

# Visualisation Report

This report aims to summarise the presentation for the Tableau Visualisation project for Udacity. [Loan Data from Prosper](#) was used as the underlying dataset for this analysis. An explanation of the columns used in this dataset can be found in this [data dictionary](#). A draft of this presentation can be found [here](#). My final presentation can be found [here](#).

## Summary

This project focuses on analysing credit grade data prior to 2009. The focus is on understanding the factors that are associated with having a certain credit grade (AA, A, B, C, D, E, HR, NC). This credit grade system was phased out soon after the global financial crisis in 2009. This analysis tries to capture good and bad elements of this credit grade system to determine whether it was reasonable or not.

## Design

The design principles used to create this data story can be summarised as follows:

- a) The data to ink ratio was maximised where possible. Unnecessary axis and tick labels were removed.
- b) Complex charts such as tree charts were avoided. Where possible only line and bar charts were used.
- c) Colour was used only when it was necessary to add another layer of information. Where possible colours were restricted to black, blue, and orange.
- d) The use of shape and size to convey information was limited as these don't seem to be as effective in portraying information.
- e) Captions were used to highlight interesting attributes of the visualisation.
- f) Introduction and conclusion slides were added to make the story flow.

Some exceptions to these rules included:

- a) The use of a map chart to identify US states with the highest credit scores. While a bar chart could have been used, this would require a reader to scroll through the various states. It would also not be able to convey geographical information such as how one state performed relative to a nearby neighbouring state.
- b) The use of an area chart to show the counts of loans with various credit grades over time. In this case, a more complex chart with colour was required to understand counts across two dimensions – time and credit grades.

## Feedback

### First Feedback (Draft not submitted)

The main feedback that was received was that the story was too long and lots of visualisations did not have much to tell. To overcome this problem, I limited my analysis only the visualisations that had meaningful information.

Another feedback was that it was hard to decipher what the visualisation was trying to say. To overcome this problem, I decided to keep the charts as simple as possible focusing on only one or two variables most of the time. I also removed any potential chart junk and added clear annotations to things I wanted the reader to take away from the visualisation.

## Second Feedback (Draft submitted for this)

I also received the following additional feedback:

- a) Use captions instead of annotations so that plots are not obscured.
- b) Don't use acronyms such as avg.
- c) Have an introductory slide to build the story.
- d) Format the plots to include appropriate units for certain measures.
- e) Provide more explanation to why Prosper Rating was not used and why a calculated column was created.

I implemented all these changes. For completeness and better story flow I also included a conclusion slide.

## Resources

No additional resources were used for this analysis.