

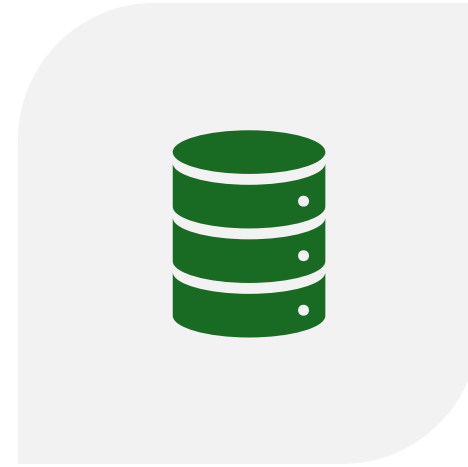
Lead Scoring Model Analysis for X Education

Analyzing Lead Conversion to Enhance Sales
Strategies

Problem Statement



OBJECTIVE: IMPROVE LEAD
CONVERSION RATES BY IDENTIFYING
HIGH-POTENTIAL LEADS



CHALLENGE: EFFICIENTLY PRIORITIZE
LEADS FROM A LARGE DATASET TO
OPTIMIZE SALES EFFORTS.

Approach to the Analysis

Data Preparation:

- **Missing Values Handling:** Filled missing values using imputation methods.
- **Feature Engineering:** Dropped irrelevant columns, encoded categorical variables, and scaled numerical features.

Model Building:

- **Model:** Logistic Regression
- **Data Split:** Training (70%) and Testing (30%) sets.

Evaluation Metrics:

Accuracy, Precision, Recall, F1 Score, and Confusion Matrix.

Key Metrics

Accuracy: 85.1%

Precision: 82.2%

Recall: 77.2%

F1 Score: 0.80

Explanation:

Accuracy: Overall correctness of the model.

Precision: Proportion of true positives among predicted positives.

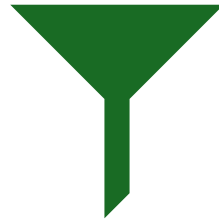
Recall: Proportion of actual positives correctly identified.

F1 Score: Balance between precision and recall.

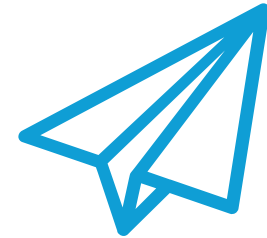
Important Features



Total Time Spent on Website:
High correlation with lead conversion.



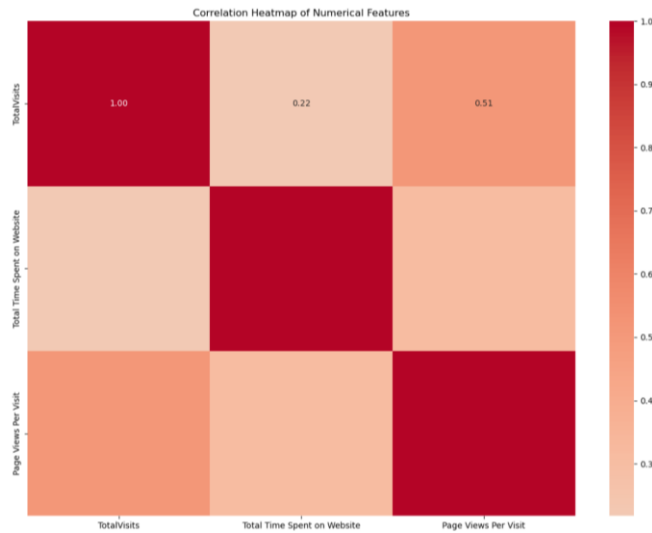
Lead Source (Google): Leads from Google searches have a higher conversion probability.



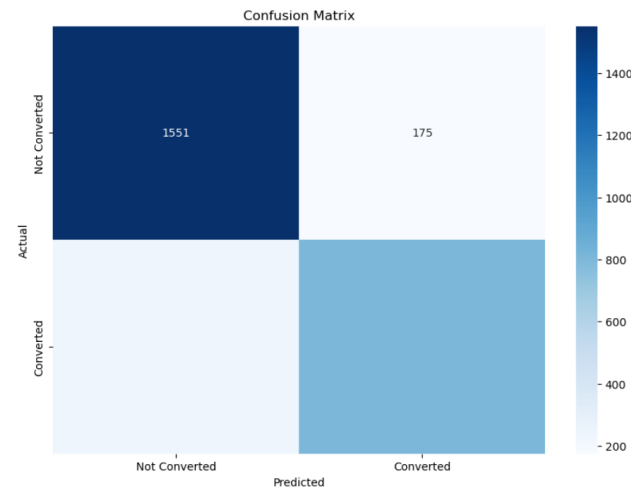
Email Interactions: Positive effect on conversion likelihood.

Visualizations

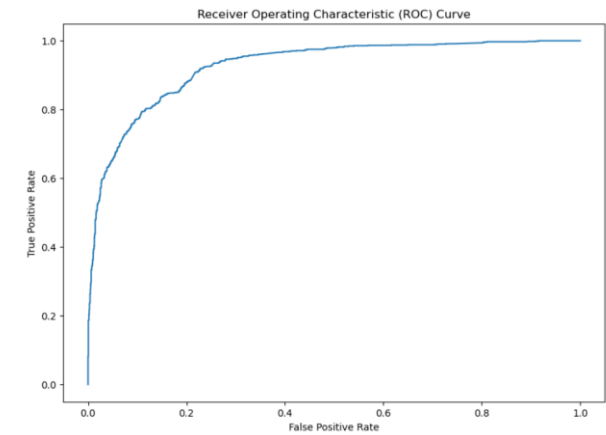
Correlation Heatmap



Confusion Matrix



Roc Curve



Business Insights

High-Performing Channels:

Focus on SEO and enhance email marketing.

Dynamic Strategy:

Adjust lead conversion thresholds based on business pressure.

Prioritization:

Concentrate on leads with higher scores for improved efficiency.

Recommendations



SEO OPTIMIZATION: INCREASE INVESTMENT IN SEARCH ENGINE VISIBILITY.



EMAIL MARKETING: REFINE EMAIL STRATEGIES TO BOOST ENGAGEMENT.



STRATEGIC RESOURCE ALLOCATION: USE MODEL INSIGHTS TO GUIDE LEAD FOLLOW-UPS.

Conclusion



Summary: The logistic regression model provides actionable insights for optimizing lead conversion.



Next Steps: Implement recommendations and continuously monitor performance.

Thank you for your attention and
engagement

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