5 Page Report

*Introduction*

As an analyst with the Consumer Financial Protection Board (CFPB), I conducted an analysis of consumer complaints against the financial industry for the years 2016 and 2019. The dataset provided a rich set of aspects for analysis, including trends over time, geographical differences, resolved cases, products and issues of complaints, and companies.

In my analysis, I utilized various visualization tools such as bar charts, scatterplots, heatmaps, tree maps, and geographical maps to explore the data and answer questions identified in the analysis goals. I prioritized the questions and decided which ones were most important to answer.

Through my analysis, I identified key points and observations. Additionally, I prepared a set of plots accompanied by notes to demonstrate that I explored the data sufficiently to be prepared for questions from the Board.

My findings showed that there were trends and differences from 2016 to 2019, and there were also trends within a specific year, such as month to month, day to day, and potential anomalies or unexpected features. Geography influenced the types and sub-types of complaints, and certain complaints were more or less frequent in certain states. I also found that some types of complaints were more likely to be resolved than others and identified companies that were outliers or showed unusual patterns.

Overall, my analysis combined various aspects of the data and resulted in deeper cross-analysis on the interaction between variables over time, geography, types of issues, and other case characteristics. The project deliverables include a formal report with plots and narrative illustrating the key points and a set of plots accompanied by notes to demonstrate that I explored the data sufficiently to be prepared for questions from the Board.

*Results*

Graph 1*:* Click Bar to Filter Sub-product Sheet

*1.Product Sheet*

1. *Field Calculations*

First, for the product sheet I created a 2016 count in the Measure Values section. I then created a field calculation of IIf (YEAR([Date received])=2016,1,0). Furthermore, I created a 2019 count in the Measure Values section of IIF (YEAR([Date received])=2019,1,0). Next, I created a company response count in the measure values section. I filled the calculation field with iif(CONTAINS([Company public response], “None”) and [Timely response?]= “Yes”,0,1). I then created a percentage timely response in the Measure Values section. For the calculation field I put SUM([timely response count]). Response duration was then added to the Measure Values section with DATEDIFF (‘day’, [Date received], [Date sent to company]). Timely response count was added next to the Measure Values Section. IIF ([Timely response?]= “Yes”,1,0).

1. *Filters*

Filters applied included Company, State, and Submitted via. I pressed “use all”. I made product a dimension. I then filtered by Top 10. For CNT (Complaint ID) I made the measure a count and continuous. For the range of values I placed them from 7-138,563.

*2. Sub-product Sheet*

1. *Filters*

I selected from the list “credit reporting, credit repair services, or other personal consumer rep…”. I also added the Filter Action (Product), Company, State, and Submitted via. For the range of values I set them from 514-136,431.

*Key Points:*

Some of the key points that emerged after using various filters include the following:

In analyzing the credit card product we see that store credit cards are a major source of issues that consumers raise. This could give the Board ideas on how to improve consumer awareness in this sector.

In analyzing the debt collection product we see that medical debt (medical debt, medical) is the highest category of subproduct followed by payday loans. This could indicate that consumers are burdened with medical debt issues and payday loan issues.

Graph 2:

2016, 2019 Complaint Counts by Month

*Filter by Product, Company, and State Above*

*Key Points:*

The 2019 complaint counts by month show a difference of almost 4000 complaints every month. This means complaints in 2019 were higher than in 2016 which could reflect increased public awareness.

Graph 3: Companies in 2016 with more than 50 Complaints vs 2019

In this dashboard I calculated the number of companies in 2016 and 2019 with more than 50 complaints each. The 2019 data shows that the number of companies with more than 50 complaints has increased as can be seen from the map. This could indicate more public awareness.

Graph 4: 2016 State Trends vs 2019 State Trends

*Key Points*: Statewide we observe that the number of complaints has increased from 2016 to 2019.

Graph 5: Complaints Submitted Broken Down by Method of Submission 2016 vs 2019

*Key Points:*

Web submission complaints increased from 30% of all submissions to 50% of all submissions and postal mail submissions dropped from 2.53% to 1.50% of total submissions.

Graph 6: Count of Complaints by Year for the Top 10 Companies by Complaint Count in Dumbbell Chart Formation

*Key Points*:

Equifax, Experian, and Transunion (the major credit reporting companies) all had more than double the number of complaints between 2016 and 2019, while Wells Fargo, Bank of America, and other banking companies did better with less complaints in 2019. Attention might need to be brought to the reasons for the increase in complaints on the credit reporting companies.

Graph 7: Analysis of Percent of Timely Response by Major Companies Broken Down by Year 2016 vs 2019

*Key Points:* Transunion, Experian, and Equifax all dramatically improved the timeliness of their responses which indicates that the complaint board is highly effective. Future funding requests can be supported by these statistics.

Graph 8: Duration to Respond

*Key Points:*

The faster you send the complaint, the faster it gets answered. For example, if we want to have more timely responses we might need to ask for additional staff so complaints can be sent out faster.

Graph 9: Percentage of Cases Disputed or not Disputed as a Percentage of Total Complaints

*Key Points:*  An interesting thing is that the majority of cases are not disputed. In Virginia 95% of cases are not disputed. In Vermont the disputed cases are relatively high (25%) of disputed total. Most major states are in the 15 to 19 percent range of disputed cases. I used an exclude level of detail calculation to get the percentages.

Graph 10: Company and Complaint Count by State

*Key Points*: California had the most complaints.