**Executive Summary – IMDB Movie Analysis Project**

This project analyzed IMDB movie data to uncover factors contributing to movie success, defined by higher IMDB ratings. Key findings include:

* **Top Genres:** *Drama*, *Thriller*, and *Crime* had the highest average IMDB scores — with Drama averaging **7.2** and Crime **7.0**.
* **Descriptive Statistics by Genre:** The standard deviation of IMDB scores across genres ranged from **0.4 to 1.2**, indicating rating consistency in some and variability in others.
* **Top Directors:** Using the **90th percentile (≥7.5)** as a threshold, **218 directors** were identified as top performers with **7.82** average IMDB rating, compared to an overall average IMDB rating of **6.41**.
* **Budget vs Gross Correlation:** A weak positive relationship (**R² = 0.11**) was found between movie budgets and gross earnings, suggesting that while higher budgets may contribute to better earnings, other factors also play a significant role in a movie's financial success.
* **Duration Impact:** The average movie duration was 106 minutes, with a weak relationship (**R² = 0.056**) to IMDB scores, indicating that duration has minimal influence on movie ratings.
* **Language Insight:** English movies over **90%** of the dataset and showed an average rating (**6.37**) than most regional languages.
* **Profit Margin Leader:** Avathar is the top profit margin movie(₹52.35 cr).

**Recommendation:**  
Focus future production investments on proven genres (like Drama and Crime) and collaborate with directors in the top **10% percentile (rating ≥ 7.5)**. Additionally, ensure budget planning is data-driven, aligning with patterns seen in profitable movies.