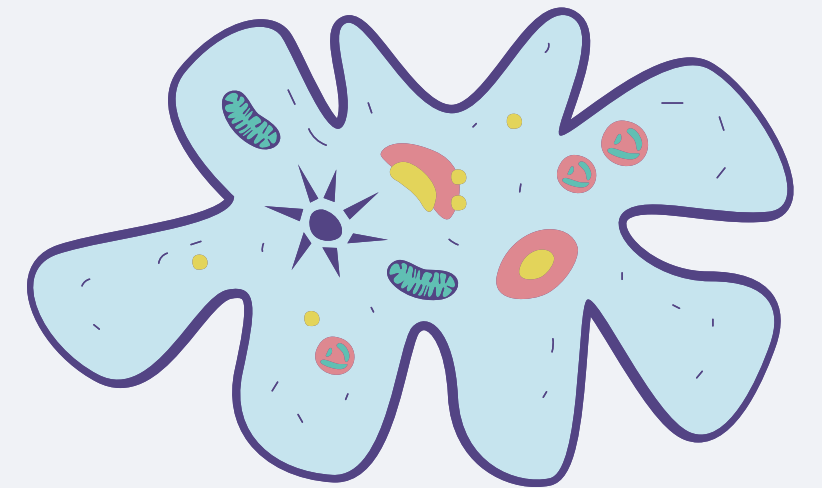


# Data Meets Strategy: A Review Prediction Proposal For Nile



Amoeba Analytics

*November 2024*



# Background

## Customer Expectations

- High-quality products
- Timely deliveries
- Seamless shopping experience



## Business Challenge

- Enhance positive review generation.
- Identify & target satisfied customers for feedback.
- Boost trust, sales, and competitive edge.



## Factors Impacting Customer Reviews

- Late deliveries
- Poor product descriptions
- High shipping costs
- Customer Support Experience



# Motivation

## The Opportunity

- Use data to identify customer review patterns.
- Target satisfied customers for their feedback via multiple channels.
- Enhance loyalty, repeat purchases, and review scores.

## The Importance of Positive Reviews

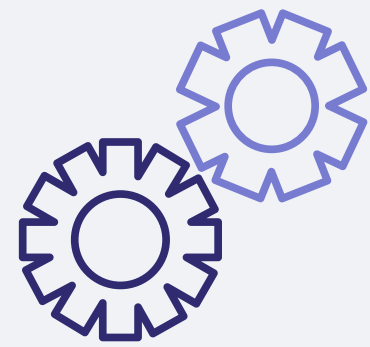
- Builds trust and credibility among potential customers.
- Boosts Conversion Rates by encouraging hesitant buyers to complete their purchases.
- Enhances the reputation and profitability of Nile.

## Why This Should Matter to Nile

Even a 1-star improvement in ratings can significantly boost revenue growth, reduce refunds and churn, and elevate the overall shopping experience, strengthening Nile's position as a trusted eCommerce leader in South America.



# The Product



## Reviews Prediction Model

- **Objective:** Identify customers most likely to leave positive reviews.
- **Key Features:** Data-driven approach, predictive accuracy, scalable framework.
- **Customer Metrics Impact:**
  - **Customer Satisfaction Score (CSAT):** Improves satisfaction by targeting happy customers for reviews.
  - **Net Promoter Score (NPS):** Boosts loyalty from a seller perspective by identifying promoters likely to recommend Nile.

## Analytics Dashboard

- **Objective:** Deliver real-time insights into customer review trends and model performance.
- **Key Features:** Interactive visualisations, intuitive interface, customisable reporting.
- **Business Impact:** Enables data-driven decision-making and continuous performance monitoring for the key stakeholders of Nile.



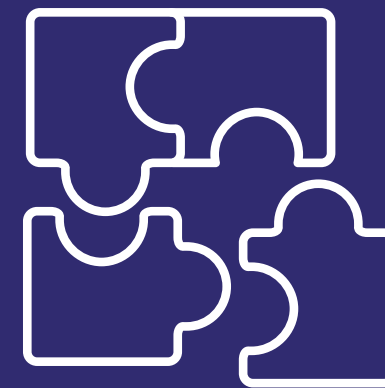
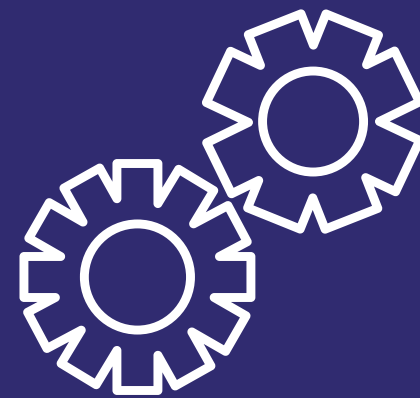
# Process Flow

Data Analysis

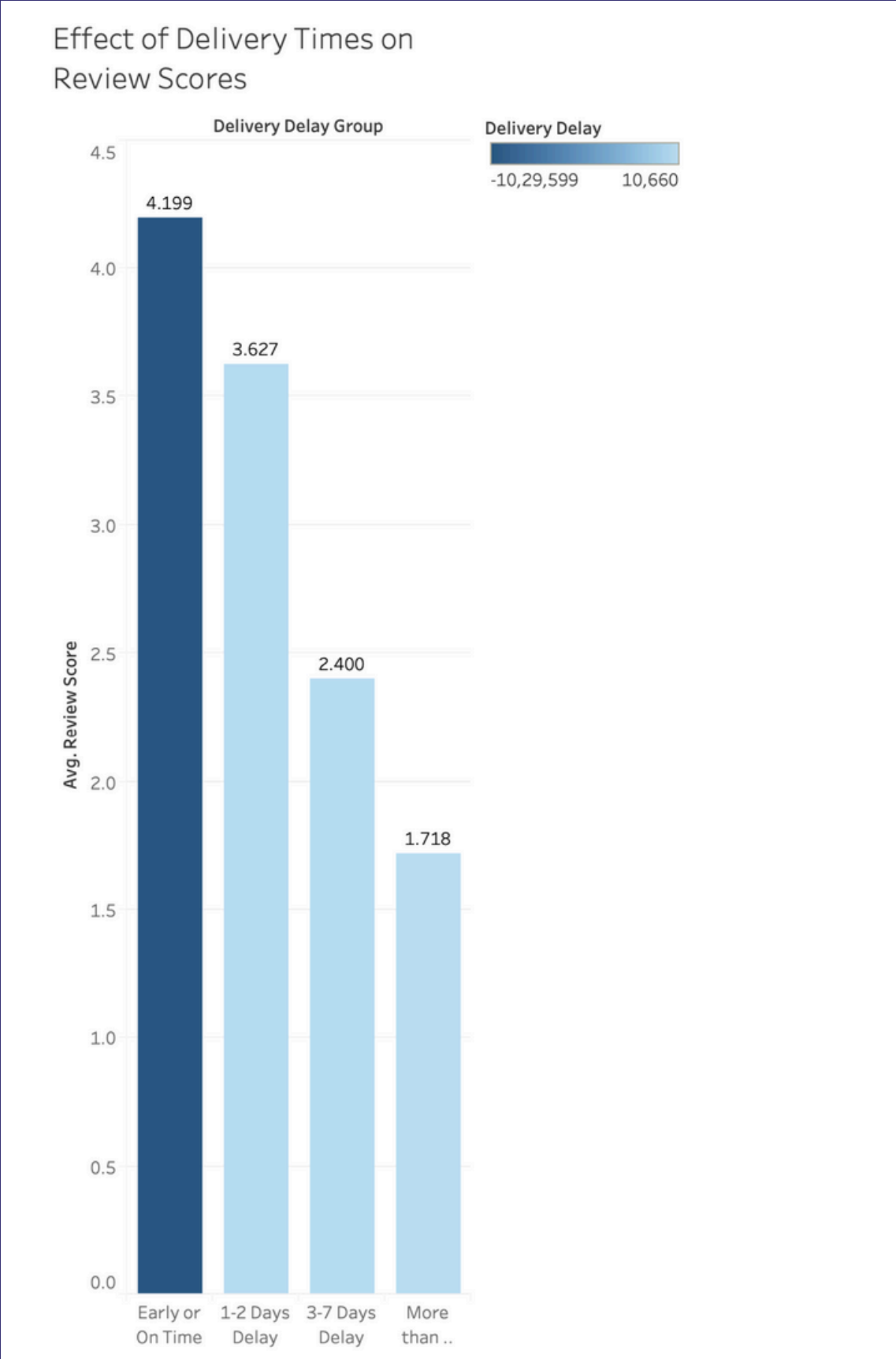
Feature Engineering

Modeling

Output

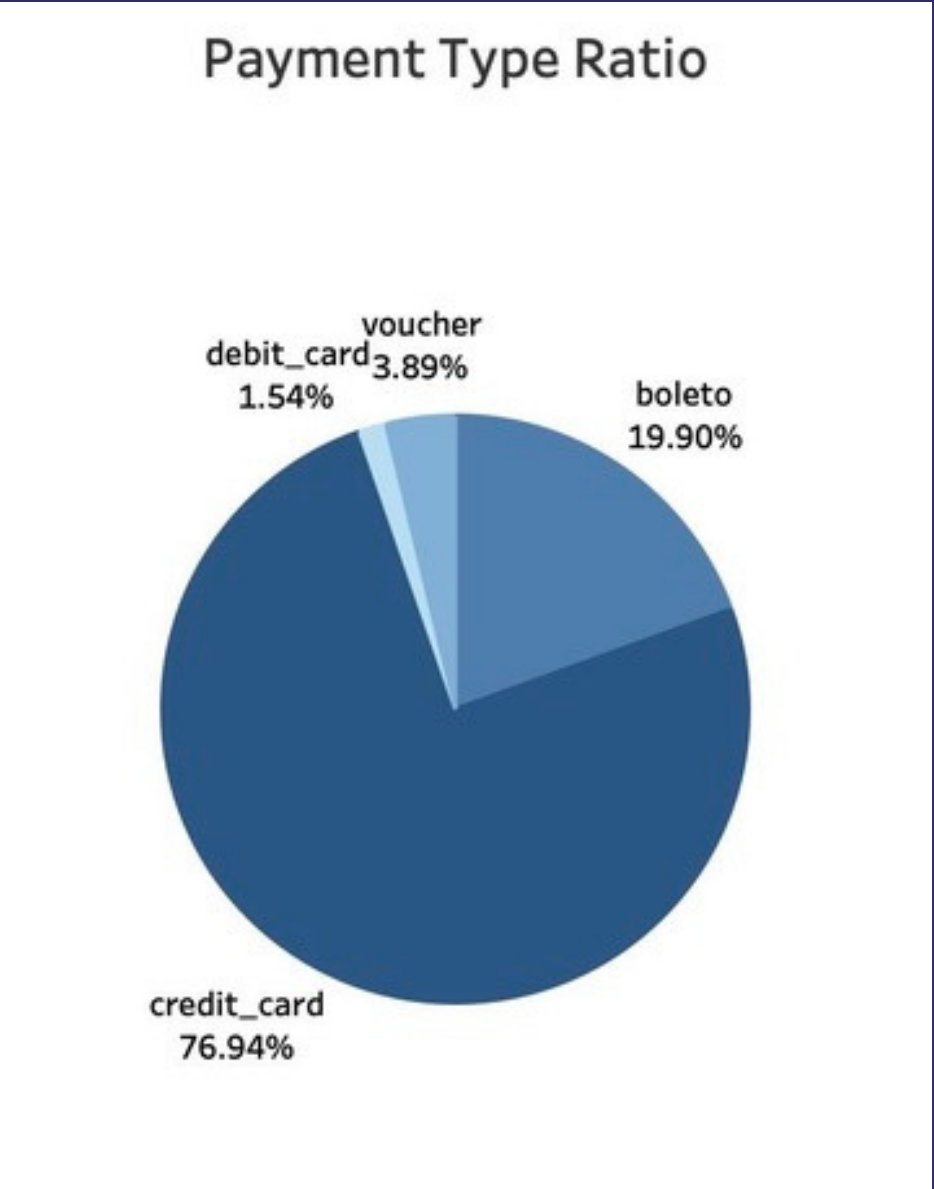
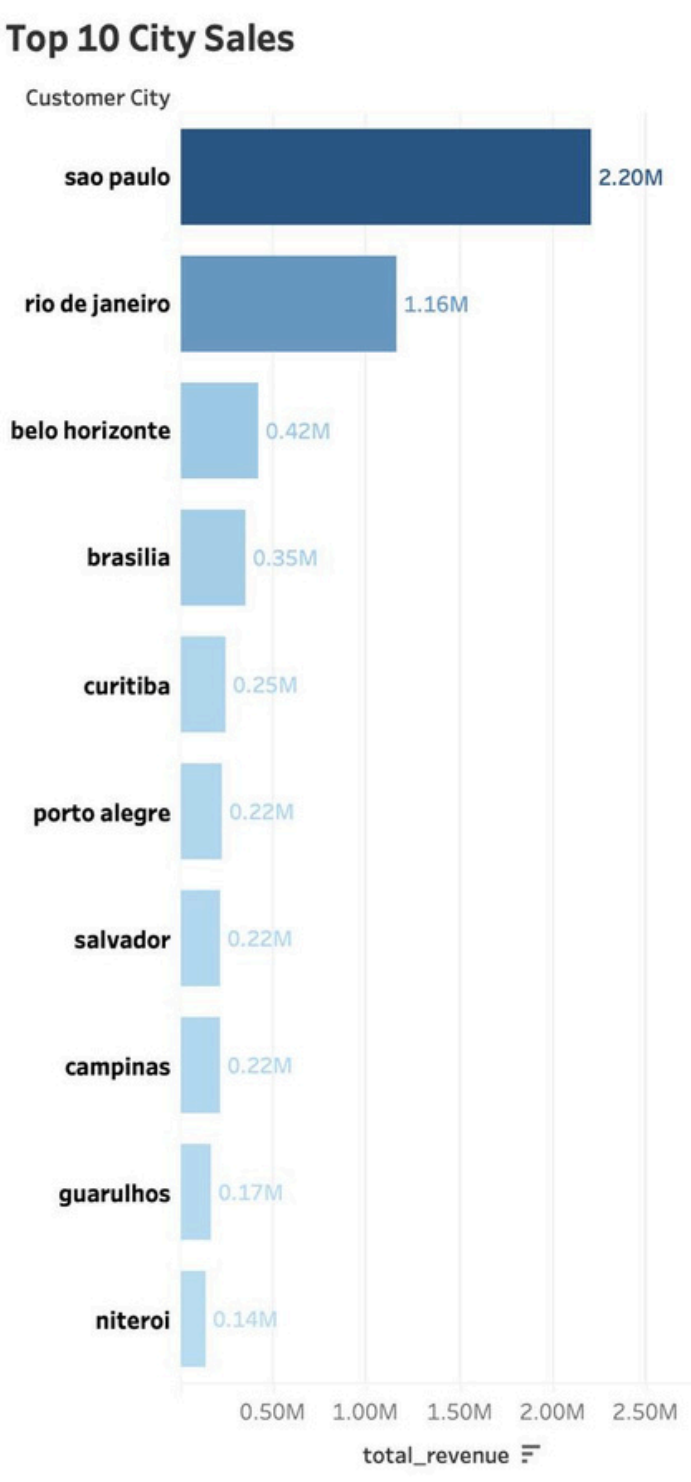


# Data Insights



A delay of 1 day leads to an average decrease of 0.5 stars in the review rating.

Delays exceeding 1 week result in ratings dropping by an average of 2 stars, significantly affecting customer satisfaction.



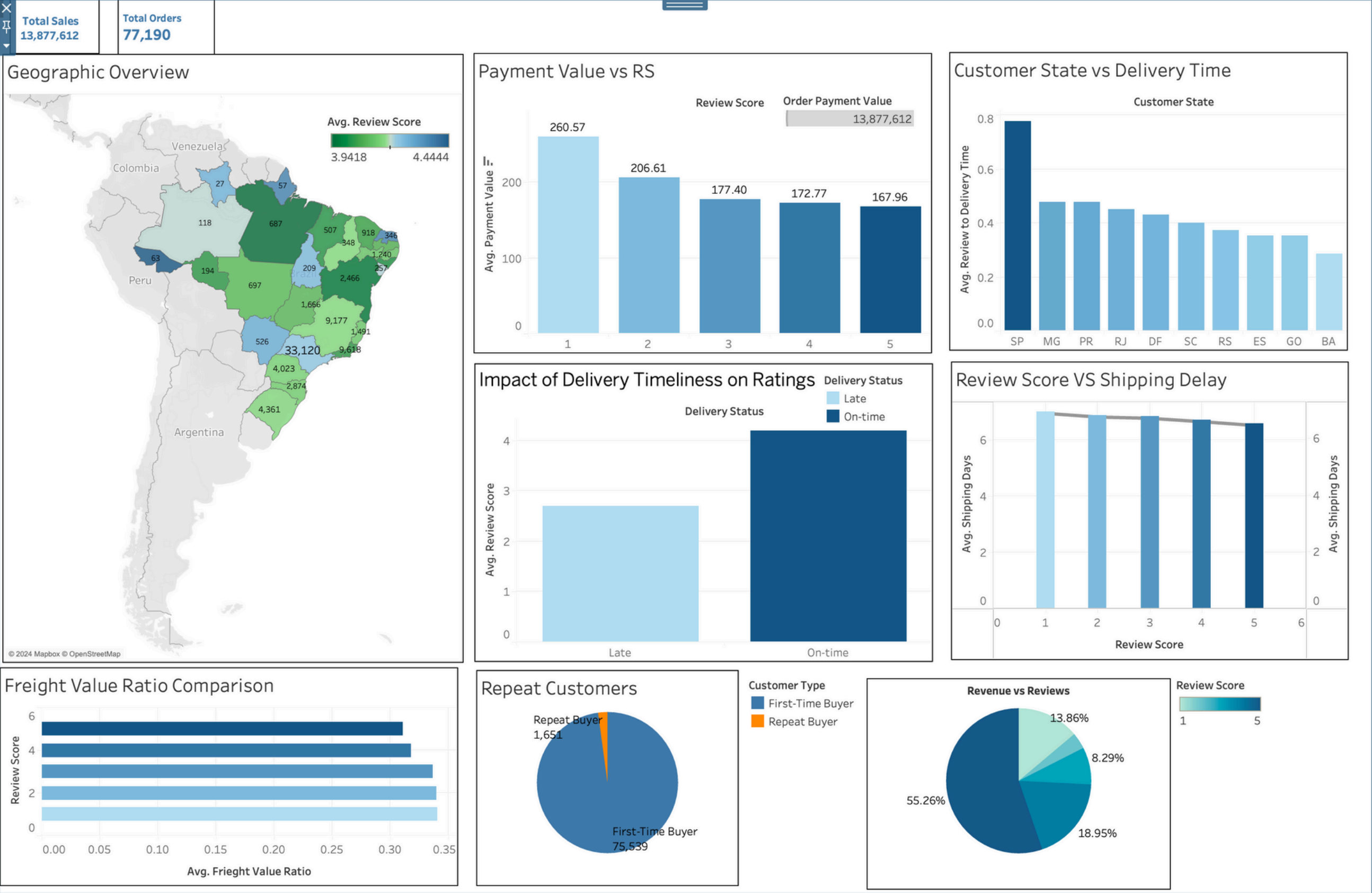
# Prototype Results

Model Name	Accuracy	Precision
Decision Trees	72%	51%
SVM	84%	42.2%
Logistic Regression	84%	50%
Random Forest	84%	58%
GBDT	84%	72%
XGBDT	84%	62%



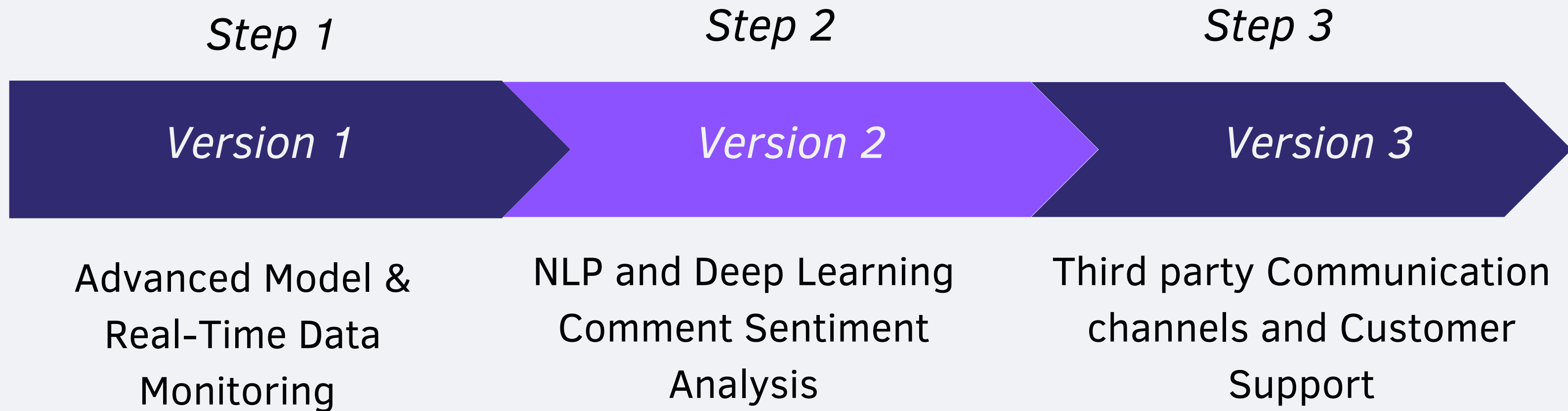
*We have further optimised our model using ML advanced techniques*

# Analytics Dashboard





# Outline of Product Evolution



*The versions can be customised as per Nile's exact requirements.*

# Product V1

**Prototype**



**Model**

1. Additional Data Required
2. Optimising the Algorithm and features
3. Feedback Loop
4. Real Time Data for the Analytics Dashboard
5. Deployment

# Product V2



## Proposed Actions:

### 1. Sentiment Analysis:

- Use NLP and deep learning to classify reviews as positive, negative, or neutral.
- Identify key drivers of customer sentiment for actionable insights.

### 2. Comment Analysis:

- Analyze unstructured customer feedback to uncover trends and recurring issues.
- Integrate insights into product and service improvements.

# Product V3



## Customer Journey Funnel:

- Map and optimize the customer journey from purchase to post-delivery.
- Provide timely support, engagement, and information at every stage.

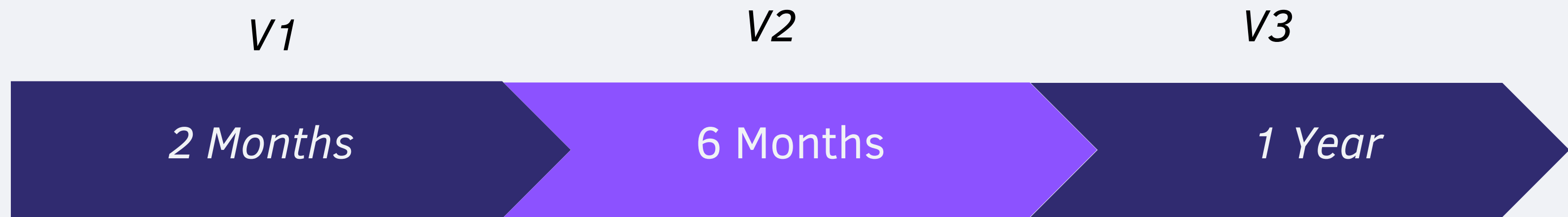
## Scheduled Mailers (Communication Hub):

- Automate personalized emails to engage customers at key stages of their journey.
- Examples:
  - Apology notifications for delayed deliveries and vouchers in case of significant delay.
  - Updates on shipping status.
  - Post-purchase feedback forms.

## Incentive-Based Review System:

- Offer targeted incentives (e.g., discounts, loyalty points) for reviews.
- Monitor and analyze reviews to identify trends and drive continuous improvement.

# Timelines and SLA's



## Nile-Specific SLAs:

- Review Prediction Accuracy: Ensure a minimum prediction accuracy of 85%.
- Mailer Response Time: Deliver email campaigns within 24 hours of trigger events (e.g., purchase, delivery).
- Incentive Processing Time: Resolve incentive-related queries within 48 hours.

## Monitoring and Reporting for Nile:

- Weekly progress reports on model performance and engagement metrics.
- Real-time dashboard to track SLA compliance and customer feedback trends.

*"Please contact the Sales team to finalize the contractual terms and financial arrangements."*

Business Impact Focused

Scalable Solutions

Cutting-Edge Technology

Customer-Centric Approach

# Why Choose Us?





THANK YOU!

