), [t(214.00) = 8.30, p < 0.05]. Sequel budgets were higher than parent budgets.

### Additional Analyses: Review

The four *t*-tests in this section were all conducted with the films released after Metacritic's launch. These additional *t*-tests were ran to examine if parent review elements had any influence on or relation to sequel elements. The researcher predicted that these findings may be useful to further understanding of the financial success of sequels.

Supporting evidence for H3a and H3b indicated that sequel ratings had significant influence on sequel ROI which indicates towards the relationship of critics and reviewers as opinion leaders. The researcher wanted to explore if opinion leaders' views of parent films extend to the sequels. Positive reviews of parent films may result in high expectations for the sequels and may contribute to sequel ROI and sequel reviews.

To assess the relationship between parent metascore and sequel ROI, an independent-samples *t*-test was conducted to test if there was a significant difference in sequel ROI based on parent metascores. The median number for parent metascores, 57, was used as the cut point for higher and lower parent metascores. No significant difference was found in ROI between sequels with higher parent metascores (M = 2.79, SD = 2.31) and lower parent metascores (M = 2.04, SD = 2.14), but the results approached significance, [*t* (129.00) = 1.92, *p* = 0.06].

To assess the relationship between parent user score and sequel ROI, an independent-samples *t*-test was conducted to test if there was a significant difference in sequel ROI based on parent user scores. The median number for parent user scores, 7.1, was used as the cut point for higher and lower parent user scores. There was a significant difference in ROI between sequels with higher parent user scores (M = 3.04, SD = 2.45) and lower parent user scores (M = 1.76, SD = 1.80), [t(124.35) = 3.44, p < 0.05]. Sequels with higher parent user scores had higher ROI than sequels with lower parent user scores.

To assess the relationship between parent metascore and sequel metascore, a paired-samples *t*-test was conducted to test if there was a significant difference between sequel and parent metascores within the same franchise. There was a significant difference between sequel metascores (M = 47.96, SD = 16.73) and parent metascores (M = 55.05, SD = 16.32), [t(141.00) = -6.63, p < 0.05]. Parent metascores were higher than sequel metascores. Table 6 displays the paired *t*-tests mean differences between parent films and sequels on Metacritic metascore and user ratings.

Paired t-tests: Mean Differences Between Parent Films and Sequels on Metacritic Metascore and User Ratings

	t	df	Sig. (2-tailed)
Sequel Metascore –	-6.63	141.00	.00
Parent Metascore			
Sequel User Score –	-8.61	141.00	.00
Parent User Score			

To assess the relationship between parent user score and sequel user score, a paired-samples *t*-test was conducted to test if there was a significant difference between sequel and parent user scores within the same franchise. There was a significant difference between sequel user scores (M = 6.10, SD = 1.43) and parent user scores (M = 6.97, SD = 1.16), [t(141.00) = -8.61, p < 0.05]. Parent user scores were higher than sequel user scores.

# Correlations

Pearson correlations were conducted with all data for the financial and personnel retention variables. The results can be found in Table 7. Pearson correlations were also conducted with the films released after Metacritic's launch between the review variables and the other variables. The results can be found in Table 8.

	Sequel	Sequel	Main	Star Cast	Director	Parent	Parent	
	ROI	Budget	Cast	Retention	Retention	ROI	Budget	
		-	Retention				_	
Sequel	1							
ROI								
Sequel	09	1						
Budget								
Main	.08	.20**	1					
Cast								
Retention								
Star Cast	.05	.14	.51**	1				
Retention								
Director	.04	.24**	.19**	.08	1			
Retention								
Parent	.55**	21**	.00	17	.06	1		
ROI								
Parent	03	.83**	.23**	.15	.18**	37**	1	
Budget								

Pearson Correlations for Financial and Personnel Retention Variables

\*\*Correlation is significant at the 0.01 level (2-tailed)

	Sequel	Sequel	Main	Star Cast	Director	Sequel	Sequel	Parent	Parent	Parent	Parent
	ROI	Budget	Cast	Retention	Retention	Metascore	User	ROI	Budget	Metascore	User
			Retention				Score				Score
Sequel	.33**	.36**	.26**	.36**	.18*	1					
Metascore											
Sequel	.30**	.29**	.10	.25*	.08	.75**	1				
User											
Score											
Parent	.17*	.36**	.24**	.14	.18*	.70**	.51**	.03	.27**	1	
Metascore											
Parent	.28**	.13	.11	.10	.04	.49**	.58**	.08	.05	.66**	1
User											
Score											

Pearson Correlations for Critic/User Review Variables

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

### CHAPTER 5: DISCUSSION

This study attempted to examine the relationship of budget, personnel retention, and reviews with the ROI of franchise film sequels. The film franchise was conceptualized as an experiential brand from which additional products of revenue, such as sequels, can come (Thompson, 2007) and the sequel was conceptualized as an experiential product that extends the brand (Sood & Dreze, 2006). ROI was used as the measure of success rather than revenue to avoid confounding effects of factors, including budget size and inflation. That choice was consistent with the rationale of Ravid (1999), who argued that because ROI is sufficient for other industries and there are films with high revenue that fail to make a profit, ROI makes sense as the economic measure of film success.

Financial Success of Film Sequels: Role of Financial Factors

Hypothesis 1 predicted that sequels with higher budgets would have higher ROI than sequels with lower budgets. While no significant difference was found, the results were approaching significance for the other direction: sequels with lower budgets had significantly higher ROI than sequels with lower budgets.

While there was no significant difference in ROI between sequels with higher and lower budgets, parent ROI was found to be significantly different when compared on the basis of budget size. Parent films with lower budgets reported higher ROI than those with higher budgets. Also, parent budget and parent ROI had a weak negative correlational relationship. These results are consistent with the findings of Ravid (1999), who found that higher budgets may not be an indicator of profitability. This suggests that less expensive films may be more profitable than more expensive films. This may be because big budget expenses, such as expensive actors, directors, sets, and special effects, are not capturing their assumed financial value, whereas lower budget costs are earning back their assumed worth (Ravid, 1999; John et al., 2002).

The current trend is for sequels to be systematically given more money (Hennig-Thurau et al., 2009; Basuroy & Chatterjee, 2008). That is consistent with the finding in this study, where sequel budgets were significantly higher than parent budgets within the same franchise. Sequel budget and parent budget had a very strong positive correlational relationship. This suggests that the higher the parent budget, the more likely the sequel's budget will be high as well.

Sequel ROI was found to be significantly different when compared on the basis of parent ROI. Sequels which had parents with higher ROI reported higher ROI than sequels which had parents with lower ROI. Also, sequel ROI and parent ROI had a moderately strong positive correlational relationship. These findings suggest that if the first film in a franchise is successful, then the extension is likely to be successful. Parent ROI was found to be significantly higher than sequel ROI. This suggests that parents perform financially better than sequels, which is consistent with past research (Sood & Dreze, 2008).

Financial Success of Film Sequels: Role of Personnel Retention Factors

Hypothesis 2a predicted that sequels with higher main cast retention would have higher ROI than sequels with lower main cast retention, hypothesis 2b predicted that sequels with higher star cast retention would have higher ROI than sequels with lower star cast retention, and hypothesis 2c predicted that sequels with higher director retention would have higher ROI than sequels with lower director retention. No significant difference was found when comparing the sequel ROI of higher main cast retention and lower main cast retention or higher star cast retention and lower star cast retention. Higher director retention and lower director retention also had no significant difference on sequel ROI. These results suggest that filmgoer response to sequels may not be dependent on the retention of the main cast, headlining stars, or directors. While findings on the influence of actors and directors on financial success were inconsistent, the finding of this study is consistent with those that suggested actors and directors may not affect box office revenue. Litman (1983) suggested that audiences care more about the content, storyline, and overall quality of the film than the creative personnel of the film and this limits the particular affect actors and directors may have on success.

Brand extension theory states that every brand has attributes or characteristics that are associated with it and they transfer to extensions (Aaker & Keller, 1992). When the perceived similarity is high then the extension evaluation is high, and if the similarity is low then the extension evaluation is also low. In this study, actors and directors in the franchise's first film were considered brand attributes that can be transferred to the sequel. In building these hypotheses, it was assumed that when the personnel are transferred this would be considered a high similarity, or feature overlap, with the original product and lead to high consumer evaluations. This is because people like congruity and the lack of it can cause frustration (Meyers-Levy & Tybout, 1989; Mandler, 1982). The testing of these hypotheses found that personnel transfer may not affect the ROI of sequels. It may be that actors and directors are not the associative network memory model links that strengthen the relationship of brand and brand extension nodes (Keller, 1993; Meyers-Levy & Tybout, 1989; Mandler, 1982).

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Financial Success of Film Sequels: Role of Critic and Filmgoer Opinions

Hypothesis 3a predicted that sequels with more positive professional critic reviews would have higher ROI than sequels with less positive professional critic reviews and hypothesis 3b predicted that sequels with more positive antecedent filmgoer reviews would have higher ROI than sequels with less positive antecedent filmgoer reviews. Sequels with higher metascores had significantly higher ROI than sequels with lower metascores and sequels with higher user scores had significantly higher ROI than sequels with lower user scores. Also, both sequel metascore and sequel user score had a weak positive correlational relationship with sequel ROI.

These hypotheses were testing if two-step flow applied to franchise film sequels. Reviewers are the opinion leaders who experience the film sequels. Then, they pass on the experience as they've interpreted it to potential filmgoers. The results for these tests suggest that critics and antecedent filmgoers may have influence the ROI of franchise film sequels. Among researchers, there are a diversity of opinions on whether critics are influencers or predictors, or both in regards to financial success. The results of this study suggest that reviewers may be influencers of film profitability. Most studies that look into review impact on financial success use revenue as a dependent variable (Duan et al., 2008; Liu, 2006; Eliashberg & Shugan, 1997; Reinstein & Snyder, 2005; Boatwright et al., 2007; Moon et al. 2010). The results of these tests suggest that reviewers may impact ROI as well.

Parent metascores were significantly higher than sequel metascores within the same franchise and parent user scores were significantly higher than sequel user scores within the same franchise. This suggests that both critics and antecedent filmgoers

reviewed parents more positively than sequels. Sequel metascore and sequel user score had a strong positive correlational relationship, as well as parent metascore and parent user score. This suggests that critics and antecedent filmgoers review films similarly. These findings are not consistent with any research because past findings on the relationship between critics and audience reviews have been thin and inconsistent (Plucker et al., 2009).

Sequels with higher parent user scores had significantly higher ROI than sequels with lower parent user scores. This suggests that benefits from the profitability of the parent film may extend to the sequel. This is consistent with branding research which says brands have attributes that transfer to extensions and they may have a positive influence on the success of the product (Aaker & Keller, 1992). It may be that parent reviews are strengtheners of the associative network memory model link between a brand and its brand extension, in that the favorability of the parent creates an attribute/association of quality for the franchise. This idea from branding theory is also consistent with this study's finding that parent metascores and sequel metascores had a strong positive correlational relationship, as well as parent user scores and sequel user scores. While sequels with higher parent metascores, the results were approaching significance.

#### Implications

The findings of this study suggest that less expensive sequels are more profitable than more expensive ones, but budgets have been increasing over the years (Basuroy et al., 2003). This is because larger budgets make studios feel safer (Liman & Ahn, 1998).

Litman (1983) argued that big budgets reflect greater box office popularity and higher quality. They also serve as an insurance policy and can lessen the impact of negative reviews (Basuroy et al., 2003). This study's finding implies that spending more money on a film's budget is not as efficient as spending less money. It also implies that more money will be returned for each dollar invested on lower budget films than on higher budget films.

Because this study found that varying amounts of main cast, star cast, and director retention do not have significant differences based on sequel ROI, the results suggest that actors and directors may not be the brand features that are important for profitable film franchise extensions. This finding is inconsistent with Hennig-Thurau et al. (2009), who found that a sequel to *Spider-Man* without Tobey Maguire, but an actor with equal star power and salary, would decrease the sequel's revenue by \$181.8 million. This may indicate that actors have a different impact on revenue than they do on ROI. Prior research has found the budget spent on actors is more likely to lead to increased revenue than increased profitability (Ravid, 1999). There may be other branding attributes that influence the ROI of franchise film sequels. Sood and Dreze (2006) found that adding a new genre to the brand is way to increase sequel ratings. This is one of many attributes that can be tested on sequel ROI in the future.

Because this study's findings suggest that sequel ROI is influenced by both professional critics and antecedent filmgoers, it implies that two-step flow may apply to franchise film sequels and its ideas can be used to increase their financial success (Katz, 1957). Critics and antecedent filmgoers may be opinion leaders whose influence should be paid attention to by those examining sequel ROI. This is consistent with research which recommends that marketing teams consider reviews when creating their campaigns. Basuroy et al. (2003) recommends that marketing teams incorporate critics if they foresee positive criticism for their film and avoid critics if they foresee negative criticism. Dellarocas et al. (2007) said forecasting box office revenue is more accurate if WOM is calculated in managements forecasting models.

Findings from this study suggest that information from a parent film can be used to predict sequel performance. Parent ROI may be a gauge for how profitable a sequel will be. This study found that parents may have higher ROI than sequels. So, for the sequel to attain equal or more returns than its parent, more may have to be done such as spending more money. This tactic is one reason sequels are more expensive than parents (Hennig-Thurau et al., 2009; Basuroy & Chatterjee, 2008).

Since higher and lower reviewed films were significantly different based on ROI, it implies that opinion leaders may affect the consumption of experiential products such as franchise film sequels. In this case, professional critics and the antecedent filmgoers consume the experiential product and influence potential filmgoers with the outlooks and opinions of their experiences. Those interested in consumer research of experiential products should consider the influence of opinion leaders.

# Limitations

While there were 314 film sequels and their corresponding parent films in the data set, sequel ROI was only calculated for 167 films because of missing budget or revenue data. Star cast retention was only calculated for 126 films because many posters/DVD covers did not highlight/headline any of the actors.

The equation for ROI only calculated the negative cost of the film, which is "the cost of producing/shooting the film" (IMDB.com, Inc., 2015). It did not include advertising/marketing or distribution costs. Advertising is a key strategy in luring people to see a film (Litman & Kohl, 1989). In 2007, the MPAA (2007) reported that the total cost to produce a film for its six members was \$106 million, \$70.8 million of that for marketing and \$35.9 million for production. While it may have been interesting to see what marketing figures were like for the sequels, obtaining such figures is difficult (Litman & Kohl, 1989) and could not be found online.

# Future Research

This study hypothesized about the first sequel in a film franchise. The definition of sequel used was the second film in a franchise whose plot is chronologically after that of the first film. For future research, researchers could hypothesize about the third, fourth and fifth films in a film franchise. It could be that the dynamics of budget, personnel retention, and reviews are different for further extensions of a franchise.

Further research could be done on how ROI is affected by its actors. It may be that stars effect sequel revenue more than sequel ROI or that only certain star/director changes affect ROI. It may also be that only certain franchises are affected by personnel change such as franchises that are highly popular, have more extensive character development, or have a lot of additional products of revenue. Certain actors may be seen as more integral to the brand as compared to others.

For personnel retention, this study only examined which actors or directors from the parent film returned for the sequel. A future study could examine what happens to sequel profitability when notable actors or directors are added to the franchise or when notable actors or directors replace those that were not retained.

While only three attributes were tested in this study for their effects on ROI, there are many more that can be researched. Writer, producer, distributor, MPAA rating, genre, number of screens, release date, awards, advertising, and competitive forces are other attributes that can be tested. Elements of the story line can also be examined, such as if new major characters were added or removed, a particular film element was intensified or if new elements were added, if a new story structure was used, or the nature of how the franchise's story was moved forward. These would be more internal/filmic attributes as opposed to the external ones looked at in this study.

This study explored whether budget, personnel retention, and reviews are influential on the ROI of sequels. Future research could look into the ROI of film franchise prequels, reboots, remakes, and adaptations. It could also look at the elements of successful transmedia storytelling, or stories told across multiple media such as novels, cinema, comics, television, games, and video games (Scolari, 2009; Jenkins, 2009).

While this study researched financial success of sequels using ROI as the measure of success, future studies could explore critical success as a dependent variable. Studies can also be done where filmgoers are surveyed to learn what makes individuals attracted to sequels on a personal/psychological level. Another study that could be done is what criteria make films able to turn into a franchise.

With the explosion and increasing influence of social media in recent years (Asur & Huberman, 2010) and this study finding that professional critics and WOM may influence sequel ROI, a future study can be done on the impact of sequel reviews through

social media platforms. Social media is quickly changing the way people communicate and share information (Asur & Huberman, 2010). Researchers are finding it can be used to forecast future outcomes and for designing advertising and marketing campaigns. Using Twitter, Asur & Huberman (2010) found that the rate at which films are tweeted about and the sentiments of the tweets (messages with a 140-character limit that are shared with followers) can be used to improve box-office revenue forecasting models. Their Twitter-based model performed better than market-based predictors.

# Conclusion

There are a multitude of areas and approaches in which the financial success of sequels can be researched. This study examined the relationship that budget, personnel factors, and reviews have with sequel ROI. No significant difference was found in ROI based on sequel budgets, but some of the study's results suggest that lower budget films are more profitable than higher budget films. No significant difference in ROI was found based on main cast, star cast, or director retention. This indicates that retaining actors and directors from the parent film may not affect the profitability of the sequel. Sequels with more positive professional reviews had significantly higher ROI than sequels with less positive professional ratings and sequels with more positive antecedent filmgoer reviews had significantly higher ROI than sequels ROI.

Revenue and ROI are different measures of economic success with different dynamics. The film industry is seemingly much more concerned with revenue (Ravid, 1999). While revenue is how much a film makes in ticket sales, ROI is a measure of profitability that looks at the efficiency of an investment. In other words, how much of the budget invested in the film was used. Ravid (1999) argued that ROI should be the measure of success the industry uses, as it is a sufficient measure of success in most industries and it is possible for high revenue films to not make a profit. Revenues have been increasing over the years and the majority of films have had negative ROI (although in recent years the average ROI is positive) (Ferrari, 2008). As measures of business success that are calculated differently and have different meanings for businesses, the variables that affect one may not affect the other. Even if some variables affect both, they may affect the two differently. So, scholarship and film studios may want to pay more attention to ROI in the future to examine what else can be learned about its relationship with film and what implications it has on film business.

### REFERENCES

- Aaker, D. A. & Keller, K. L. (1990). Consumer Evaluations of Brand Extensions. Journal of Marketing, 54, 27-41.
- Basuroy, S. & Chatterjee S. (2008). Fast and Frequent: Investigating Box OfficeRevenues of Motion Picture Sequels. *Journal of Business Research*, *61*, 798-803.
- Basuroy, S., Chatterjee, S., & Ravid, A. (2003). How Critical Are Critical Reviews? The
  Box Office Effects of Film Critics, Star Power, and Budgets. *Journal of Marketing, Vol. 67*, 103–117.
- Boatwright, P., Basuroy, S., & Kamakura, W. (2007). Reviewing the Reviewers: The Impact of Individual Film Critics on Box Office Performance. *Quantitative Marketing and Economics*, 5, 401-425.
- Boush, D. M. & Loken, B. (1991). A Process-Tracing Study of Brand Extension Evaluation. *Journal of Marketing Research*, 28, 16-28.
- Brewer, S. M., Kelley, J. M., & Jozefowicz, J. J. (2009). A Blueprint for Success in the US Film Industry. *Applied Economics*, 41, 589-606.
- Broniarczyk, S. M. & Alba, J. W. (1994). The Importance of the Brand in Brand Extension. *Journal of Marketing Research*, *31*, 214-228.
- CBS Interactive Inc. (2015). How We Create the Metascore Magic. Retrieved from http://www.metacritic.com/about-metascores
- Chakravarty, A., Liu Y., & Mazumdar T. (2010). The Differential Effects of Online
   Word-of-Mouth and Critics' Reviews on Pre-release Movie Evaluation. *Journal of Interactive Marketing*, 24(3), 185-197.

- Chang, B. & Ki, E. (2005). Devising a Practical Model for Predicting Theatrical Movie Success: Focusing on the Experience Good Property. *Journal of Media Economics*, 18(4), 247–269.
- Collins, A. M. & Loftus, E. F. (1975). A Spreading Activation Theory of Semantic Processing. *Psychological Review*, *82*, 407-428.
- Cooper-Martin, E. (1991). Consumers and Movies: Some Findings on Experiential
   Products. In Rebecca H. Holman and Michael R. Solomon (Eds.), *Advances in Consumer Research Volume 18* (372-378). Provo, UT: Association for Consumer
   Research.
- Cooper-Martin, E. (1992). Consumers and Movies: Information Sources For Experiential Products. In John F. Sherry, Jr. and Brian Sternthal (Eds.), *Advances in Consumer Research Volume 19* (756-761). Provo, UT : Association for Consumer Research.
- Dellarocas, C., Zhang, X., & Awad, N. F. (2007). Exploring the Value of Online Product Reviews in Forecasting Sales: The Case of Motion Pictures. *Journal of Interactive Marketing*, 21(4), 23-45.
- Duan, W., Gu, B., & Whinston, A. B. (2008). The Dynamics of Online Word-of-Mouth and Product Sales-An Empirical Investigation of the Movie Industry. *Journal of Retailing*, 84(2), 233-242.
- Eliashberg J. & Shugan, J. (1997). Film Critics: Influencers or Predictors? *Journal of Marketing*, *61(2)*, 68-78.

Farquhar, P. H. (1989). Managing Brand Equity. Marketing Research, 1, 24-33.

- Hennig-Thurau, T., Houston, M. B., & Heitjans, T. (2009). Conceptualizing and Measuring the Monetary Value of Brand Extensions: The Case of Motion Pictures. *Journal of Marketing*, 73, 167–183.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging Concepts, Methods and Propositions. *Journal of Marketing*, 46, 92–101.
- Holbrook, Morris B. (1999). Popular Appeal Versus Expert Judgments of Motion Pictures. *Journal of Consumer Research, 26(2)*, 144-155.
- Holbrook, Morris B. (2005). The Role of Ordinary Evaluations in the Market for Popular Culture: Do Consumers Have 'Good Taste'?". *Marketing Letters*, *16(2)*, 75-86.
- Holbrook, Morris B. & Hirschman, Elizabeth C. (1982). The Experiential Aspects of Consumption Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research*, 9(2), 132-140.
- IMDb.com, Inc. (2015). Where do you get your budget numbers and what do they mean? Retrieved from http://www.imdb.com/help/show\_leaf?budget
- Investopedia, LLC. (2015). Definition of 'Return on Investment ROI'. Retrieved from http://www.investopedia.com/terms/r/returnoninvestment.asp
- Jenkins, H. (2009). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. Cambridge, Massachusetts: The MIT Press.
- John, K., Ravid, S. A., and Sunder, J. (2002). The Role of Termination in Employment Contracts: Theory and Evidence from Film Directors' Careers (Working Paper). New York, NY: Stern School of Business, New York University.
- Katz, E. (1957). The Two-Step Flow of Communication: An Up-To-Date Report on an Hypothesis\*. *Public Opinion Quarterly*, *21(1)*, 61-78.

- Keller, K. L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, *57(1)*, 1-22.
- Litman, B. & Ahn, H. (1998). Predicting Financial Success of Motion Pictures: The Early
  '90s Experience. In B. R. Litman (Ed.), *The Motion Picture Mega-Industry* (172-179). Needham Heights, MA: Allyn Bacon.
- Litman, B. R. (1983). Predicting Success of Theatrical Movies: An Empirical Study. Journal of Popular Culture, 16(4), 159-175.
- Litman, B. R. & Kohl, L. S. (1989). Predicting Financial Success of Motion Pictures: The '80s experience. *Journal of Media Economics*, *2(2)*, 35-50.
- Liu, Y. (2006). Word of Mouth for Movies: Its Dynamics and Impact on Box Office Revenue. *Journal of Marketing*, *70*, 74-89.
- Mandler, G. (1982). The Structure of Value: Accounting for Taste. In Margaret S. Clark
  & Susan T. Fiske (Eds.), *Affect and Cognition: The 17th Annual Carnegie Symposium*, (3-36). Hillsdale, NJ: Lawrence Erlbaum Associates.
- McDuling, J. (2014, November 26). Hollywood's glut of sequels may still leave it with a meager Thanksgiving. *Quartz*. Retrieved from http://qz.com/303181/hollywoods-glut-of-sequels-may-still-leave-it-with-a-meager-thanksgiving
- Meyers-Levy, J. & Tybout, A. M. (1989). Schema Congruity as a Basis for Product Evaluation. *The Journal of Consumer Research*, *16(1)*, 39-54.
- Moon, S., Bergey, P. K., Iacobucci, D. (2010). Dynamic Effects Among Movie Ratings, Movie Revenues, and Viewer Satisfaction. *Journal of Marketing*, *74(1)*, 108-143.
- Moore, G. A. (2005). *Dealing with Darwin: How Great Companies Innovate at Every Phase of Their Evolution*. New York: Portfolio.

- Park, W., Milberg, S., & Lawson, R. (1991). Evaluation of Brand Extensions: The Role of Product Feature Similarity and Brand Concept Consistency. *Journal of Consumer Research, 18,* 185-193.
- Prag, J. & Casvant, J. (1994). An Empirical Study of the Determinants of Revenues and Marketing Expenditures in the Motion Picture Industry. *Journal of Cultural Economics*, 18(3), 217-235.
- Raaijmakers, J. G. W. & Shiffrin, R. M. (1981). Search of Associative Memory. *Psychological Review*, 88, 93-134.
- Ratcliff, R. & McKoon, G. (1988). A Retrieval Theory of Priming in Memory. *Psychological Review*, *95(3)*, 385-408.
- Ravid, S. A. (1999). Information, Blockbusters, and Stars: A Study of the Film Industry. *The Journal of Business*, 72(4), 463-492.
- Reddy, S. K., Swaminathan V., & Motley, C. M. (1998). Exploring the Determinants of Broadway Show Success. *Journal of Marketing Research*, 35(3), 370-383.
- Reinstein, D. A. & Snyder, C. M. (2005). The Influence of Expert Reviews on Consumer Demand for Experience Goods: A Case Study of Movie Critics. *The Journal of Industrial Economics*, 53, 27-51.
- Savova, I (2012). *Movie Sequels: Is there a formula for success?* (Unpublished master's thesis). Erasmus School of Economics, Rotterdam, Netherlands.
- Scolari, C. A. (2009). Transmedia Storytelling: Implicit Consumers, Narrative Worlds, and Branding in Contemporary Media Production. *International Journal of Communication, 3*, 586-606.

- Shapiro, C. & Varian, H. R. (1999). Information Rules: A Strategic Guide to the Network Economy. Boston: Harvard Business School Press.
- Sood S. & Dreze X. (2006). Brand Extensions of Experiential Goods: Movie Sequel Evaluations. *Journal of Consumer Research*, *22(3)*, 352-60.
- Tauber, E. M. (1981). Brand Franchise Extensions: New Products Benefit from Existing Brand Names. *Business Horizons*, 24(2), 36-41.
- Terry, N., Butler, M., De'Arno, D. (2003). The Determinants of Domestic Box Office Performance in the Motion Picture Industry. *Proceedings of the Academy of Marketing Studies*, 8(2), 23-28.
- Terry, N., Cooley, J., & Zachary, M. (2009). The Determinants of Foreign Box Office Revenue for English Language Movies. *Journal of International Business and Cultural Studies*, 2(1).
- Thompson, K. (2007). *The Frodo Franchise: The Lord of the Rings and Modern Hollywood*. London, England: University of California Press, Ltd.
- Thorsten, H., Houston, M. B., Walsh, G. (2007). Determinants of Motion Picture Box Office and Profitability: An Interrelationship Approach. *Review of Managerial Science*, 1(1), 65-92.
- Wallace, T. W., Seigerman, M., Holbrook, M. B. (1993). The Role of Actors and Actresses in the Success of Films: How Much Is a Movie Star Worth. *Journal of Cultural Economics*, 17(1), 1-27.
- Wang A. (2005). The Effects of Expert and Consumer Endorsements on Audience Response. *Journal of Advertising Research*, 45(4), 402-412.

Wasserman et al. (2014). Correlations Between User Voting Data, Budget, and Box office for Films in the Internet Movie Database. arXiv:1312.3986v3 [physics.socph]. Retrieved from http://arxiv.org/pdf/1312.3986v3.pdf

Webfinance, Inc. (2015). Return on Investment (ROI). Retrieved from

http://www.businessdictionary.com/definition/return-on-investment-ROI.html



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