

Abstract

The Green Terp Program at the University of Maryland is a dynamic initiative aimed at fostering environmental responsibility among students, facilitated through partnerships with the Department of Resident Life and the Office of Sustainability. One key strategy involves encouraging students to pledge their support for these initiatives. To enhance engagement and productivity, our team analyzed data spanning five years and comprising 10,995 observations and 78 variables, capturing various aspects of the club including engagement metrics and pledge execution statuses.

Employing rigorous data cleaning techniques in R Studio, we refined the dataset by eliminating irrelevant information and addressing categorical variables and missing values. Subsequently, a correlation matrix was constructed to identify relationships within the dataset. Our analysis revealed that the "dine_volunteer" variable exhibited the strongest correlation with pledge follow-through, while "commute_walk" showed the least correlation.

By considering all 78 variables, we extracted insights to aid Green Terps in achieving their goal of increasing engagement and promoting pledge actions. This analysis serves as a foundation for data-driven decision-making, empowering Green Terps to tailor their strategies effectively. The insights derived from our analysis provide valuable guidance for strategic planning and resource allocation, enabling the program to refine its approach and strengthen its impact in promoting sustainability and environmental consciousness throughout the University of Maryland campus.