

# **Predicting Lead Conversion for Professional Training Courses at X Education**

**Objective:** Identify factors influencing student conversion to online professional training courses and improve enrollment rates.

## **Methodology:**

- Data cleaning and preprocessing
- Feature engineering
- Logistic regression modeling with feature selection (RFE)
- Model evaluation and interpretation

## **Key Findings:**

- Website engagement (visits, time spent, page views) increases conversion
- Management specializations have higher conversion rates
- Unemployed users and students are more likely to convert

## **Model Performance:**

- RFE-based feature selection model outperforms full-feature model
- Accuracy: 77%
- Sensitivity: 49%
- Specificity: 93%

## **Recommendations:**

- Target marketing efforts at unemployed, students, and management professionals
- Optimize website engagement and user experience
- Focus marketing efforts in Mumbai and Maharashtra

## **Conclusion:**

This analysis identified key factors influencing lead conversion for X Education's professional training courses, providing actionable insights to improve enrollment rates and drive business growth.