# A Proposal to Review How Consumer Complaints Can Help Improve The Financial Marketplace

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### 1 Abstract

The purpose of this research is to highlight factors causing increase in complaints in financial marketplace and to understand how the customer satisfaction rate can be increased into financial marketplace including products and services. Preliminary data will be collected from CFPB (Consumer Financial Protection Bureau) an online public repository. The hypothesis of the study is developed as H1: There is a significant breach in policies of financial products and services due to this customer satisfaction rate is going down. A t-test for independent samples is used to address the hypothesis. The discussion of the study explored good information on complaint database and what actions are required to improve the marketplace. Still there are important variables that are missing in this study which can be considered in future for designing efficient method. The method section has considered text mining, predictive analytic and risk percentage analyses techniques to improve the confidence level of customers and which product or service requires more attention in future. The result of the study is successful and effective visualization of consumer complaint database and prediction of products/services/companies with good safety index and high risk index as well. It will help customers for choosing right product/services as well as companies to employ proper practices for making better Financial Marketplace.

## 2 Introduction

The financial market is a broad term it is a place where firms and individuals come into contracts to buy or sell specific product. There is wide range of financial products some financial products provide convenience to our everyday lives, such as having a bank account to manage our money. Other products like insurance provide financial coverage against a range of events. Investment products may help us grow the money we have for purposes such as our retirement. According to an annual report of year 2015 published by FTC(Federal Trade Commission), debt collection(a financial Product) with hold of 29 percent complaints is at the top of most consumer complaint sectors list. And also there are other financial products where consumers are facing problems. There can be increment in customer satisfaction rate if proper policies are designed for financial products.

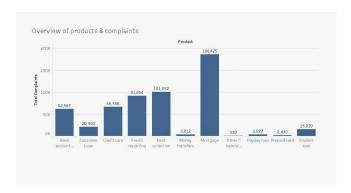
This document proposes a review of how consumer complaints about financial products can help other individuals avoid similar ones. And evaluate inappropriate practices to stop them before they become major issues which can help in making better financial marketplace for everyone. Included in this proposal are my methods for gathering information and doing proper visualization of that information.

### 3 Data

The Consumer Financial Protection Bureau (CFPB) is a US government official agency for collecting consumer complaints and helping consumers to take more control over their economic lives. The complaint database of CFPB is public for analyses purpose, available at Complaint Database.

• The Consumer Complaint Database is a collection of 658,603 complaints. This data is sent to companies for response, on a range of consumer financial products and services.

• The data set contains information for each complaint like date of submission, source of complaint, for which financial product complaint was filed, the company name complaint was sent for, how company responded, complaint description of what happened, consumer state and zip code information.



- CFPB provides latest data as complaints database updates on nightly basis. Also some basic analyses is done by CFPB that can be helpful in design of solution.
- For visualization of data, tools like Plotly and Tableau would be used.

### 4 Methods

Based on the accuracy and timeliness of the provided data trend analysis would be performed to predict growth in number of complaints for any financial product and following analyses could be a step to improve financial marketplace.

- We can analyze financial products with highest number of consumer complaints.
- We can employ text mining techniques to understand types of consumer complaints and responses from companies.
- Which state is experiencing more issues.
- Which month has highest number of complaints registered.
- Also there are attributes combinations we can use for analyses and clear picture of this
  analyses can be provided to consumers as well as financial institutions to improve the policies
  associated with products.

#### 5 Results

Using methods discussed earlier we can build a model. This model will let us know about complaints like ratio of complaints which were not true and what text was used by customer, response from companies is appropriate or not and which company needs improvement in responses. How many times same kind of issue is filed against company(monthly/yearly) that will tell us know whether particular company is making any improvements in its policy or not.

This analyses will provide information like risk percentage associated with any product or company to customers.

#### 6 Discussion

The method above is using text mining, prediction, risk analyses techniques on the data provided by CFPB. Although, most of the information is provided in the data set. But still there are some variables like customer satisfaction with company response, date time when product was purchased

by customer, are missing from data set which can help in strong model building.

In current analyses only US country data is taken into account in future, data for different countries and from different sources could be considered.

# References

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