MBASalaries Analysis

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For the given dataset of MBA Starting salaries, it was important to understand the factors responsible for starting salaries of a candidate after graduating. I have used different methods to analyze every aspect in order to understand the major driving factor of the starting salary.

* The given dataset portrays that work experience of a candidate range from 0-22 with 3 being the average. Additionally, it was also observed that total GMAT scores varies from 450 to 790 with 619 as the average
* The total score of the maximum students fall in the category of 550 and 630 followed by 60 and 600
* The salary distribution of the placed candidates are widespread.
* The maximum work experience is observed to be 2 years followed by 3, 4 , 1 and 6 years
* Most of the MBA candidates lies at the age group of 25-27
* As per the analysis, it was observed that male candidates received higher salary as compared to female. It was also seen that candidate with first language as English did better in GMAT verbal than the candidates with other first language
* A relation was found between the s\_avg and f\_avg which showcased that student performing well in either performs well in the other too. Additionally, there was consistent flow in each quarter with respect to the starting salaries with slight upward in 1st quarter
* Most of the candidates with GMAT total scores above 570 maintained a Fall GPA above 2 and most of the candidates with Fall GPA above 2 maintained Spring GPA of more than 2.5
* Most of the experienced candidates maintained GPA above 3
* Applying chi-square test over place Fall average and GMAT total score gave p-value as 0.3578 whereas applying chi-square test over Fall average and Spring average gave p-value as 2.2e-16. On the other hand Fall average and work experience gave p-value as 0.2747 and first language and GMAT verbal gave p-value as 0.007852
* Applying t-test over first language and GMAT verbal gave p-value as 2.2e-16. The p-value remained below 0.05 for comparison between salary and Fall GPA / Spring GPA. P-value remained below 0.05 for comparison between salary and work experience. This means all these variables are statistically significant with respect to the starting salary
* GMAT total score has high correlation with verbal, quantitative and overall score (which was obvious) . It has a positive correlation with Fall / Spring average. Spring and Fall average shares strong positive correlation. The salary is highly correlated with work experience and age
* The work experience and age seems to be a good predictor variable for salary as response variable. They fit the model positively
* For non-placed candidate maximum GMAT score was 610 whereas for a placed candidate it is 630
* Applying logistic regression gives a positive relation with work experience and Spring average. The residual deviance is observed to be 345.39