



Analytics in Practice
Group 17

Analytics Pitch Deck

Review Prediction for Nile: Targeting Positive
Feedback to Drive Growth

**Alicia | Carol | Harshit |
Ketul | Omid | Sanna**



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Introduction



Company Background

Nile, a South-American eCommerce giant, wishes to consult analytics companies to help them identify the customer segments likely to leave positive reviews on their platform



Project Objective

As an analytics consultancy company, our objective is to build a model that predicts and helps incentivise the customers to leave positive feedbacks for Nile



Value Generation

Communication of key business insights to Nile based on the findings such as how to enhance brand reputation, increase positive customer engagement, and incentivise customers efficiently

Business Problem

- Nile needs to be resource-efficient in terms of targeting customers likely to enhance brand reputation based on positive reviews
- We aim to help identify and incentivise customers likely to leave stellar feedback and those who may be persuaded to change their feedback to positive given needful service tweaks

Data-driven Prediction

Identification of correct ML prediction model technique suitable for available data

Deriving insights based on underlying pattern

Targeting Positive Reviews

Need to incentivise customers who are likely to leave positive reviews

Prediction model based on past purchasing data

Key Levers Driving Positive Reviews

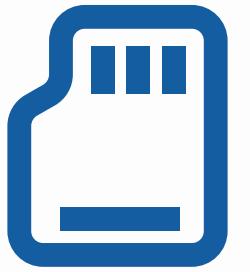
Identification of inflection points driving positive review scores

Breaking down problem across business functions and developing a targeted strategy



Approach

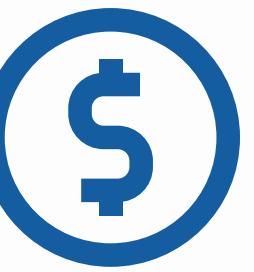
Following the industry standard CRISP-DM methodology, step-by-step approach to deriving comprehensive business insights was taken following the defining of Business Problem



Assess and Prepare Data

Selection of required customer features influencing the decision

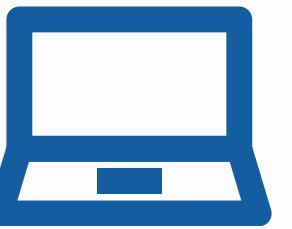
Cleaning of unwanted data such as missing values, outliers and deduplication



Modelling

Building Prediction model using multiple techniques

Assessed model success metrics to affirm model predictions



Evaluation

Deriving insights from the analysed data

Preparation of dashboards and visualisation of insights for management

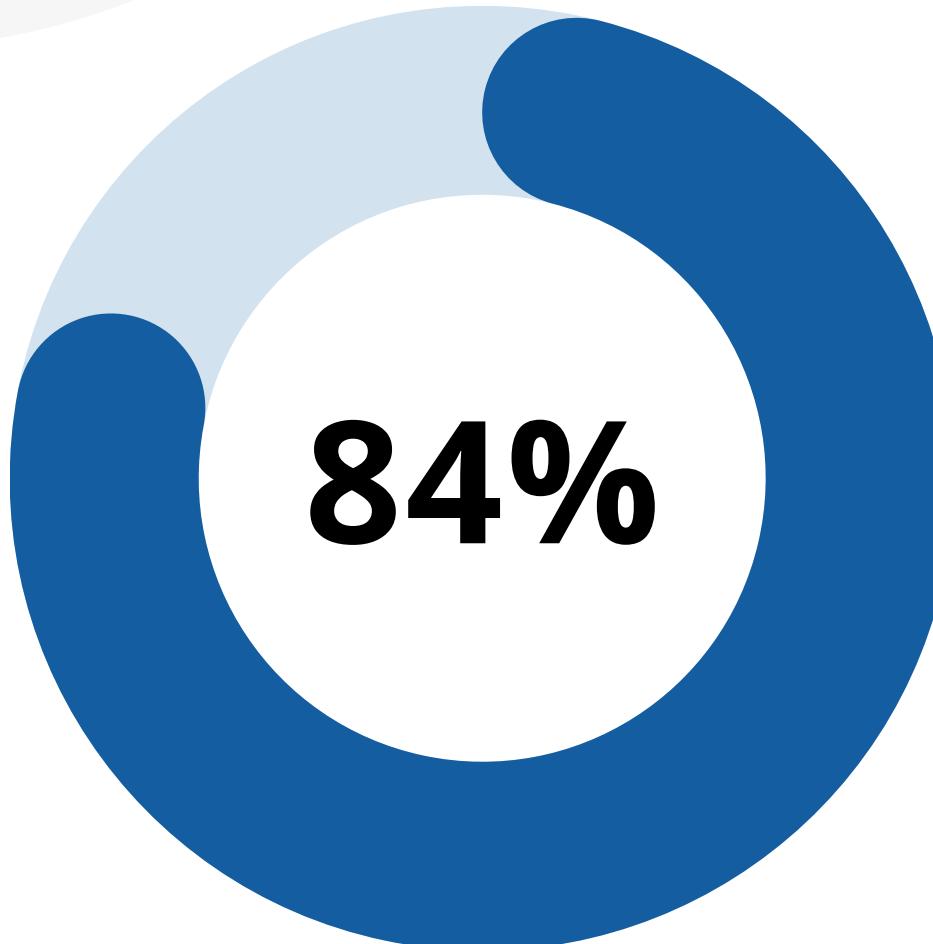


Prediction Model Prototype

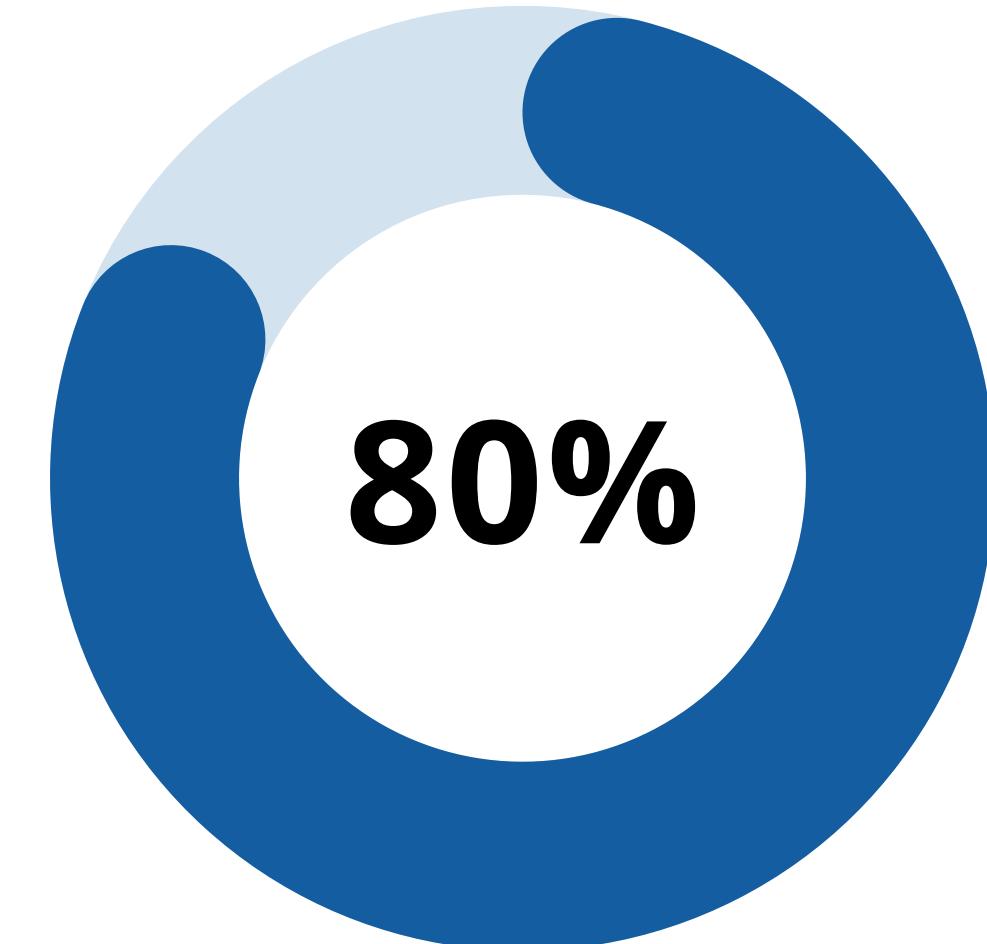
Model Benefits

- Highly scalable for the next phase of model development
- Best-suited for categorising review ratings
- Efficient and adaptable to different computational requirements

Overall Accuracy Rate



Predictive Target of Positive Review Customers

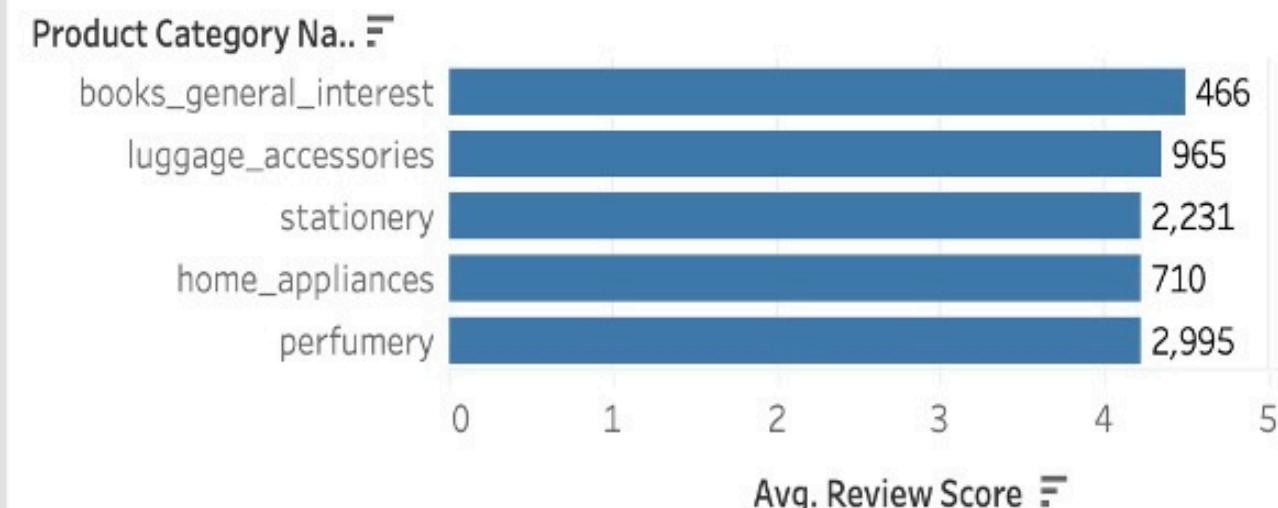


Opportunity Rate

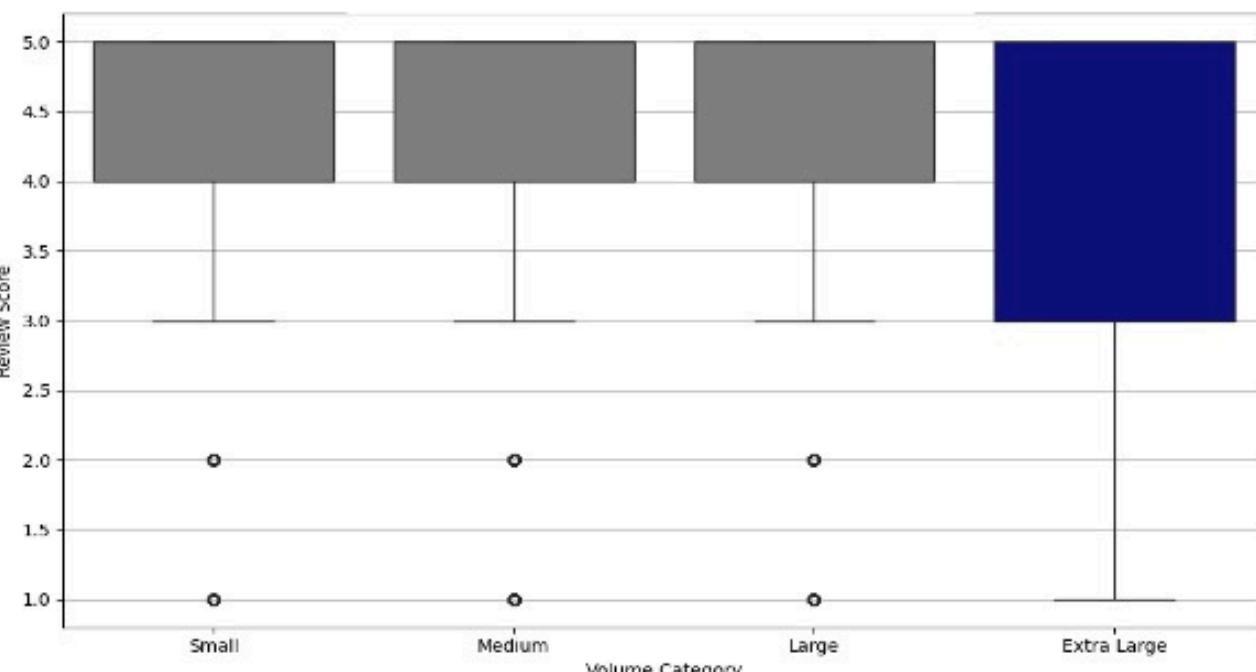
~50% of bad and neutral review scores were detected by the model. Improvements in this metric can be part of the model's next iteration stage.

Top 5 Categories by Score

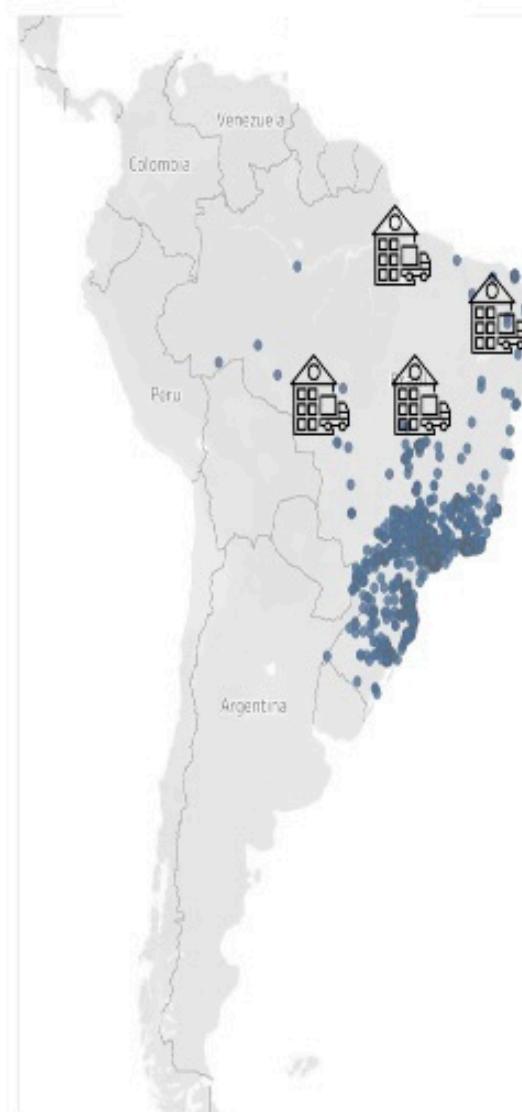
With At least 300 Reviews



Customer Feedbacks Based on Package Size



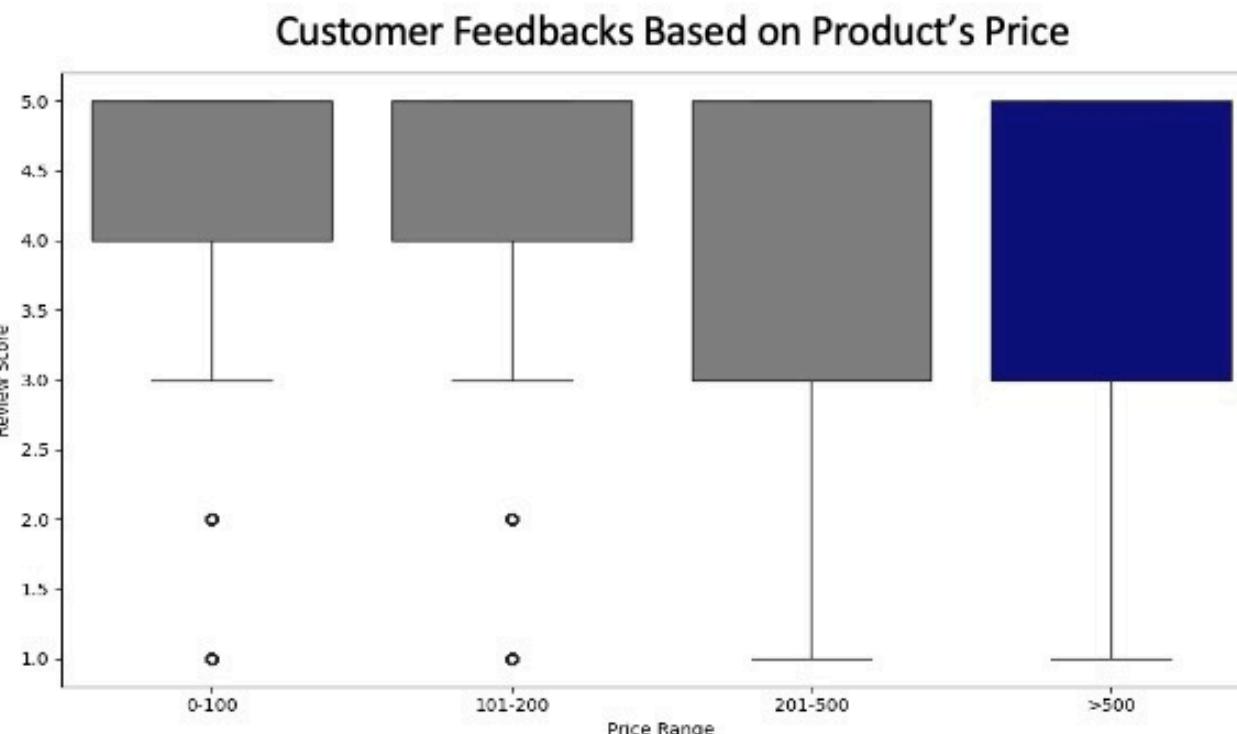
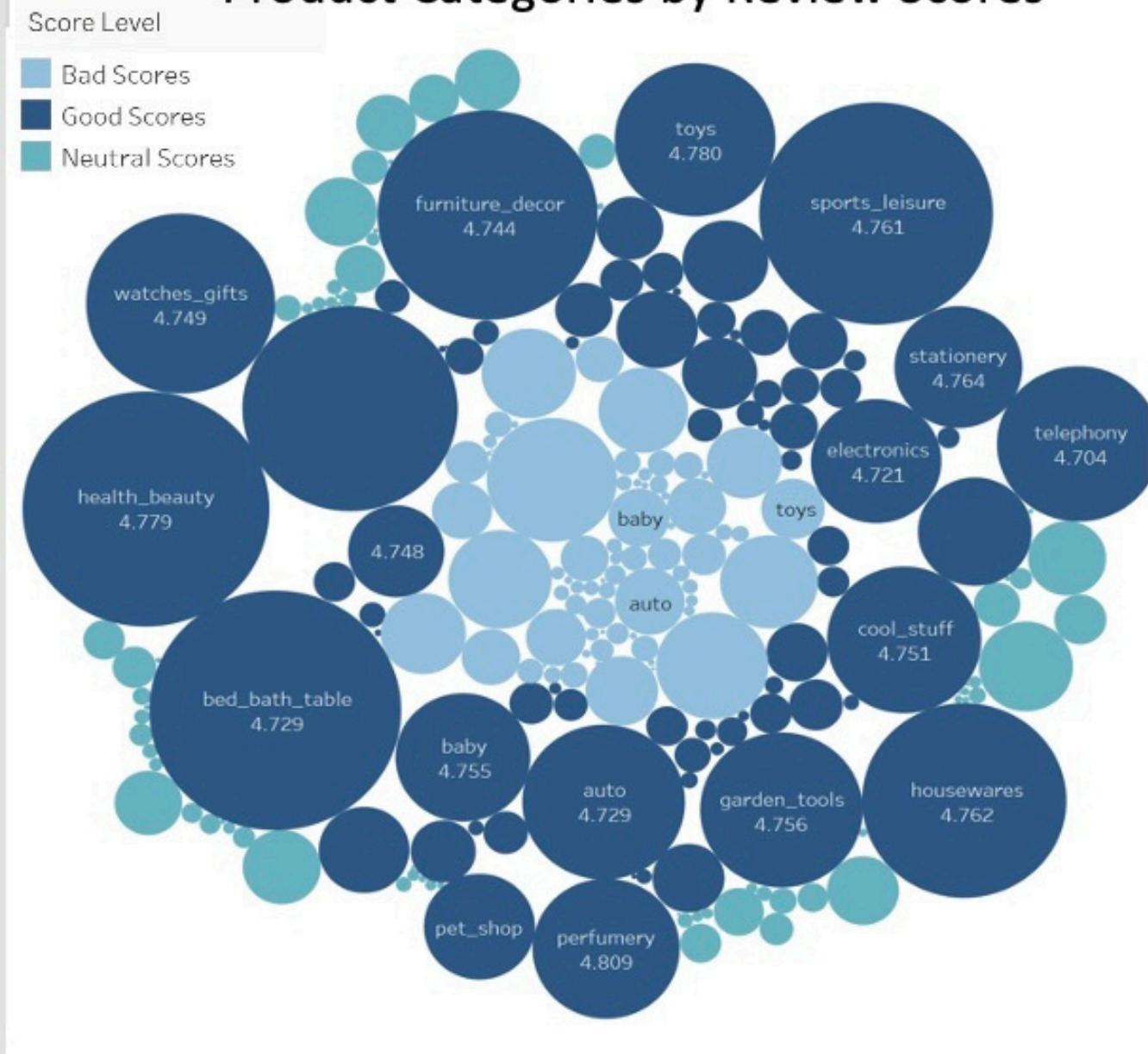
Sellers



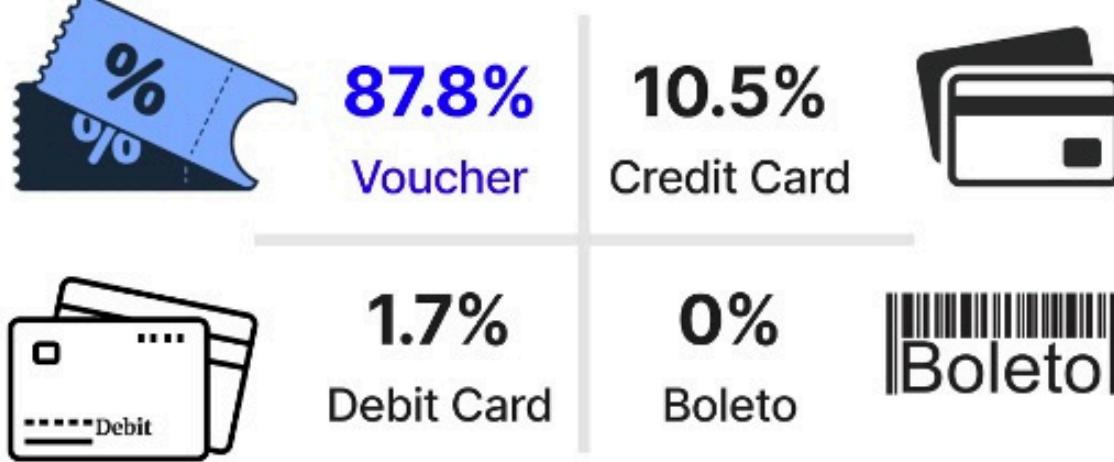
Customers



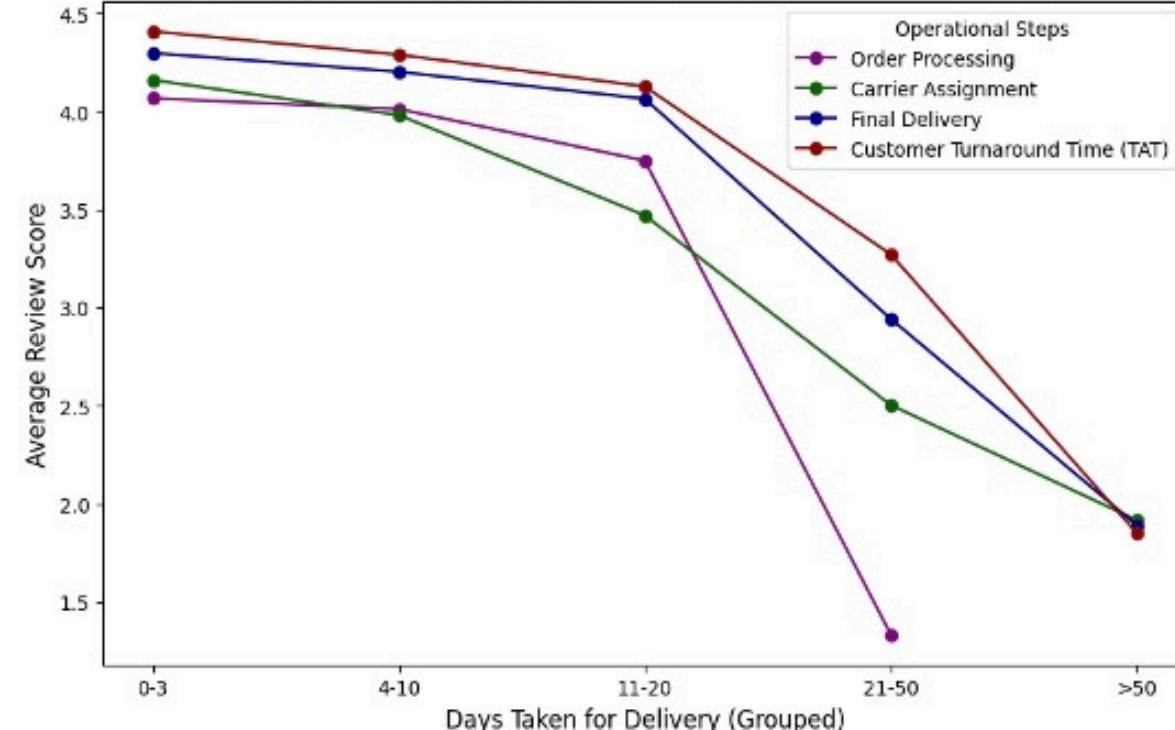
Product Categories by Review Scores



Second Payment Preferences



Impact of Operational Steps on Average Review Scores



Key Insights

Key Factors influencing Decision Making for customers likely to leave positive reviews are last mile delivery time, Boleto payments, geolocation (state) are significant drivers impacting customer review scores

±1.36

Variation in
Review Score

9D

Last Mile Operations
Variation

76%

Boleto - positive
reviews

72%

Sales Revenue by
Positive Reviewers

Review Score Detection

Bad Review

Accuracy: 84%

Good Review

Accuracy: 79%

Neutral Review

Accuracy: 78%

Recommendations

- Last Mile Operations is key in terms of gaining a positive review from customers.
- Focused product strategy can also lead to higher positive reviews and more customer engagement.
- Incentivising customers with vouchers and partnering with Boleto can lead to greater customer satisfaction.
- Expanding Seller and Carrier Network can lead to smarter operations and hence positive customer experience

Operations

- Order Cycle Times
- Handling heavy and large packages

Product

- Promoting top performing product categories
- Improving service for higher price range

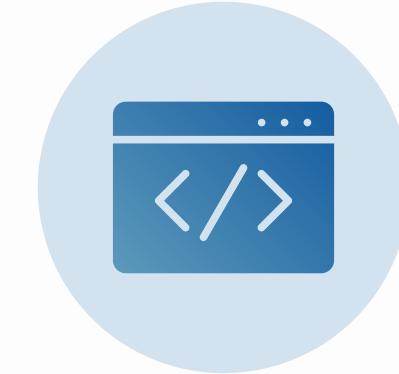
Promotions

- Incentivising with vouchers
- Partnering and promoting local methods like Boleto

Distribution

- Expanding network of sellers and logistics partner
- Strategic placement of warehouses

Next Steps...



Deployment & Real-time Analysis

- Integration with CRM system for automated targeting based on real-time data and effective data management
- Automation and personalisation of incentives such as Free Delivery, vouchers, etc. based on analysis

Deep Learning Modelling



Sentiment Analysis

- Review Comments can be analyzed to understand customer satisfaction trends
- Qualitative Market Research for the key drivers of positive and non-positive reviews

Address concerns proactively



Expand to tap potential

- Conversion of Neutral reviews to Positive reviews by tweaking aspects such as product design, quality or features
- Extending model to understand what is causing Negative reviews

Capture larger market share

Thank you!



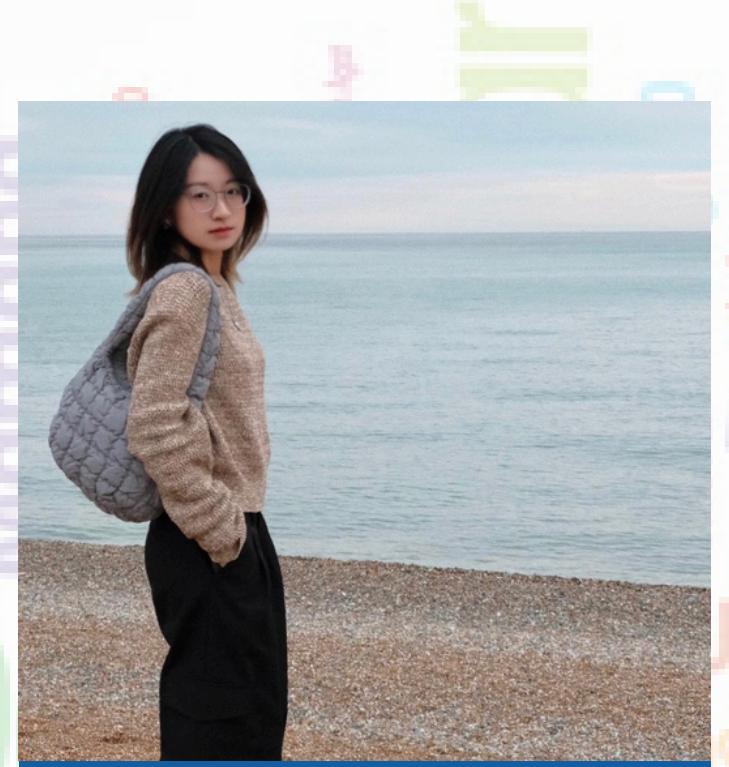
Alicia Clara Trevina

Senior Analyst



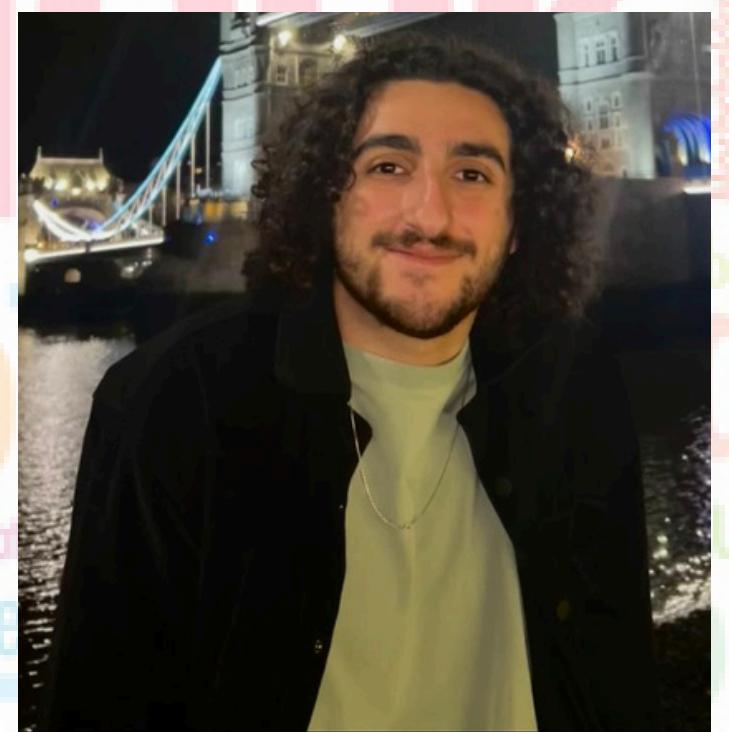
Ketul Chauhan

Project Manager



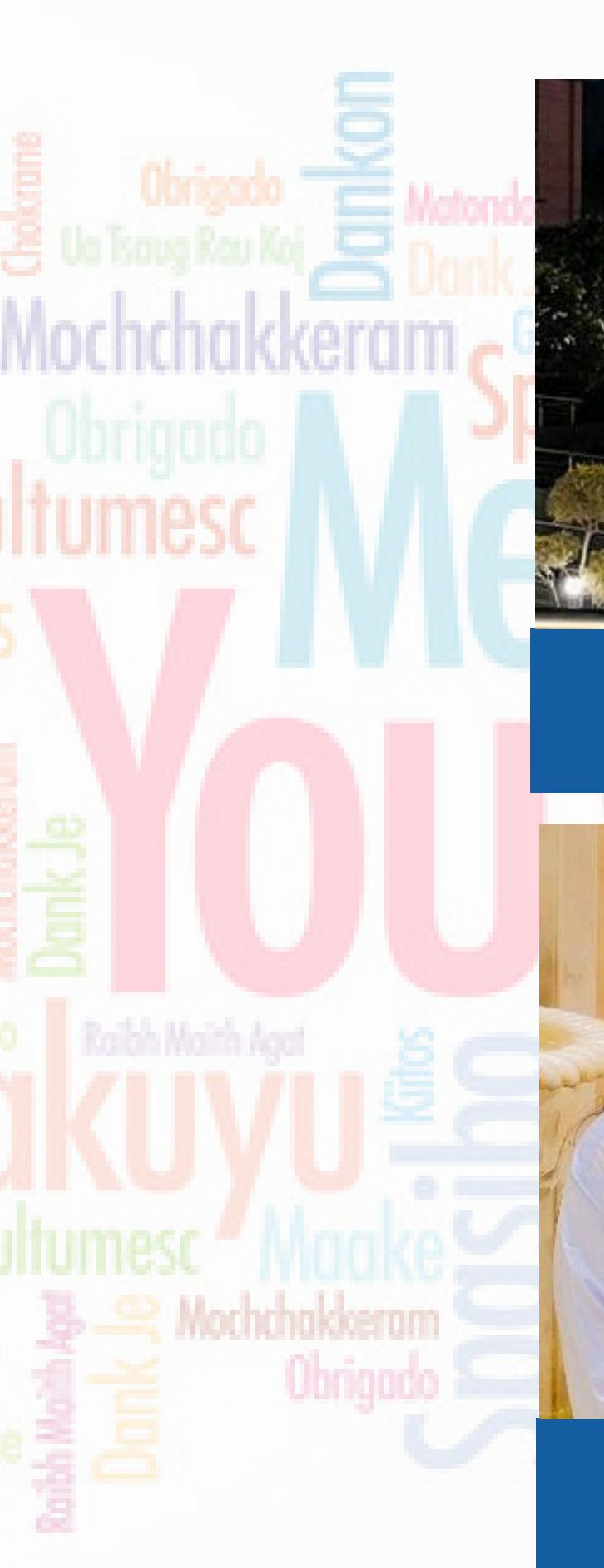
Qiyue Zhang

Associate Analyst



Omid Tahernejad

Project Manager



Harshit Singh

Associate Analyst



Sanna Golecha

Associate Analyst