The most important predictors to the IMDB movies US box office success
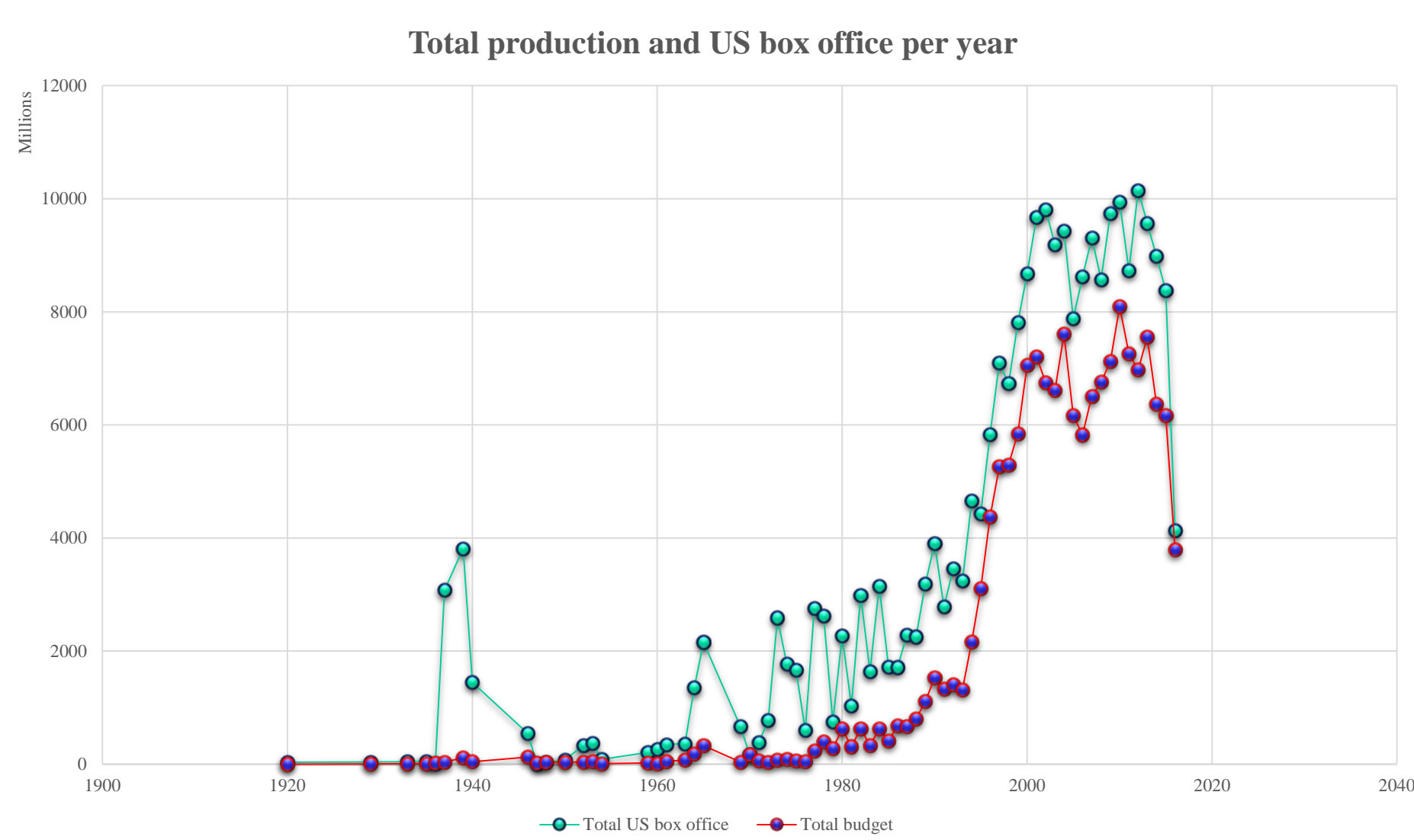
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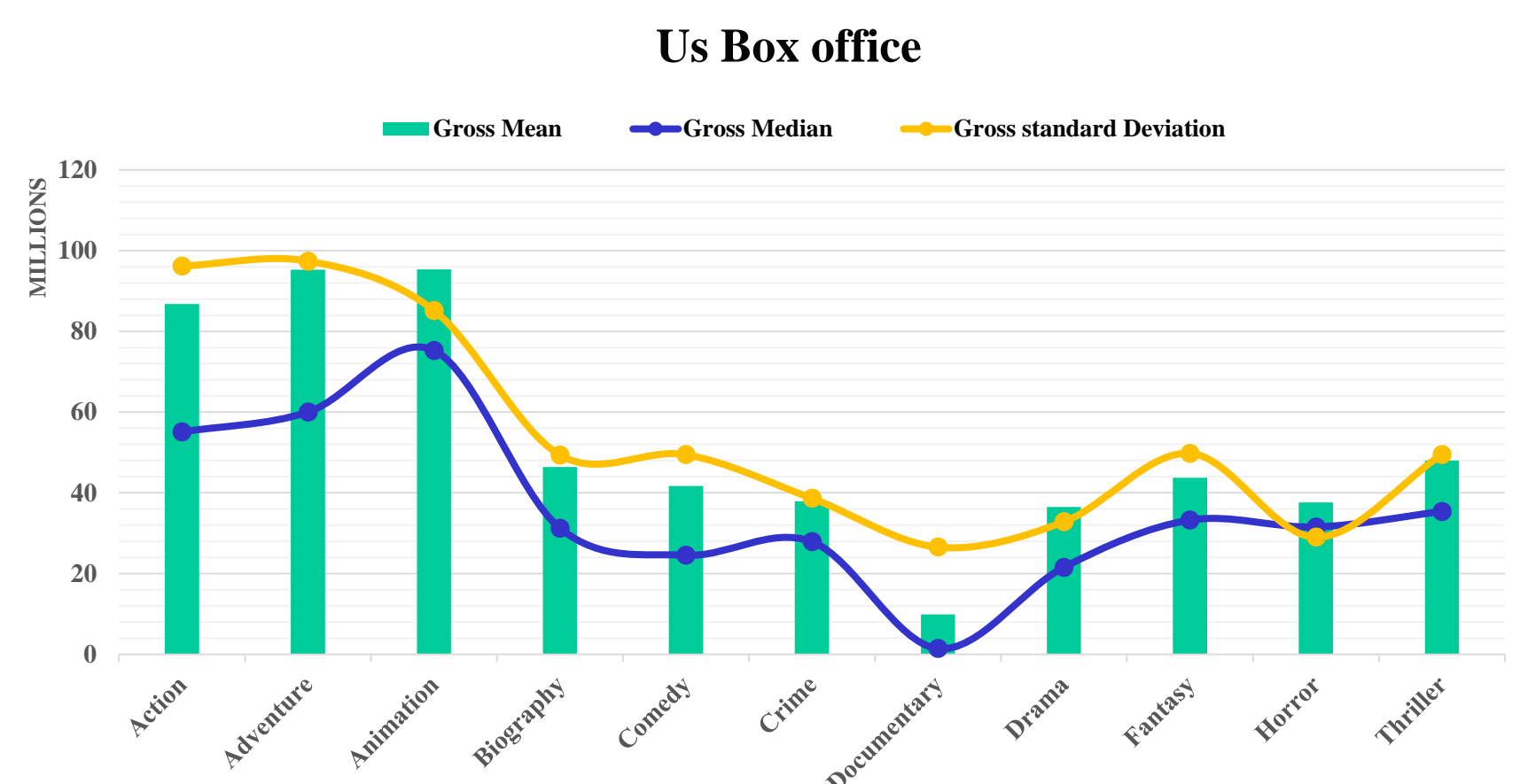**University of Bridgeport, Bridgeport, CT**

Abstract

This research highlights the determinants that affects the US box office returns for the American movies. Accordingly, the industry makers may be able to increase their movie returns based on highlighting the most significant factors that affect the returns. Additionally, the analysis results may be interesting for cinema critics, in order to be able to predict the returns of the movies.

Findings

The graph indicates the sum of the adjusted budget spent on American movies and the US box office returns per year in 2016 US dollar value.

Total production and US box office per year

The graph indicates the mean, median, and standard deviation of the US box office returns per each movie genre

Us Box office

- The highest US box office returns are for the adventure movies, followed by the animation and the action.

Multiple Regression Analysis since 1916

	Coefficients	Standard Error	t Stat	P-value
Intercept	-168 million	14.5 million	-11.626	0.000
Budget	1.027	0.047	21.730	0.000
Movie FB likes	166.505	113.529	1.467	0.143
IMDB	31 million	2.3 million	13.693	0.000
Cast total FB likes	-81.100	116.361	-0.697	0.486

- The relationship between the cast total Facebook likes with US box office is negative, and insignificant, because the Facebook was active in 2000

- The relationship between the movies Facebook likes and the US box office is positive and insignificant

- The relationship between the IMDB and the adjusted budget in 2016 with the US box office is positive and significant

Multiple Regression Analysis since 2000

	Coefficients	Standard Error	t Stat	P-value
Intercept	-61.2 million	8.0 milion	-7.626	0.000
IMDB	11.0 million	1.3 million	8.562	0.000
Movie FB likes	372.5	55.844	6.671	0.000
Budget	1.0	0.025	42.107	0.000
Total Cast FB likes	133.1	57.374	2.319	0.020

- The relationship between the cast total Facebook likes with US box office is positive and significant

- The relationship between the movies Facebook likes and US box office is positive and significant

- The relationship between the IMDB and the adjusted budget in 2016 with the US box office is positive and significant

Conclusion

- 2010 was the year of the highest total budget spent in the US movie industry since 1916

- 2012 was the year of the highest US box office returns in the US movie industry since 1916

- The animation movies earned the highest US box office since 1916

- The higher the IMDB score and the budget, the higher the US box office returns since 1916

- The higher the Facebook likes for the cast and movies, the higher the US box office returns since 2000