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## Understanding the Problem

In today's competitive eCommerce landscape, customer reviews play a pivotal role in shaping consumer perceptions and influencing purchasing decisions.

## Nile's Challenge

Maintaining a steady stream of positive reviews is essential to driving sales, enhancing product credibility, and building customer trust. However, the task of identifying which customers are most likely to leave positive reviews presents a significant challenge.

# Key Challenges



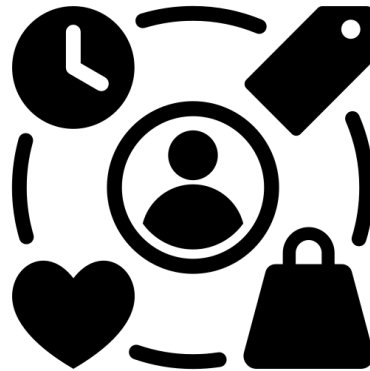
**IDENTIFYING LIKELY REVIEWERS**



**RESOURCE ALLOCATION**



**IMPACT OF POSITIVE REVIEWS**

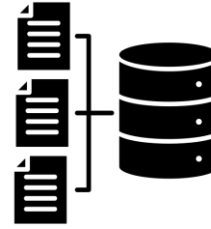


**CUSTOMER BEHAVIOR UNDERSTANDING**

# Objective

To leverage data analytics to accurately predict which customers are likely to leave positive reviews, enabling Nile to strategically engage with these customers and maintain a strong online reputation.

## KEY GOALS



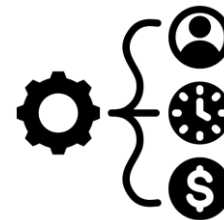
### Data Preparation

Combine relevant customer, order, and product data to create a comprehensive dataset.



### Model Development

Implement a suitable machine learning algorithm to predict positive reviews.



### Resource Efficiency

Cost-effectively deploy the model to maximise Return On Investment (ROI) and optimise customer engagement.

# The Solution Approach

## The Approach:

We created a predictive model that helps Nile identify which customers are likely to leave a good review (4 or 5 stars).

## How We Did It:

### Data Review

We analysed various customer data, including purchase history, seller information, and product details.

### Focus on Reviews

The model predicts whether a customer will leave a positive review, helping to focus marketing efforts.

### Key Metric

Focus on precision – the accuracy of our predictions. To minimise risk of spending resources on customers who won't leave positive reviews.

### Main Benefit:

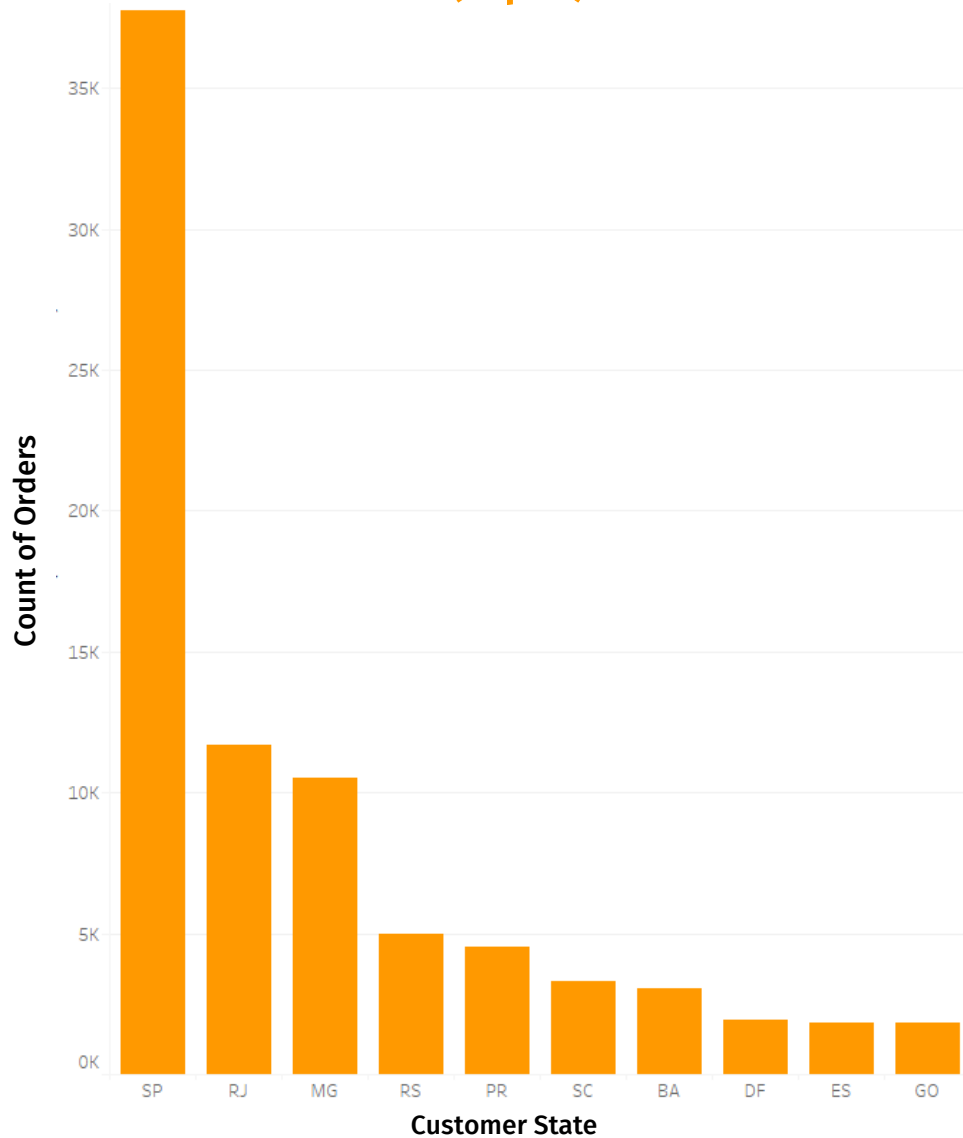
Nile can now concentrate efforts on customers who are more likely to leave positive feedback, improving both customer engagement and resource management.

# Datasets

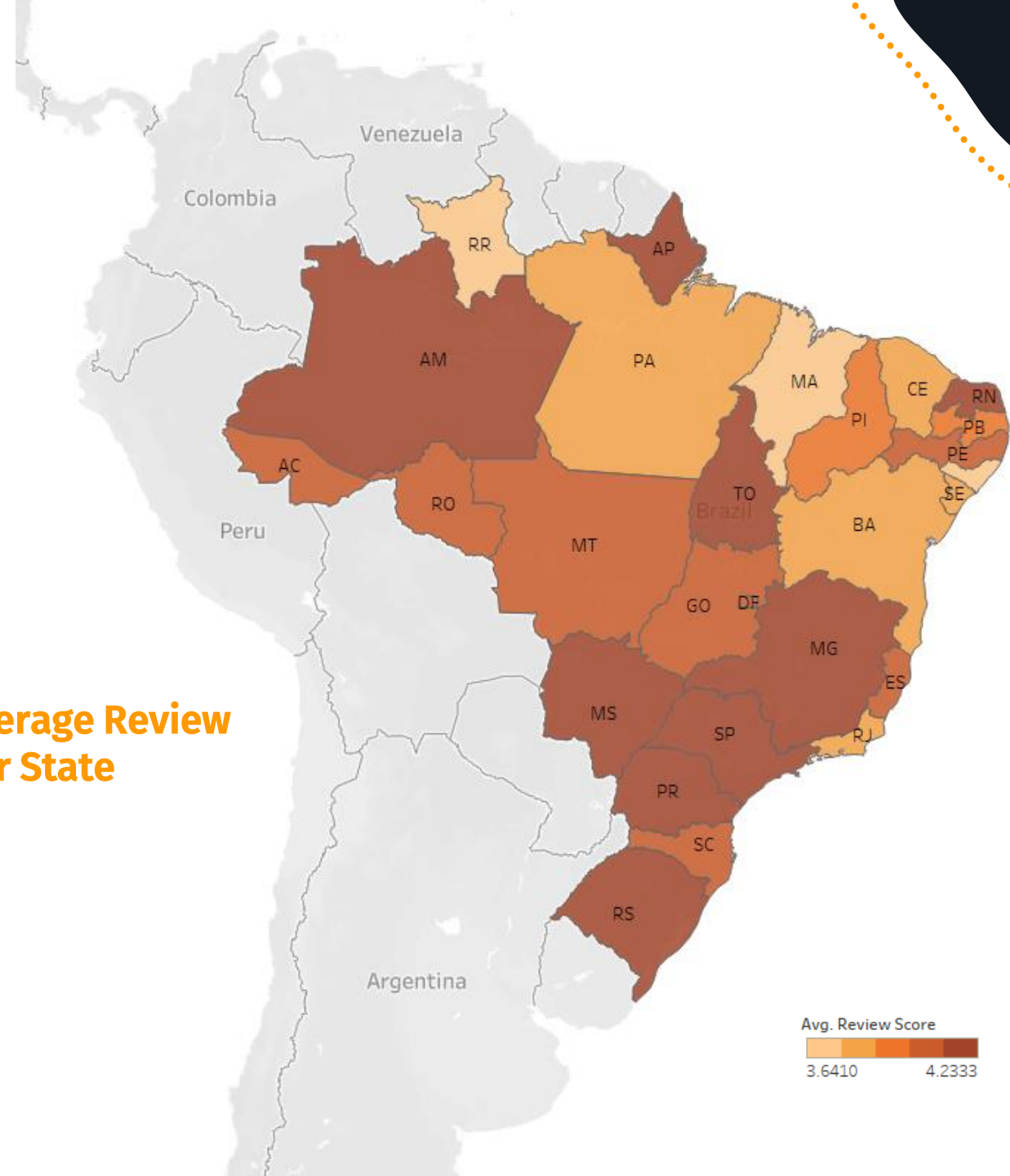


# Key Insights

## Orders Per State (Top 10)



## Average Review Per State





# Evaluating the Results



## Model Performance:

- The model was tested on actual data to see how well it predicted positive reviews.
- **Success:** The model was highly accurate in predicting customers who would leave positive reviews.



## Key Findings:

- Our model performed well, with a high precision score of 0.89 out of 1, meaning it correctly identified good reviewers almost 89% of the time.



## Business Impact:

- Nile can now reliably target customers who are more likely to leave positive feedback, making marketing campaigns more efficient.

# Business Implications

## What Does This Mean for Nile?

### Better Engagement

Nile can prioritise contacting customers who are more likely to leave positive reviews, ensuring better interactions.

### Resource Optimisation

By focusing on the right customers, Nile can direct time and money to effective marketing strategies.

### Improved Reputation

Positive reviews help build trust and reputation, which drives sales and customer loyalty.

## FUTURE CONSIDERATIONS



### Improve Data Quality

More accurate predictions can be made by addressing missing data in customer reviews.



### Expand for New Customers

Future models could be enhanced to also work well with new customers who may not have much historical data.



# Thanks!

