Lessons Learned Report – C5T2 – EDA

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As part of our analysis of the Credit Data we were able to observe the following:

* The vast majority of our customers are educated consumer sthat have a college or graduate degree (80%).
* More customers are women(60%) than men.
* Customers who are single (53%) slightly outnumber our married customers (45%). Very few customers are divorced.
* Most customers have less than $100K Balance Limit.
* The majority of customers had no payment activity, paid balances in full or used revolving credit amongst the 6 pay cycles included in the data. Very few customers had a late payment beyond 1-2 months late.
* 78% of customers did not have a default payment compared to 22% which did default.
* A large number of customers had a credit balance or zero balance on their account for each of the 6 billing periods
* Most customers age range is between 30-40 years of age. Higher percentage of defaults fall in the 22-27 years of age range.
* Our single customers in the early 20-37 age range also make-up the majority of the defaults, while our older 50-60 year old married and widowed showed lower range of defaults. 50-60 year old single adults exhibited the least number of defaults.
* Lower educated had fewer overall defaults but also make up a smaller percentage of borrowers.
* Higher credit limit balance customers had fewer defaults than lower credit limit customers. This may have a correlation with the age observations we noted above.
* High school and college educated borrowers showed similar default ratios while borrowers with less than high school educated borrowers had a much lower rate of default. Graduate borrowers had lower rate of default that increases as age increased.

The Python tool can provide a great deal of useful information in understanding the relationships between data elements and how stratification of each variable.

Further analysis should be completed in understanding lending habits of our partners and what variables they are using to extend credit. With the high number of younger borrowers defaulting, we might also look into research on the job stability, understanding of credit obligations and spending habits, and education opportunities for younger borrowers.