Business Insights

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Feature Engineering

* Females Vs Males
* Vehicle age, fuel type, losses
* Gender, fuel type, losses
* Years of driving experience, fuel type, losses
* Year of driving experience, number of vehicles, losses
* Age, losses

Descriptive Analysis

* Plot Bar Graph, show some pivot table
* Having sum, mean, median, deviation of the categories in a particular feature

Diagnostics Analysis

* What is the method of testing of hypothesis, that females are more careful than males

Predictive Analysis

* Predict the losses for the Diesel or Petrol types of fuel vehicles

Prescriptive Statistics

* How can we reduce(prevent) the losses from occurring

1.How Females are better than Males interms of owning vehicles

* The no of vehicles owns by females compared to males is 51:49

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Count of Number of Vehicles** | **Column Labels** |  |  |  |  |
| **Row Labels** | **1** | **2** | **3** | **4** | **Grand Total** |
| **F** | **1281** | **2625** | **2551** | **1290** | **7747** |
| Married | 675 | 1331 | 1322 | 646 | 3974 |
| Single | 606 | 1294 | 1229 | 644 | 3773 |
| **M** | **1252** | **2527** | **2544** | **1220** | **7543** |
| Married | 642 | 1275 | 1291 | 601 | 3809 |
| Single | 610 | 1252 | 1253 | 619 | 3734 |
| **Grand Total** | **2533** | **5152** | **5095** | **2510** | **15290** |

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| --- | --- | --- | --- | --- | --- |
| **Count of Number of Vehicles** | **Column Labels** |  |  |  |  |
| **Row Labels** | **1** | **2** | **3** | **4** | **Grand Total** |
| **F** | **50.57%** | **50.95%** | **50.07%** | **51.39%** | **51%** |
| Married | 26.65% | 25.83% | 25.95% | 25.74% | 25.99% |
| Single | 23.92% | 25.12% | 24.12% | 25.66% | 24.68% |
| **M** | **49.43%** | **49.05%** | **49.93%** | **48.61%** | **49%** |
| Married | 25.35% | 24.75% | 25.34% | 23.94% | 24.91% |
| Single | 24.08% | 24.30% | 24.59% | 24.66% | 24.42% |
| **Grand Total** | **100.00%** | **100.00%** | **100.00%** | **100.00%** | **100.00%** |

2. Can we determine the losses are related to some of the factors like vehicle age, vehicle type

- New diesel vehicles are having huge losses

- New Petrol vehicles are having Less losses

- As gradually vehicle age increases, losses are decreasing in diesel vehicles (proportional) by 1%

- As gradually vehicle age increases, losses are increasing in petrol vehicles by 1%

- we can see negative correlation in vehicle age and losses in diesel

- we can see positive correlation in vehicle age and losses in petrol



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| --- | --- | --- | --- |
| **Sum of Losses** | **Fuel Types** |  |  |
| **Vehicle Age** | **D** | **P** | **Grand Total** |
| 0 | 229121.0748 | 83721.30325 | 312842.378 |
| 1 | 243211.3412 | 99627.53732 | 342838.8785 |
| 2 | 222474.5928 | 89490.94082 | 311965.5336 |
| 3 | 248139.7142 | 93979.23486 | 342118.949 |
| 4 | 220923.1888 | 88079.29032 | 309002.4791 |
| 5 | 209780.9485 | 95063.73208 | 304844.6806 |
| 6 | 114686.333 | 285735.3866 | 400421.7195 |
| 7 | 114735.312 | 294922.4112 | 409657.7232 |
| 8 | 110573.327 | 291654.6634 | 402227.9903 |
| 9 | 110315.6792 | 300648.2445 | 410963.9236 |
| 10 | 109419.3519 | 317062.6461 | 426481.998 |
| 11 | 155290.5781 | 254408.2319 | 409698.81 |
| 12 | 150331.73 | 273404.8272 | 423736.5572 |
| 13 | 116634.2911 | 262775.414 | 379409.705 |
| 14 | 124455.4224 | 259040.673 | 383496.0955 |
| 15 | 126370.0131 | 264877.6508 | 391247.6639 |
| **Grand Total** | **2606462.898** | **3354492.187** | **5960955.085** |

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| --- | --- | --- | --- |
| **Sum of Losses in Percentages** | **Fuel Types** |  |  |
| **Vehicle Age** | **D** | **P** | **Grand Total** |
| 0 | 8.79% | 2.50% | 5.25% |
| 1 | 9.33% | 2.97% | 5.75% |
| 2 | 8.54% | 2.67% | 5.23% |
| 3 | 9.52% | 2.80% | 5.74% |
| 4 | 8.48% | 2.63% | 5.18% |
| 5 | 8.05% | 2.83% | 5.11% |
| 6 | 4.40% | 8.52% | 6.72% |
| 7 | 4.40% | 8.79% | 6.87% |
| 8 | 4.24% | 8.69% | 6.75% |
| 9 | 4.23% | 8.96% | 6.89% |
| 10 | 4.20% | 9.45% | 7.15% |
| 11 | 5.96% | 7.58% | 6.87% |
| 12 | 5.77% | 8.15% | 7.11% |
| 13 | 4.47% | 7.83% | 6.36% |
| 14 | 4.77% | 7.72% | 6.43% |
| 15 | 4.85% | 7.90% | 6.56% |
| **Grand Total** | **100.00%** | **100.00%** | **100.00%** |

3. Can we determine any relationship on Losses of Females & Males interms of Years of Experience

- We can interpret like having no experience of driving a vehicle can have huge loss of 12.25%

- interms of losses, males are more impacted than females

- we can say, no prior experience is said to be outlier

- In females, there are 11% having no experience

- In males, there are 14% having no experience

- gradually, females and males decrease their losses by 0.2% as year of driving experience increases

- we can see, there is a direct relationship of year of driving experience and loses which depicts negative correlation

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| --- | --- | --- | --- |
| **Sum of Losses** | **Gender** |  |  |
| **Years of Driving Experience** | **F** | **M** | **Grand Total** |
| 0 | 282877.3326 | 447283.9039 | 730161.2365 |
| 1 | 88836.23156 | 128640.3866 | 217476.6181 |
| 2 | 89487.58633 | 125213.4551 | 214701.0414 |
| 3 | 96642.74094 | 143259.8943 | 239902.6352 |
| 4 | 101784.1941 | 166352.0785 | 268136.2725 |
| 5 | 93682.79921 | 147943.0355 | 241625.8347 |
| 6 | 119621.5866 | 160272.5112 | 279894.0978 |
| 7 | 88222.48287 | 113535.2431 | 201757.726 |
| 8 | 70714.45524 | 99251.76564 | 169966.2209 |
| 9 | 41446.61052 | 39784.61911 | 81231.22963 |
| 10 | 39621.81681 | 35048.11018 | 74669.92698 |
| 11 | 37943.9731 | 41381.93998 | 79325.91308 |
| 12 | 38453.31173 | 42796.76064 | 81250.07237 |
| 13 | 35647.12089 | 41112.34103 | 76759.46192 |
| 14 | 44021.3782 | 36586.5744 | 80607.95261 |
| 15 | 33209.39337 | 46411.98419 | 79621.37756 |
| 16 | 37703.65594 | 33074.79844 | 70778.45438 |
| 17 | 40041.47334 | 30956.76528 | 70998.23862 |
| 18 | 31816.0243 | 40303.83227 | 72119.85657 |
| 19 | 37773.44919 | 48635.76467 | 86409.21386 |
| 20 | 41484.27853 | 46482.20771 | 87966.48624 |
| 21 | 39100.5337 | 28263.58247 | 67364.11616 |
| 22 | 32386.69121 | 45132.93451 | 77519.62572 |
| 23 | 37290.34199 | 49010.46368 | 86300.80567 |
| 24 | 40083.39578 | 32798.75063 | 72882.14642 |
| 25 | 40757.87085 | 38296.33762 | 79054.20846 |
| 26 | 36699.95835 | 43875.93654 | 80575.89488 |
| 27 | 43643.61357 | 38290.18321 | 81933.79678 |
| 28 | 38523.32312 | 42804.2883 | 81327.61142 |
| 29 | 41856.91169 | 38675.06957 | 80531.98127 |
| 30 | 31944.18724 | 43441.05371 | 75385.24095 |
| 31 | 38167.41903 | 41817.96346 | 79985.38249 |
| 32 | 39713.78877 | 37321.5478 | 77035.33658 |
| 33 | 32747.24412 | 43084.88094 | 75832.12506 |
| 34 | 36564.50162 | 37302.1109 | 73866.61252 |
| 35 | 40693.8695 | 38639.89889 | 79333.76839 |
| 36 | 41986.43071 | 37889.44475 | 79875.87547 |
| 37 | 30800.98454 | 38329.50436 | 69130.48889 |
| 38 | 35084.81623 | 38731.99156 | 73816.80779 |
| 39 | 31922.19634 | 44019.99183 | 75942.18817 |
| 40 | 38300.47573 | 46715.81945 | 85016.29517 |
| 41 | 36178.15659 | 36634.45579 | 72812.61238 |
| 42 | 32632.0355 | 40025.11175 | 72657.14725 |
| 43 | 45065.24348 | 41281.95055 | 86347.19403 |
| 44 | 39805.96808 | 47884.07981 | 87690.04789 |
| 45 | 38954.74096 | 43482.6323 | 82437.37326 |
| 46 | 40491.81867 | 47506.06337 | 87997.88204 |
| 47 | 39103.20809 | 41391.06211 | 80494.2702 |
| 48 | 35964.69965 | 41638.33247 | 77603.03212 |
| 49 | 34579.3031 | 43469.25535 | 78048.55845 |
| 50 | 30857.63301 | 37091.07375 | 67948.70676 |
| 51 | 23626.33223 | 28794.1704 | 52420.50263 |
| 52 | 17814.46796 | 18133.33472 | 35947.80268 |
| 53 | 8338.924456 | 12140.85576 | 20479.78021 |
| **Grand Total** | **2662712.981** | **3298242.104** | **5960955.085** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sum of Losses** | **Gender** |  |  |
| **Years of Driving Experience** | **F** | **M** | **Grand Total** |
| 0 | 10.62% | 13.56% | 12.25% |
| 1 | 3.34% | 3.90% | 3.65% |
| 2 | 3.36% | 3.80% | 3.60% |
| 3 | 3.63% | 4.34% | 4.02% |
| 4 | 3.82% | 5.04% | 4.50% |
| 5 | 3.52% | 4.49% | 4.05% |
| 6 | 4.49% | 4.86% | 4.70% |
| 7 | 3.31% | 3.44% | 3.38% |
| 8 | 2.66% | 3.01% | 2.85% |
| 9 | 1.56% | 1.21% | 1.36% |
| 10 | 1.49% | 1.06% | 1.25% |
| 11 | 1.43% | 1.25% | 1.33% |
| 12 | 1.44% | 1.30% | 1.36% |
| 13 | 1.34% | 1.25% | 1.29% |
| 14 | 1.65% | 1.11% | 1.35% |
| 15 | 1.25% | 1.41% | 1.34% |
| 16 | 1.42% | 1.00% | 1.19% |
| 17 | 1.50% | 0.94% | 1.19% |
| 18 | 1.19% | 1.22% | 1.21% |
| 19 | 1.42% | 1.47% | 1.45% |
| 20 | 1.56% | 1.41% | 1.48% |
| 21 | 1.47% | 0.86% | 1.13% |
| 22 | 1.22% | 1.37% | 1.30% |
| 23 | 1.40% | 1.49% | 1.45% |
| 24 | 1.51% | 0.99% | 1.22% |
| 25 | 1.53% | 1.16% | 1.33% |
| 26 | 1.38% | 1.33% | 1.35% |
| 27 | 1.64% | 1.16% | 1.37% |
| 28 | 1.45% | 1.30% | 1.36% |
| 29 | 1.57% | 1.17% | 1.35% |
| 30 | 1.20% | 1.32% | 1.26% |
| 31 | 1.43% | 1.27% | 1.34% |
| 32 | 1.49% | 1.13% | 1.29% |
| 33 | 1.23% | 1.31% | 1.27% |
| 34 | 1.37% | 1.13% | 1.24% |
| 35 | 1.53% | 1.17% | 1.33% |
| 36 | 1.58% | 1.15% | 1.34% |
| 37 | 1.16% | 1.16% | 1.16% |
| 38 | 1.32% | 1.17% | 1.24% |
| 39 | 1.20% | 1.33% | 1.27% |
| 40 | 1.44% | 1.42% | 1.43% |
| 41 | 1.36% | 1.11% | 1.22% |
| 42 | 1.23% | 1.21% | 1.22% |
| 43 | 1.69% | 1.25% | 1.45% |
| 44 | 1.49% | 1.45% | 1.47% |
| 45 | 1.46% | 1.32% | 1.38% |
| 46 | 1.52% | 1.44% | 1.48% |
| 47 | 1.47% | 1.25% | 1.35% |
| 48 | 1.35% | 1.26% | 1.30% |
| 49 | 1.30% | 1.32% | 1.31% |
| 50 | 1.16% | 1.12% | 1.14% |
| 51 | 0.89% | 0.87% | 0.88% |
| 52 | 0.67% | 0.55% | 0.60% |
| 53 | 0.31% | 0.37% | 0.34% |
| **Grand Total** | **100.00%** | **100.00%** | **100.00%** |

4. Can we determine any relationship on Losses of Females & Males interms of Years of Experience by their number of vehicles

- There are 2 & 3 number of vehicles owns by Females & Males are having huge losses when compared to 1 & 4

- The losses for the zero year of driving experience of owning 2 & 3 no. of vehicles having huge loss to the males when compared to females in the ratio 14:11

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sum of Losses** | **Gender** | **Number of Vehicles** |  |  |
|  | **F** |  |  |  |
| **Years of Driving Experience** | **1** | **2** | **3** | **4** |
| 0 | 10.20% | 11.05% | 10.49% | 10.44% |
| 1 | 3.20% | 3.55% | 3.28% | 3.16% |
| 2 | 3.65% | 3.20% | 3.25% | 3.60% |
| 3 | 3.80% | 3.17% | 3.59% | 4.50% |
| 4 | 3.36% | 3.31% | 4.36% | 4.30% |
| 5 | 4.11% | 3.51% | 3.62% | 2.70% |
| 6 | 4.50% | 4.90% | 4.49% | 3.64% |
| 7 | 3.09% | 3.56% | 3.17% | 3.32% |
| 8 | 3.32% | 2.61% | 2.95% | 1.46% |
| 9 | 1.51% | 1.68% | 1.53% | 1.41% |
| 10 | 1.16% | 1.61% | 1.73% | 1.09% |
| 11 | 0.99% | 1.32% | 1.63% | 1.70% |
| 12 | 1.11% | 1.71% | 1.37% | 1.39% |
| 13 | 1.22% | 1.29% | 1.27% | 1.71% |
| 14 | 1.29% | 1.87% | 1.75% | 1.37% |
| 15 | 1.75% | 1.01% | 1.27% | 1.17% |
| 16 | 1.26% | 1.23% | 1.41% | 2.00% |
| 17 | 1.87% | 1.08% | 1.92% | 1.17% |
| 18 | 1.10% | 1.40% | 1.13% | 1.00% |
| 19 | 1.76% | 1.60% | 1.19% | 1.14% |
| 20 | 1.70% | 1.30% | 1.66% | 1.73% |
| 21 | 1.35% | 1.70% | 1.09% | 1.88% |
| 22 | 1.27% | 1.17% | 0.99% | 1.72% |
| 23 | 1.44% | 1.70% | 1.16% | 1.22% |
| 24 | 1.84% | 1.39% | 1.26% | 1.89% |
| 25 | 2.01% | 1.80% | 1.19% | 1.15% |
| 26 | 1.20% | 1.38% | 1.67% | 0.97% |
| 27 | 2.01% | 1.45% | 1.69% | 1.55% |
| 28 | 1.17% | 1.35% | 1.53% | 1.76% |
| 29 | 1.28% | 1.65% | 1.64% | 1.56% |
| 30 | 1.69% | 1.25% | 0.88% | 1.23% |
| 31 | 1.26% | 1.10% | 1.85% | 1.49% |
| 32 | 2.31% | 1.44% | 1.20% | 1.32% |
| 33 | 1.32% | 1.13% | 1.22% | 1.37% |
| 34 | 1.05% | 1.54% | 1.41% | 1.29% |
| 35 | 1.41% | 1.16% | 1.65% | 2.20% |
| 36 | 1.28% | 1.92% | 1.68% | 0.95% |
| 37 | 1.05% | 1.40% | 1.04% | 1.00% |
| 38 | 1.67% | 1.39% | 1.23% | 0.97% |
| 39 | 0.99% | 1.36% | 1.05% | 1.39% |
| 40 | 1.38% | 1.48% | 1.20% | 1.90% |
| 41 | 1.16% | 1.48% | 1.45% | 1.12% |
| 42 | 1.07% | 1.14% | 1.22% | 1.57% |
| 43 | 1.89% | 1.86% | 1.36% | 1.81% |
| 44 | 1.25% | 1.53% | 1.54% | 1.59% |
| 45 | 1.32% | 1.20% | 1.64% | 1.81% |
| 46 | 1.98% | 1.34% | 1.46% | 1.56% |
| 47 | 1.13% | 1.45% | 1.43% | 1.97% |
| 48 | 1.16% | 1.18% | 1.73% | 1.13% |
| 49 | 1.00% | 1.34% | 1.54% | 1.03% |
| 50 | 1.09% | 1.00% | 1.27% | 1.33% |
| 51 | 0.97% | 0.90% | 0.83% | 0.89% |
| 52 | 0.79% | 0.69% | 0.41% | 1.01% |
| 53 | 0.27% | 0.18% | 0.46% | 0.35% |
| **Grand Total** | **100.00%** | **100.00%** | **100.00%** | **100.00%** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sum of Losses** | **Gender** | **Number of Vehicles** |  |  |  |
| **M** |  |  |  | **M Total** | **Grand Total** |
| **1** | **2** | **3** | **4** |  |  |
| 11.77% | 13.76% | 13.96% | 14.18% | 13.56% | 12.25% |
| 3.69% | 4.42% | 3.97% | 2.92% | 3.90% | 3.65% |
| 3.18% | 4.76% | 3.66% | 2.74% | 3.80% | 3.60% |
| 3.43% | 4.63% | 4.05% | 5.29% | 4.34% | 4.02% |
| 5.76% | 4.99% | 4.30% | 5.93% | 5.04% | 4.50% |
| 5.11% | 4.03% | 4.69% | 4.36% | 4.49% | 4.05% |
| 4.83% | 5.08% | 5.05% | 4.07% | 4.86% | 4.70% |
| 4.81% | 2.18% | 3.50% | 4.50% | 3.44% | 3.38% |
| 3.83% | 2.98% | 2.73% | 2.80% | 3.01% | 2.85% |
| 1.40% | 1.00% | 1.32% | 1.20% | 1.21% | 1.36% |
| 0.68% | 1.03% | 1.01% | 1.62% | 1.06% | 1.25% |
| 1.46% | 1.32% | 1.03% | 1.37% | 1.25% | 1.33% |
| 1.62% | 1.17% | 1.09% | 1.63% | 1.30% | 1.36% |
| 1.52% | 1.48% | 1.00% | 0.99% | 1.25% | 1.29% |
| 1.23% | 1.19% | 1.03% | 0.98% | 1.11% | 1.35% |
| 1.73% | 1.26% | 1.56% | 1.06% | 1.41% | 1.34% |
| 0.62% | 1.44% | 0.70% | 1.13% | 1.00% | 1.19% |
| 1.23% | 0.85% | 1.12% | 0.45% | 0.94% | 1.19% |
| 1.58% | 0.79% | 1.38% | 1.42% | 1.22% | 1.21% |
| 1.10% | 1.40% | 1.69% | 1.58% | 1.47% | 1.45% |
| 1.86% | 1.25% | 1.47% | 1.16% | 1.41% | 1.48% |
| 0.58% | 0.68% | 1.11% | 0.99% | 0.86% | 1.13% |
| 1.09% | 1.39% | 1.58% | 1.18% | 1.37% | 1.30% |
| 1.61% | 1.58% | 1.47% | 1.21% | 1.49% | 1.45% |
| 1.02% | 0.61% | 1.22% | 1.30% | 0.99% | 1.22% |
| 1.50% | 1.19% | 1.31% | 0.47% | 1.16% | 1.33% |
| 1.23% | 1.11% | 1.35% | 1.85% | 1.33% | 1.35% |
| 1.50% | 0.96% | 1.05% | 1.43% | 1.16% | 1.37% |
| 1.15% | 1.13% | 1.35% | 1.69% | 1.30% | 1.36% |
| 0.81% | 1.34% | 1.21% | 1.11% | 1.17% | 1.35% |
| 1.17% | 1.31% | 1.49% | 1.13% | 1.32% | 1.26% |
| 1.50% | 1.32% | 0.99% | 1.50% | 1.27% | 1.34% |
| 0.53% | 1.48% | 1.13% | 1.04% | 1.13% | 1.29% |
| 1.57% | 1.65% | 0.92% | 1.12% | 1.31% | 1.27% |
| 1.44% | 1.26% | 0.86% | 1.11% | 1.13% | 1.24% |
| 0.85% | 1.82% | 0.89% | 0.77% | 1.17% | 1.33% |
| 1.12% | 0.94% | 1.45% | 0.99% | 1.15% | 1.34% |
| 0.87% | 0.85% | 1.46% | 1.49% | 1.16% | 1.16% |
| 0.70% | 1.29% | 1.19% | 1.38% | 1.17% | 1.24% |
| 1.57% | 1.25% | 1.38% | 1.16% | 1.33% | 1.27% |
| 1.59% | 1.52% | 1.43% | 1.00% | 1.42% | 1.43% |
| 0.71% | 0.96% | 1.28% | 1.48% | 1.11% | 1.22% |
| 1.12% | 1.05% | 1.26% | 1.55% | 1.21% | 1.22% |
| 1.06% | 1.16% | 1.52% | 1.08% | 1.25% | 1.45% |
| 1.83% | 1.13% | 1.44% | 1.74% | 1.45% | 1.47% |
| 0.78% | 1.70% | 1.25% | 1.22% | 1.32% | 1.38% |
| 1.79% | 1.59% | 1.14% | 1.38% | 1.44% | 1.48% |
| 1.29% | 1.15% | 1.33% | 1.29% | 1.25% | 1.35% |
| 1.39% | 1.22% | 1.28% | 1.18% | 1.26% | 1.30% |
| 1.37% | 1.54% | 0.99% | 1.47% | 1.32% | 1.31% |
| 1.28% | 1.13% | 1.13% | 0.94% | 1.12% | 1.14% |
| 0.74% | 0.76% | 1.12% | 0.73% | 0.87% | 0.88% |
| 0.46% | 0.53% | 0.70% | 0.39% | 0.55% | 0.60% |
| 0.39% | 0.40% | 0.38% | 0.26% | 0.37% | 0.34% |
| **100.00%** | **100.00%** | **100.00%** | **100.00%** | **100.00%** | **100.00%** |

5. State top 3 Age group have suffered huge losses

- The 25th age group have suffered most higher loss

- The 22nd age group have second higher loss

- The 21st age group have third higher loss

|  |  |  |  |
| --- | --- | --- | --- |
| **Sum of Losses** | **Gender** |  |  |
| **Age** | **F** | **M** | **Grand Total** |
| 25 | 3.32% | 3.15% | 3.23% |
| 22 | 3.06% | 3.24% | 3.16% |
| 21 | 3.12% | 2.99% | 3.05% |
| 23 | 2.88% | 3.14% | 3.02% |
| 18 | 2.95% | 3.07% | 3.02% |
| 16 | 2.89% | 3.06% | 2.99% |
| 19 | 2.58% | 3.14% | 2.89% |
| 70 | 2.73% | 2.95% | 2.85% |
| 17 | 3.09% | 2.63% | 2.83% |
| 20 | 2.74% | 2.87% | 2.82% |
| 63 | 2.79% | 2.83% | 2.81% |
| 24 | 2.79% | 2.75% | 2.77% |
| 68 | 2.79% | 2.63% | 2.70% |
| 61 | 2.57% | 2.75% | 2.67% |
| 64 | 2.42% | 2.84% | 2.65% |
| 69 | 2.69% | 2.61% | 2.65% |
| 67 | 2.71% | 2.58% | 2.64% |
| 62 | 2.64% | 2.30% | 2.45% |
| 65 | 2.30% | 2.53% | 2.43% |
| 60 | 2.59% | 2.19% | 2.37% |
| 66 | 2.35% | 2.27% | 2.31% |
| 43 | 1.55% | 1.31% | 1.42% |
| 53 | 1.40% | 1.41% | 1.41% |
| 55 | 1.30% | 1.41% | 1.36% |
| 49 | 1.48% | 1.26% | 1.36% |
| 40 | 1.42% | 1.29% | 1.35% |
| 38 | 1.32% | 1.31% | 1.32% |
| 45 | 1.26% | 1.35% | 1.31% |
| 58 | 1.45% | 1.16% | 1.29% |
| 39 | 1.24% | 1.33% | 1.29% |
| 28 | 1.36% | 1.23% | 1.29% |
| 57 | 1.28% | 1.28% | 1.28% |
| 54 | 1.45% | 1.13% | 1.27% |
| 50 | 1.21% | 1.31% | 1.27% |
| 47 | 1.14% | 1.36% | 1.26% |
| 34 | 1.14% | 1.34% | 1.25% |
| 29 | 1.07% | 1.37% | 1.24% |
| 26 | 1.23% | 1.24% | 1.23% |
| 41 | 1.17% | 1.28% | 1.23% |
| 46 | 1.21% | 1.25% | 1.23% |
| 52 | 1.14% | 1.28% | 1.22% |
| 27 | 1.27% | 1.17% | 1.22% |
| 32 | 1.13% | 1.27% | 1.21% |
| 44 | 1.16% | 1.22% | 1.19% |
| 33 | 1.07% | 1.27% | 1.18% |
| 35 | 1.39% | 0.99% | 1.17% |
| 51 | 1.18% | 1.15% | 1.16% |
| 36 | 1.18% | 1.11% | 1.14% |
| 31 | 1.35% | 0.97% | 1.14% |
| 30 | 1.15% | 1.08% | 1.11% |
| 37 | 1.08% | 1.13% | 1.11% |
| 48 | 1.08% | 1.06% | 1.07% |
| 56 | 0.95% | 1.14% | 1.06% |
| 59 | 1.18% | 0.95% | 1.05% |
| 42 | 1.04% | 1.03% | 1.03% |
| **Grand Total** | **100.00%** | **100.00%** | **100.00%** |

6. How many new vehicles registered so far?

- we can say 580 vehicles are registered so far

|  |  |
| --- | --- |
| **Vehicle Age** | **Count of Vehicle Age** |
| 0 | 580 |
| **Grand Total** | **580** |

7. How market is dominated interms of petrol by diesel?

- The market is Dominated by petrol vehicles compare to Diesel vehicles by "P(11670) / D(3620)" in the ratio 76:24

|  |  |
| --- | --- |
| **Fuel Type Petro Diesel etc.** | **Count of Fuel Type Petro Diesel etc.** |
| D | 24% |
| P | 76% |
| **Grand Total** | **100.00%** |

8. What is the modal value of the Policy Number feature?

- Policy number of 181066 has high number of counts of 4

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Policy Number** | **Age** | **Years of Driving Experience** | **Number of Vehicles** | **Gender** | **Married** | **Vehicle Age** | **Fuel Type Petro Diesel etc.** | **Losses** |
| 181066 | 66 | 37 | 3 | F | Married | 4 | D | 753.774245 |
| 181066 | 25 | 11 | 2 | M | Married | 11 | P | 347.442301 |
| 181066 | 17 | 19 | 3 | M | Married | 12 | P | 228.0744586 |
| 181066 | 70 | 8 | 3 | F | Single | 14 | P | 256.3007473 |

- Policy number of 178900 has second high number of counts of 4

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Policy Number** | **Age** | **Years of Driving Experience** | **Number of Vehicles** | **Gender** | **Married** | **Vehicle Age** | **Fuel Type Petro Diesel etc.** | **Losses** |
| 178900 | 61 | 44 | 1 | M | Single | 6 | P | 330.1496076 |
| 178900 | 60 | 0 | 2 | F | Married | 7 | P | 243.6923338 |
| 178900 | 28 | 48 | 3 | F | Married | 14 | P | 201.5175786 |
| 178900 | 22 | 12 | 4 | F | Single | 15 | P | 188.0890053 |