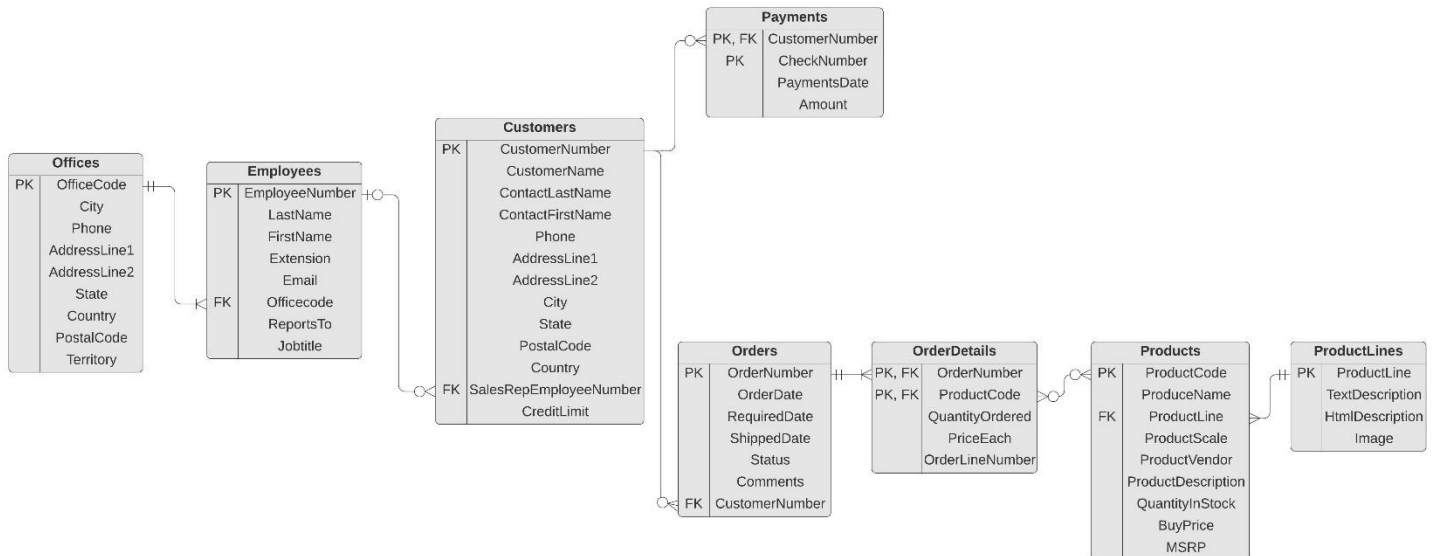


Classicmodels Portfolio

Database

Classicmodels is a company that sales vehicle miniature models.

Classicmodels database built from 8 tables that connected like shawn below.



The company has 6 offices, 23 employees, 122 customers and 110 products.

The database contains information from January 2003 to May 2005.

Analysis

I analyzed the database with SQL.

The analysis is separated to 3 sections, in each section I dived into a different table:

Section 1 – Employees and Customers

Section 2 – Orders

Section 3 – Products

I visualized every section with a dashboard.

The code can be found in my github profile:

<https://github.com/NirMendelson/PortfolioProjects>

Section 3 – Products

In this section I'm going to analyze the company's Products
I hope this data exploration will lead to recommendations for how to make this company more effective and productive.

First I want to see which are our 10 best-selling products and our 10 least sold products:

| orders | productname | orders | productname |
|--------|---|--------|----------------------------------|
| 1808 | 1992 Ferrari 360 Spider red | 0 | 1985 Toyota Supra |
| 1111 | 1937 Lincoln Berline | 767 | 1957 Ford Thunderbird |
| 1085 | American Airlines: MD-11S | 803 | 1970 Chevy Chevelle SS 454 |
| 1076 | 1941 Chevrolet Special Deluxe Cabriolet | 824 | 1936 Mercedes Benz 500k Roadster |
| 1074 | 1930 Buick Marquette Phaeton | 832 | 1911 Ford Town Car |

The '1992 Ferrari 360 Spider red' is the best-selling product.

The company hasn't sold a single '1985 Toyota Supra'.

Let's see how many Toyota Supras are in stock:

| productname | quantityinstock |
|-------------------|-----------------|
| 1985 Toyota Supra | 7733 |

We have 7,733 models of the '1985 Toyota Supra', I recommend putting this model on sale/investing in marketing.

Let's see which products have the highest and lowest margins per sale (we don't sell the products at a set price, so I calculated by the average price):

| productname | avg revenue | cost | Margin per sale | productname | avg revenue | cost | Margin per sale |
|--------------------------------------|-------------|-------|-----------------|------------------------------|-------------|-------|-----------------|
| 1952 Alpine Renault 1300 | 197.31 | 98.58 | 98.73 | 1939 Chevrolet Deluxe Coupe | 29.93 | 22.57 | 7.36 |
| 2001 Ferrari Enzo | 187.10 | 95.59 | 91.51 | Boeing X-32A JSF | 44.43 | 32.77 | 11.66 |
| 2003 Harley-Davidson Eagle Drag Bike | 172.29 | 91.02 | 81.27 | 1930 Buick Marquette Phaeton | 38.79 | 27.06 | 11.73 |
| 1928 Mercedes-Benz SSK | 149.89 | 72.56 | 77.33 | 1982 Ducati 996 R | 36.59 | 24.14 | 12.45 |
| 1968 Ford Mustang | 172.45 | 95.34 | 77.11 | 1982 Ducati 900 Monster | 61.36 | 47.10 | 14.26 |

The '1952 Alpine Renault 1300' has the highest margin.

The '1939 Chevrolet Deluxe Coupe' has the lowest margin.

I recommend talking to all of the sales reps and telling them to try to sell more of the products with the highest margins.

Let's see which products have the highest total margin and which have the lowest:

| productname | total_margin | productname | total_margin | |
|--------------------------------------|--------------|----------------------------------|--------------|--------------------------------|
| 1992 Ferrari 360 Spider red | 135996.78 | 1939 Chevrolet Deluxe Coupe | 6904.85 | The '1992 Ferrari 360 |
| 1952 Alpine Renault 1300 | 95282.58 | Boeing X-32A JSF | 11233.33 | |
| 2001 Ferrari Enzo | 93349.65 | 1982 Ducati 996 R | 11397.92 | |
| 2003 Harley-Davidson Eagle Drag Bike | 81031.30 | 1936 Mercedes Benz 500k Roadster | 11841.39 | |
| 1968 Ford Mustang | 72579.26 | 1930 Buick Marquette Phaeton | 12536.80 | |
| | | | | |

Spider red' has the highest total margin by far (\$275,357).

Although the '2001 Ferrari Enzo' wasn't in the top 10 best selling products, he has the second highest total margin (\$190,555).

Let's see which productline sells the most and which has the highest total margin:

| orders | productline | total margin |
|--------|------------------|--------------|
| 35582 | Classic Cars | 3842916.66 |
| 22933 | Vintage Cars | 1796853.47 |
| 12778 | Motorcycles | 1115763.52 |
| 11872 | Planes | 953567.28 |
| 11001 | Trucks and Buses | 1019816.59 |
| 8532 | Ships | 663298.07 |
| 2818 | Trains | 189175.19 |

The 'Classic Cars' product line sells the most and has the highest total margin.

Showing the minimum, maximum and average values of product types and total quantity of units:

| minimum_product_types | maximum_product_types | avg_product_types | minimum_products_quantity | maximum_products_quantity | average_products_quantity |
|-----------------------|-----------------------|-------------------|---------------------------|---------------------------|---------------------------|
| 1 | 18 | 9.2 | 15 | 717 | 323.7 |

People buy between 1 to 18 product types.

People buy between 15 to 717 product units.

Let's see how many product types customers usually buy:

| number of orders | number of product types |
|------------------|-------------------------|
| 28 | 9 |
| 26 | 6 |
| 25 | 14 |
| 24 | 8 |
| 22 | 2 |
| 20 | 11 |
| 19 | 13 |
| 18 | 5 |
| 17 | 16 |
| 17 | 4 |
| 17 | 1 |
| 15 | 17 |
| 15 | 10 |
| 14 | 15 |
| 14 | 3 |
| 13 | 12 |
| 11 | 18 |
| 11 | 7 |

We can see that most orders have close to 10 or 15 product types, so I recommend giving a discount when purchasing 10 or 15 product types.