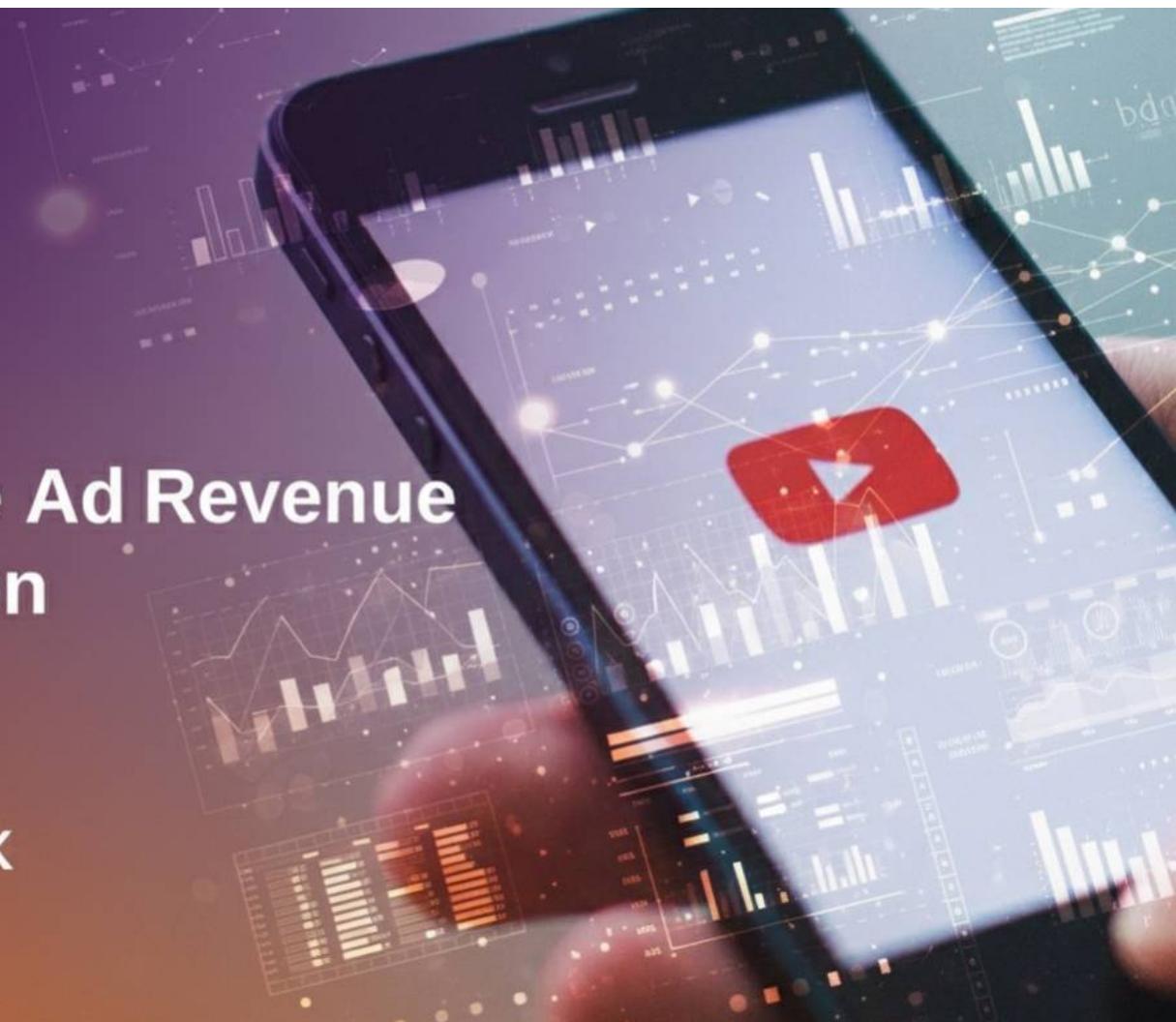


# YouTube Ad Revenue Prediction

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NAREN K





# Problem Statement

**Importance of predicting ad revenue for content creators & businesses**

01

**Supports strategy, forecasting, and ad planning**

02

**Helps optimize engagement and monetization strategies**

03



## Exploratory Data Analysis (EDA)

**Correlation heatmap – understand relationships between variables**

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**Outlier detection – identify anomalies in revenue data**

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**Trends in engagement (views, likes, comments) vs revenue**

## Regression Models

- 01 Linear Regression – Straight-line fit
- 02 Decision Tree – Splits data into branches & nodes
- 03 Ridge Regression – Reduces overfitting by keeping all features with small weights.
- 04 Lasso Regression – Useful for feature selection by setting some weights to zero.





## Model Evaluation

Metrics used: MAE,  
MSE, RMSE, R<sup>2</sup>

Compared performance  
across models

Linear Regression  
achieved the best  
accuracy for revenue  
prediction

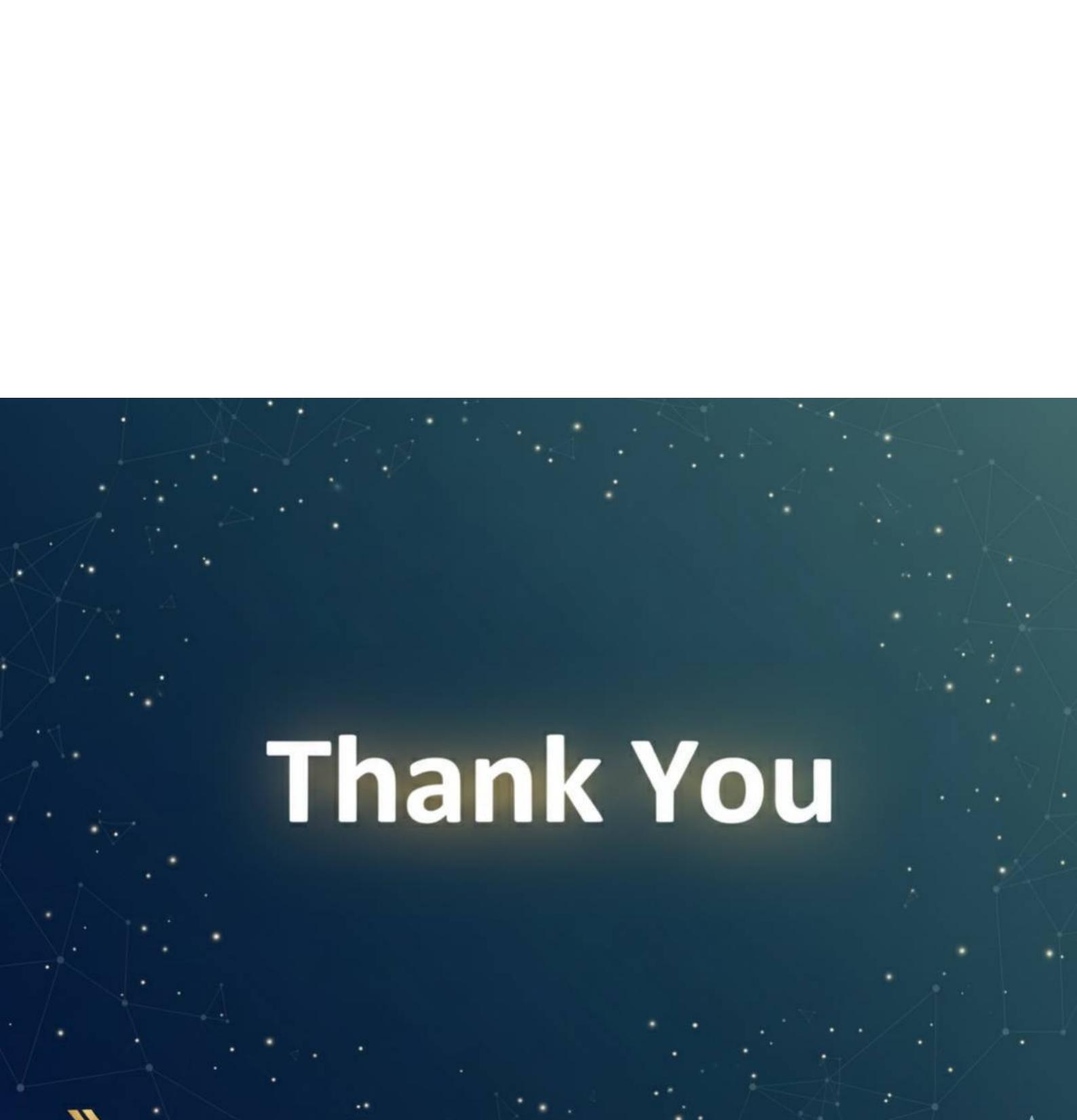
## Key Takeaways

- Machine learning can effectively predict YouTube ad revenue

- Engagement metrics (views, likes, comments) strongly influence earnings

- Business value: Better forecasting & content monetization strategies





# Thank You