Lead Scoring Analysis

Optimizing Lead Conversion for X Education

Introduction

- Brief introduction to the purpose of the analysis

Problem Statement

- Goals of the analysis:
- 1. Identify key factors influencing lead conversion
- 2. Develop strategies to optimize sales efforts

Analysis Approach

- Overview of the approach taken:
- 1. Data Preprocessing
- 2. Modeling
- 3. Feature Importance

Data Preprocessing

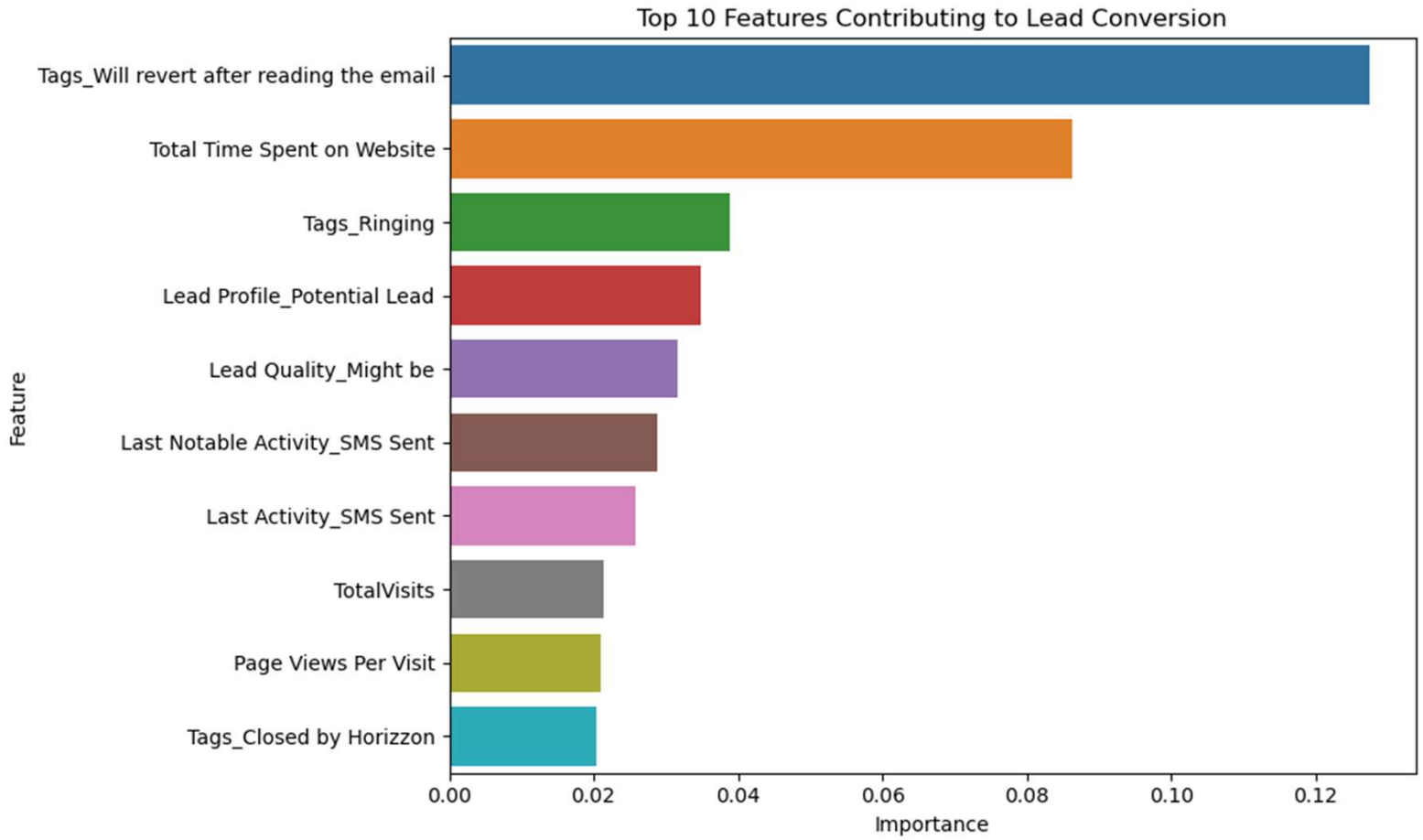
- Steps taken to clean and prepare the data:
- 1. Filling missing values
- 2. Converting categorical variables to dummy variables

Model Selection

- Explanation of why RandomForestClassifier was chosen

A RandomForestClassifier was selected for the analysis due to its robustness and ability to handle a mix of numerical and categorical data. The dataset was split into training and testing sets to evaluate the model's performance. The model was trained on the training set and tested on the testing set to ensure accuracy and generalizability.

Feature Importance

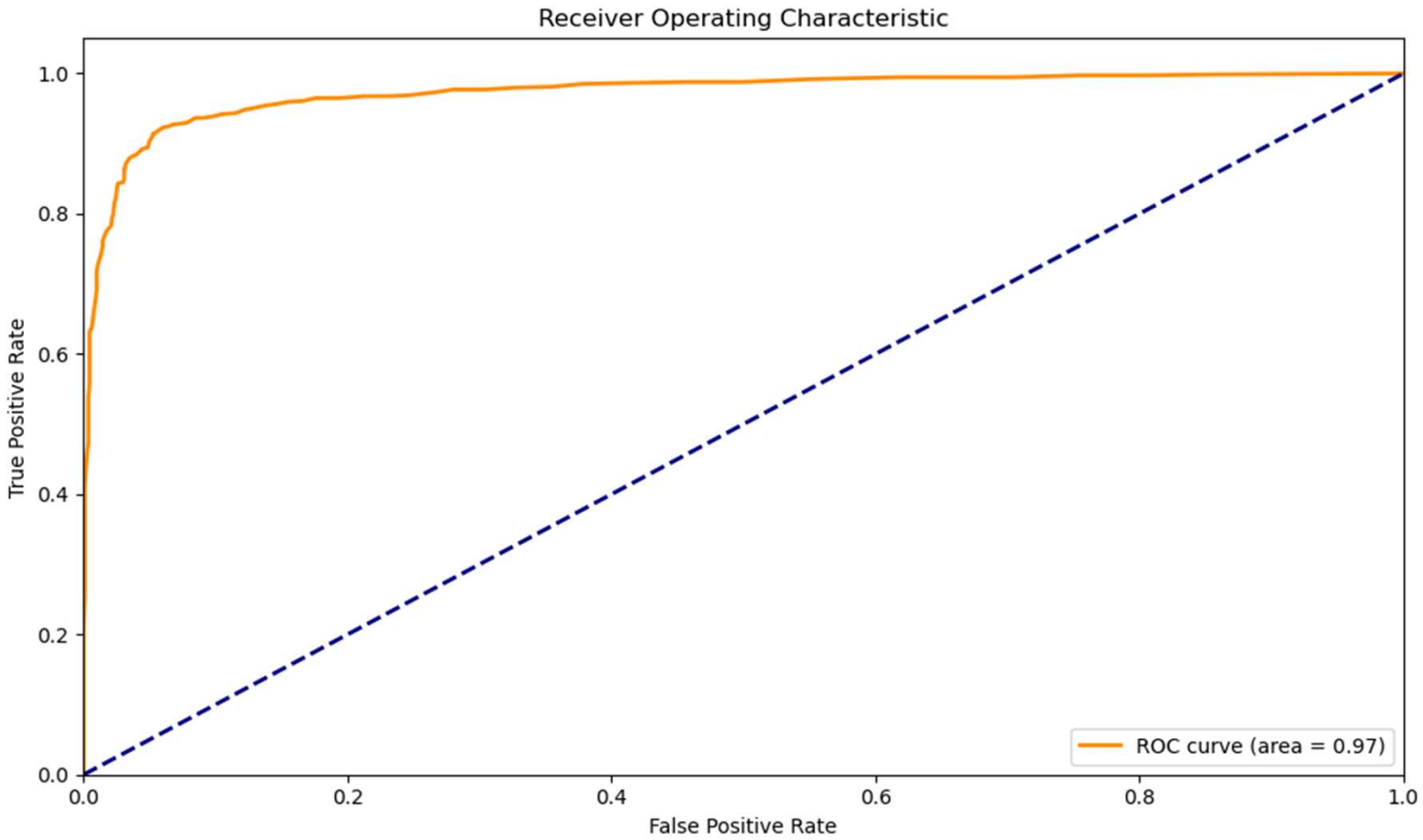


Results and Business Implications

- Key findings:
- 1. Top three variables influencing lead conversion
- 2. Top three categorical/dummy variables

- Business strategies:
- 1. Aggressive lead conversion during intern phases
- 2. Minimize unnecessary phone calls after meeting targets

Visualizations



Summary and Key Takeaways

- The analysis identified key variables influencing lead conversion.
- Strategies were developed to optimize lead conversion efforts during specific phases.
- The model's performance was evaluated using feature importance and ROC curve analysis.
- Future work includes continuous monitoring and model refinement to adapt to changing lead characteristics.