

2024

CONSUMER COMPLAINTS ANALYSIS

BY
MUTAHER IJAZ

CONSUMER COMPLAINTS ANALYSIS – REPORT

Problem Statement

1. Analyze consumer complaints data set to identify reasons for customer dissatisfaction and proffer viable recommendations to improve policy making to achieve customer satisfaction by reducing legal procedures.

About Dataset

2. The data set contains detailed information about the consumer complaints being submitted, reasons for these complaints & against whom they have been levied.

Data Dictionary

Field Name	Type	Mode	Description
Date_Received	Datetime	Required	Date of submitting complaint
Product_Name	Str	Required	Product category
Sub_Product	Str	Nullable	Product sub category
Issue	Str	Required	Issue category
Sub_Issue	Str	Nullable	Issue sub category
Company	Str	Nullable	Company details
State_Name	Str	Nullable	Region where the consumer lives
Zip_Code	Str	Nullable	Postal code where the consumer lives
Consumer_Consent_Povided	Str	Nullable	Consumer consent provided for resolving the issue
Submitted_via	Str	Required	Mode used to register the complaint
Date_Sent_to_Company	Datetime	Required	Date of forwarding complaint to company
Company_Response_to_Consumer	Str	Nullable	Company's response
Timely_Response	Str	Nullable	Was a timely response provided
Consumer_Disputed	Str	Nullable	Is the consumer satisfied by the response
Complaint_ID	Int	Required	Unique identifier for each complaint

Data Process

3. **Data Extraction** - Extract Data from Kaggle.

4. **Data Cleaning**

a. **Duplicates Removal** – Identified and removed duplicate records.

b. **Missing Values Handling** – Managed missing data through imputation and deletion.

c. **Data Consistency** – Standardized formats for dates and data.

5. **Data Transformation** – Merged/ delete data to create a unified dataset.

6. **Data Validation**

a. **Accuracy Checks** – Verified data accuracy through sample checks & comparisons.

b. **Integrity Constraints** – Ensured referential integrity across the dataset.

Analytical Questions

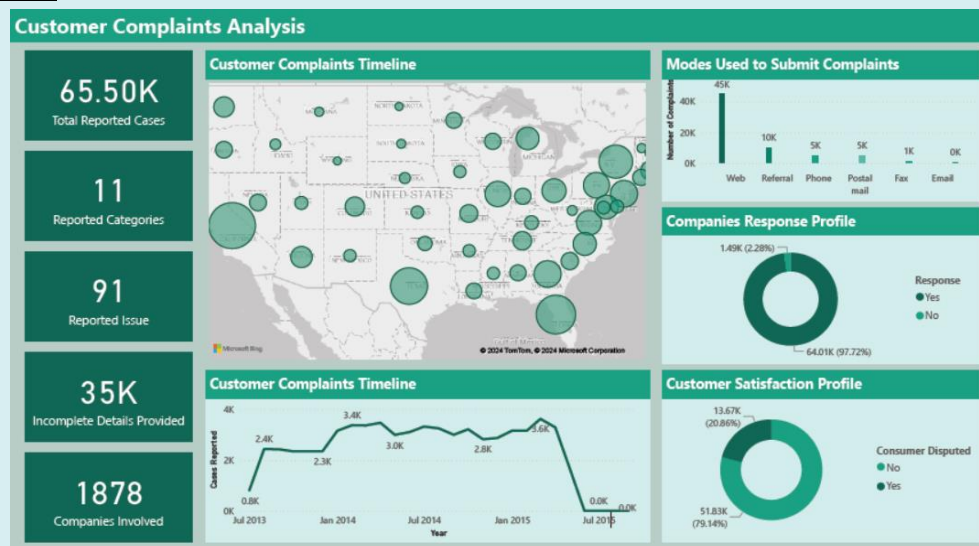
7. Customer Behavior Analysis

- Most & Least Reported Cases** – What are the most and least reported cases about - Product?
- Most & Least Reported Issues** – What are the most and least reported issues about - Reasons?
- Information Provided by Customer** – How many customers did not provide complete details of the issue?
- Modes Used** – What all modes were used to submit complaints?
- State Wise Cases** – Which are the states with highest and lowest reported cases?

8. Companies Comportment

- Companies Complaints Profile** – Which companies are involved in most and least reported cases?
- Customer Satisfaction Profile** – How many customers are satisfied by the response provided by the company?
- Timely Response Provided** – How many times a timely response was provided to the customers?
- Reported Cases Timeline** – When were the most cases reported – Month & year wise.

Visualization



Analysis

9. Customer Behavior Analysis

- Most & Least Reported Cases** – From 2013 to 2015, the most reported cases were related to Mortgage i.e. 18734 followed by Debt collection i.e. 16106 and Credit reporting i.e. 12092. The least known reported cases were regarding Prepaid card i.e. 190.

- b. **Most & Least Reported Issues** – From 2013 to 2015, the most reported issues were related to Loan modification, collection, foreclosure i.e. 9338 followed by incorrect information on credit report i.e. 8914 and Cont'd attempts to collect debt not owed i.e. 6779. The least known reported issues were regarding Lender sold the property, Excessive fees, Lost or stolen check i.e. 1.
- c. **Information Provided by Customer** – There were 34841 instances where information provided by customers was incomplete to properly handle the complaint.
- d. **Modes Used** – The most complaints were lodged via web i.e. 44904 followed by referral i.e. 10202.
- e. **State Wise Cases** – The most cases were reported from CA i.e. 9316 whereas the least were reported from MP i.e. 1.

10. **Companies Comportment Analysis**

- a. **Companies Complaints Profile** – From 2013 to 2015, the most reported cases were related to Bank of America i.e. 4719 followed by Experian i.e. 4230.
- b. **Customer Satisfaction Profile** – From 2013 to 2015, Only 20.9% of customers were satisfied by the response provided by the companies i.e. 13666 customers.
- c. **Timely Response Provided** – From 2013 to 2015, 97.7% of customers were provided timely response by the companies i.e. 64007 customers.
- d. **Reported Cases Timeline** – In 2013, the total number of cases reported were 12707 i.e. 19.4%. The number increased significantly in 2014 to 37874 i.e. 57.8%. Whereas in 2015 the number reduced to 14918 i.e. 22.8% complaints in a calendar year.

Recommendations for Stakeholders

11. **Customer Behavior Analysis**

- a. A mechanism be devised at state level to provide legal aid to customers to resolve outstanding cases.
- b. Companies to train customer care agents to better guide customers while receiving complaints so that all necessary information is obtained for better handling of the case.
- c. Companies to identify real and fake complaints after thorough checks to discourage lodging of unnecessary complaints.

12. **Companies Comportment Analysis**

- a. Companies are required to review important policies and identify loop holes causing customer complaints.
- b. Review of company policies regarding provision of services in different states making them more customer friendly.
- c. Review proficiency of data entry employees while filling in the details of customers to avoid unnecessary paperwork and legal procedures at later stages.