

MinT

Government's Reach to Social Media Audience

Presented By

Mr. VijayKumar C Navalgund

Ms. Ambily Raju C

NIC Karnataka

Government departments receive lot of feedback/ suggestions/complaints/ comments from citizens on various subjects like department functioning, programs, schemes, services etc. through various channels like web site, phone, email and social media

You Tube



pravin Kumar 1 year ago

सर अभी मैं मकान लिया नहीं हूं, मुझे नया फ्लैट लेना है वो भी लोन से ।
सर मैं आपसे इतना जानना चाहता हूँ कि मैं इस समय CLSS फॉर्म भर सकता हु की नहीं?
या मकान लेने के बाद?



Vishal Dodiya  @iamDodiya · 27 Dec 2018

One more Good News For Gujarat a specially bjp government on completing of 1 year..

Gujarat becomes the first state to reach the milestone figure of 1 lakh houses under the CLSScheme

Congratulations @vijayrupanibjp sir..

[#PMAYUrban](#) [#HousingForAll](#)



Vijaay Mahato Hi.. I just wanted to bring few things in highlight... Recently visited CDC centre in my area... As per the website information registration for Pradhan Mantri awas yojna is Rs. 25 but CDC staff are charging from 150 to 250 for registration process... THERE IS A LOOP HOLE WHICH GOVT AGENTS NEEDS TO CLOSE..





The feedback is received in textual, video, image and audio formats.

But still it becomes a tedious work for the administrative officers to view each feedback data coming from all these social media and to make an inference from this.

The technological advancements in the field of machine learning/Artificial intelligence can be reaped to find a solution to this problem.

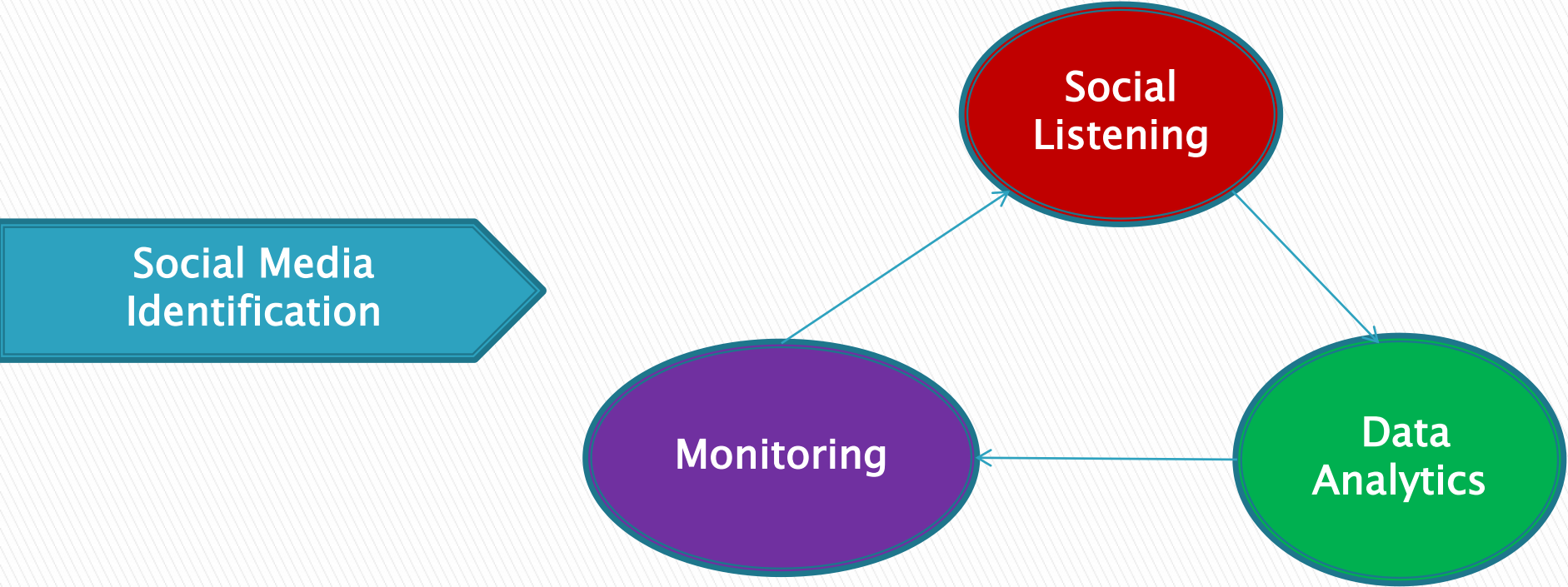
MinT is an attempt in that direction.

There is a need for a mining and classification engine MinT which reads feedback/ suggestions/complaints/ comments of citizens in audio/text format on different government schemes/services from Emails, Web Applications, Social Media sites like Twitter, Facebook and do Data Mining to generate a dashboard which will help senior officers of department to understand citizens' needs and priorities.



Thus, in turn Mint is expected to become a handy and time savvy tool for the Administrative officers to monitor the performance of scheme/services

Social Media Strategy



Salient Features of MinT

Open Source
Technologies

Neural
Network
Models

Twitter
FaceBook
YouTube
InstaGram
Email
WhatsApp

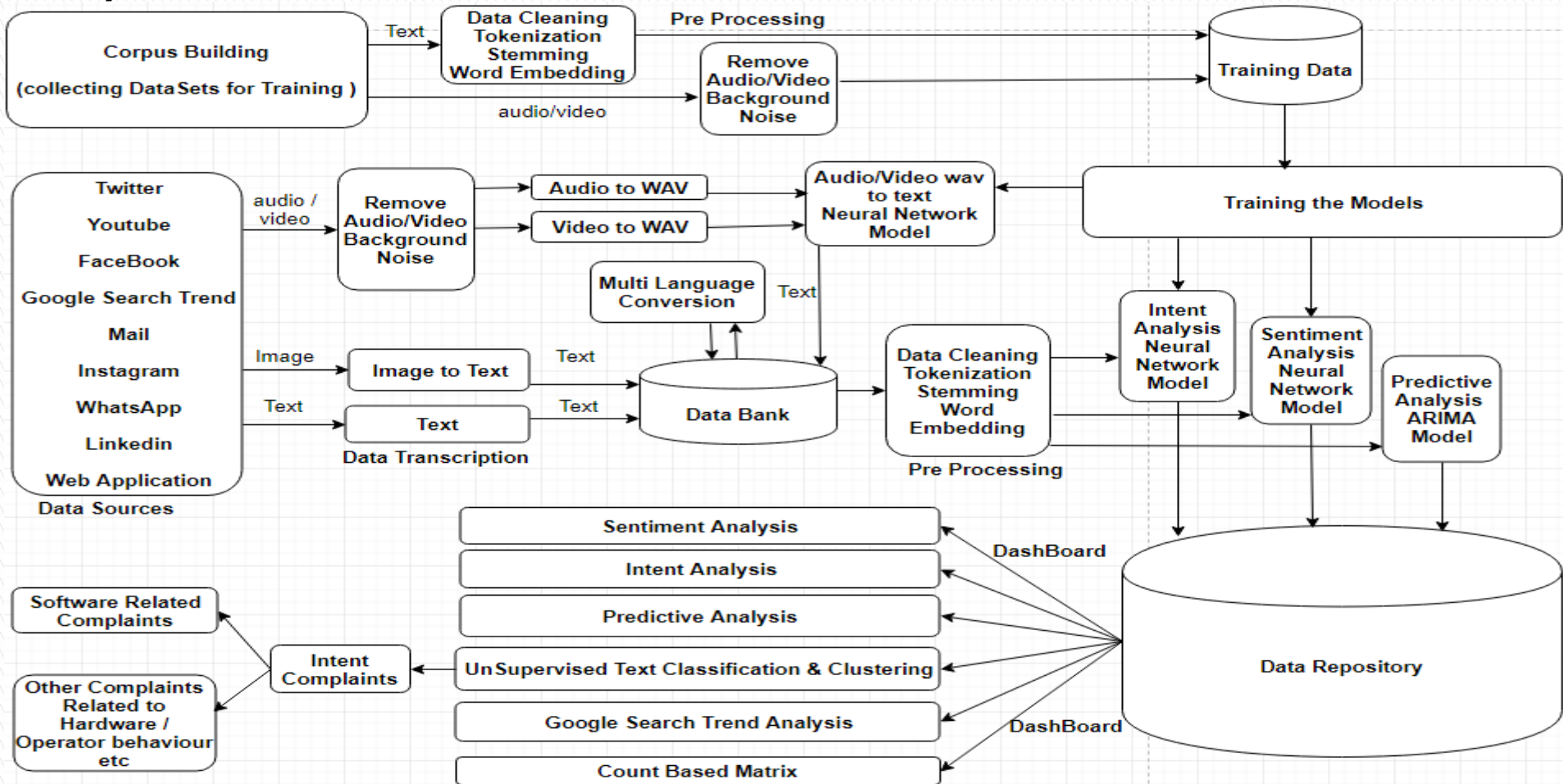
Audio
Video
Image
Text

Multi
Language
Support

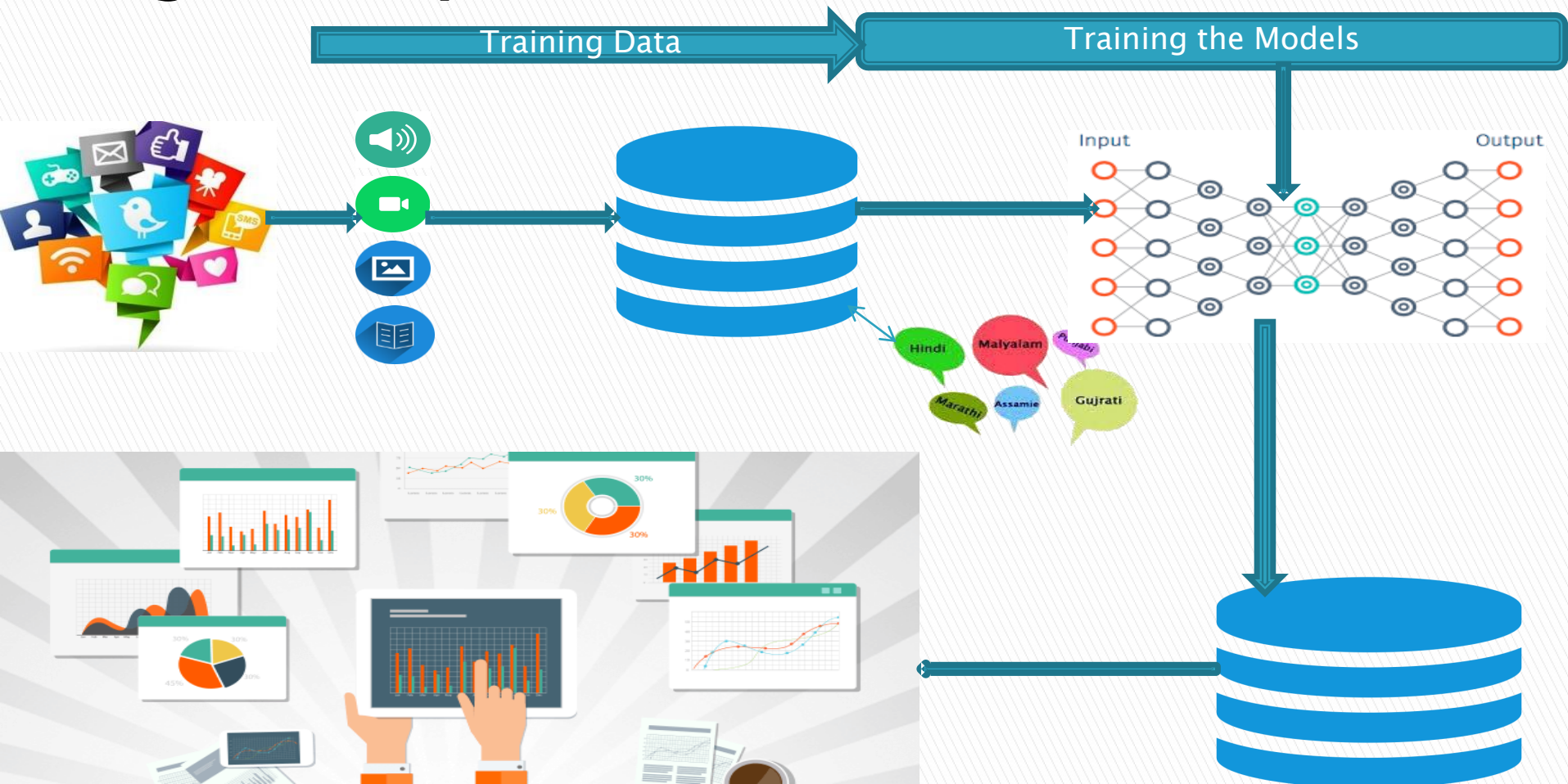
Analysis

DashBoard

System Architecture



High level process flow



Data Extraction



Tweepy



Graph API



YouTube API



Graphql



py_translator

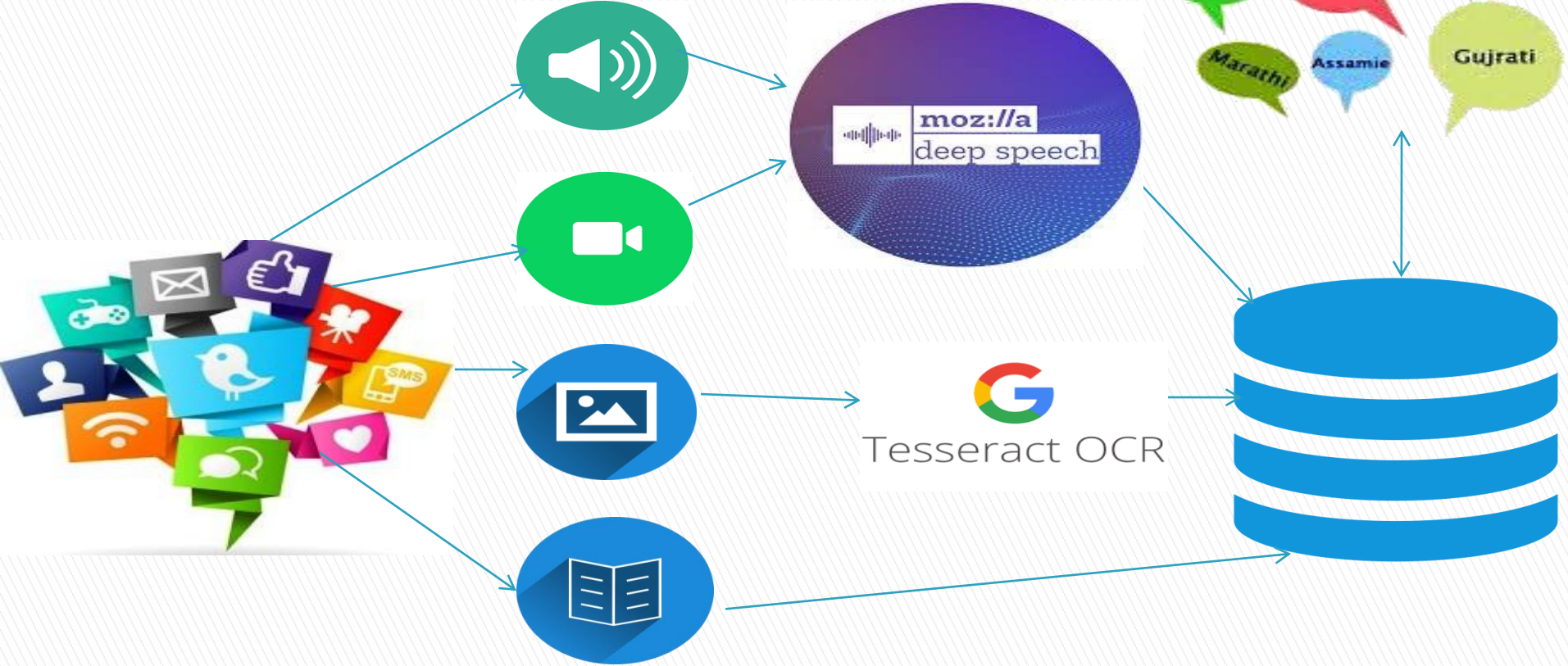


PyTrends



Email Library

Data Transcription



Audio / Video to Text

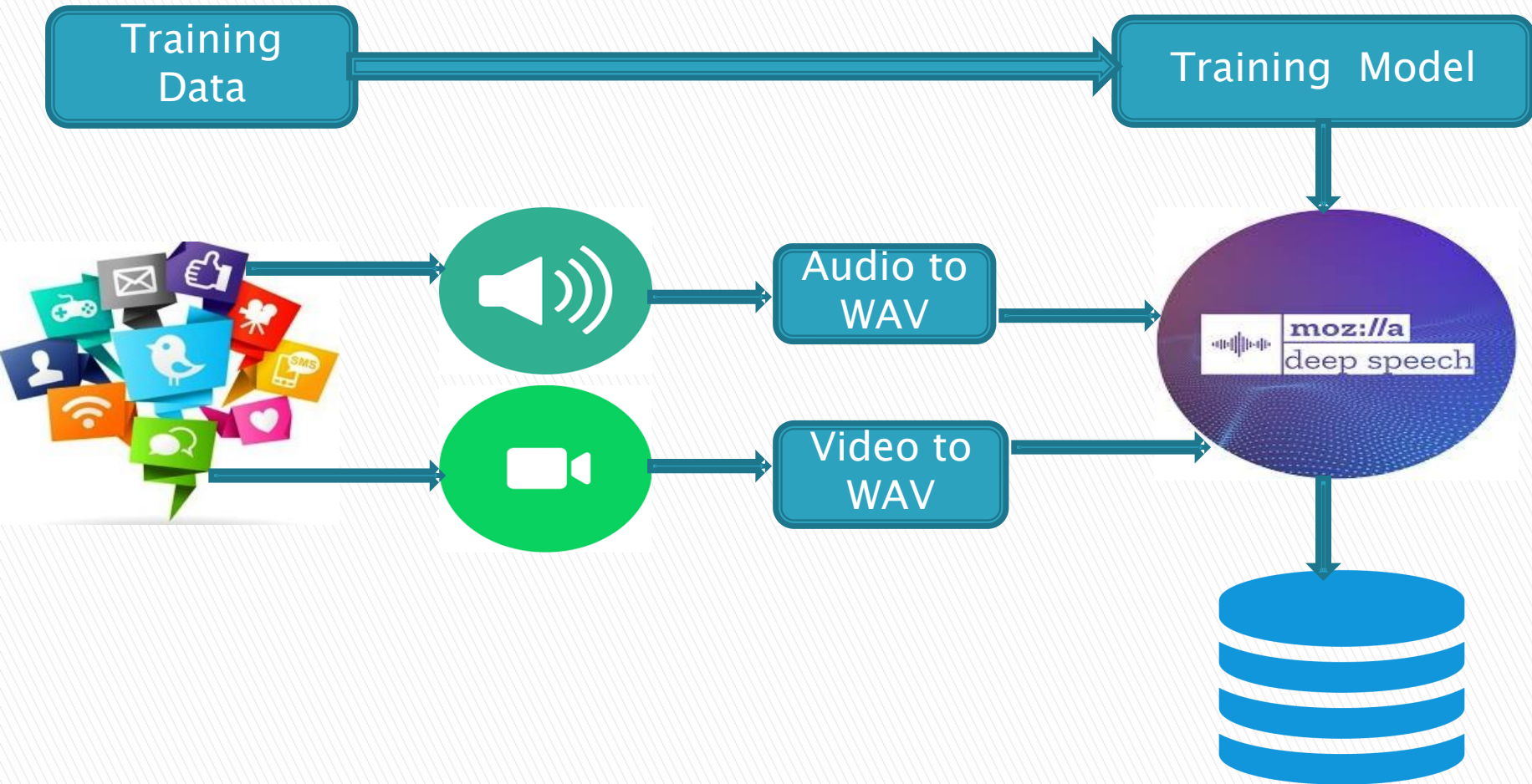
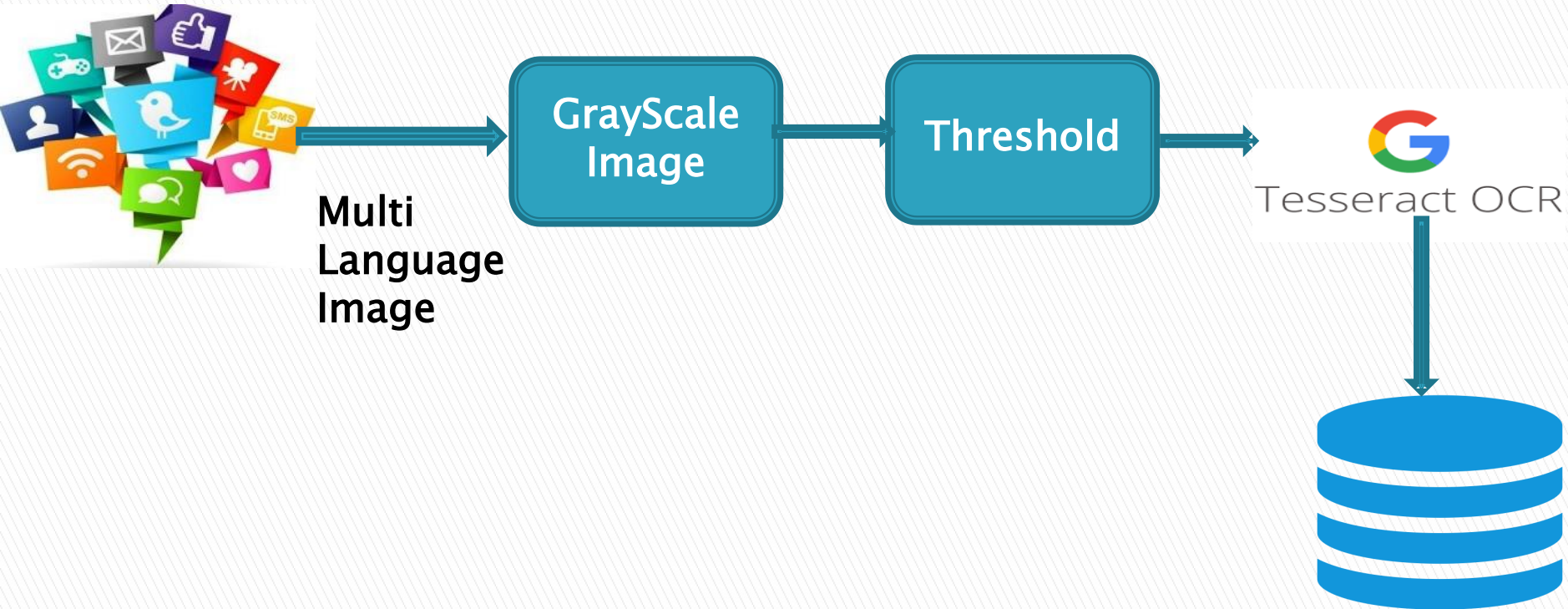



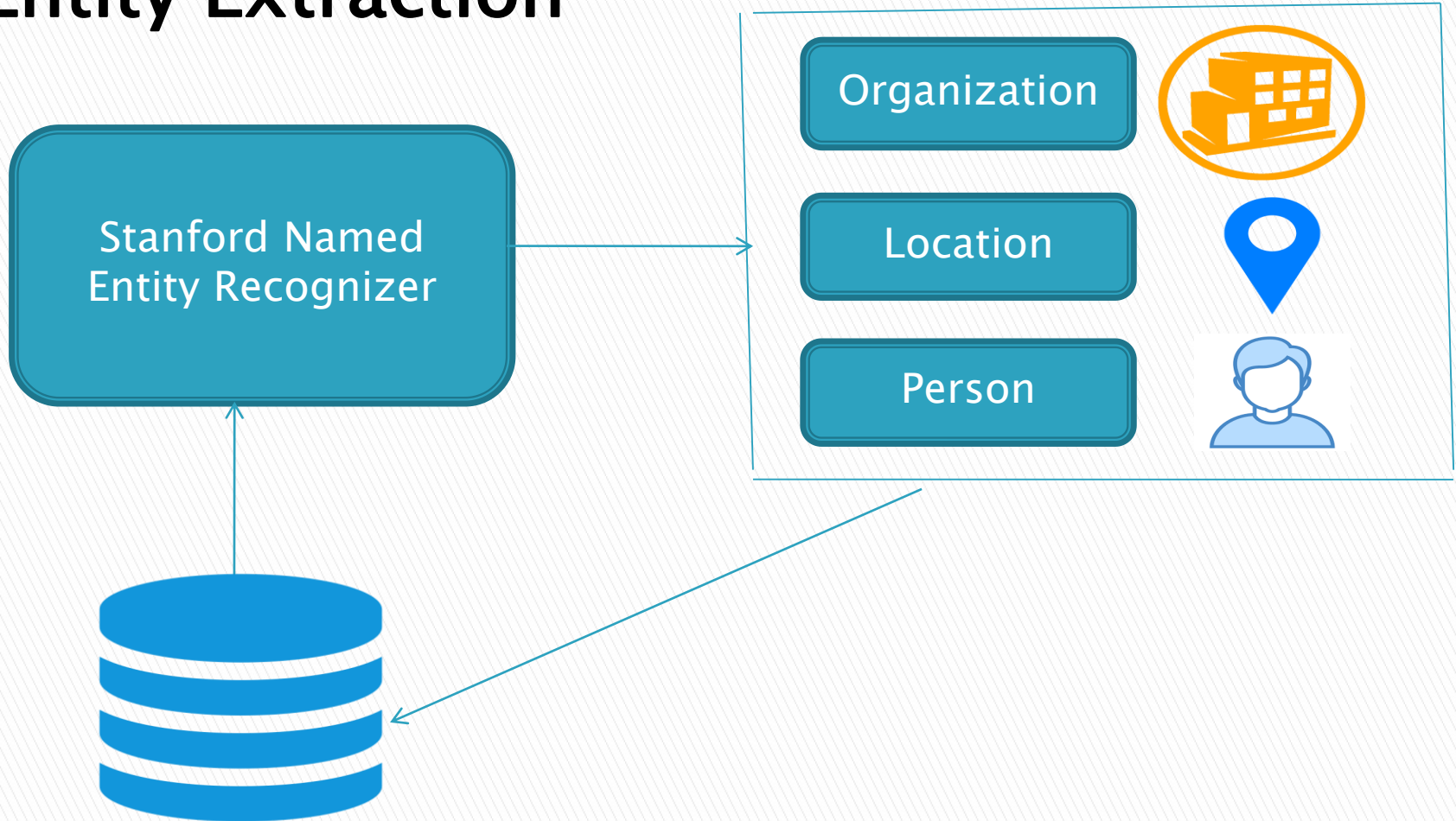
Image to Text



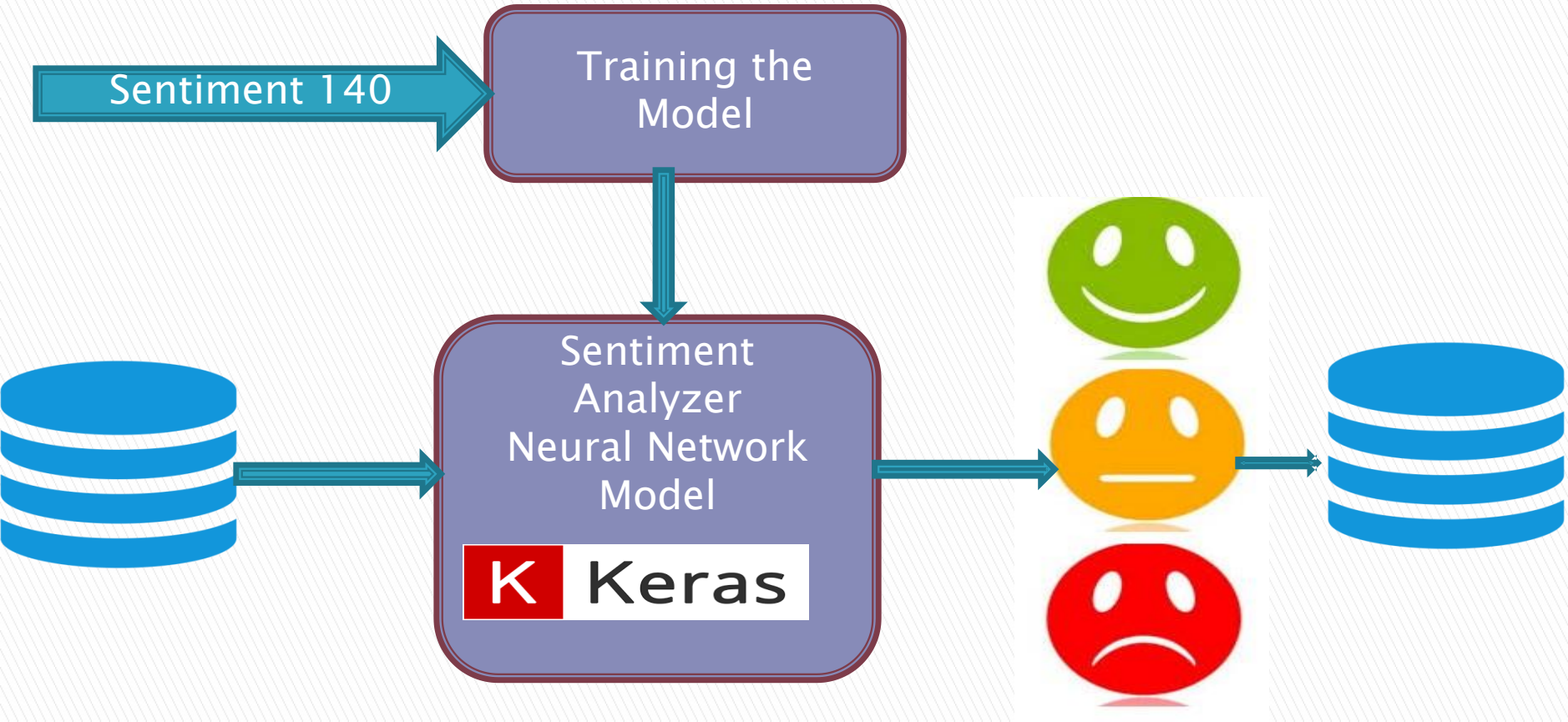
Data Analysis

- ▶ Entity Extraction
 - ▶ Intent Analysis
 - ▶ Sentiment Analysis
 - ▶ Predictive Analysis
 - ▶ Clustering
- 

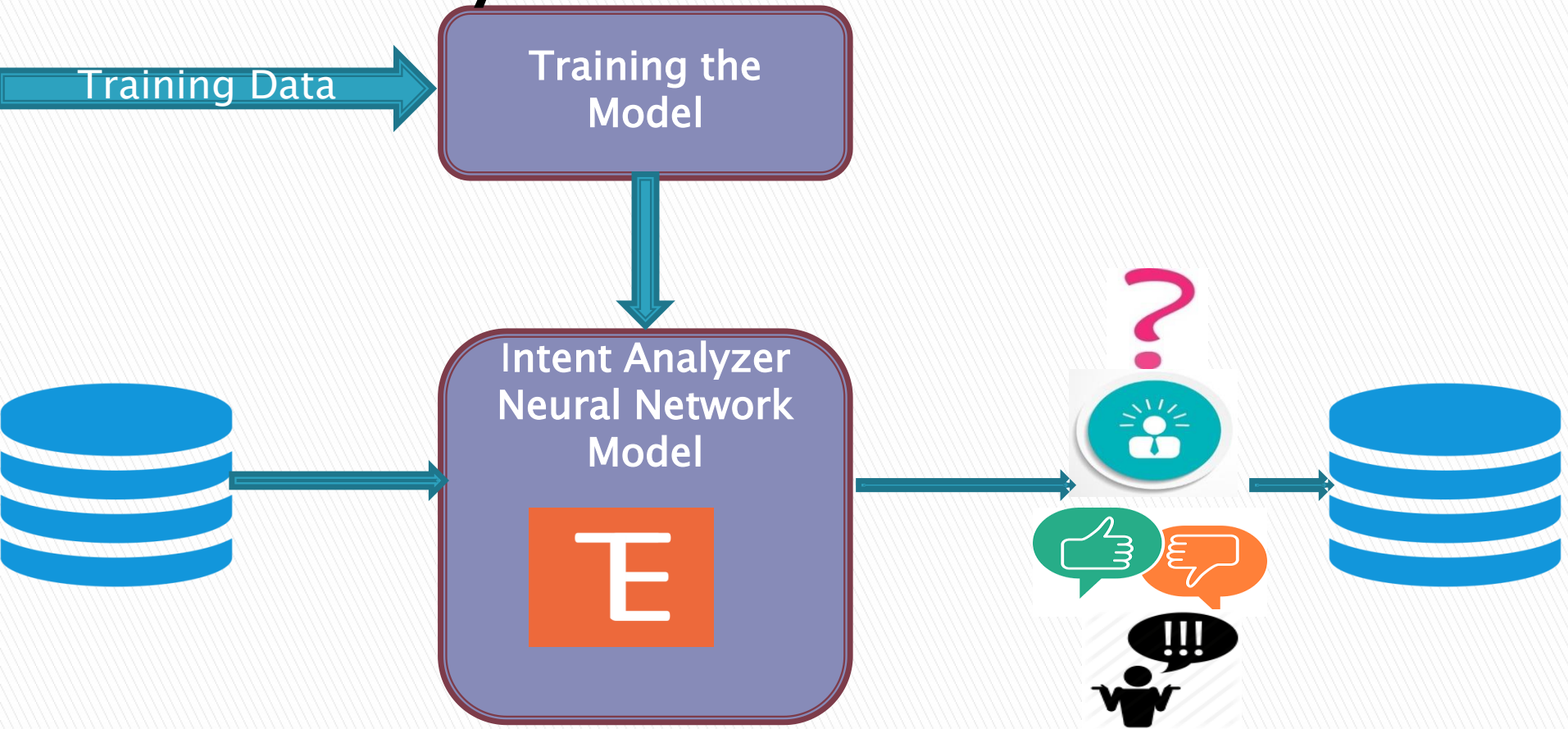
Entity Extraction



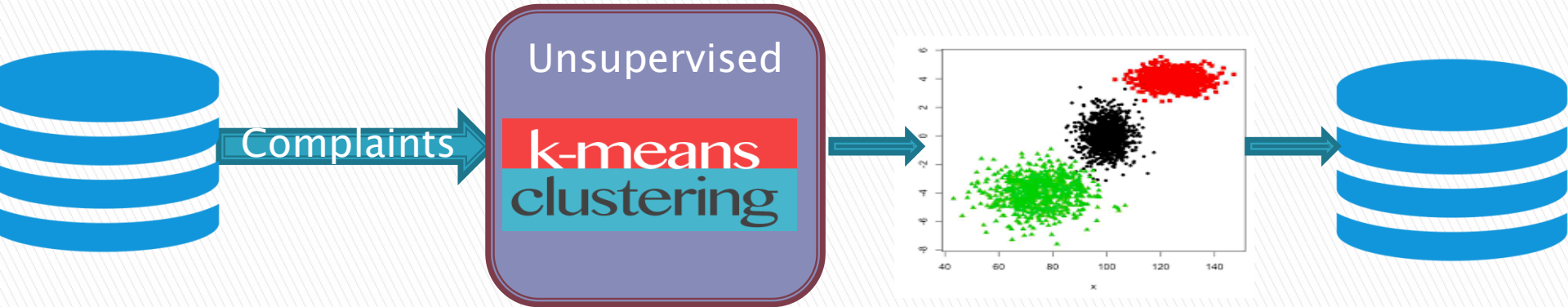
Sentiment Analysis



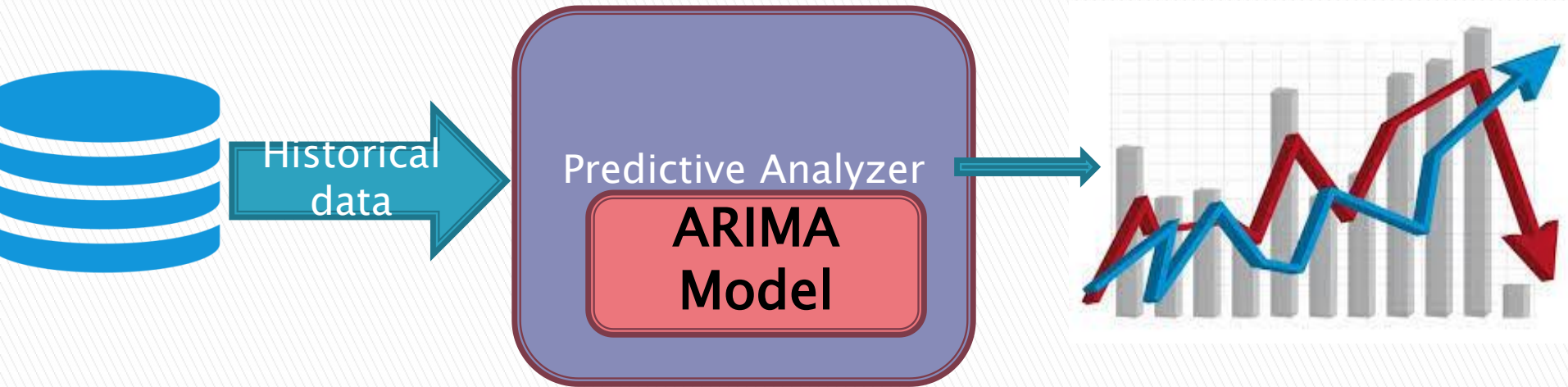
Intent Analysis




Unsupervised Clustering



Predictive Analysis



Dashboards

- ▶ Count matrices
 - ▶ Time series graphs
 - ▶ Classification dashboards
- 

MinT Social Media Analyzer

Government's Reach to Social Media Audience

View Count Matrix

View intent Analyzer

View Sentiment analyzer

View Configuration

Add/Update Config

Extract twitter data

Extract Youtube data

Extract Mail data

Extract Facebook data

Extract instagram data

Run Entity analyzer

Run intent analyzer

Run Cluster analysis

Run sentiment analyzer

Run Google Trend analysis

Run Predictive analysis

MinT Social Media Analyzer

Government's Reach to Social Media Audience

Name of Department

Pradhan Mantri Awas Yojan

Twitter Handle #tag

pmay

Facebook Handle @tag

pmay

Facebook Page Id

191735718397797

Facebook Page Access Token

EAAhHhPYaRJ8BALKvaGw

Mail Account Id

customermint2018@gmail.c

Mail Account Password

Mint2018

Youtube Search Tag

pmay

Instagram Search Tag

pmay

Google Trend Search Tag

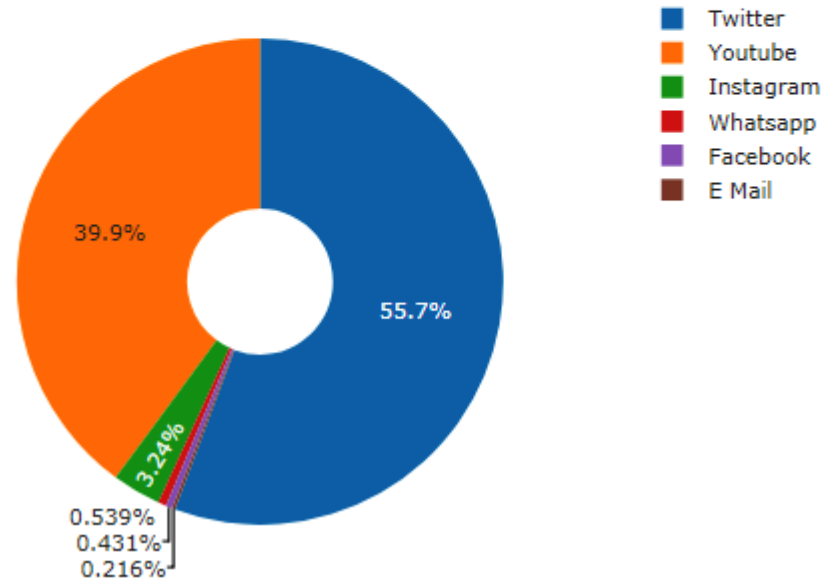
pradhan mantri awas yojna

Submit

Pradhan Mantri Awas Yojana

Social Media Presence

Social Media Presence



Popular Posts from Social Media



Tweet	Tweeted From	Favourite Count
I look forward to visiting Solapur tomorrow in connection with following development works Dedication of four laning of Solapur Osmanabad section of NH 211 Foundation Stone of 30 000 houses under PMAY Launch of underground Sewerage System and three Sewage Treatment Plants	India	10905
भोपाल के रसुडिया गांव में रहने वाली रईसन बी ने आसमां से बरसती आफत की बारिश के दर्द को सालों साल झेला है। रुच्चे मकान में कीचड़ व कीड़े मकड़ों के बीच जिंदगी बिताने को मजबूर हमारे गांवों के ऐसे करोड़ों परिवारों को मैं अपना पक्का घर पाकर इन तकलीफों से अब मुक्ति मिली है।	India	1842
Interaction with the beneficiaries of from Maharashtra	Maharashtra State,India	1341
रुच्चे घर में छत से टपकते पानी और परेशानियों से मिली आजादी का सुख क्या होता है ये आप मोतिहारी बिहार की कलौती देवी जी से जान सकते हैं। प्रधानमंत्री आवास योजना से मिले अपने पक्के घर का यही	India	1065



Comment	Like Count
SBI furthers the progress of Government Schemes by providing online and offline assistance to its customers Follow the official process of enrollment to avoid being deceived by fraudulent entities Visit or for more information	3643
SBI furthers the progress of Government Schemes by providing online and offline assistance to its customers Follow the official process of enrollment to avoid being deceived by fraudulent entities Visit or for more information	3244
क्या वारुडें में प्रधानमंत्री आवास योजना में जनता को मिल रहे हैं पक्के मकान आइये पता करते हैं सचचाई	449
प्रधानमंत्री आवास योजना गोसाइंगंज की सारावती गौतम का पूरा हुआ अपने घर का सपना। दिया प्रधानमंत्री जी को धन्यवाद। देखिये आप या आपके जानने वाले मोदी जी की कौन कौन सी योजनाओं का लाभ ले सकते हैं Click	342



Video URL	Video Title	Like Count	Comment Count
youtube.com/watch?v=dXwc_AWqDno	Pradhan Mantri Awas Yojana 2018 (PMAY) / Complete Guide / प्रधानमंत्री आवास योजना 2018	8022	1094
youtube.com/watch?v=NIOMVvAjGCc	How to apply PMAY online	1018	136
youtube.com/watch?v=fl_PDg2_jEc	Eligibility Criteria and Conditions for PMAY, Who can Apply for PMAY....??	773	125
youtube.com/watch?v=1NtQZ2roO7Y	PMAY Eligibility Criteria Home Loan Subsidy 2018 Apply & Refund Process	94	92



Comment	Like Count	Shares Count
इस योजना से बहुत से लोगों को फायदा होगा	2	0
yes it is useful scheme	2	0
Sir I have no house I want a house I was a hard workar but I can not do hard work as an accident Please tel me how to apply to get this house	1	1
I am very happy that our PM has launched a housing scheme for the needy people Those who don t have shelter can apply for the same	1	0

Entity Extraction Analysis : Organizations Detected

INDIABULLS FINANCIAL Pvt Ltd Axis Bank Axis Bank Aadhaar Housing Finance SBI National Informatics Centre Department of Electronics Information Technology Ministry of Communications Information Technology PMAY MSME SBI Mam BOI PMAY PMAY DHFL Development Corporation BPL Gic Bank of Baroda Central Bank of India LIG EWS Vijaya Bank BDA PMAY Haryana Govt Committee

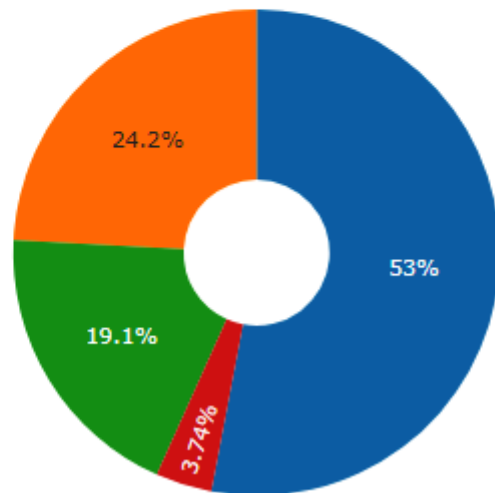
Entity Extraction Analysis : Places Detected

Solapur Indore Ayodhya Kulgam India India Bihar Lahore Loksabha Ketan Delhi Delhi India Kolkata Kolkata Khudda India Yamuna Pune India Mumbai Maharashtra Maine India Mumbai Bihar India Nalgonda Telangana jammu Bogibeel India India Villege Delhi INDIA India Pusa Road New Delhi Ujjwala Yamuna India Indore City Hariyana Loksabha Kulgam Kyuki Nagaland Odisha Mumbai India Loksabha

Intent Analysis



Over All Intent Classification



- Query
- Feedback
- Complaints
- Suggestions

Intent Analysis : Count Matrix Dashboard

Select Year

Select Month

Select Location

2018



All Month



All Location



Data Source	Total	Feedback	Query	Complaint	Suggestion
youtube	1061	233	682	40	106
twitter	684	132	360	21	171
facebook	12	2	8	0	2
instagram	73	21	39	7	6
linkedn	0	0	0	0	0
mail	6	3	0	0	3
whatsapp	15	5	7	2	1

Intent Analysis : Time series Dashboard

Select Year

Select Month

Select DataSource

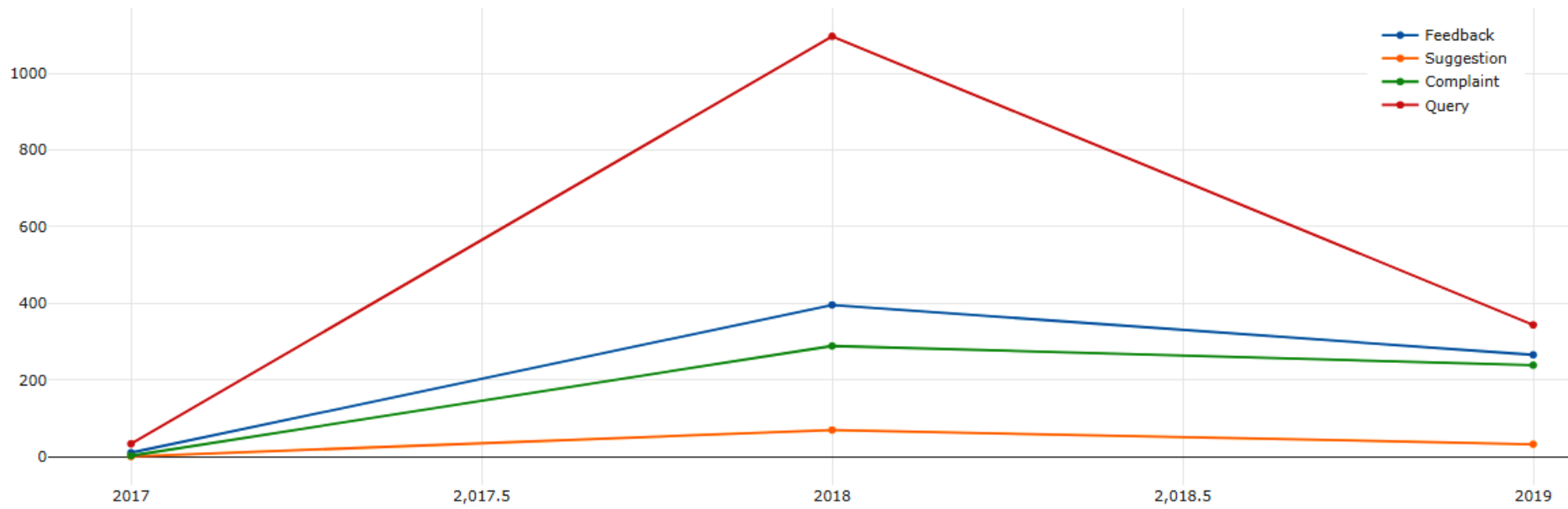
Select Location

All Year x

Select...

Select...

Select...



Intent Analysis : Text Classification Dashboard

Select Year

Select Location

2018



Select...



FILTER ROWS

<input type="checkbox"/>	Data Source	Intent	Month	Text
<input type="checkbox"/>	twitter	complaint	December	Mr Jaitley feels that NDA govt has done reasonably well But people of
<input type="checkbox"/>	youtube	query	September	Thanks for the video Recently I have got a loan sanctioned worth 30 L
<input type="checkbox"/>	youtube	query	October	I am following in mig2 category and I have applied for home loan in Ju
<input type="checkbox"/>	youtube	complaint	October	Axis Bank says it is 2018 final disbursement has not been subsidized y
<input type="checkbox"/>	youtube	query	October	Hi Could you please clear one doubt of mine That if I avail loan for 30 :
<input type="checkbox"/>	youtube	query	September	Hi Sir I Bir Kumar Singha ex Navy Presently serving under UAE Govt I
<input type="checkbox"/>	twitter	complaint	December	Modi has given little bit relief on income tax Also under PMAY I can no
<input type="checkbox"/>	twitter	complaint	December	I have no idea that my subsidiary will not be able to pay 3 times for 3 ti

Unsupervised Clustering : Text Classification Clustering Dashboard

Select Year

Select Type of Complaint

2018

Select...

Other Complaints

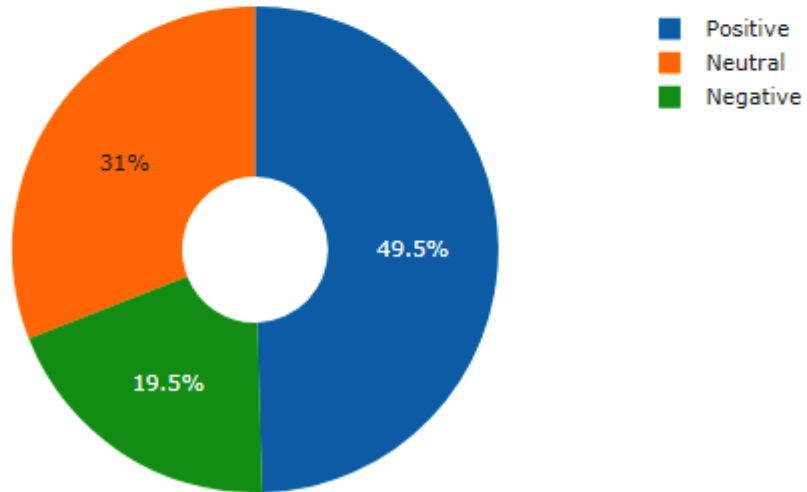
Software Complaints

FILTER ROWS

<input type="checkbox"/>	Data Source	Year	Month	Text
	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
<input type="checkbox"/>	twitter	2018	December	PMAY subsidy scheme no response from either the bank nor from the NHB Fake p
<input type="checkbox"/>	twitter	2018	December	I do not get what is core voter See PMAY was a huge success but people voted on
<input type="checkbox"/>	youtube	2018	July	No further processing is done on the basis of not having a brother, Brother does no
<input type="checkbox"/>	youtube	2018	November	I have been entering my Aadhaar number in the field and after clicking on the check
<input type="checkbox"/>	youtube	2018	September	Its not working

Sentiment Analysis

Over All Sentiment Classification



Sentiment Analysis : Count Matrix Dashboard

Select Year

Select Month

Select Location

2018



Select...



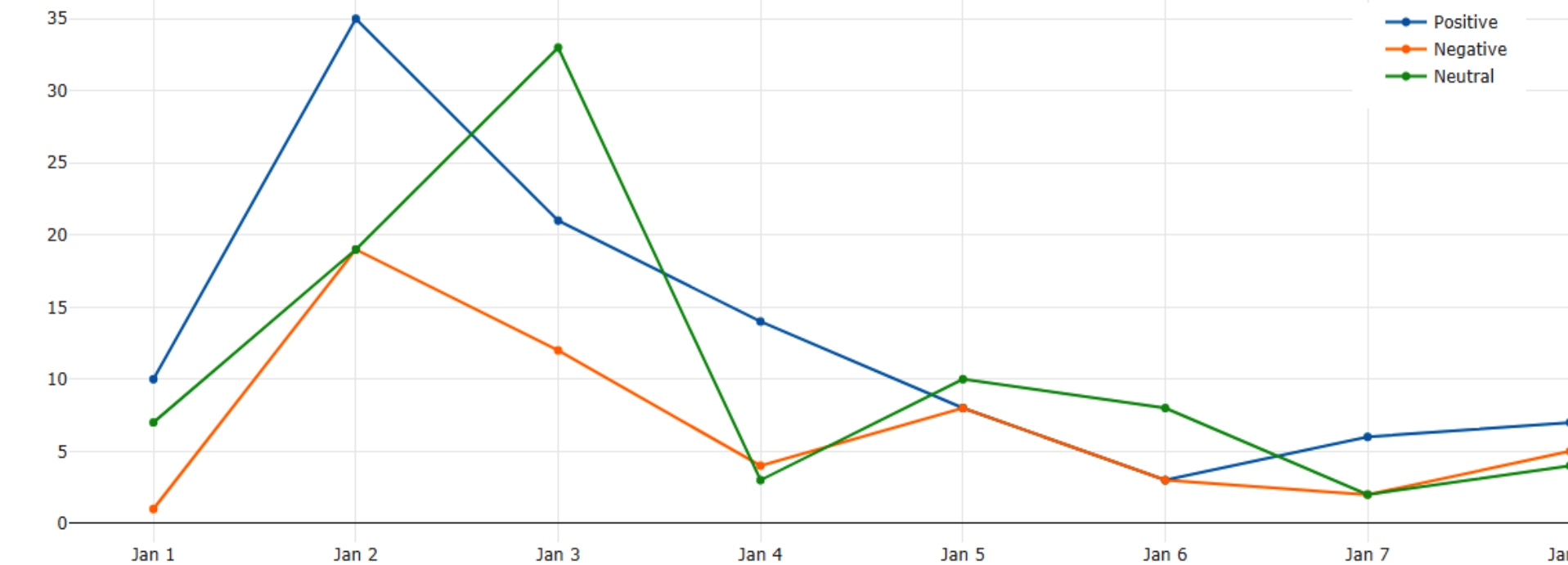
Select...

Data Source	Total	Positive	Negative	Neutral
youtube	233	145	36	52
twitter	132	47	31	54
facebook	2	2	0	0
instagram	21	11	2	8
linkedn	0	0	0	0
mail	3	3	0	0
whatsapp	5	5	0	0

Sentiment Analysis : Time series Dashboard

Select Year Select Month Select DataSource Select Location

2019 × ▾ January × ▾ twitter × ▾ Select...



Sentiment Analysis : Text Classification Dashboard

Select Year

Select Location

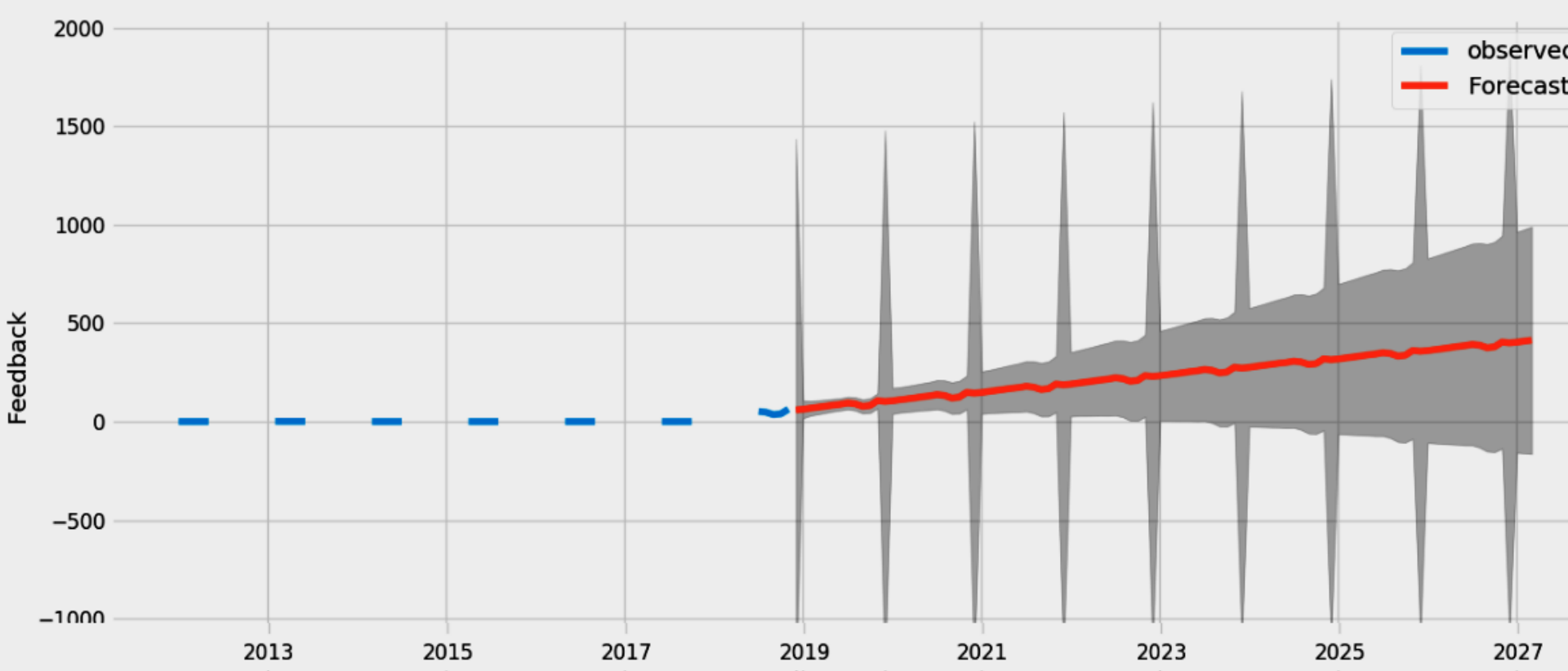
Select...

Select...

FILTER ROWS

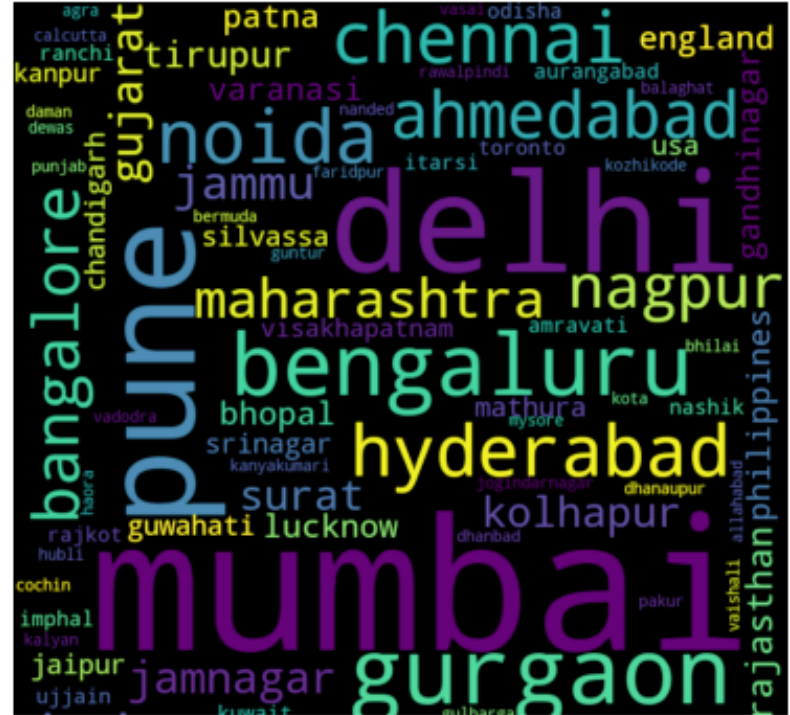
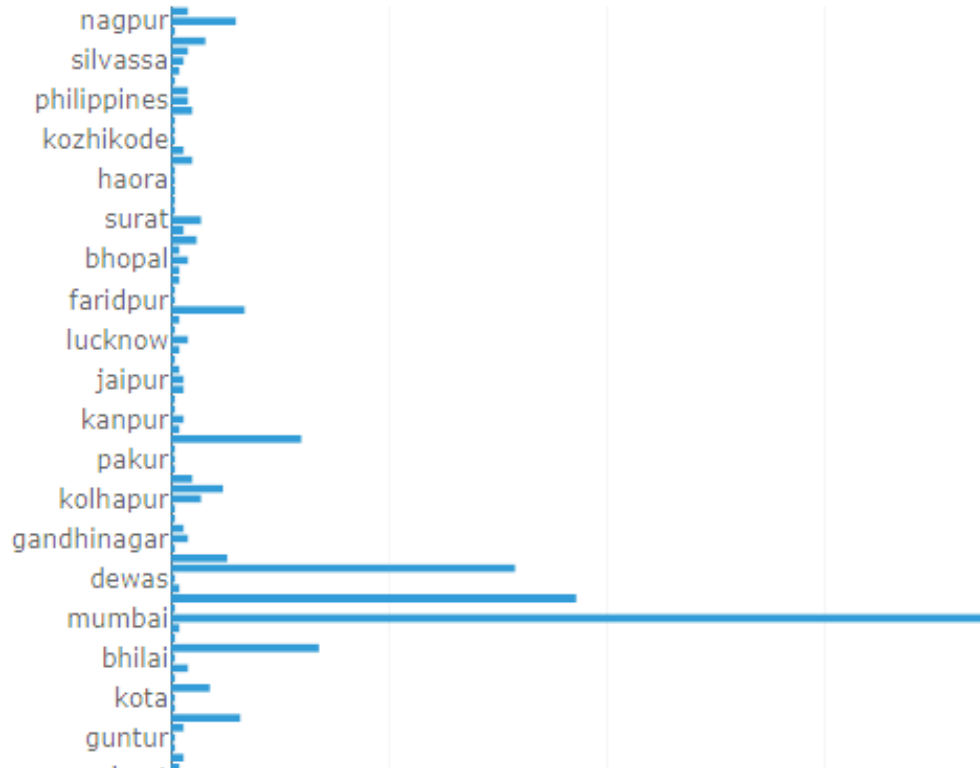
<input type="checkbox"/>	Data Source	Sentiment	Month	Text
<input type="checkbox"/>	youtube	positive	October	Very nice information
<input type="checkbox"/>	youtube	positive	December	very nice explanation
<input type="checkbox"/>	youtube	positive	September	Very nice
<input type="checkbox"/>	instagram	positive	November	A place enviable for its Peace and Harmony Saachi Homes Book your dream
<input type="checkbox"/>	twitter	negative	January	Ajay ji did not make any house based house
<input type="checkbox"/>	twitter	negative	January	sir Even after having my mother s name smt bhimsaniya soni age 60 years in
<input type="checkbox"/>	twitter	positive	January	Public relation will certainly increase the credibility of the Government. The use

Predictive Analysis on Feedback



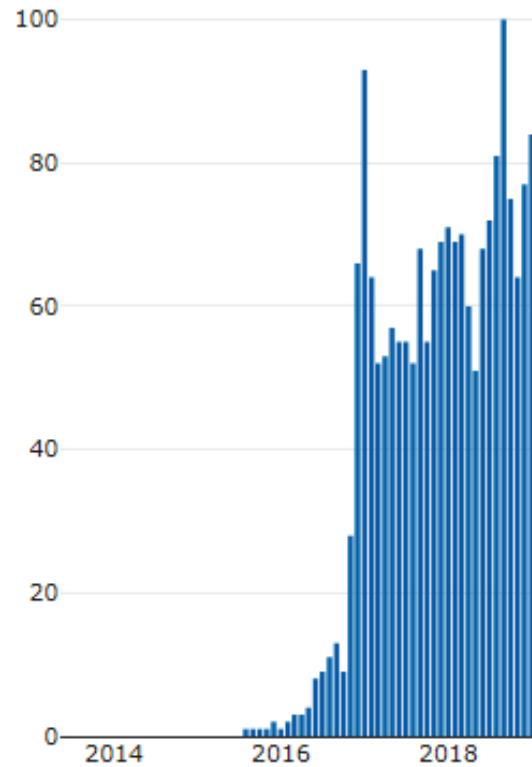
Location Plot

Location Wise Details



Google Trends Plot

Date Wise Trend



State Wise Trend

