DATA STORYTELLING

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DATA ANALYSIS AND VISUALISATION



INTRODUCTION

- IN THIS ANALYSIS, WE WILL BE EXAMINING HOW DIFFERENT SPEED LIMITS IMPACT THE AMOUNT OF FUEL CONSUMED BY VEHICLES. ITS AN INTERESTING TOPIC BECAUSE UNDERSTANDING THE RELATIONSHIP BETWEEN SPEED LIMITS AND FUEL CONSUMPTION CAN HAVE IMPLICATIONS FOR FUEL EFFICIENCY, ENVIRONMENTAL IMPACT AND TRANSPORTATION POLICIES.
- THROUGHOUT THE ANALYSIS, WE WILL BE LOOKING AT A DATASET THAT INCLUDES
 INFORMATION ON A VARIOUS VEHICLES, THEIR CORRESPONDING SPEED LIMITS AND THE
 AMOUNT OF FUEL CONSUMED. BY ANALYZING THIS DATA, WE CAN GAIN INSIGHTS IN TO
 HOW SPEED LIMITS AFFECT FUEL EFFICIENCY.



AIMS AND OBJECTIVES

- TO UNDERSTAND THE FUEL CONSUMPTION BASED ON THE SPEED LIMIT OF MOTOR VEHICLES COMPANY.
- ANALYZE MAKE, MODEL, TRANSMISSIONS AND ENGINE DISPLACEMENT OF THE VEHICLES.
- OUR AIM IS TO UNCOVER ANY PATTERNS OR TRENDS THAT MAY EXIST BETWEEN SPEED LIMITS
 AND FUEL CONSUMPTION. THIS ANALYSIS CAN PROVIDE VALUABLE INFORMATION FOR CAR
 MANUFACTURERS AND INDIVIDUALS LOOKING TO MAKE MORE INFORMED DECISIONS ABOUT
 THEIR DRIVING HABITS.



METHODOLOGY

I FOUND A DATA FROM A SECOND SOURCE OF INFORMATION KAGGLE AND THIS DATASET OFFERS A COMPREHENSIVE LOOK INTO THE FUEL ECONOMY IN AUTOMOTIVE WORLD, EXPLORING DETAILS ABOUT VARIOUS VEHICLES SPANNING DIFFERENT YEARS, MAKES AND MODELS. IT INCLUDES INFORMATION ON ENGINE SPECIFICATIONS, FUEL TYPES, TRANSMISSIONS SYSTEM AND EVEN FACTORS LIKE FUEL ECONOMY, CARBONDIOXIDES EMISSIONS AND TECHNOLOGICAL FEATURES.



PROBLEM STATEMENT

- WHICH CAR HAS THE HIGHIEST FUEL CONSUMPTION ?
- WHICH CAR TRANSMISSIONS HAS THE LOWEST FUEL CONSUMPTION?
- BASED ON CAR SPEED WHICH CAR COMPANY HAS THE HIGHIEST SPEED LIMIT ON A HIGH WAY?

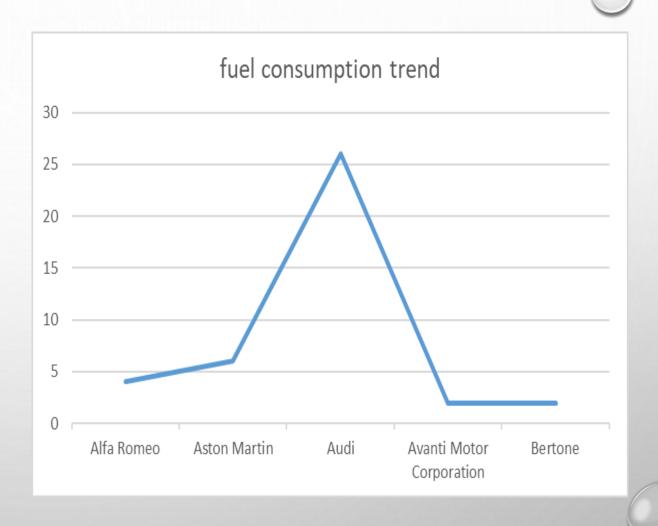


FINDINGS AND INSIGHTS

WHICH CAR HAS THE HIGHIEST FUEL CONSUMPTION ?

AUDI CARS HAS THE HIGHIEST FUEL LEVEL.

AUDI CARS ARE KNOWN FOR THEIR HIGH-QUALITY ENGINEERING AND PERFORMANCE. THEY OFTEN USE ADVANCED FUEL-EFFICIENT TECHNOLOGIES, WHICH CAN HELP THEM ACHIEVE A HIGHER FUEL EFFICIENCY COMPARED TO SOME OTHER CAR BRANDS. SO, THAT IS WHY AUDI CARS TEND TO HAVE A HIGHER FUEL LEVEL.

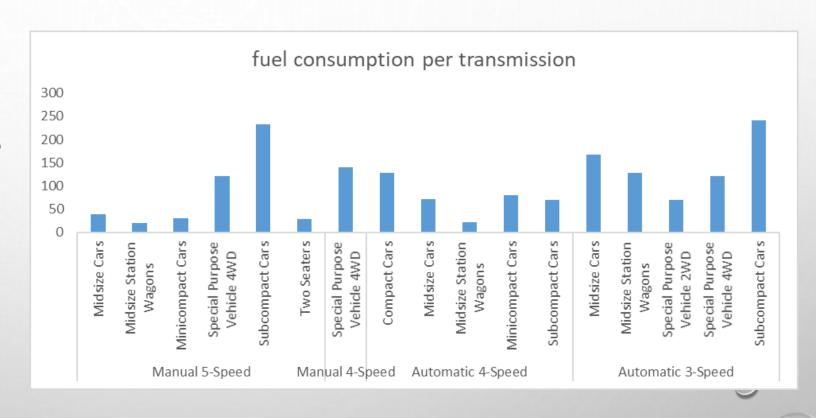




THE CAR THAT HAS THE LOWEST FUEL CONSUMPTION PER TRANSMISSIONS.

WHEN IT COMES TO FUEL CONSUMPTION, CARS WITH MANUAL TRANSMISSIONS GRNERALLY TEND TO HAVE LOWER FUEL CONSUMPTION COMPARED TO **AUTOMATIC TRANSMISSIONS.WITH A** MANUAL TRANSMISSION, THE DRIVER HAS MORE CONTROL OVER GEAR SHIFTING, WHICH CAN HELP OPTIMIZE FUEL EFFICIENCY.HOWEVER, ITS IMPORTANT TO NOTE THAT ADVANCEMENTS IN AUTOMATIC TRANSMISSIONS TECHNOLOGY HAVE MADE THEM MORE FUEL- EFFICIENT AS WEEL. SO, WHILE MANUAL TRANSMISSIONS OFTEN HAVE LOWER FUEL CONSUMPTION, IT ULTIMATELY DEPENDS ON THE SPECIFIC CAR MODEL AND ITS ENGINEERING.

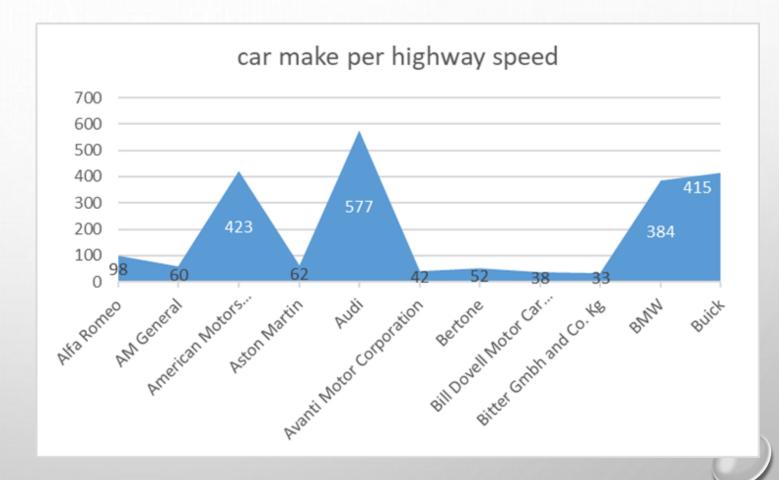
WHICH CAR TRANSMISSION HAS THE LOWEST FUEL CONSUMPTION ?



CAR SPEED LIMIT ON A HIGH WAY BASED ON COMPANY

ABSOLUTELY! AUDI IS INDEES KNOWN FOR PRODUCING CARS WITH IMPRESSIVE SPEED CAPABILITIES. THEY HAVE A RANGE OF HIGH-PERFORMANCE MODELS LIKE THE AUDI R8,RS MODELS, AND THE AUDI S8, WHICH CAN ALL DELIVER THRILLING ACCELERATION AND TOP SPEEDS.THESE CARS ARE DESIGNED TO PROVIDE AN EXHILARATING DRIVING EXPERIENCE FOR THOSE WHO ENJOYED SPEED AND PERFORMANCE.AUDI COMBINES POWERFUL ENGINES, ADVANCED AERODYNAMICS AND CUTTING-EDGE TECHNOLOGY TO ACHIEVE IMPRESSIVE SPEEDS WHILE MAINTAINING SAFETY AND CONTROL.

 BASED ON CAR SPEED WHICH CAR COMPANY HAS THE HIGHEST SPEED LIMIT ON A HIGH WAYS?



RECOMMENDATION AND CONCLUSION

- RECOMMENDATION:-
- ADHERE TO SPEED LIMITS:- ITS IMPORTANT FOR DRIVERS TO FOLLOW SPEED LIMITS AS THEY ARE DESIGNED TO ENSURE SAFETY ON THE ROADS. BY DRIVING WITHIN THE DESIGNATED SPEED LIMITS, DRIVERS CANNOT ONLY REDUCE THE RISK OF ACCIDENTS BUT ALSO OPTIMIZE FUEL EFFICIENCY.
- CONCLUTIONS:-
- OPTIMAL SPEED RANGE:- THE ANALYSIS ALSO SUGGEST THAT THERE IS AN OPTIMAL SPEED RANGE FOR FUEL EFFICIENCY.DRIVING
 WITHIN THIS RANGE, TYPICALLY AT OR SLIGTLY BELOW THE SPEED LIMIT, CAN HELP MINIMIZE FUEL CONSUMPTION. GOING
 SIGNIFICANTLY ABOVE OR BELOW THE SPEED LIMIT MAY RESULT IN INCREASED FUEL USAGE.
- IMPACT OF SPEEDING:- THE ANALYSIS ALSO HIGHLIGHTS THE NEGATIVE IMPACT OF SPEEDING ON FUEL CONSUMPTION. DRIVING AT
 HIGH SPEEDS SIGNIFICANTLY INCREASES FUEL CONSUMPTION, LEADIND TO LOWER FUEL EFFICIENCY. THEREFORE, ITS ADVISABLE TO
 MAINTAIN A CONSISTENT AND MODERATE SPEED TO MAXIMIZE FUEL EFFICINCY.