# The Changing Tides of Movie Production: Insights from the "Big-Five" Studios

### Report by Bindu Sai Sri Yerra

Tableau Link: https://prod-useast-b.online.tableau.com/#/site/msis670b/workbooks/1563645

### **Data Preparation:**

The thorough data preparation procedures used to examine the "BIG FIVE" major motion picture studios Warner Bros., Universal Pictures, Walt Disney Pictures, Paramount Pictures, and Columbia Pictures are described in this section of the report. Data cleaning and filtering were part of the preparation process to guarantee a thorough and targeted examination of these important business participants. The investigation seeks to explore several operational facets, such as casting efficacy, production patterns, and popularity of genres.

Utilizing the 'Production Companies' column in the dataset, I was able to precisely locate and refine records linked solely to the "BIG FIVE" studios and their acknowledged subsidiaries. This approach made sure that these important actors would be the only subjects of my analysis.

To guarantee that all ensuing studies would originate from a logical and pertinent subset of the original dataset, the filtering was consistently applied to all data sheets, including those pertaining to the Movies, Cast, and Person.

To improve the next visualizations, New Calculated columns were made. These columns were meticulously created to include crucial metrics that are essential to the analysis. Any detected null values were thoroughly examined and cleaned throughout the dataset, but only when doing so was required to maintain the accuracy and integrity of the data. Because of this deliberate management of null values, the dataset remained stable and dependable for complex analytical tasks. By making these changes, the project's latter phases will have a solid basis on which to build intelligent visualizations.

Amidst the explosion of digital material and the streaming wars, there have been notable changes in the movie production industry. Fascinating tendencies that not only represent Hollywood's current situation but also suggest where it may go in the future have been found in recent data analysis of the "Big Five" production companies: Walt Disney, Universal Pictures, Warner Bros., Columbia Pictures, and Paramount Pictures.

### 1. Production output of Hollywood's Big Five Studios

The number of films made by the five major Hollywood studios between 2010 and 2022 is represented by a bar chart. With 133 films overall, Universal Pictures leads the pack, suggesting that the studio is using a variety of content offerings to try and gain a larger market share. Warner Bros. trails behind with 108 films, continuing to produce at a rate that solidifies its standing as one of the industry's leading companies.

Both Columbia Pictures and Paramount Pictures have a competitive production count of 97 and 96 films, respectively, demonstrating their strong presence in the business and their efforts to meet consumer demand. Walt Disney makes fewer films than its competitors, having a total of 63 films to its credit. This lower production output is probably a result of Disney's intentional focus on high-end, high-caliber movies, like family-friendly blockbusters and animated features, that fit their brand and audience expectations.

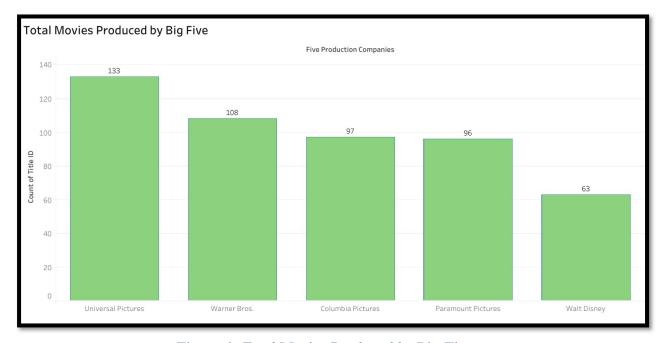


Figure 1: Total Movies Produced by Big Five.

### 2. Audience engagement and quality perception by studio

With almost 30 million votes, Warner Bros. is at the top of the list, demonstrating its enormous reach. However, its average rating of 6.6 raises questions about whether quality may have been compromised in favor of quantity. Both Paramount and Columbia come in close behind, garnering

almost 21-19.3 million votes apiece, demonstrating a robust market presence with potential for creative improvement to raise their roughly 6.3 & 6.17 average ratings.

With 18.45 million votes and a 6.08 rating, Universal Pictures emphasizes the necessity for creativity, whereas Walt Disney, with the lowest votes and the highest average rating of 6.76, is a prime example of the benefits of prioritizing quality over quantity. The significance of striking a balance between broad appeal and cinematic excellence is underscored by this picture, which also serves as a foundation for strategic modifications inside these studios.

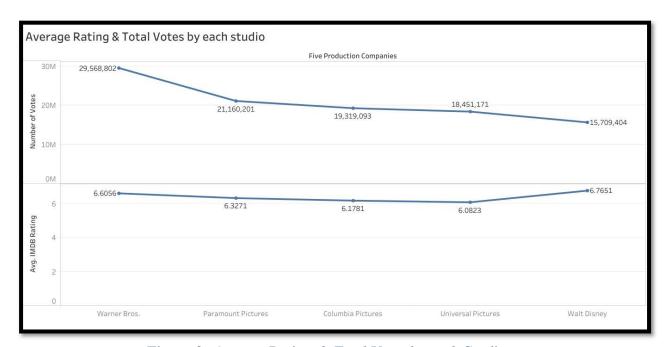


Figure 2: Average Rating & Total Votes by each Studio.

### 3. Hollywood's Genre Playbook: Decoding the Big Five's Strategy

The film productions of the "Big Five" studios - create a vivid image of strategic diversity and brand identity in the bustling world of Hollywood, where genres often speak louder than words.

Upon closely examining production trends, it is evident that Universal, Columbia, and Paramount have a strong preference for action and comedy among other genres. These studios have successfully loaded their slates with popular comedy and high-octane action movies, capitalizing on a combination that should generate strong box office results and broad popularity. While Warner Bros. excels in Action along with animation. They have a great dedication to drama and adventure as well, broadening their collection to include stories that suit a range of audience tastes.

### **Animation and Adventure: Disney's Dual Dominance**

Disney's strategic expertise is evident in its dominant position in the action-adventure and animation genres. Disney maintains its historic prominence in animation by producing enchanting narratives that attract both young audiences and the young at heart, with 26 animated titles at the

top of their catalogue. This dedication highlights their historical relevance as well as their continuous storytelling inventiveness. While Disney's extensive library of fifteen titles in the action and adventure genres is equally outstanding.

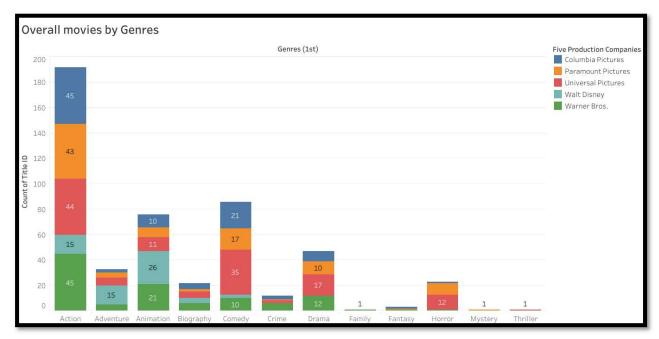


Figure 3: Overall Movies by Genres.

### 4. Riding the Waves: A Decade of Fluctuations in Film Production

The journey starts in 2010, where 2011 was a remarkable peak year with 57 films produced, indicating a strong comeback from the world financial crisis. Studios expanded their production slates because of this revival, which was driven by fresh investments and a positive market outlook. And "2011: A Record Year for Sequels, Prequels, Remakes, and Spin-Offs".

But as the decade went on, the scene started to shift. A steady downhill trajectory followed, reaching a major low point in 2020 when the industry produced a mere 28 films. This precipitous drop was a direct result of the COVID-19 epidemic, which caused schedule disruptions and a near halt to production worldwide.

In 2021 to 2022, things took a turn for the better, showing a noticeable upturn to 38/34 films. This rebound demonstrates the industry's adaptability and durability as it swiftly adopted new production techniques and distribution strategies, especially the use of streaming platforms, which are now a key component of distribution plans.

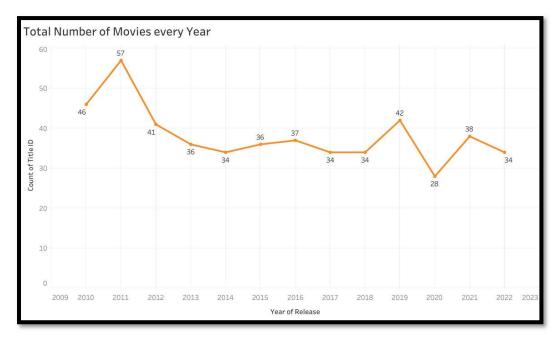


Figure 4: Total Number of Movies every Year.

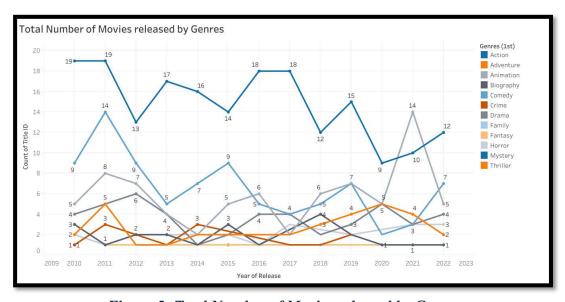


Figure 5: Total Number of Movies released by Genres.

### 5. Titans of 2011: A Year of Billion-Dollar Blockbusters

Examining the cinematic landscape of 2011, we find that it was a year distinguished not only by a wide range of genres but also by enormous financial achievements that exceeded predictions. The year was marked by blockbusters including "Transformers: Dark of the Moon," "Harry Potter and the Deathly Hallows – Part 2," and "Pirates of the Caribbean: On Stranger Tides," all of which made over a billion dollars worldwide.

Together with other box office successes like "Mission: Impossible – Ghost Protocol" and "Fast Five, The Smurfs" these films highlight a noteworthy trend more than \$500 Million worldwide gross: 2011 saw a rise in the popularity of sequels and franchise films, which not only dominated the box office but also became cultural phenomena due to their unmatched ability to entice people to see them in theatres all over the world. This collection of films shows how strong storylines and devoted fan bases can be in creating box office success.

Five Produc		Runtime (M	Adjusted N 479,970	7.800
Columbia Pictures	The Girl with the Dragon Tattoo  Moneyball	133	447,545	7.600
		130	41,706	6.800
	Anonymous The Green Hornet	119	163,123	5.800
	Just Go with It	117	256,865	6.400
	Battle Los Angeles	116	183,339	5.700
	The Adventures of Tintin	107	238,497	7.300
	The Smurfs	103	94,318	5.400
	Zookeeper	102	63,806	5.200
	The Ides of March	101	227,494	7.100
	Bucky Larson: Born to Be a Star	97	12,590	3.300
	Ghost Rider: Spirit of Vengeance	96	123,845	4.300
	The Only One	95	0	
	Bad Teacher	92	209,011	5.600
	Restless	91	18,211	6.700
	Jack and Jill	91	88,270	3.300
	30 Minutes or Less	83	104,987	6.100
Paramount	Transformers: Dark of the Moon	154	424,585	6.200
Pictures	Mission: Impossible - Ghost Protocol	132	515,934	7.400
	Hugo	126	330,856	7.500
	Captain America: The First Avenger	124	875,012	6.900
	Thor	115	879,390	7.000
	Footloose	113	51,963	5.800
	Super 8	112	362,891	7.000
	No Strings Attached	108	239,194	6.200
	Rango	107	283,486	7.200
	Young Adult	94	86,258	6.300
	Like Crazy	86	62,749	6.600
	Paranormal Activity 3	83	98,061	5.800
Universal	Fast Five	130	397,916	7.300
Pictures	Bridesmaids	125	303,008	6.800
	Cowboys & Aliens	119	227,945	6.000
	The Change-Up	112	190,765	6.300
	The Dilemma	111	56,282	5.300
	Sanctum	108	56,702	5.900
	The Adjustment Bureau	106	264,551	7.000
	Tower Heist	104	148,702	6.200
	Paul	104	261,469	6.900
	Your Highness	102	103,341	5.500
	Johnny English Reborn	101	137,340	6.300
	Larry Crowne	98	69,547	6.100
	Нор	95	36,124	5.400
Walt Disney	Pirates of the Caribbean: On Stranger Tides	137	548,244	6.600
	The Muppets	120	95,331	7.100
	Cars 2	106	206,311	6.200
	Mars Needs Moms	88	23,444	5.400
	Winnie the Pooh	63	27,184	7.100
Warner Bros.	Harry Potter and the Deathly Hallows: Part 2	130	914,711	8.100
	Sherlock Holmes: A Game of Shadows	129	470,392	7.400
	Extremely Loud & Incredibly Close	129	104,064	6.900
	Happy Feet Two	117	46,668	5.800
	Green Lantern	114	291,616	5.500
	Sucker Punch	110	248,128	6.000
	Arthur	110	52,603	5.700
	Contagion	106	310,743	6.800
	The Hangover Part II	102	520,204	6.500

Figure 6: 2011 - A Remarkable Year

### 6. Cinematic Portraits: The Interplay of Quantity and Quality in Actors' Careers

Each actor adds a distinctive thread to the fabric of cinema, colored by the average IMDb ratings of the films they've been in. Plotting the number of titles against the average ratings, the "Quality vs Quantity" graphic skillfully charts these creative journeys, illuminating both the volume of work and its audience relevance. The stories of the widely distributed dots on the graph depict a variety of successful careers with varying numbers of films and degrees of impact.

Certain groups of dots are closer to the desired 8-rating; these are the seasoned performers whose choices frequently guarantee a balance between quantity and quality, drawing crowds in repeatedly. Others dispersed, delving into a variety of roles and tales, with their ratings fluctuating in tandem with the storylines of the films. This graph tells the story of careers developed role by role and film by film as observed by viewers worldwide; it is more than just numbers.

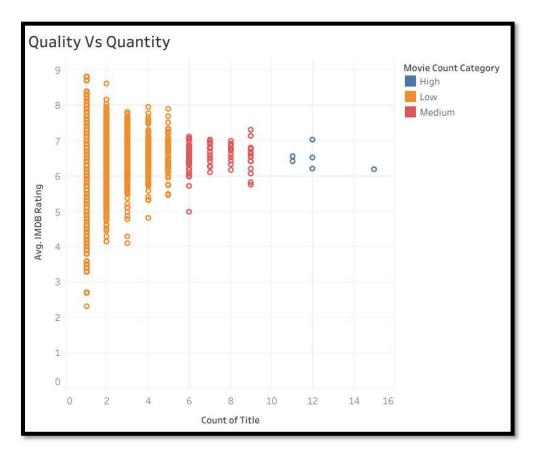


Figure 7: Quality vs Quantity.

# 7. The Cinematic Journey: Exploring the Nexus Between Film Duration and Viewer Ratings

In the world of film, a picture's runtime frequently reveals details about its narrative complexity and depth. Our charts, "Rating vs. Movie Runtime" and "Duration Category vs. Rating," illustrate the intriguing correlation between a film's duration and critical praise. There is a noticeable rise in

their ratings as we go from the quick, snappy stories of short films to the more in-depth stories of medium-length films to epic sagas that last longer than two hours.

This sequence of events implies that longer films have a deeper emotional resonance with viewers due to their rich character arcs and luxuriously paced storytelling, which encourages viewers to fully immerse themselves and think more positively of the experience. Filmmakers and studios can benefit from this observation, which suggests that spending money on lengthier, more intricate cinematic experiences may be the secret to winning over both audiences and critics.

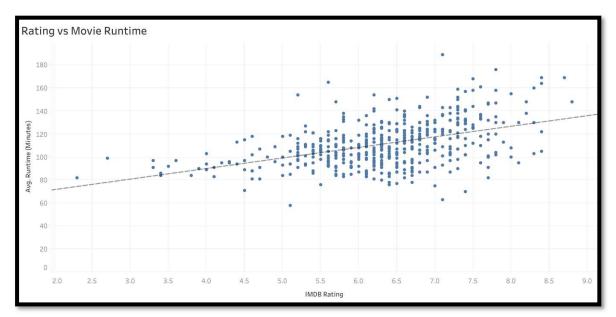


Figure 8: Rating vs Movie Runtime

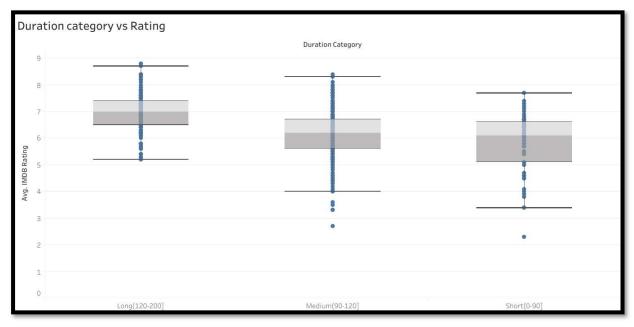


Figure 9: Duration category vs Rating.

### 8. The Echoes of Acclaim: How Critically Acclaimed Films Capture Audiences

Within the world of film, where each movie is a brilliant work of art that emerges from a creative nebula, the "IMDB Rating vs. Number of Votes" chart provides an engaging account of both critical and audience success. This four-act visual narrative progresses from critical misses to critically acclaimed creations of art. As the chart progresses, the films that receive high praise from critics (rating 7.5–10) not only get more attention, but also draw sizable audiences and garner a substantial number of votes.

According to this pattern, films that score higher on critics' lists also tend to enthrall bigger crowds and make a lasting impression. This phenomenon demonstrates the compelling power of excellent narrative and shows how, when a movie hits the perfect note, it leaves a lasting impression on audiences that lasts long after the initial round of applause.

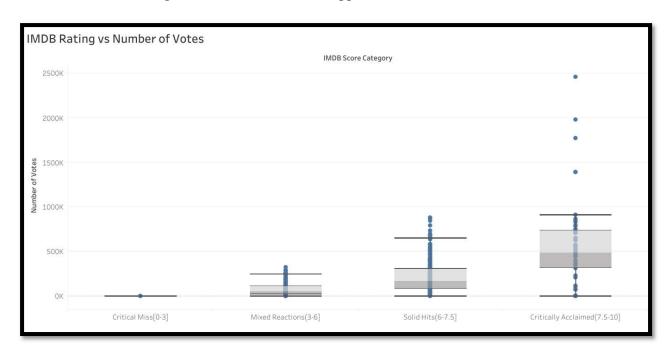


Figure 10: IMDB Rating vs Number of Votes.

### 9. Spotlight Stars: The Luminary Path of Top-Billed Actors

Envision a stage where the main performer, capturing the focus of the audience, is at the center of attention, with the spotlight shining brightest at that point. This image, which depicts the highest-paid actors in a variety of movies, presents a comparable image of the movie industry. Actors like Tom Cruise and Adam Sandler, who are usually at the top of cast lists across all genres, not only star in numerous productions but also bear the responsibility for the successes and failures of the films.

Diverse average ratings are shown as the list goes down, indicating that presence alone, rather than critical acclaim is the guarantee of being a frequent lead. The enduring attraction of these actors, their path through the film industry, and their capacity to pull audiences, sometimes more so

because of their star power than the story they contribute to, are all told in this image, which delivers more than just names and numbers.



Figure 11: Top Billed Actors.

### 10. Actors' Spectrum: Analyzing IMDb Scores Across Careers

A striking tableau charting the careers of Hollywood's best performers can be found in the great theatre of film, where each role is a brushstroke on the canvas of cinema. This story is not only about actors like Tom Cruise and Adam Sandler; it's a history of their film projects as seen through the prism of IMDb ratings, which range from overwhelming praise to critical failures.

The picture conveys a story of different success with each bar, a range of colors from muted greys to vivid purples, showing how each actor's choice of roles has been received by the public and critics. Here, in this mosaic of ratings, we see the ups and downs of an acting career, characterized not just by box office successes but also by audacious endeavors that may have missed the point. This chart is more than just a record; it tells a story about tenacity, aspiration, and the shifting tides of cinematic success.

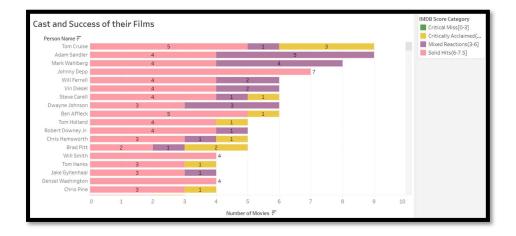


Figure 12: Cast and Success of their films.

### 11. Spotlights and Shadows: The Gender Dynamics of Leading Roles in Film

Within the enormous cinematic canvas, the parts played by actors and actresses frequently convey a narrative that goes beyond the screen, one of representation and prominence.

A clear visual representation of this story is provided by the "Leading Films by actor vs actress" chart, which highlights the five main production organizations. It exposes a scene in which leading roles are usually dominated by actors, as exemplified by Universal Pictures, which has 103 actors play prominent roles in comparison to 29 actresses.

Walt Disney still tends to focus on male leads, but he takes a more balanced approach. Not only does this portrayal count possibilities, but it also reflects larger industry trends and cultural narratives, igniting discussions about gender fairness in Hollywood casting choices. It serves as a spur to continue working towards a more diverse film industry.

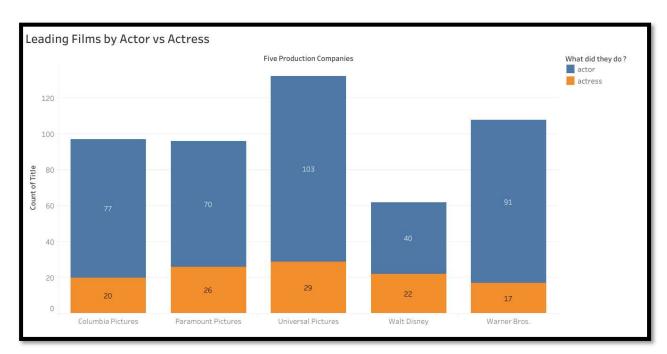


Figure 13: Leading Films by Actor vs Actress.

## "BIG FIVE" - Production Companies

The "BIG FIVE" production companies' varied film production components are visualized in this extensive dashboard.

#### Actions used in this dashboard:

- **Filter Action 1:** The "Total movies produced by Big Five" chart on your dashboard will automatically update the other charts to provide information specific to that studio if you pick its bar.
- Filter Action 2: The "Total number of movies per year" chart on your dashboard will automatically update the other charts to provide information about that year by selecting the tip of the line.

The visuals show the total number of films produced by each studio, with Universal Pictures coming in first.

The distribution of genres reveals a varied portfolio with notable outputs in Action and Comedy, while the average rating and total votes chart links film quality with viewer involvement.

Years' worth of trends demonstrates variations in the number of films released; a thorough examination of the relationship between quantity and quality reveals that more films doesn't necessarily equate to higher reviews.

In addition, an examination of the correlation between IMDb ratings, the quantity of votes cast, and the duration of the film offers insights into the variables affecting the popularity and reception of the film among viewers.

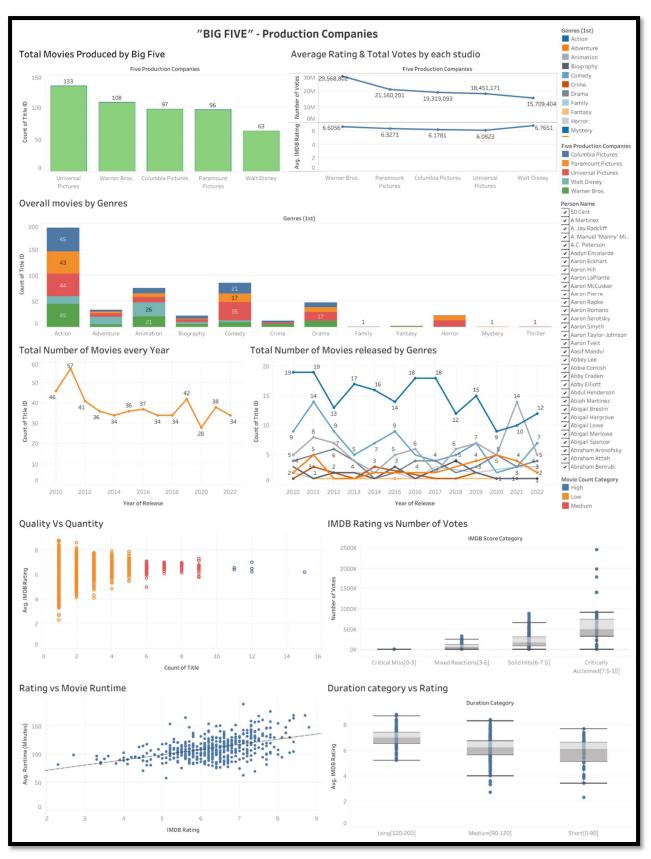


Figure 14: BIG FIVE -Production Companies Dashboard

### "BIG FIVE" - Production Cast Success

A comprehensive overview of actor participation and their influence on the films made by the "BIG FIVE" production firms can be found on this dashboard.

### Actions used in this dashboard:

- Filter Action 1: The "Leading Films by Actor vs Actress" chart on your dashboard will automatically update the other charts to provide information specific to the actors for that specific studio if you pick its bar.
- **Filter Action 2:** The "Total Movies by Genre" chart on your dashboard will automatically update the other charts to provide information in that genre if you pick its circle.

It shows a substantial predominance of male leads across the studios by contrasting the number of top films with males against actresses. Tom Cruise and Adam Sandler stand out as the most frequently featured leads in the examination of top-billed performers, indicating their considerable appeal in box office roles.

The actors' success metrics are explored in the figure on the right, which links the actors' number of films with both critical and commercial successes. It shows that some actors, like Tom Cruise, are always in high-grossing films, while others have varying degrees of success.

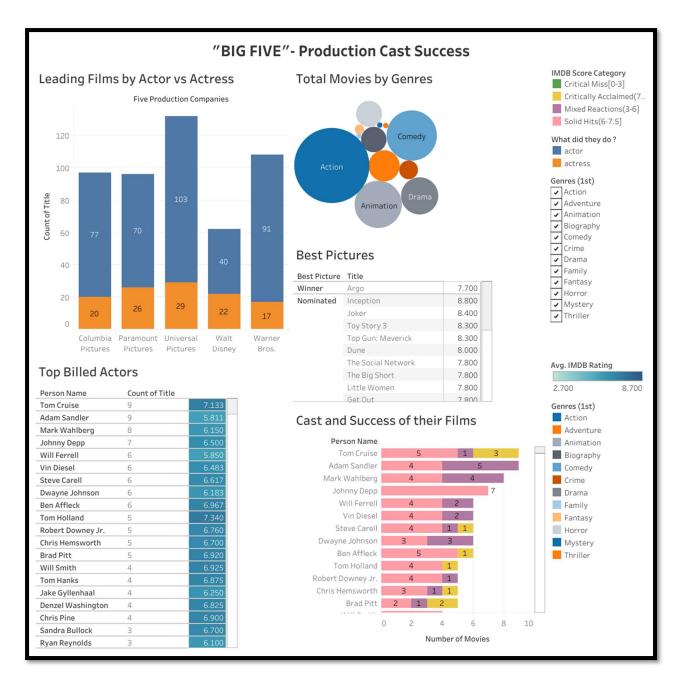


Figure 15: BIG FIVE - Production Cast Success Dashboard

### **References:**

- → <a href="https://www.popoptiq.com/2011-a-record-year-for-sequels-prequels-remakes-and-spin-offs/">https://www.popoptiq.com/2011-a-record-year-for-sequels-prequels-remakes-and-spin-offs/</a>
- → 2011 in film Wikipedia