REPORT

INTRODUCTION

WELCOME TO THIS COMPREHENSIVE REPORT, WHERE WE EXPLORE AND ANALYSE THE DETAILS OF CARS WITH

DATABASE 'CAR_DEKHO'. THIS REPORT AIMS TO PROVIDE A DETAILED OVERVIEW AND INSIGHTS INTO THE GIVEN

DATASET. THROUGH THIS ANALYSIS AND INTERPRETATION, WE HAVE UNCOVERED VALUABLE FINDINGS.

THIS REPORT FOCUSES ON THE ANALYSIS OF THE CAR_TABLE, WHICH CONTAINS A VAST ARRAY OF INFORMATION

ABOUT VARIOUS CARS, INCLUDING THEIR FEATURES, SPECIFICATIONS, AND CHARACTERISTICS.

USING SQL QUERIES, WE HAVE EXTRACTED AND ANALYZED KEY DATA POINTS FROM THE CAR_TABLE TO GAIN A

DEEPER UNDERSTANDING OF THE DATASET. THE QUERIES ANALYZED INCLUDE:

1. PRICE COMPARISON BY COMPANY

2. TRANSMISSION TYPE AND FUEL TYPE

3. MILEAGE AND SELLING PRICE

4.YEAR-WISE PRICE TREND

5. SEAT CAPACITY IMPACT

6. OWNER IMPACT

7. FUEL EFFICIENCY ANALYSIS

8.ENGINE PERFORMANCE ANALYSIS

9. MOST SOLD VEHICLE

10. KM DRIVEN VS PRICE

OBJECTIVE

DATA COLLECTION:

BY ACQUIRING A WELL-STRUCTURED DATASET. THIS DATASET INCLUDED DETAILS SUCH AS CAR INFORMATION, COMPANY NAME, SELLING PRICE, SELLER TYPE,TRANSMISSION AND MORE. THE DATA WAS STORED IN A RELATIONAL DATABASE

DATA CLEANING AND PREPROCESSING:

PERFORMED DATA CLEANING TASKS TO HANDLE MISSING VALUES, DUPLICATE RECORDS, AND OUTLIERS, ENSURING THE DATASET'S INTEGRITY.

SQL QUERIES:

DESIGNED AND EXECUTED SQL QUERIES TO EXTRACT RELEVANT INFORMATION FROM THE DATABASE. THIS INVOLVED A RANGE OF SQL OPERATIONS, INCLUDING SELECT, JOIN, GROUP BY, AND AGGREGATION FUNCTIONS.

INSIGHTS

I. PRICE COMPARISON BY COMPANY:

- QUERY: SELECT TRANSMISSION,MAX(SELLING_PRICE)FROM CAR_TABLE GROUP BY TRANSMISSION;

BY COMPARING THE PRICES OF CARS FROM DIFFERENT COMPANIES WE CAN SEE VOLVO TEND TO BE MORE EXPENSIVE THAN OTHERS.

II. TRANSMISSION TYPE AND FUEL TYPE:

- QUERY:SELECT TRANSMISSION,FUEL,COUNT(*) AS COUNT FROM CAR_TABLE GROUP BY TRANSMISSION,FUEL ORDER BY TRANSMISSION,FUEL ;

ACCORDING THE RELATIONSHIP BETWEEN TRANSMISSION TYPE AND FUEL TYPE WE CAN SEE MANUAL TRANSMISSIONS ARE MORE COMMONLY USED WITH PETROL AS FUEL .

III. MILEAGE AND SELLING PRICE:

- QUERY: SELECT MILEAGE,SELLING_PRICE FROM CAR_TABLE ORDER BY MILEAGE DESC;

BY ANALYZING THE RELATIONSHIP BETWEEN MILEAGE AND SELLING PRICE TO DETERMINE IF HIGHER MILEAGE CARS ARE SOLD AT HIGHER PRICES.

IV. YEAR-WISE PRICE TREND:

- QUERY: SELECT YEAR, AVG(SELLING_PRICE) AS AVG_SELLING_PRICE FROM CAR_TABLE GROUP BY YEAR;

THE RELATIONSHIP BETWEEN YEAR AND SELLING PRICE TO DETERMINE IF NEWER CARS ARE SOLD AT HIGHER PRICES.

V. SEAT CAPACITY IMPACT:

- QUERY: SELECT SEATS,AVG(SELLING_PRICE) AS ST FROM CAR_TABLE GROUP BY SEATS ORDER BY SEATS DESC;

BY THE RELATIONSHIP BETWEEN SEAT CAPACITY AND SELLING PRICE TO DETERMINE , CARS WITH MORE SEATS ARE PRICED LOWER.

VI. OWNER IMPACT:

- QUERY: SELECT OWNER,AVG(SELLING_PRICE) AS PRICE FROM CAR_TABLE GROUP BY OWNER;

THE RELATIONSHIP BETWEEN OWNER TYPE AND SELLING PRICE TO DETERMINE THE CARS SOLD BY DEALERS ARE PRICED LOWER.

VII. FUEL EFFICIENCY ANALYSIS:

- QUERY: SELECT FUEL, AVG(MILEAGE) AS AVG_MILEAGE FROM CAR_TABLE GROUP BY FUEL;

ACCORDING THE RELATIONSHIP BETWEEN FUEL TYPE AND MILEAGE ,ELECTRIC ARE MOST EFFICIENT.

VIII. ENGINE PERFORMANCE ANALYSIS:

- QUERY: SELECT ENGINE, AVG(SELLING_PRICE) AS AVG_PRICE FROM CAR_TABLE GROUP BY ENGINE ORDER BY ENGINE;

SELECT SELLING_PRICE, AVG(ENGINE) AS AVG_ FROM CAR_TABLE GROUP BY SELLING_PRICE ORDER BY SELLING_PRICE ;

THE RELATIONSHIP BETWEEN ENGINE AND SELLING PRICE DETERMINE THAT WHEN ENGINES DECREASES PRICE ALSO DRESESES.

IX. MOST SOLD VEHICLE:

- QUERY: SELECT SEATS,COUNT(*) FROM CAR_TABLE GROUP BY SEATS;

MOST SOLD VEHICLES ARE 5 SEATER

X. KM DRIVEN VS PRICE

- QUERY: SELECT KM_DRIVEN_CAT,AVG(SELLING_PRICE) FROM CAR_TABLE GROUP BY KM_DRIVEN_CAT;

VEHICLE WITH HIGHER KM DRIVEN HAS LOWER PRICE.

VEHICLE WITH LOWER KM DRIVEN HAS HIGHER PRICE.

CONCLUSION

THE DATA'S HAS BEEN ANALYSED USING THE HELP OF SQL WE HAVE CLEANED THE RAW DATA'S AND TURNED THE DATA'S INTO AN ACTIONABLE INSISTS HELPING THE CUSTOMERS TO MAKE DECISIONS BASED ON THE DATA THIS IMPROVES THE CUSTOMER SATISFACTION OF IN THIS DATA WE HAVE EXPLORED DATA'S FROM THEDATABASE CAR_DEKHO