

# “Analyzing Financial Complaints in the USA”

## <Team & Roles>



### TEAM 1

21800272 박상범

Data Pre-processing

21800697 조은성

Data Background Information

22000282 박예은

Data Analyzing

## <Project Background>

Banks record 117% increase in customers' complaints

The complaints of customers to five banks rose by 117 per cent to 6,865,217 year-on-year as of June 2023 from 3,156,704 complaints as

<https://punchng.com/banks-record-117-increase-in-customers-co...>



Handling complaints better can deliver financial rewards

Applying a CX lens to managing complaints means transforming from a compliance focus to a customer-centric approach.

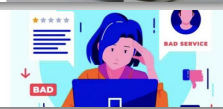
<https://www.bai.org/banking-strategies/handling-complaints-bett...>



Poor customer service is a grave concern

Just a couple of days back, the Reserve Bank of India (RBI) hit major headlines; not for any policy rate cut but for showing its concern over

<https://www.greterkashmir.com/todays-paper/editorial-page/poor...>



“The complaints are unverified and often mislabeled and financial institutions have no effective opportunity to respond with the other side of the story,” said Nessa Feddis, a senior vice president at the American Bankers Association.

### Corporate Perspective

U.S. financial companies face daily challenges in addressing a high volume of customer complaints due to limited resources.

### Government Perspective

Customized state-specific financial policies are needed, but government requires information on citizen preferences and acknowledges regional policy variations.

## <Project Goal>



### Corporate Perspective

- Identify complaint-prone areas through Text Quantification, TF-IDF, Topic Modeling, and Sentiment Analysis to improve the bank's services and assess complaint severity.
- Automate complaint resolution using SVM classification.

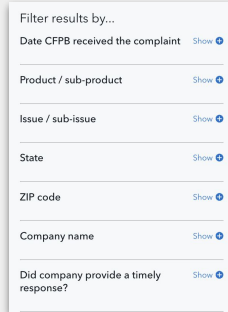
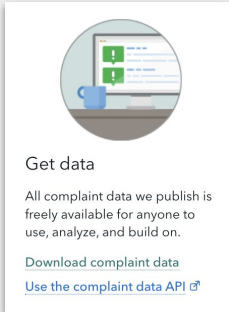
### Government Perspective

- Analyze data by grouping it on a state-by-state basis using TF-IDF, Topic Modeling, and Sentiment Analysis to identify key financial issues and sentiments.
- Provide policy insights with reports, and visualizing high-frequency words or services for each state.

# “Analyzing Financial Complaints in the USA”

## <Data Plan>

### Data Collection



### Data Management



## <Analysis Plan>

### Data Collection



### Data Pre-processing

R - dplyr, stringr, textstem, etc.,



### Data Analyzing

R - stringr, RWeka, tm, etc.,



### Classification

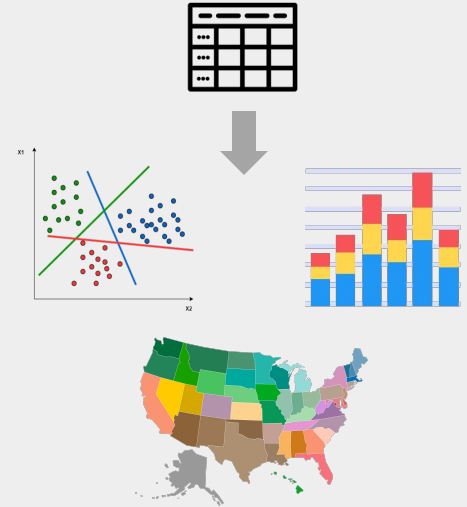
Python - SVM



### Visualization

Mapping, Bar Graph, etc.,

## <Expected Results>



- Automated complaint handling **boosts consumer trust and loyalty.**
- Enhanced bank reliability prevents consumer withdrawals and **decreases bankruptcy risk.**
- Weekly financial complaint analysis **supports policy updates.**