**True Blue Times – Deliverable**

Problem statement

For the past decade, our publishing industry has been on a dramatic decline. This past year alone, our revenue has dropped 20%, and there are no signs of this decline changing. However, we can reverse this trend by creating a tool to help students choose a college or university. This product will help shift our current demographic of 35–50-year-old professionals to a younger audience of potential and current college students.

Identifying a solution

During this process, we examined the data and discovered there are many ways a college could manipulate a college ranking system. This required us to find a solution that benefits the student the most and not have a gameable system. In the given dataset, 14 possible variables could be used to rank the schools. Through data exploration, we determined that three variables should be used. It led us to design a college ranking system based on a school’s average grant aid, total annual cost, and alumni salary. These factors were weighed equally to create a fairer ranking system for colleges and universities.

Feature engineering

In the dataset, many values were missing. The first step to implementing this ranking required us to use feature engineering on the dataset. Two methods were used to fill in the missing data. The first method was manually imputing the missing cities based on which state they were located in. The second method was taking the means of private and public schools’ variables and then filling in the value based on whether the school was private or public.

Implementing the solution

The ranking algorithm is based on each school’s average grant aid, total annual cost, and alumni salary. We were able to use these variables to create another variable called Net Sum. This Net Sum variable represents a formula, which is Alumni Salary + Average Grant Aid - Total Annual Cost = Net Sum. After adding this variable to all the schools, we sort the ranking in descending order based on the Net Sum. This means the higher the Net Sum, the higher ranking a school will have. Now students can see which schools offer the most potential money with student aid and costs factored in. In addition to this, the ranking system allows us to filter the schools by state and city. It lets students see the ranking of the schools in each state or city.

Value

According to our data, most people are starting to read their content online, and our subscriptions are decreasing. Our ranking system will be easily accessible to the public on the internet and garner attention from potential and current college students. By expanding to a younger and growing audience, we expect to increase revenue in the following years. It was also determined that there are currently no other tools that have been produced to aid students, so the market is large for this type of product.

Next Steps

Now that the product is created, our priority should be to promote this product which shows college and university rankings. There is a large market for this tool, and we currently have no competitors in this market. Additionally, if we receive further funding, we can continue expanding this product. Our analytics department has a proposal to create a website that will use this ranking algorithm to reinvigorate our brand and attract new customers.