predictive models using datasets to smooth the Grievance redressal mechanism

Submitted By -

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Introduction & Abstract

- One way to make the system smooth and effective is by analyzing the working till now predicting what may happen in future.
- Analysis will find what the loopholes are in the system and give insights to solve theses loopholes.
- Prediction will ensure that the system continues to work in an efficient manner.
- We were provided with six dataset for this purpose. All the given datasets were used for various purposes.
- The main idea is finding out efficiency of every department by finding out all the pending receipts the department has and the rate at which receipts are getting disposed.
- We have analyzed the total number of grievances filed and on an average what number of receipts is disposed.
- Also predicting what number of receipts a department will receive in future can help to set a target accordingly and manage the disposal rate.
- Hence, we have used time series forecasting to predict the future values of receipts and also what number of receipts will be disposed if routine rate is followed.
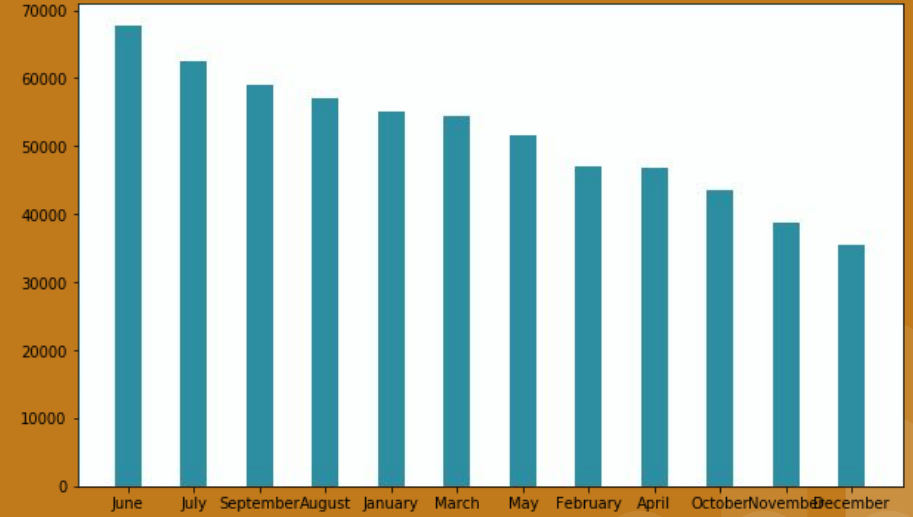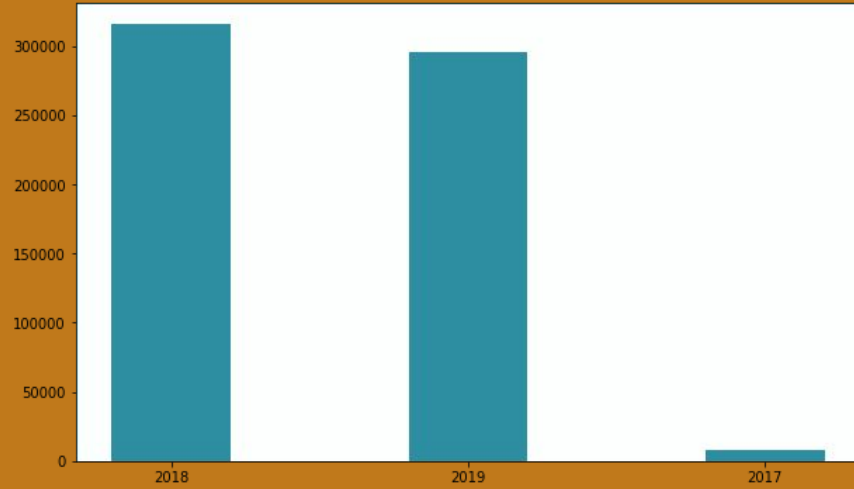
Registered Users
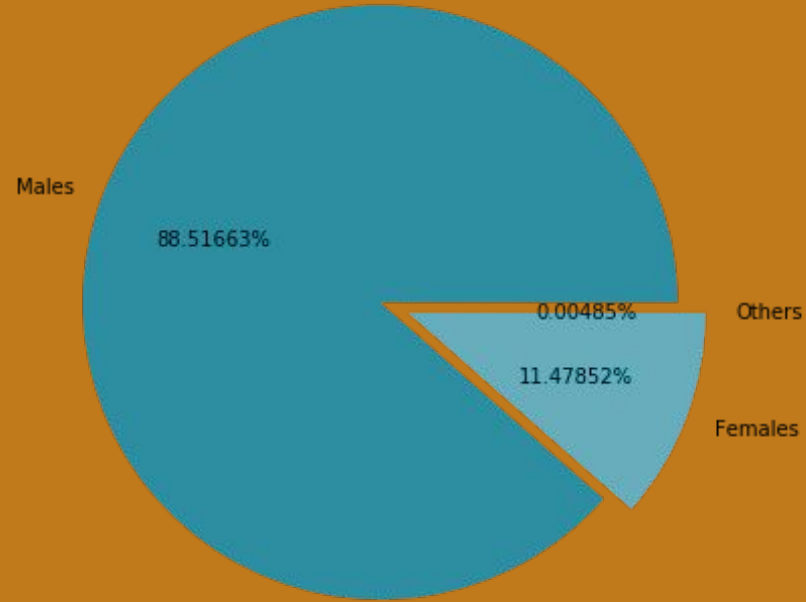
Maximum Number of Registered Users are Male : 5,47,616
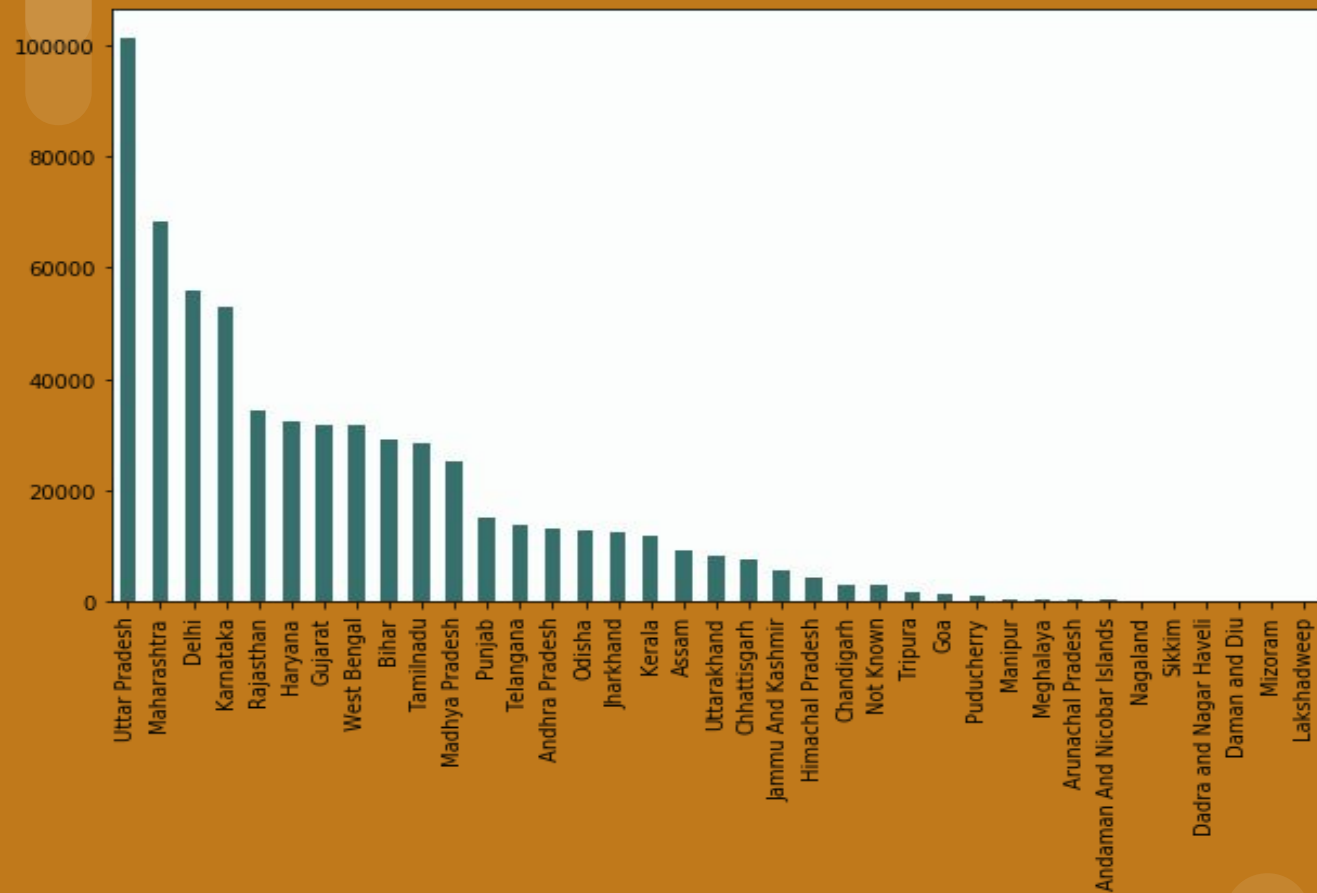
Maximum Number of Registered Users are from Uttar Pradesh(1,01,272) followed by Maharashtra(68,331)

Maximum Registeration were made in the year 2018 followed by 2019
**Maximum Registeration are made in month of June and July.**

Receipts
Disposal

|	Year	Month	Receipts	Disposals
count	5567.000000	5567.000000	5567.000000	5567.000000
mean	2017.489851	6.391054	837.197773	688.464703
std	1.102636	3.377380	1631.776291	1591.735766
min	2016.000000	1.000000	1.000000	1.000000
25%	2017.000000	3.000000	82.000000	48.000000
50%	2017.000000	6.000000	264.000000	160.000000
75%	2018.000000	9.000000	888.000000	606.500000
max	2019.000000	12.000000	24977.000000	25005.000000

1.)   The mean values of the columns "Receipts" and "Disposals" are much lesser than their respective median values(50%).
2.)   There is a large difference between the 75% values and max values of "Receipts" and "Disposals" suggesting the presence of some very high values
3.)   The range of values for "Receipts" is 1 to 24977 and "Disposals" is 1 to 25005

As per the information provided, the receipts and disposals have been recorded for a period of 47 months (January 2016 - November 2019)

Organizations with highest number of Receipts
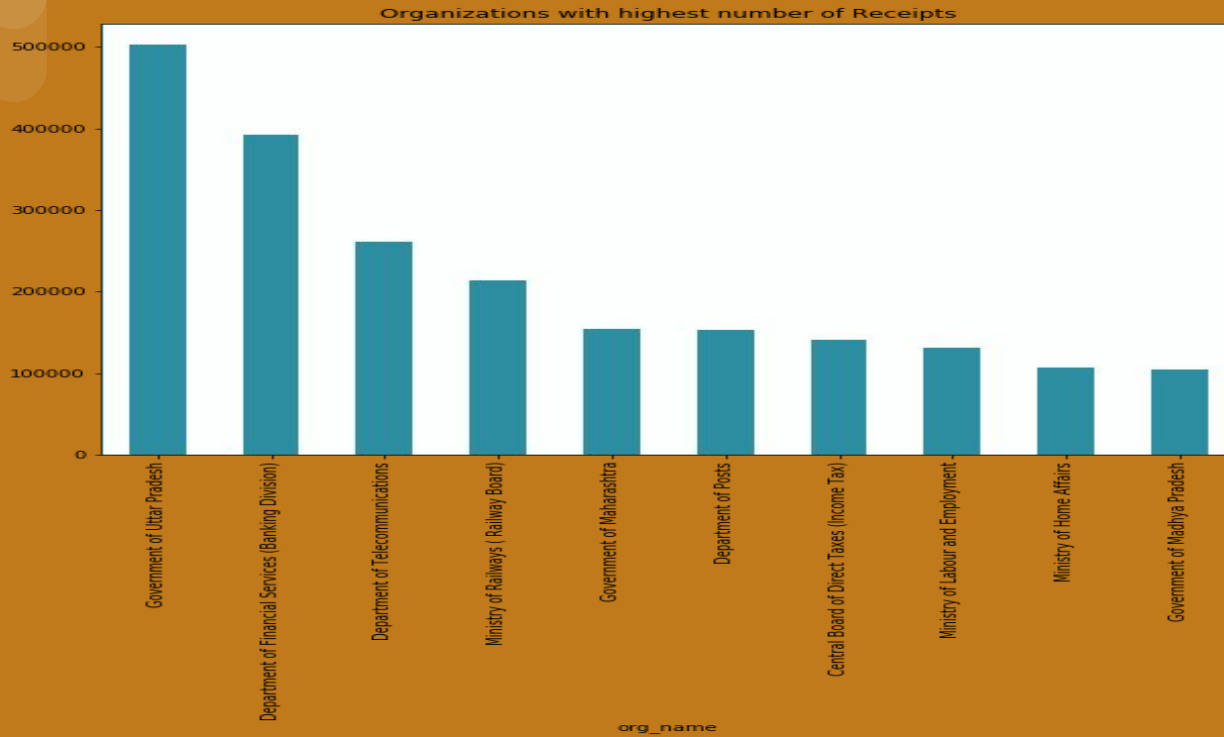
It is observed that the data has been grouped-by according to the organization name from January 2016 to November 2019. So it is better to analyze the receipts and disposals of each organization's data separately.
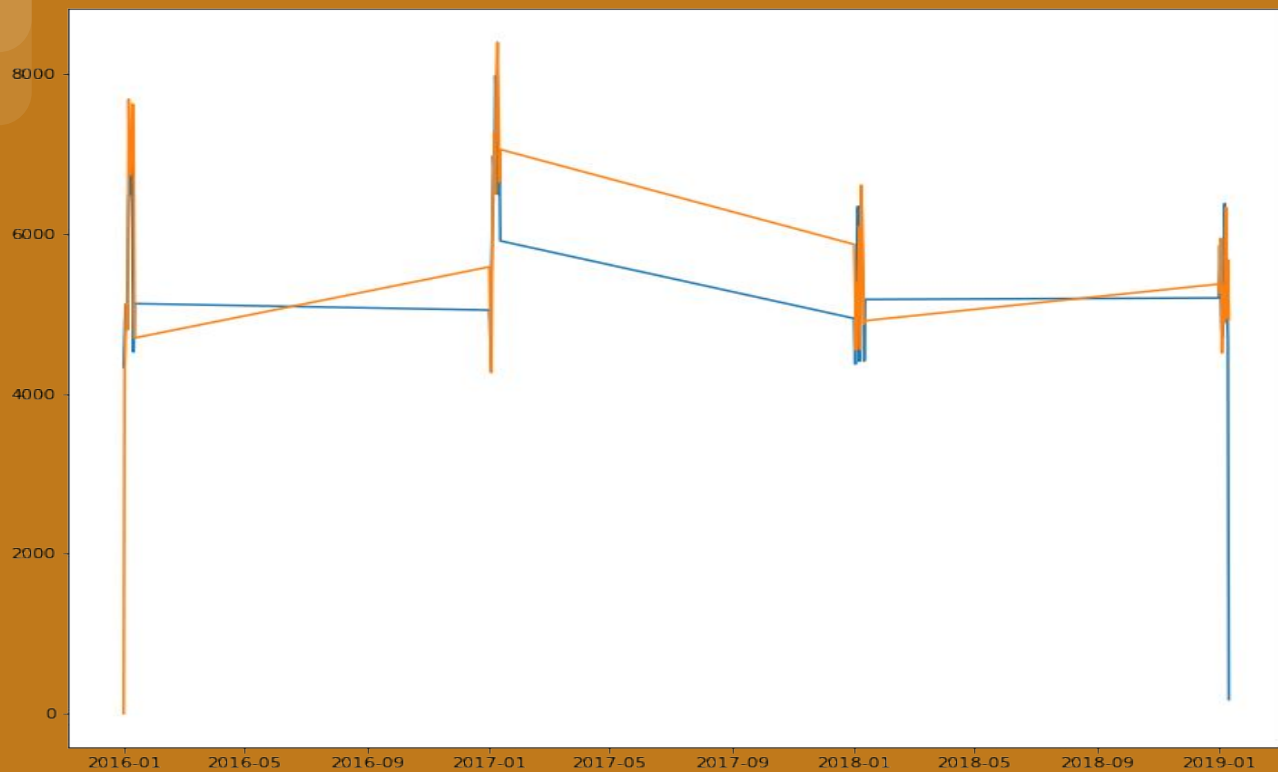
Predicted Receipts (Oranage) vs Actual Receipts (blue)

Department of Telecommunication

Nodal Officers
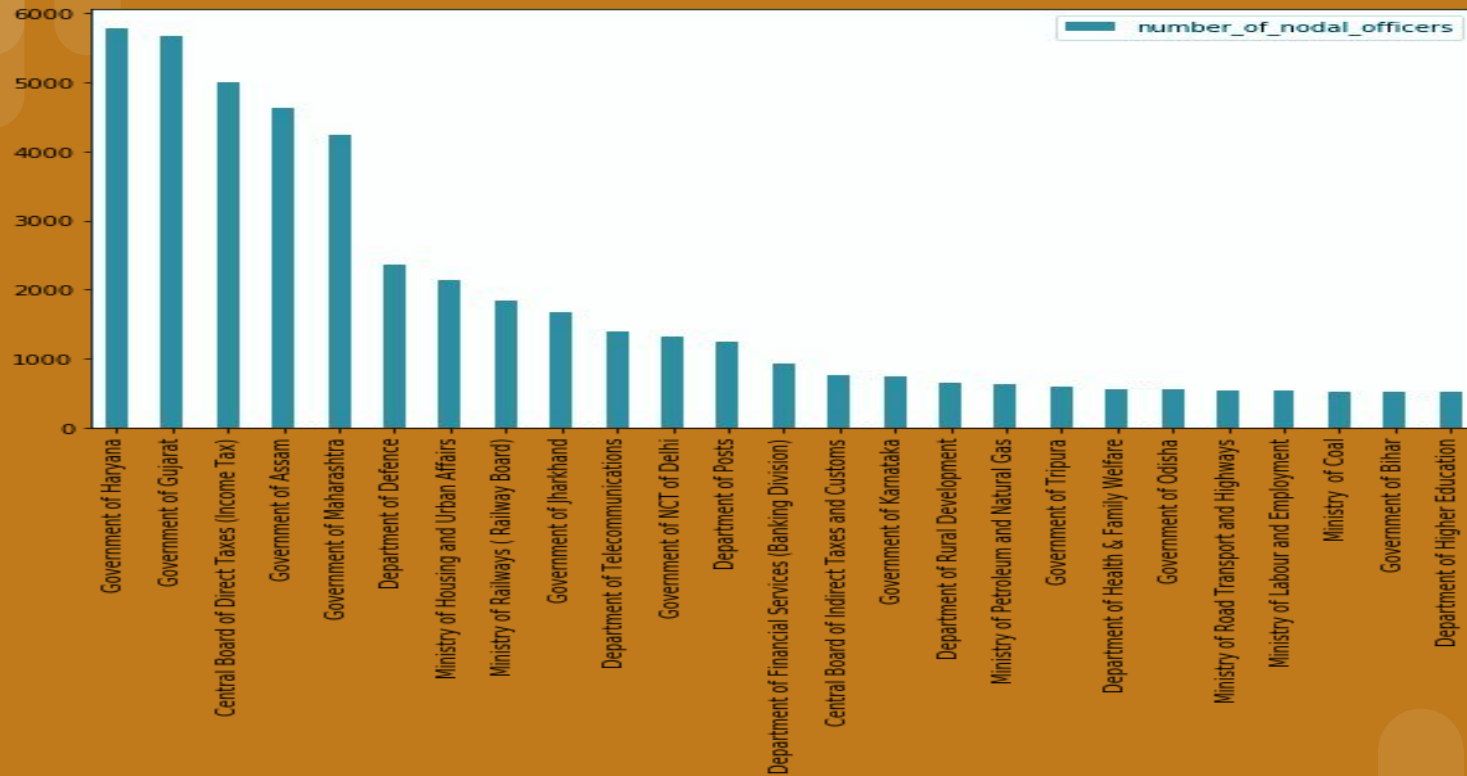
Distribution of Nodal Officer Department-wise/Ministry-wise/Government(State/Central)
The Bar graph shows top 25 Departments having Maximum number of nodal office

- Under the public grievance mechanism any citizen of India can raise their problems, grievance or pleas to the central government and state government Ministries and Departments. Grievance can be submitted to all important portfolio ministers and Departments.
- The grievance redressal mechanism is said to be yet not effective since most grievances are rejected, disposed or closed. It is said that pleas and grievances dispose without resolving or addressing the issue.
- Though government is taking effective measures to help people, the redressal mechanism seens to be in development phase.
- Hence, one way to make the system smooth and effective is by analyzing the working till now predicting what may happen in future.
- Analysis will find what the loopholes are in the system and give insights to solve theses loopholes. Prediction will ensure that the system continues to work in an efficient manner.

THANK YOU

Submitted to

Department of Administrative Reforms and Public Grievances, Ministry of Personnel, Public Grievances and Pensions