

Project: E-news Express: A/B Testing for New Landing Page Effectiveness

Covered Skills and Tools

- Commenced the project by clearly defining the problem statement and setting the stage for an in-depth Exploratory Data Analysis (EDA). Analyzed the data to understand user interactions with the old and new landing pages, employing univariate and bivariate analyses to uncover patterns and derive insights about individual variables and their relationships.
- Illustrated key findings from the EDA, highlighting meaningful observations regarding user behavior on the landing pages. Focused on differences in time spent on the pages, conversion rates, and preferences across various user segments.
- Investigated whether users spent more time on the new landing page compared to the old one. Conducted a visual analysis to support hypothesis testing, formulated null and alternative hypotheses, selected an appropriate statistical test, calculated the p-value, and provided inference based on the p-value, adhering to a 5% significance level.
- Analyzed whether the conversion rate for the new landing page surpassed that of the old page. Performed a similar sequence of steps as above, including visual analysis, hypothesis formulation, test selection, p-value calculation, and drawing inferences to provide a clear answer.
- Explored the relationship between users' preferred language and their converted status. Conducted a visual and statistical analysis to determine if language preference influenced the likelihood of subscription conversion, following the same structured approach to hypothesis testing and inference.
- Examined if the average time spent on the new landing page varied among users preferring different languages. Utilized visual analysis to guide the formulation of hypotheses, chose a suitable statistical test, computed the p-value, and interpreted the results, providing insights into user engagement across language preferences.
- Ensured the presentation of the project was of high quality, with a focus on structured and logical flow, clarity, and visual appeal. The notebook was well-commented, making the analysis easily understandable. Concluded with actionable business recommendations based on the statistical findings, advising E-news Express on the new landing page's effectiveness in attracting new subscribers.