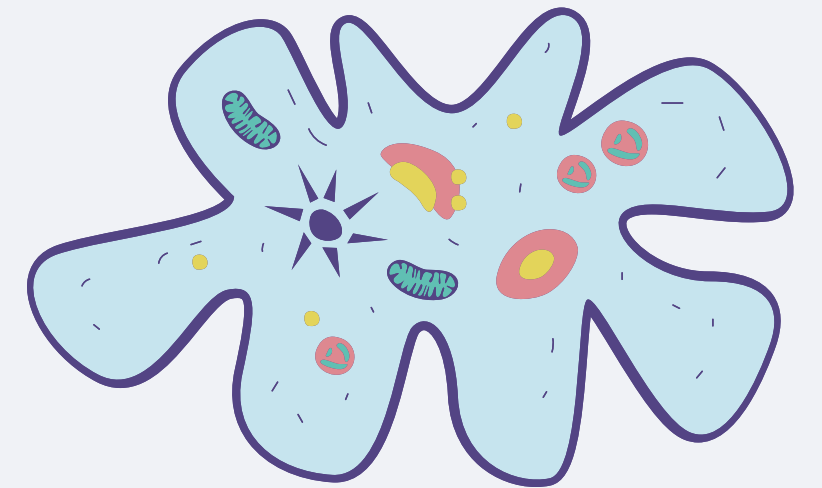


Data Meets Strategy: A Review Prediction Proposal For Nile



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

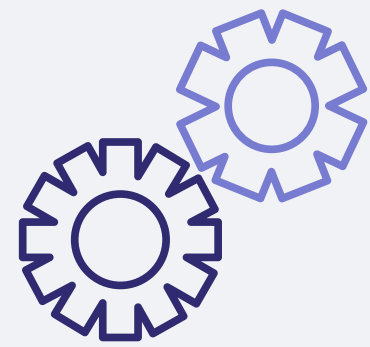
- Builds trust and credibility among potential customers.
- Boosts Conversion Rates by encouraging hesitant buyers to complete their purchases.
- Enhances the reputation and profitability of Nile.

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.



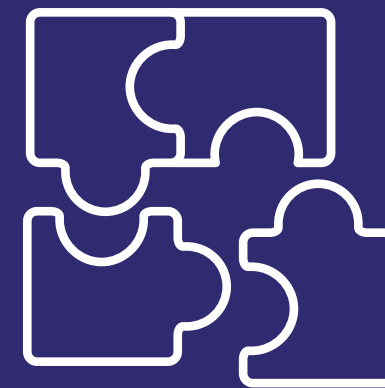
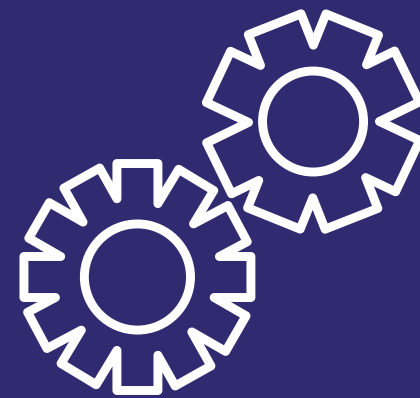
Process Flow

Data Analysis

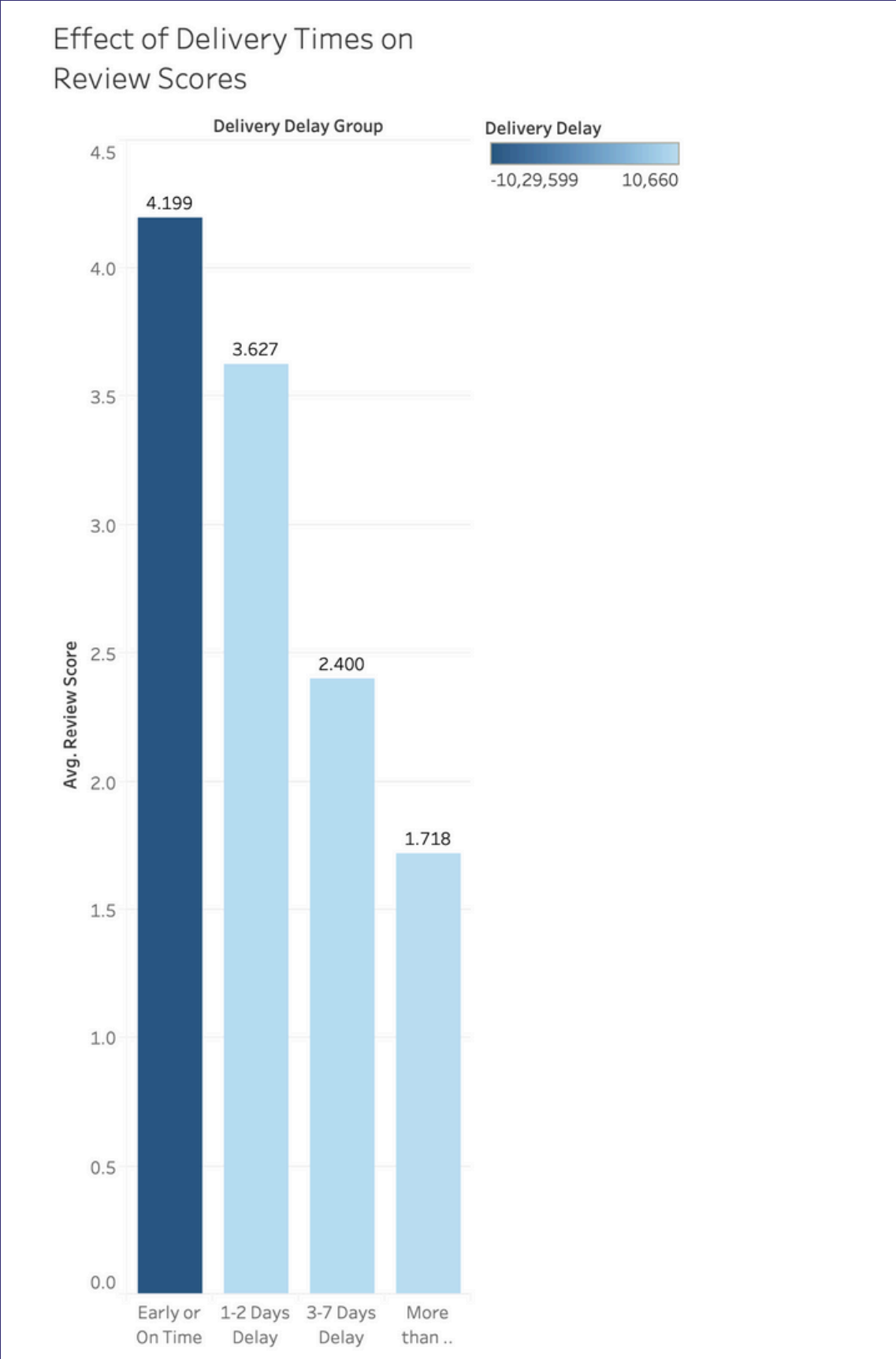
Feature Engineering

Modeling

Output

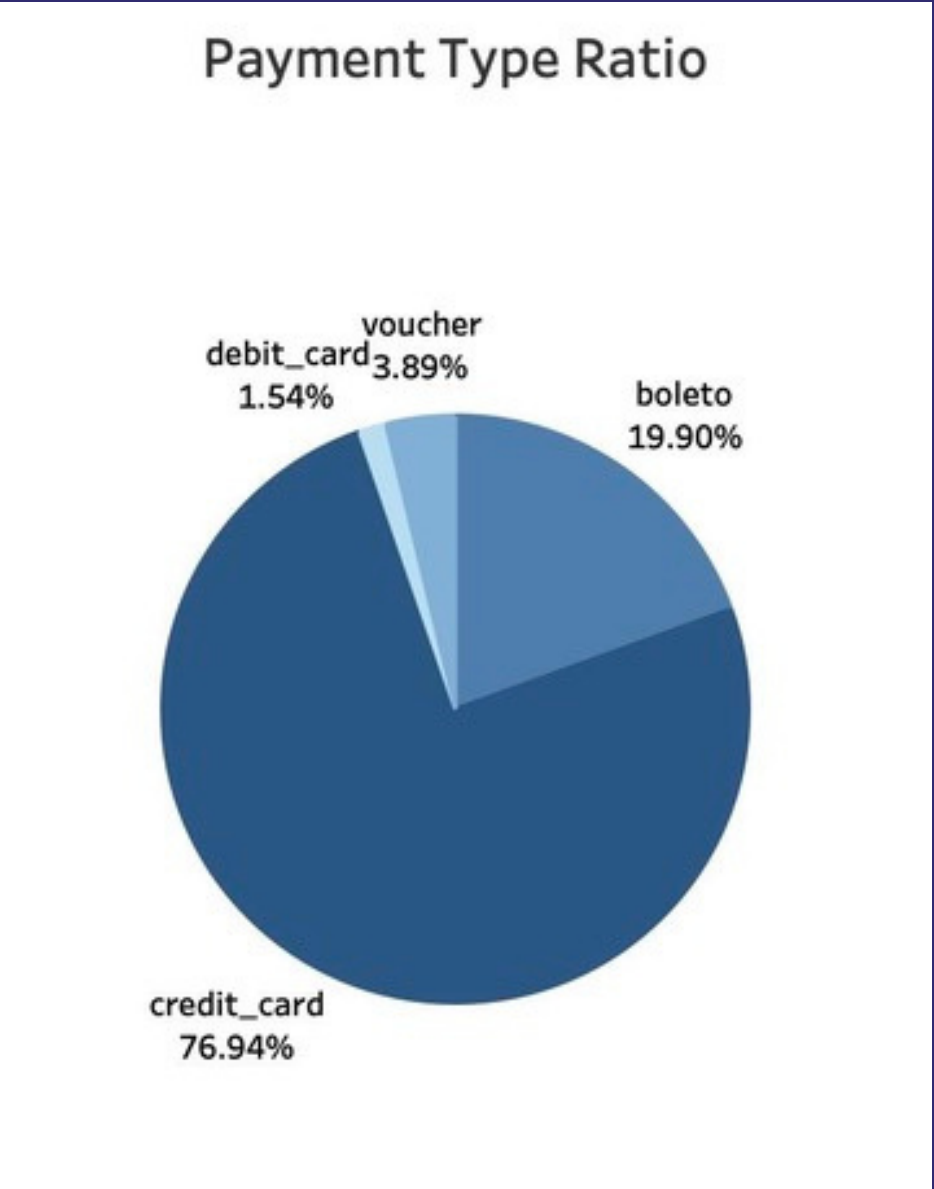
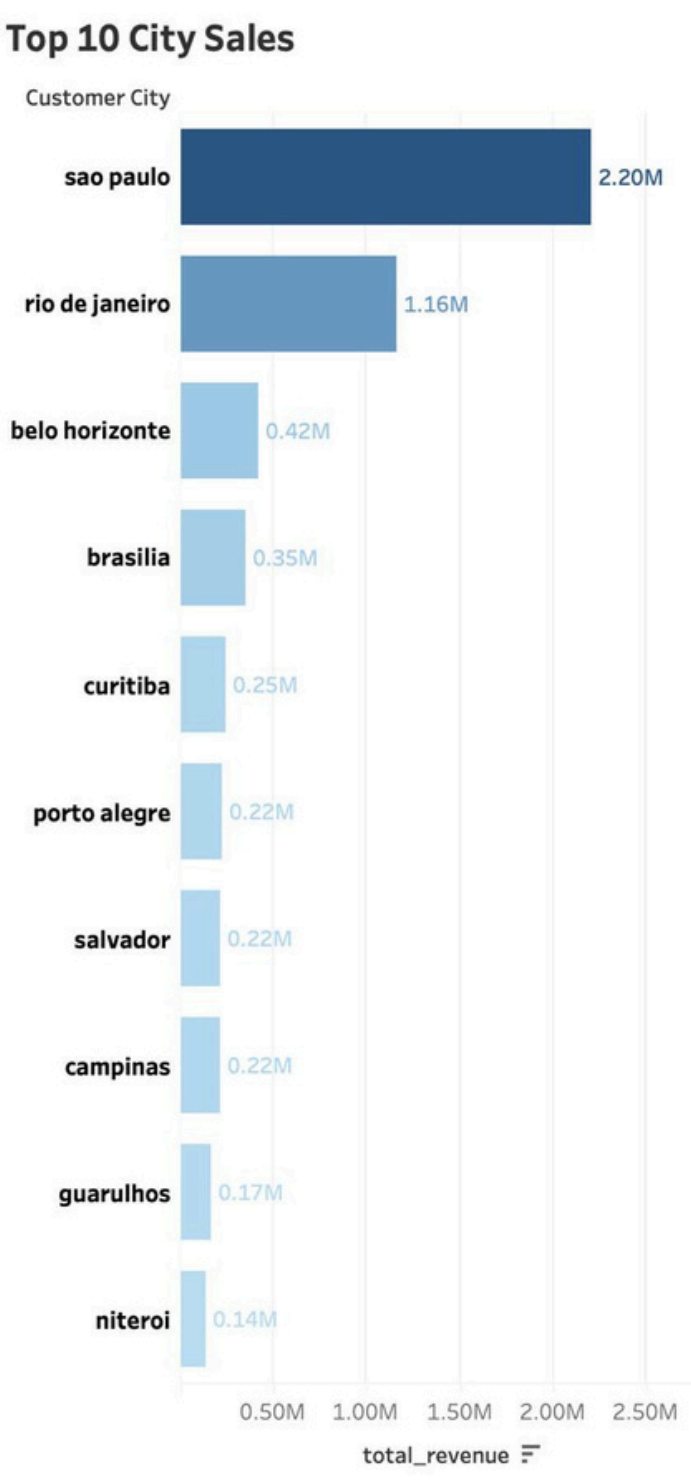


Data Insights



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.



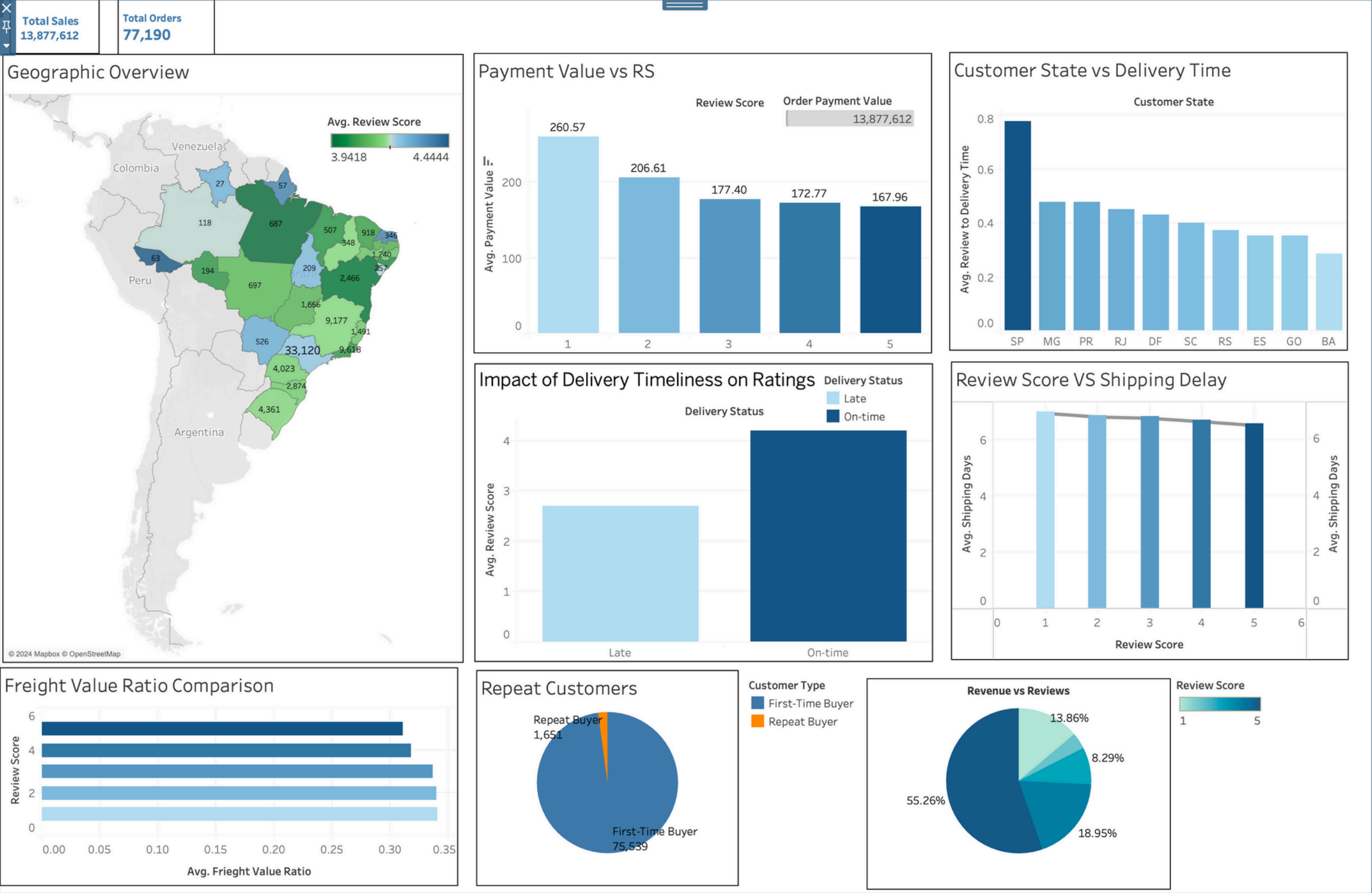
Prototype Results

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%

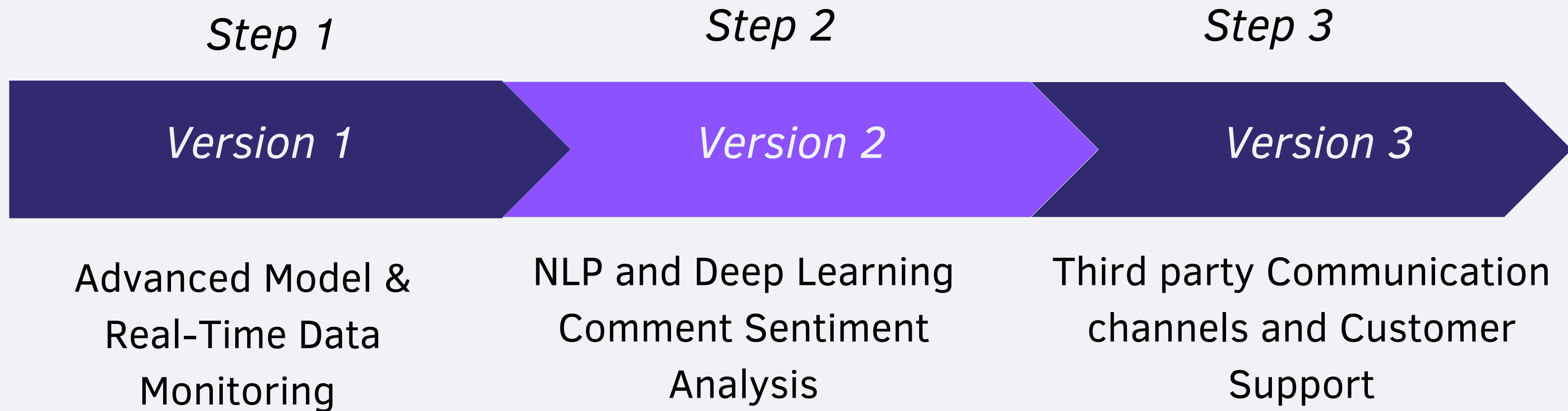


We have further optimised our model using ML advanced techniques

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.

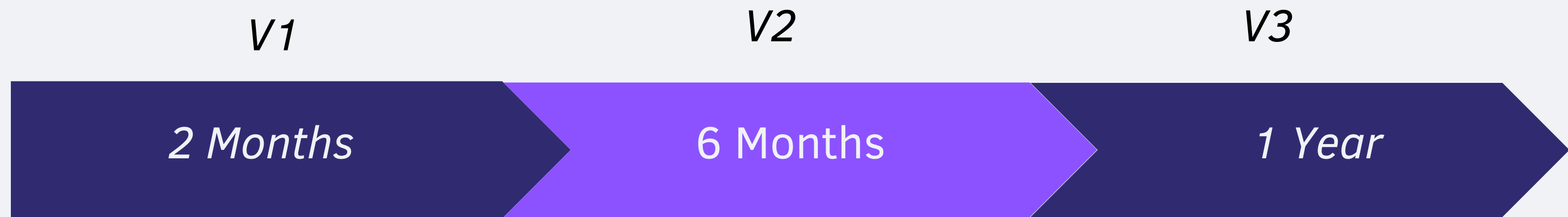
Scheduled Mailers (Communication Hub):

- 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!

