



ALY 6080: INTEGRATED EXPERIENTIAL LEARNING

Assignment 7: Group Project- CoverQuick Scope

Submitted To:

Dr. Chinthaka Pathum Dinesh, PhD, Prof. Herath Gedara,
Faculty Lecturer

Submitted By:

Abhilash Dikshit
Kush Patel
Siddharth Alashi

Academic Term: Spring 2023

Graduate Students at Northeastern University, Vancouver, BC,
Canada

Master of Professional Studies in Analytics

May 31, 2023

I. Project Overview:

The project aims to perform a comprehensive data analysis on the CoverQuick company's customer data to derive meaningful insights and provide job recommendations by improving resume and cover letter performance using AI. The analysis will involve examining company and skill trends, candidate's demographics, resume performance, and candidate's satisfaction metrics based on various factors. The project's objective is to help CoverQuick make data-driven decisions and optimize their business strategies based to improve resume quality.

II. Project Objectives:

- A. Analyze the give data provided by the sponsors, including no job description and with job description records.
- B. Identify the trends, patterns, and correlations to gain a deep understanding of the factors influencing CoverQuick's business performance.
- C. Evaluate candidate's demographics, behavior, and preferences to target marketing efforts effectively and enhance customer acquisition and retention strategies.
- D. Assess the performance of different products, services, or offerings to identify strengths, weaknesses, and opportunities for improvement.
- E. Analyze customer satisfaction metrics and feedback to identify areas where CoverQuick can enhance the customer experience.
- F. Provide actionable recommendations based on the data analysis to guide strategic decision-making and improve business performance.

III. Key Risks and Mitigation Strategies:

Identified key risks and corresponding mitigation strategies include:

Risk 1: Insufficient domain knowledge: Collaborate with subject matter experts and conduct thorough research to gain a better understanding of the dataset and domain.

Risk 2: Data quality and missing values: Implement robust data preprocessing techniques and consider appropriate imputation methods to handle missing values effectively.

Risk 3: Model overfitting or underperformance: Employ cross-validation techniques,

regularization, and hyperparameter tuning to mitigate overfitting. Evaluate multiple models and select the one with the best performance.

IV. Measure of Success:

The measure of success for our project will be determined by achieving the following:

- a) Accurate and reliable predictive or descriptive models that meet the project requirements.
- b) Meaningful insights and actionable recommendations derived from the analysis.
- c) Proof of concept that demonstrates the feasibility and value of the analytic approach.

V. Presentation Method and Delivery of Proof of Concept:

The proof of concept and project findings will be presented through a comprehensive report and an interactive presentation. The report will include an executive summary, methodology, analysis results, key insights, and recommendations.

VI. In Scope:

- A. Data cleansing and preparation to ensure accuracy and consistency.
- B. Exploratory data analysis techniques to identify the trends, patterns, and correlations.
- C. Identification and visualization for the top 3 industries that most users have applied.
- D. Identification and visualization for the approximate age range and experience level.
- E. Identification and visualization for the trends in experience and skills for these target users.
- F. Identification and visualization to discover the trends in demographics for the number of candidates registering to the website across globe for resume building Product performance analysis, including sales volumes, revenue, and profitability.
- G. Customer satisfaction analysis, including survey data, feedback analysis, and sentiment analysis.

H. Presentation of data analysis findings and actionable recommendations.

VII. Out of Scope:

- A. Implementation of data management systems or infrastructure beyond the scope of data analysis.
- B. Full-scale implementation of recommended strategies without further evaluation and planning.
- C. Business operations unrelated to data analysis and decision-making.
- D. Data privacy and security compliance beyond the necessary measures to protect and handle the collected data.