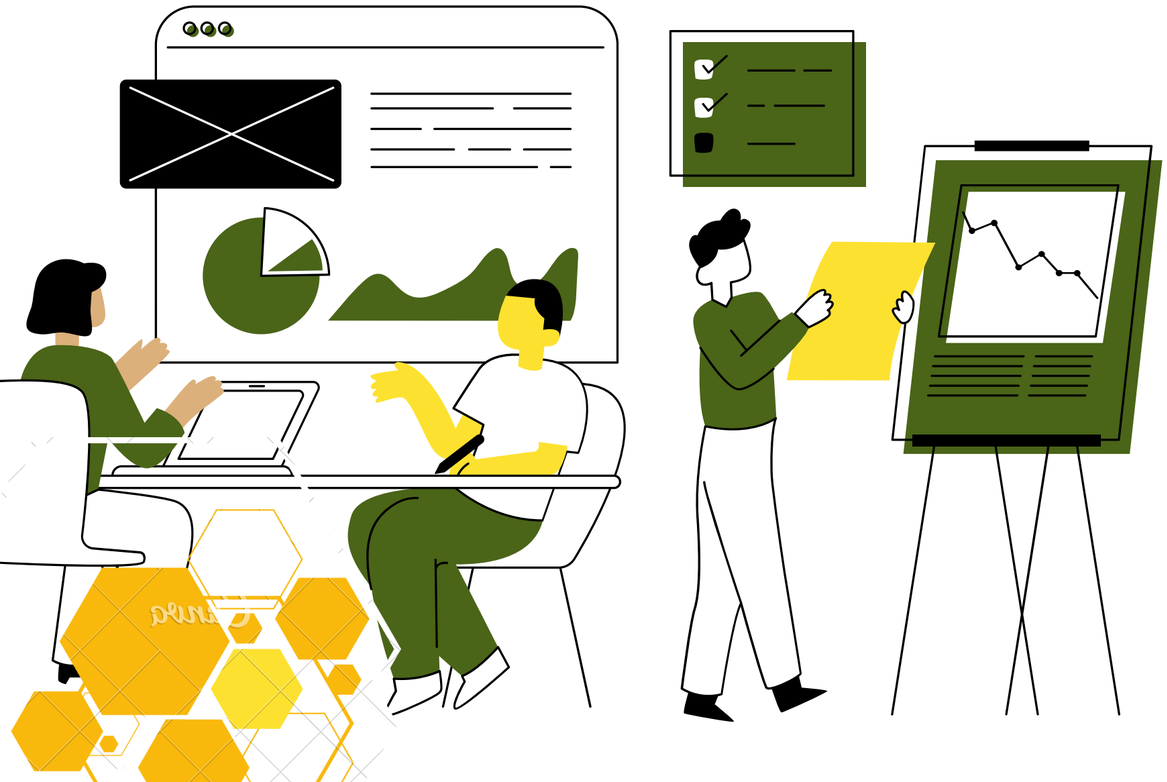
Data Statistic

Accidents vs No. of Vehicle

Introduction



I have collected the data for number of motor vehicles registered and total number of road accidents each year for 10 different states in India (Karnataka, Tamil Nadu, Maharashtra, Gujarat, Madhya Pradesh, West Bengal, Uttar Pradesh, Bihar, Rajasthan, Jharkhand)

The data is collected for five different years from 2015-2019

My hypothesis says that the number of road accidents increase with the increase in number of motor vehicles.

I will check this with the help of the data collected

DATA SOURCE

01

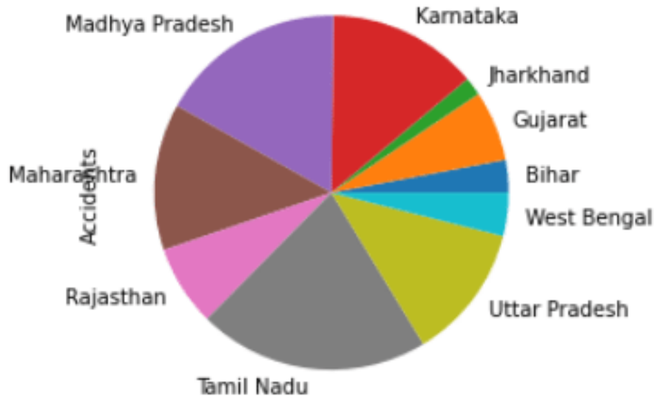
Number of registered vehicles each year for 10 different states from the year 2015-2019 is taken from https://www.statista.com/statistics/1023507/india-registered-vehicles-number

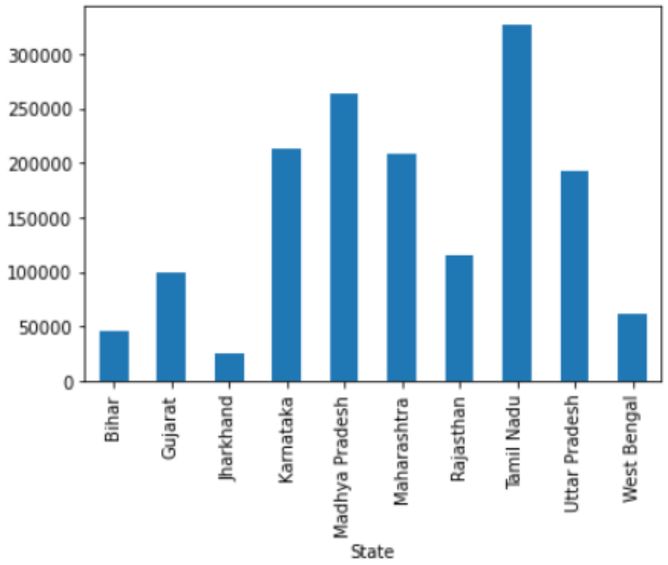
02

The total number of road accidents in these 10 states every year from 2015-2019 is taken from https://morth.nic.in/sites/default/files/Road_Accidents.pdf¶

03

From the above 2 sources i have prepared my table and created my csv file named ("Stats.csv")



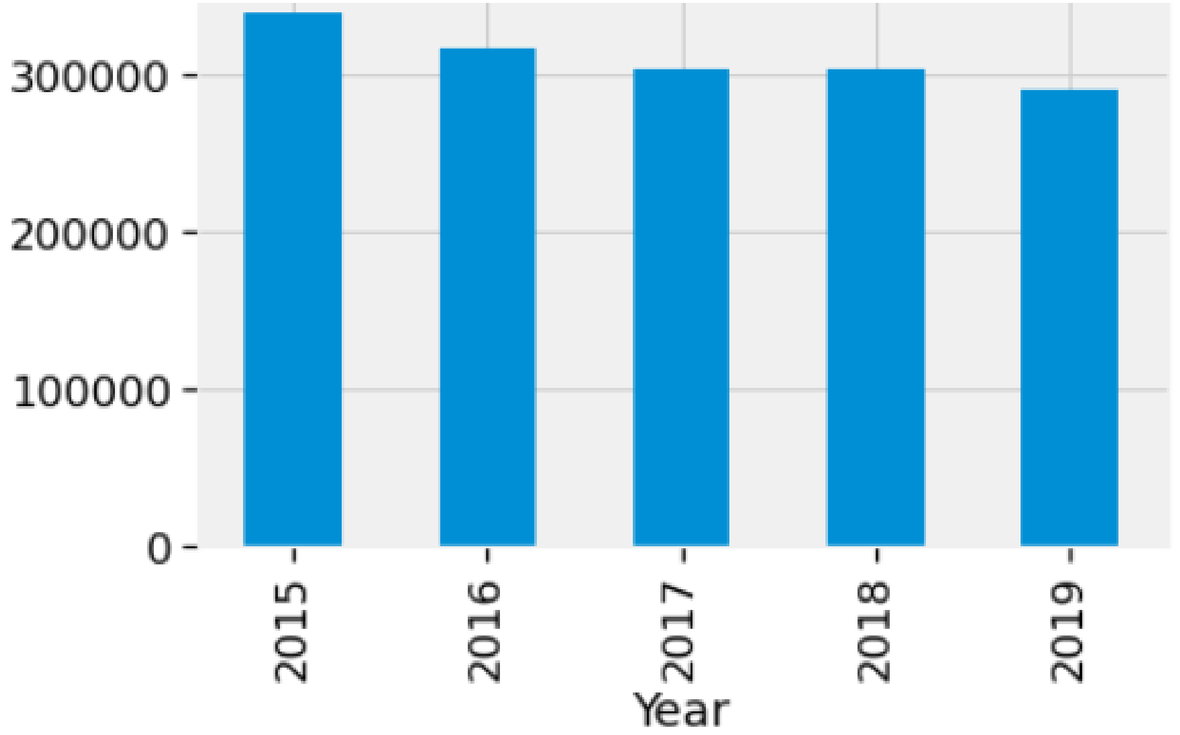


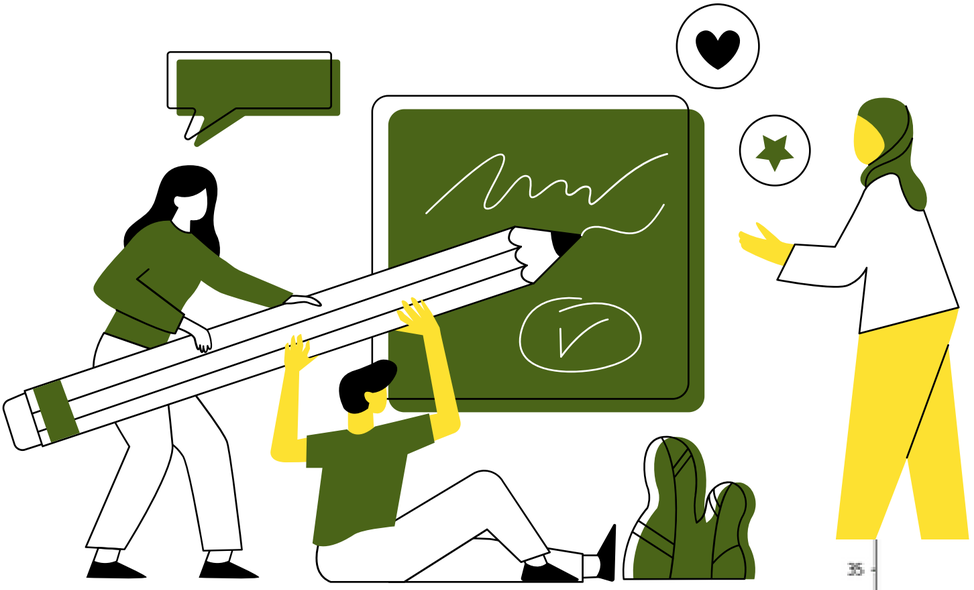
INFERENCE

From the pie chart and bar chart we can infer that Tamil Nadu has the maximum number of road accidents from the year 2015-2019, followed by Madhya Pradesh , Karnataka, Maharashtra amongst top 4

INFERENCE

From the above bar chart we can infer that the number of road accidents have decreased over the years combinely in these 10 states from year 2015- 2019. But further we need to check what is the situation for each state individually.





INFERENCE

From the above graph we can visualise that the number of vehicles are increasing each year in each state. The states with high GDP have higher number of vehicles registered.

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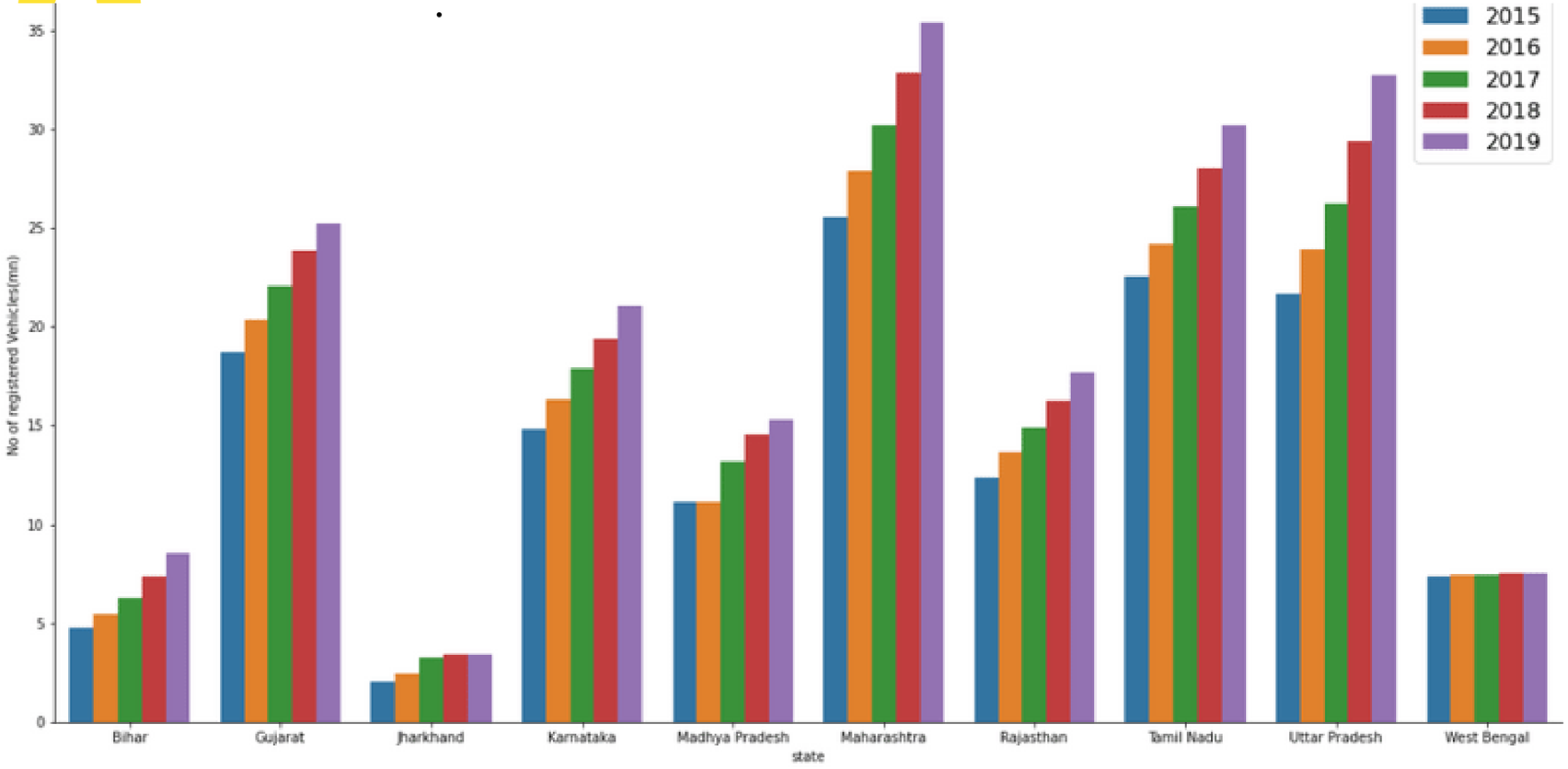
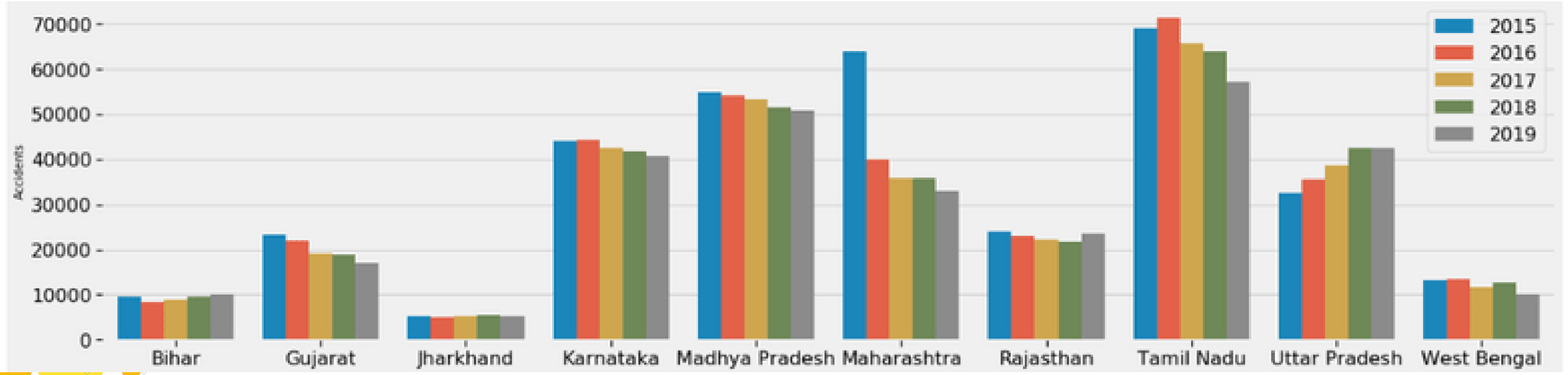
As we have seen in above bar chart that the # accidents are max in Tamil Nadu, but Maharashtra has the max #Vehicles registered.



INFERENCE


70000
60000
50000
40000
30000
20000
10000
0
Accidents
2015
2016
2017
2018
2019
Bihar
Gujarat
Jharkhand
Karnataka
Madhya Pradesh
Maharashtra
Rajasthan
Tamil Nadu
Uttar Pradesh
West Bengal

Conclusion

01

From the above graphs we can visualise that the number of road accidents is not proportional to number of registered vehicles

- In Tamil Nadu we can see that the vehicles are increasing over the period of 2015-2019, but we see that the number of road accidents are decreasing over the same period

02

We see a pattern that the #vehicles are increasing but the #accidents are decreasing in 8 states . Whereas in Uttar Pradesh and Bihar, the #accidents are increasing each year.

The possible reason for this could be due to infrastructure, road discipline and driving discipline being followed in each state.

I

03

I am taking a single state i.e Maharashtra to discuss about the changes and implementation that caused such a drastic decrease in road accidents over the year. The number of road accidents in Maharashtra has come down in the last three years due to “intelligent traffic management system” and steps taken to check over-speeding, the state’s highway police said

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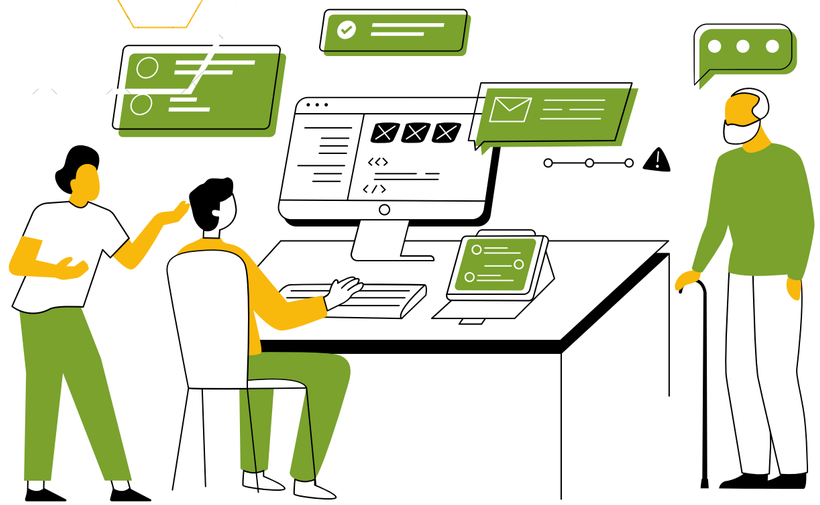

More conclusion and Further Scope.

The state recorded 39,878 road accidents in 2016, and the number dropped to 36,056 in 2017, 35,717 in 2018 and 32,925 in 2019. This happened beacause of the following reasons-¶

a)The highway police had introduced the intelligent traffic management system on the Mumbai-Pune Expressway.As a result, the number of fatal accidents reduced on the expressway from 96 in 2018 to 74 last year," the official addded.

b)The official further said the number of “black spots” also reduced to 1,000 from 1,050 as a result of corrective measures taken by the highway police. "This helped the police in making roads safer for users.

c)To check over-speeding, 96 interceptor vehicles armed with speed guns were distributed to various police units across the state last year (Source-https://www.outlookindia.com/website/story/india-news-maharashtra-records-a-dip-in-road-accidents-in-last-three-years/362440)

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THANK YOU