# Deloitte.





# Agenda

Wrap-Up

01 **Business Understanding** Introduction to Data **Overview** Data Understanding 02 Data Analysis • Recommendation Recommendations 03 Summary **Next Steps** 

Questions

# **Business Understanding**



#### **Data Exploration**

Explore the datasets provided and merge useful information



#### **Data Analysis**

Analyze high performing movies and their attributes



#### **Business Insights**

Translate findings into actionable insights to optimize performance of the studio

#### **Dataset 1: The Numbers**



id	release_date	movie	production_budget	domestic_gross	worldwide_gross
1	Dec 18, 2009	Avatar	\$425,000,000	\$760,507,625	\$2,776,345,279
2	May 20, 2011	Pirates of the Caribbean: On Stranger Tides	\$410,600,000	\$241,063,875	\$1,045,663,875
3	Jun 7, 2019	Dark Phoenix	\$350,000,000	\$42,762,350	\$149,762,350
4	May 1, 2015	Avengers: Age of Ultron	\$330,600,000	\$459,005,868	\$1,403,013,963
5	Dec 15, 2017	Star Wars Ep. VIII: The Last Jedi	\$317,000,000	\$620,181,382	\$1,316,721,747



The Numbers is a film industry data website that tracks box office revenue in a systematic, algorithmic way.



This data was used to analyze the Release Date, and the Production Budget

#### **Dataset 2: IMDb**



genres \$	runtime_minutes \$	start_year \$	original_title <b>♦</b>	primary_title \$
<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Action,Crime,Drama	175.0	2013	Sunghursh	Sunghursh
Biography,Drama	114.0	2019	Ashad Ka Ek Din	One Day Before the Rainy Season
Drama	122.0	2018	The Other Side of the Wind	The Other Side of the Wind
Comedy,Drama	NaN	2018	Sabse Bada Sukh	Sabse Bada Sukh
Comedy,Drama,Fantasy	80.0	2017	La Telenovela Errante	The Wandering Soap Opera



IMDb is an online database of information related to films, series, games and steaming.



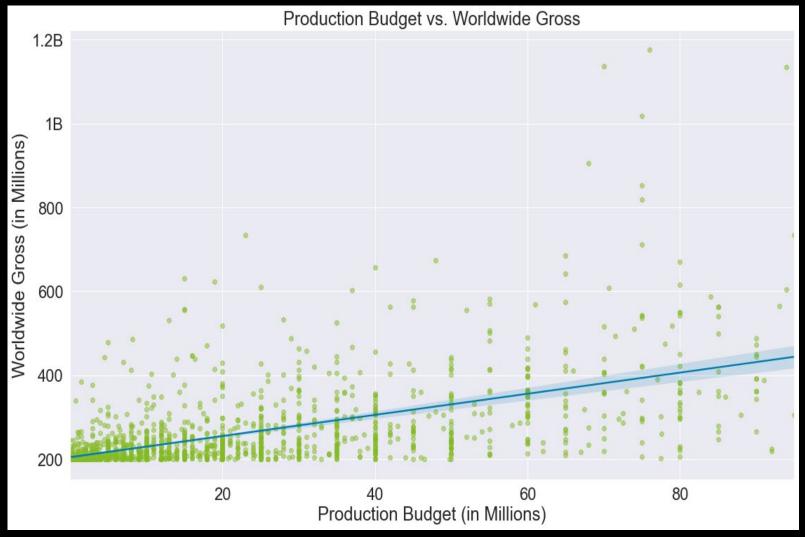
This data was used to analyze movie genres.

# **Defining Success**

# Generating the highest worldwide gross



## **Recommendation: Production Budget**





There is a positive correlation between production budget and worldwide gross.

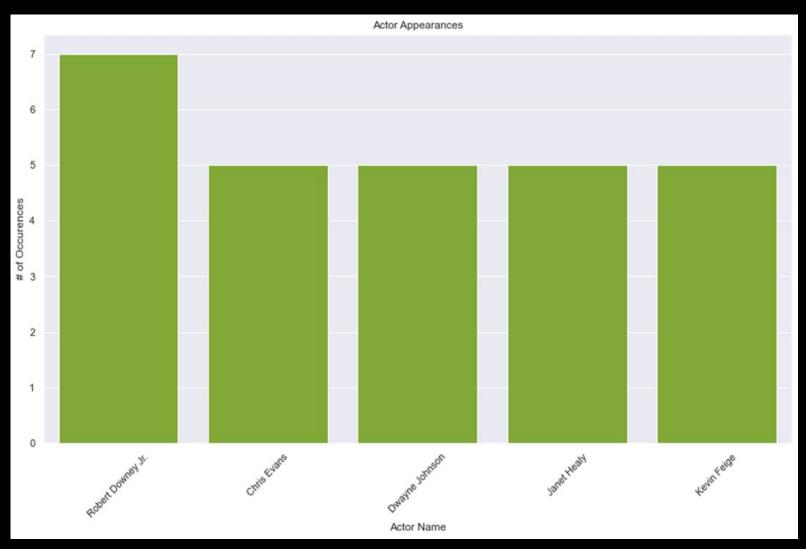


Most movies cost under 60M to produce. Low production movies tend to perform poorly.



Plan for a higher budget to increase production value and worldwide gross.

# Recommendation: Production Budget Cont.





As budget increases, studios are able to hire top actors.

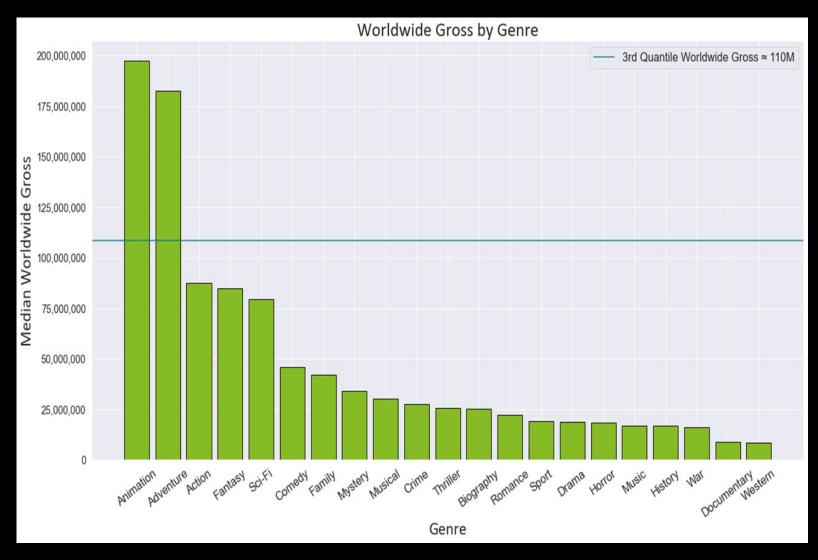


These are the top 5 occurring actors in the highest grossing films



Top actors can increase visibility, which increases revenue

### **Recommendation:** Genre





Animation and Adventure movies tended to outperform most other genres



Avoid producing low-profiting genres such as Documentary and Western



Incorporate the top genres into the movies for higher potential payout

## Statistical Analysis: Genre Cont.





1 Sample T-Test with Alpha of .05

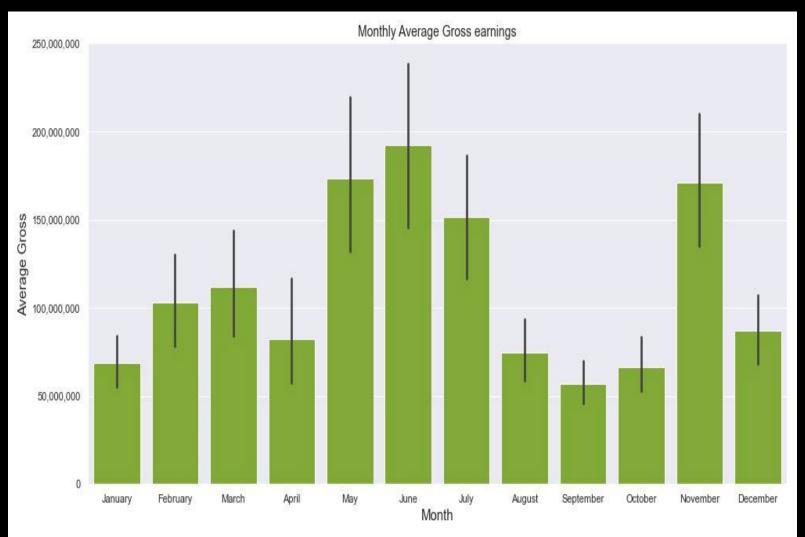


Able to say that Animated movies have a significantly higher gross than other genres.



Data is heavily skewed to the right with many outliers.

### **Recommendation:** Release Time





Average gross earnings is highest in the holiday seasons

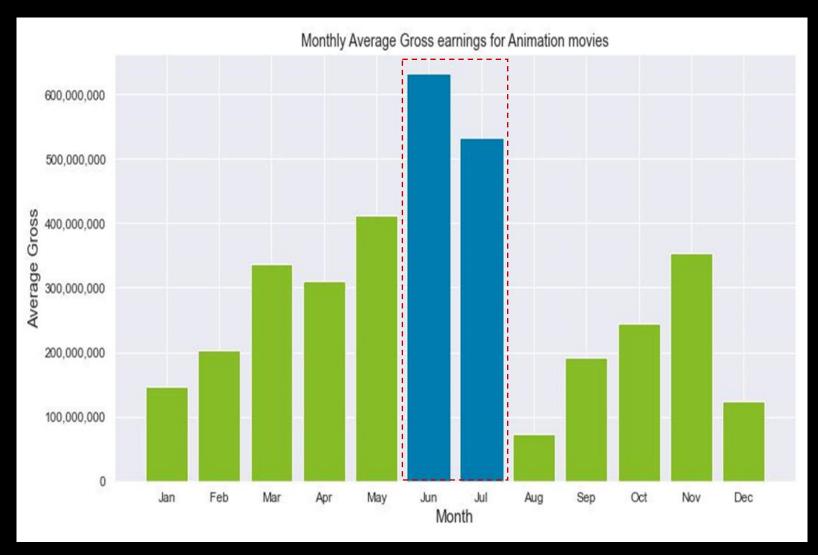


Avoid releasing movies in September and October



Aim to release the movies in holiday seasons to yield highest potential payout

#### **Recommendation:** Release Time





Average gross earnings is highest for Animated movies in the Summer months.

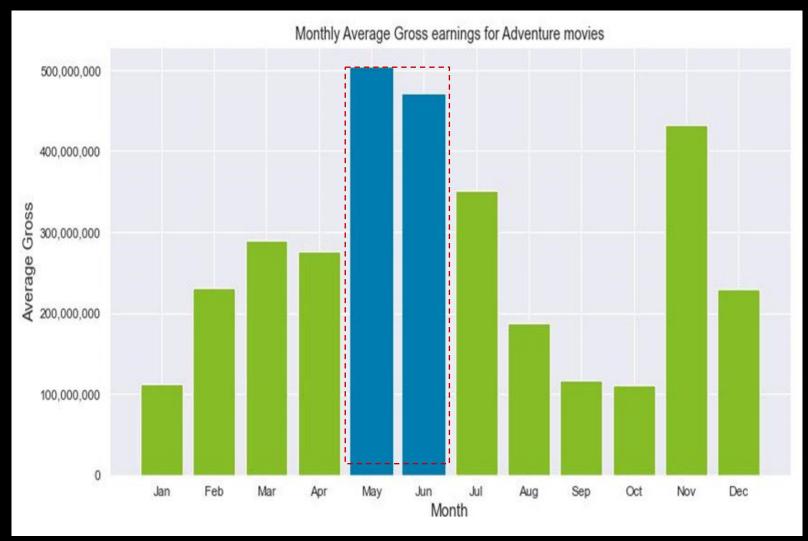


This could be due to students being off from school, and increased amounts of free time.



Plan on releasing Animated movies in the month of June or July for higher potential return.

### **Recommendation:** Release Time





Summer months yield the highest average gross earnings for Adventure movies.



This could be due to students being off from school, and increased amounts of free time.



Plan on releasing Adventure movies in the month of May or June for higher potential return.

## **Recommendation Summary**



1>

#### **Production Budget**

After comparing production budget and worldwide gross, it was found that having a higher production budget can yield higher total gross.



2

#### **Movie Genre**

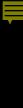
From the analysis, the top profitable genres are Animation, and Adventure. Computing Vision should create a movie that incorporates these genres.



3>

#### **Release Month**

Performing analysis showed us that Computing Vision should release Animated movies in the months of June or July and an Adventure type movie in May or June.



# **Next Steps**

What actors, directors, and writers would be most valuable?

How do various genres interact with each other?

How do we increase popularity of the movie?

Where and how should we advertise?

How should the production budget be allocated?

What is the ideal production budget?

# Deloitte.

# Thank You!

For additional information contact:

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Questions?

