Nile Company Limited

Proposal Presentation
2 December 2024

Agenda

1. Project Outline

2. Project Approach

3. Deliverable Walkthrough

1. Project Outline

Business Objective

- Develop a Predictive Model
- Strategic Customer Targeting
- Resource Efficiency
- Reinforce Online Reputation
- Sustainable Solution

Benefits to Nile:

- Enhanced Customer Engagement
- Improved Online Reputation
- Competitive Edge
- Resource Optimization
- Informed Decision-Making
- Revenue Growth

2. Project Approach

CRISP-DM
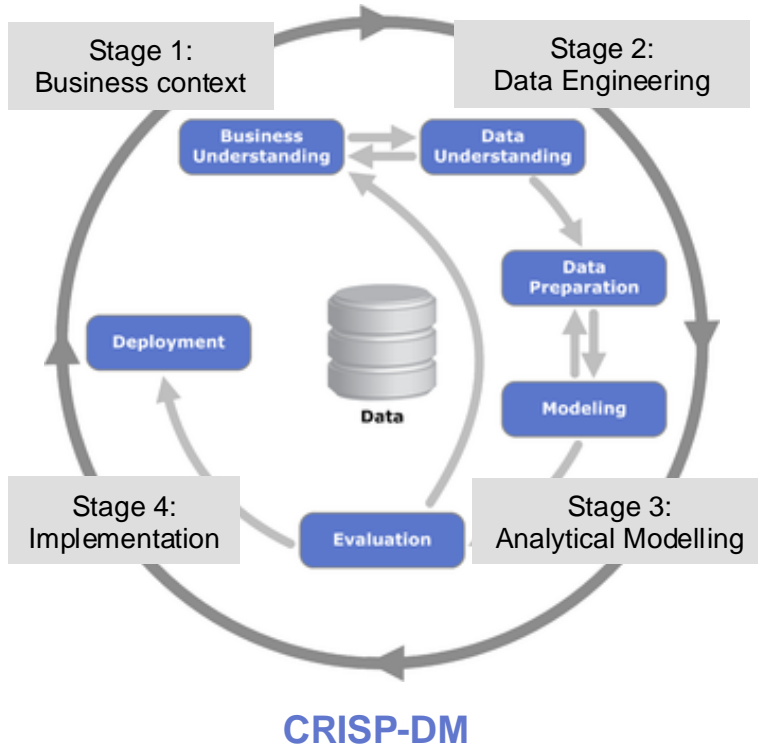
Our proposed solutions

1

Business Understanding
- Understand nature of business and industry
- Analyse potential improvement initiatives to create value-added throughout the value chain

2

Data Engineering
- Data Understanding: Review current data structure and details
- Data Preparation: Acquire, validate, and clean data to ensure the accuracy
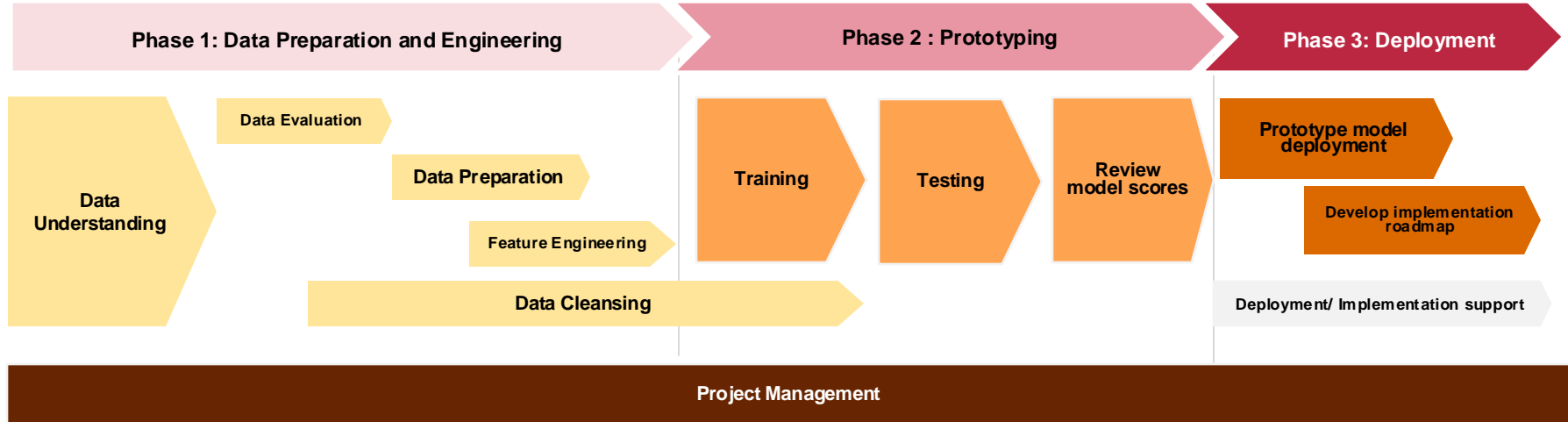
3

Analytical Modelling
- Modelling: Develop a review prediction model utilising existing data
- Evaluation: Validate and verify outcome of the model

4

Implementation
- Prepare to deploy the model
- Ensure capability and accuracy of the outcome of the model
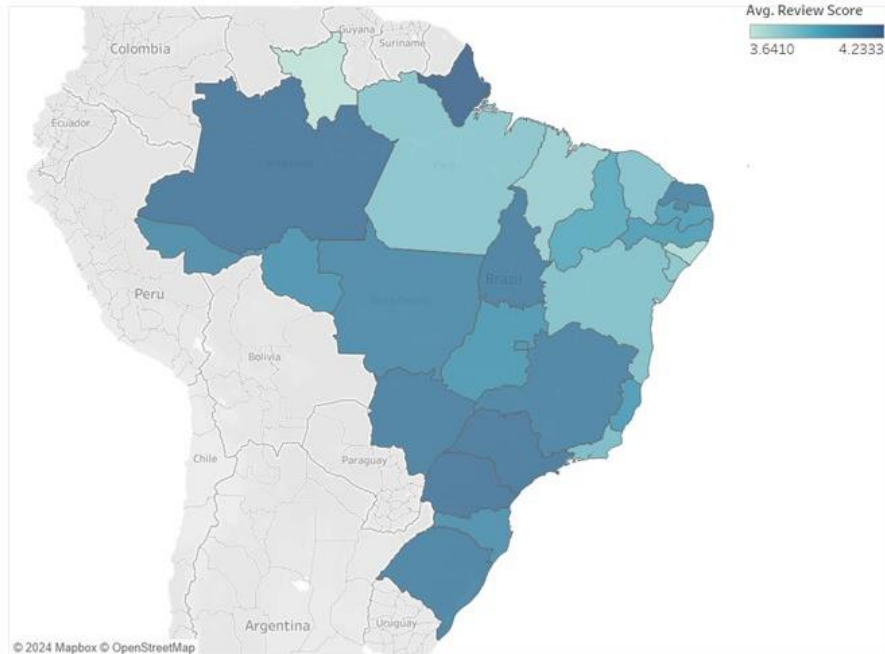
3. Deliverable Walkthrough

Phase 1: Data Preparation and Engineering

Phase 2 : Prototyping

Phase 3: Deployment

Data Understanding

Data Evaluation

Data Preparation

Feature Engineering

Data Cleansing

Training

Testing

Review model scores

Prototype model deployment

Develop implementation roadmap

Deployment/ Implementation support

Project Management

Project Assumption
- Negative reviews : 3 and Below
- Positive Reviews : 4 and 5

Phase 1 - Data Preparation and Engineering
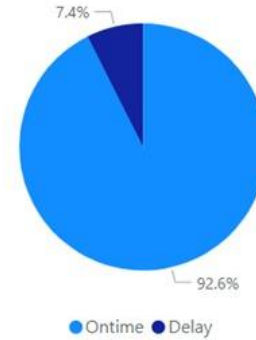
Phase 2 - Evaluation and Prototype (1/2)
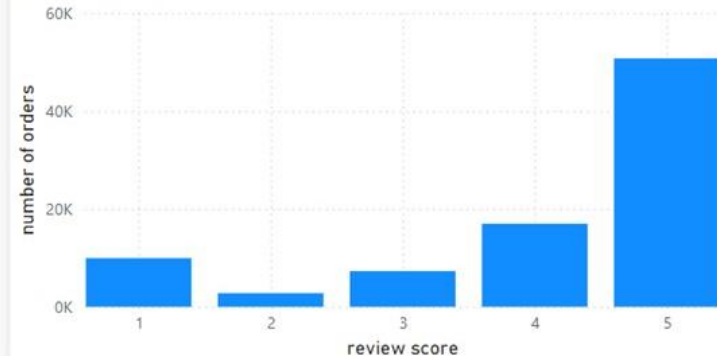
Review Prediction Matrix
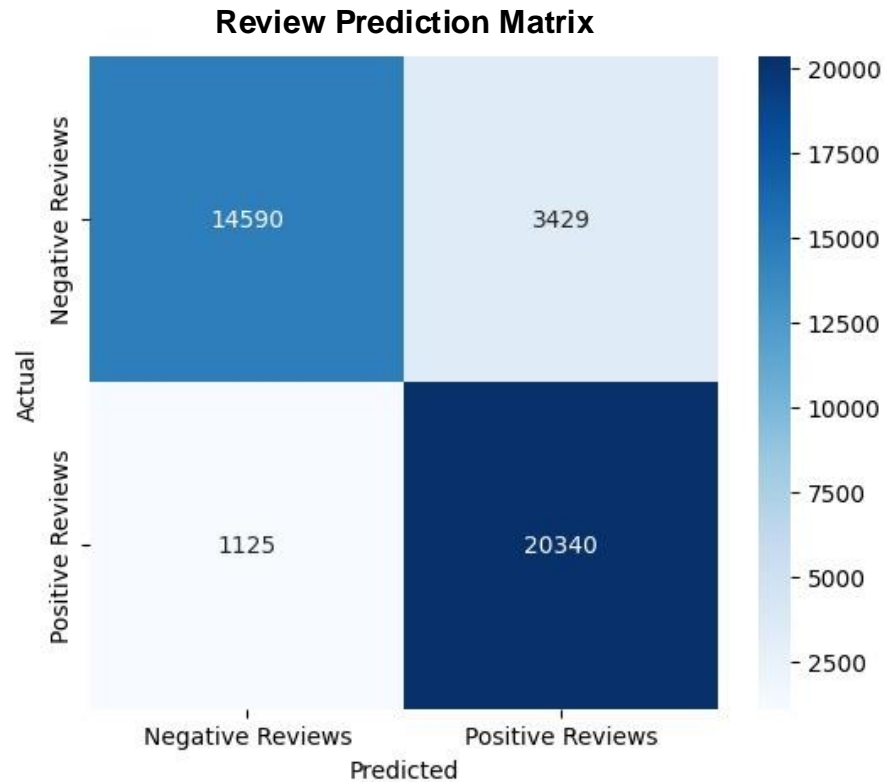
Our model can predict whether a customer is likely to leave a positive review, with an accuracy of

94%

Phase 2 - Evaluation and Prototype (2/2)

Nile eCommerce Review Prediction App

Predict whether a customer will leave a positive review.

Price ($)
125.00

Freight Value ($)
35.00

Product Weight (grams)
34

Payment Value ($)
67.00

Product Volume (cm³)
3500

Delivery Duration (days)
7

Estimated Delivery Days
7

On-time Delivery (1 for yes, 0 for no)
1

Order Delay (days)
0

Review Length (characters)
0

Total Orders by Customer
1

Customer State
SP

Order Status
delivered

Payment Type
credit_card

Seller State
RS

Product Category
Entertainment

Is there a Review?
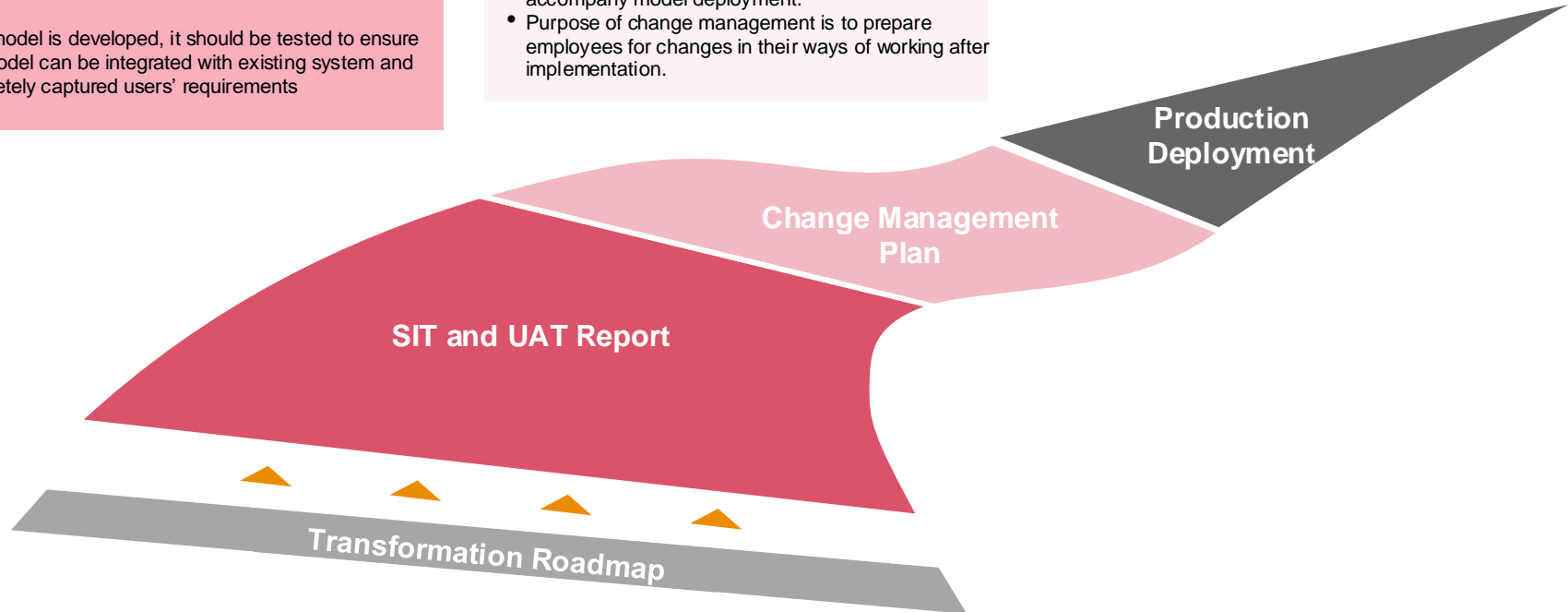yes

Predict Review

Predicted Review Sentiment: Positive

Phase 3: Deployment & Future works.

Execute the deployment of the model, ensuring alignment with operational workflows and thorough performance monitoring.

- Change management plan should be developed to accompany model deployment.
- Purpose of change management is to prepare employees for changes in their ways of working after implementation.

After model is developed, it should be tested to ensure that model can be integrated with existing system and completely captured users' requirements

Production Deployment

Change Management Plan

SIT and UAT Report

Transformation Roadmap

Thank You