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Microsoft Movie Studio

Thank you for coming to my presentation.

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# Overview

This project analyzes the global film market landscape. Currently, countless movies are pouring out into the film market and a lot of video content studios invest large amounts of money to create movies. So, this analysis will **help you make the right decision in deploying your business strategy successfully while** entering this business domain**.**

**T**his analysis **focuses on What genre of movie to Make, How Much to Invest, and When to release it.**

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# Outline

This analysis consists of **Business problems, Data, Analysis of Data,** and **Recommendations**.

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# Business Problem

You have decided to create a new movie studio, but you don’t know anything about creating movies. The initial problem is that. You are going to **enter a new business field** and **develop new revenue streams**, and you **want to ensure the success** of the first-time project.

So, we will explore **what kind of films, and what budget-size of movies** are currently doing the best at the box office, and then translates those findings into **actionable insights** that you can use to decide **what kind** and **what size** of films to create and **when is the best release time**.

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# Data

We used the “IMDB” and “The Numbers” datasets to extract our findings. “The Numbers” dataset has **5,782 film data** that includes the information on ***release time, production budget, domestic sales, and foreign sales*** of each movie. And the “IMDB” provides the **146,144 film** dataset that contains records showing the ***title and genres*** of each movie.

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# Method

The return on investment was calculated by adding up domestic sales and overseas sales and dividing by the budget.

The movies were divided into single genres and mixed genres, and calculate the average return on investment of the movies by genres.

The budget was divided into 22 different sizes, increasing by 200,000, and the average ROI of each budget size was compared by size.

The movies were divided by release month and analyzed by comparing the average ROI of each month and the number of movies released.

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# Analysis 1. GENRE

Creating a movie is a new business domain for you, so "what genre of movie you should make" is the most significant issue. First of all, you should decide on the movie genre that you are going to make.

This graph shows a number of movies by genre. Among the 4,226 samples, the movies of the **Drama** genre were the most, then **Comedy, Action** follows it.

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This graph shows the **average ROI (return on investment) by GENRE**. The most profitable movie genre is **'Animation'** then **'Musical', 'Mystery', 'Music' and 'Sci-Fi'**.

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Our results so far, show that DRAMA has the largest amount out of all the released films, while ANIMATION has the best profitability.

However, almost all movies are made by mixing two or more genres.

So, when we looked at what kind of mixed-genre movies are the most successful, a mixture of **Action-*Mystery*-*Sci-Fi*** is the most profitable, then ***Animation*-Documentary-*Sci-Fi*, Adventure-*Drama*-Western, *Drama*-Fantasy-Music, *Drama*-*Mystery,* and Comedy-Fantasy-Sci-fi.**

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Then let’s compare the ROI by single and mixed genres.

The left-side graph is the ROI of single genre and the right-side graph is the ROI of mixed genres.

The most profitable Single genres are *Animation,* Musical, *Mystery,* Music, *Sci-Fi. And the most profitable* Mixed genres are Action-*Mystery*-*Sci-Fi, Animation*-Documentary- *Sci-Fi,* Adventure-*Drama*-Western, *Drama*-Fantasy-Music, *Drama*-*Mystery, Comedy-Fantasy-Sci-fi.*

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Now, sum up the first result,

The most released movie genres are Drama**,** Comedy and Action

The **highest 'ROI'** genres are

Animation, Musical, Mystery, Music, Sci-Fi as a single genre, and

Action-Mystery-Sci-Fi, Animation-Documentary-Sci-Fi,

Adventure-Drama-Western, Drama-Fantasy-Music, Drama-Mystery, and

Comedy-Fantasy-Sci-Fi as a Mixed genre.

The **Mystery, Sci-Fi, Animation, Drama, and Fantasy genres appear** in common and most frequently in both genres.

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# Analysis 2. BUDGET

The second issue is the **Budget**. “How much money to invest” also matters when making a movie.

First, let’s take a look at the number of released movies by budget size.

**Less than 20 Million Dollar Budget Size** has the largest number of movies (about 45%) and about 90% of movies were made with a budget of 100 Million or less.

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And, let’s take a look at the Average ROI by budget size.

Of the 1876 movies, 90% of movies are with a budget of less than 100 million, and their ROI does not show much difference. The movies made on a budget of over 1 million are too few to be considered.

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So let’s put these together.

**Less than 20 Million Dollar Budget Size** has the largest number of movies (about 45%) and about 90% of movies were made with a budget of 100 Million or less. And their ROI does not show much difference. The movies made on a budget of over 1 million are too few to be considered.

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# Analysis 2. BUDGET - RESULT

**Less than 20 Million Dollar Budget Size** has the largest number of movies (about 45%) and about 90% of movies were made with a budget of 100 Million or less. And their ROI does not show much difference. The movies made on a budget of over 1 million are too few to be considered.

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# Analysis 3. RELEASE TIMING

When making a movie first, determining the release timing is also considered very important.

First, looking at the number of released movies by month, the largest number of movies released in December.

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Next, looking at the average ROI by month, movies released in February had the highest average ROI.

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Putting the two together, the months in which large amounts of movies are released, are generally not profitable.

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When analyzing the release timing, the highest number of movies were released in **December, October, and September,** but the profitability was not very good. On the other hand, movies released in **February,** **June, and November**are showing the best performance.

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# Recommendations

1. My first recommendation is “Mix 2 or more of these genres to make a movie”.

**Mystery, Sci-Fi, Animation, Drama, Fantasy**

The high 'ROI' movie genres are Animation', 'Musical', 'Mystery', 'Music' and 'Sci-Fi', whereas the most released movie genres are 'Drama', 'Comedy' and 'Action'.

However, **a film cannot be made with just one genre.** Therefore, it is necessary to mix several genres well.

Action-*Mystery*-*Sci-Fi*, *Animation*-Documentary-*Sci-Fi*, Adventure-*Drama*-Western, *Drama*-Fantasy-Music, and *Drama*-*Mystery*genres were the most profitable for movies of mixed genres.

And the genres that appear in common and most frequently in the single and mixed genres are **Mystery, Sci-Fi, Animation, Drama,** and **Fantasy**.

So, mixing 2 or more of the **Mystery, Sci-Fi, Animation, Drama, and** **Fantasy** genres to make a movie is my first recommendation.

1. My second recommendation is “Set your budget under 100 Million Dollars

About 45% of movies were made with a budget of 20 million dollars or less, and about 90% of movies were made with a budget of 100 million dollars or less, and their ROI does not show much difference.  
The movies made on a budget of over 1 million are too few to be considered.  
So, as a first time trying, it seems reasonable not to exceed 100 million dollars as a budget when making a movie.

So, to set the budget under 100 Millions is my second recommendation.

1. My last recommendation is It would be better to set the release date in February.

A large number of films were released in December, October, and September, but the profitability was not very good. Rather, **movies released in FEBRUARY, JUNE, and NOVEMBER show the best profitability.**

So, **February** is the best time to release, then **June and November** are the second best. That is my last recommendation.

Thank You!