Version One: <https://public.tableau.com/profile/christopher.richardson#!/vizhome/prosperEDAstart/Story1>

Final Version:

<https://public.tableau.com/profile/christopher.richardson#!/vizhome/P6ProsperEDAsubmission/Story1>

**SUMMARY**

* Briefly explore various occupations to view individual or grouped average finance variables such as stated monthly income, average loan amounts, and popular loan categories. We then delve into which variables are important in achieving a low apr to give insight to loanee prospects.

**DESIGN**

* The original concept was to give a generalized idea of spending habits of each particular occupation. After receiving feedback from multiple friends, I was persuaded to switch the audience from high school/community college to loanee prospects. My original idea was to show students loan data to get a rough idea what type of life you would have with a particular major. Helping students choose a career path based on such data would be fruitless and unwise. This is due to individual spending habits varying on variables such as does the loanee have a family, live near an ocean, etc. The instructional guide was also brought to the forefront of the story as a way to help users immediately understand the interface.

**VISUALIZATION DESIGN**

1. Colorful, interactive, blob charts were used on the first two pages as a way to excite the reader.
   1. Blob charts also allow the reader to easily digest proportions of a particular focal point.
      1. I.e., the blob chart on page one represents the count of each particular loan category. It allows the reader to distinguish the most popular reason a loanee would request a loan.
      2. I.e. If you take a quick glance at the blob, you can see that debt consolidation is the biggest blob of them all
2. Highlight tables/charts were used on the fourth and fifth page to help highlight average income and average principal amounts by occupation.
   1. Shades green (representing money) was used to help highlight a range. The darker the green, the higher that listing is placed on the range.
3. Treemaps are also used on the fourth and fifth page. Like the blob charts, treemaps are used to visualize proportion sizes for particular categories.
   1. T1 on page four represents a occupation’s loan category preference.
4. Plot charts were heavily used on page five to allow readers get a better understanding of the overall data set. A loanee prospect may look at each listing to get a rough idea how they stack in comparison to existing loanees.
5. Box and whisker plots were used on pages six and seven to show readers APR trends calculated by personal financial variables.
   1. I.e., page five shows listings binned by how many credit inquiries a listing has had in the past six months. The more credit inquiries a loanee has, the higher the probability that the loanee would receive a higher APR.
   2. Existing listings were plotted accordingly to give the reader an overall outlook as well as see if there are any outliers. I.e., there is a listing with ten credit inquiries within the past six months, yet they have an APR of 12.78% (listing number 557546).
6. Stacked bar charts were used on the second to last page, to show how well Prosper Scores perform in the perspective of predicting the outcome of a loanee.

**FEEDBACK**

**Feedback 1)** \*feedback was based on original Tableau presentation

**What do you notice in the visualization?**

* It’s very colorful and contains lots of data to view if statistics are your thing. Sometimes the charts can be a little confusing to read for people not familiar with those types of charts (blob and scatter plots).

**What questions do you have about the data?**

* Questions: Where was the data gathered? Does it take data from different parts of the U.S. to give a broad picture of who the loanees are, or is it specific to a certain area only. What are some other factors not discussed that also get considered for a loan.

**What relationships do you notice?**

* I only noticed the relationships the author presented to guide my thinking when viewing the charts. In this case, the debt to income ratio does not factor that much into the loan approval process with Prosper’s system.

**What do you think is the main takeaway from this visualization?**

* I believe the main takeaway is the ability to see and interpret the data quickly to allow a viewer to come to a quick conclusion upon viewing the data without having to analyze every bit of detail.

**Is there something you don’t understand in the graphic?**

* The graphics for the Debt-to-Income ratios, Inquiries, and Delinquencies, and the DTI groups and PScores/homeowner graphs were not clear to me. I was hoping an explanation would be available to help explain things, like what Scottrade.com uses to help users learn how to use their tools:

**Feedback 2)** \*feedback is based on a revised Tableau presentation

**What do you notice in the visualization?**

* The visualizations are very thorough and very organized

**What questions do you have about the data?**

* I don't understand the data and kind of didn't know what I was looking at

**What relationships do you notice?**

* ---

**What do you think is the main takeaway from this visualization?**

* my takeaways were that the APR one usually receives is based on of the person's background, and the amount of time that their credit gets checked, not so much debt is accumulated relative to income

**Is there something you don’t understand in the graphic?**

* ---

**Comments:**

I didn't really think there was going to be a conclusion to this slide until I saw the conclusion slide lol, thought it was mostly just informational, maybe hint at there will be a conclusion?

**Unstructured feedback 1)**

* Add an instruction page
* Removed non-interactive demo
  + Replaced with interactive demo
* Analysiation placement on each chart
* Uniformly highlight Prosper Score variables
* Float legends near graphs to save space
* Remove Nulls
* Make each page independent from another
  + Filters on one page effect other pages

**RESOURCES/CITATIONS**

**Classmate’s Tableau Project**

* https://public.tableau.com/profile/jay.rajagopalan#!/vizhome/TitanicDataAnalysis\_1/TitanicExploratoryAnalysis

**Duplicate listing entries**

* https://discussions.udacity.com/t/duplicate-entries-with-different-prosper-scores/316486/5
* https://stackoverflow.com/questions/45344512/averages-of-a-calculated-field/45390703#45390703

**Stacked bar combines to 100%**

* http://kb.tableau.com/articles/howto/stacked-bar-chart-multiple-measures

**Removing Null from filters**

* http://kb.tableau.com/articles/howto/hiding-null-values-from-quick-filters

**Removing data without affecting table calculations**

* https://stackoverflow.com/questions/45658355/remove-data-without-affecting-table-calculations

**Tableau Jitter**

* https://www.dataplusscience.com/TableauJitter.html
* http://www.evolytics.com/blog/tableau-201-make-customizable-jitter-plots/