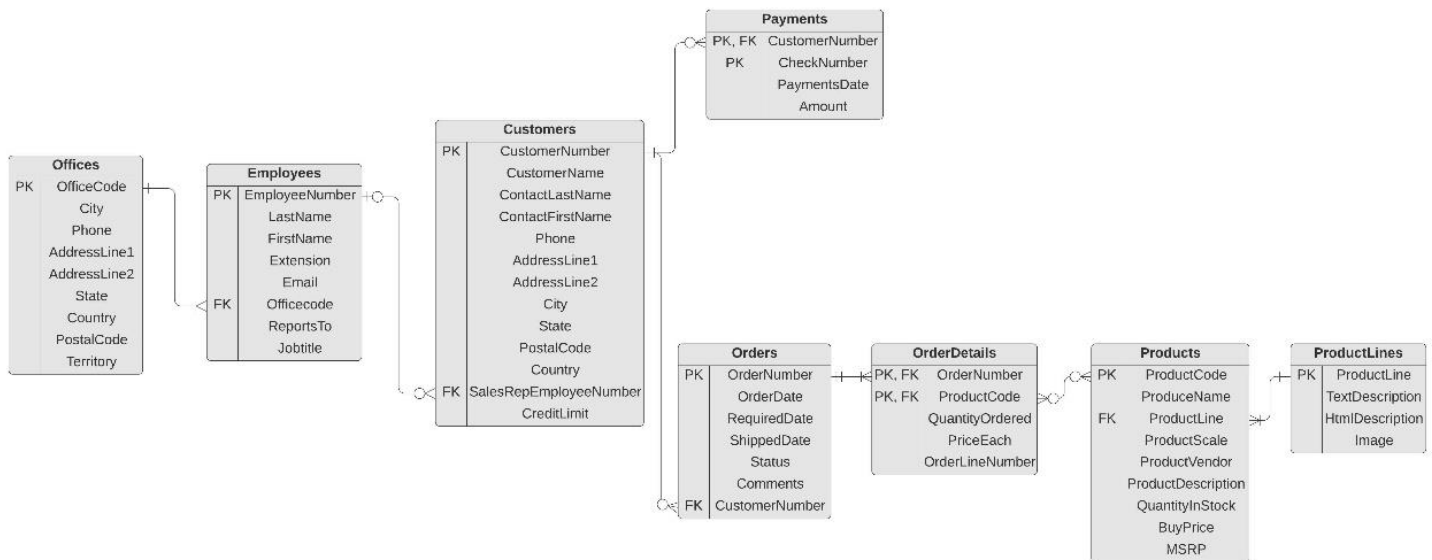# Classicmodels Portfolio

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 1 – Employees and Customers

In this section I'm going to dive into how Classicmodels company is organized, I hope this data exploration will lead to recommendations for how to make this company more effective and productive.

First I want to see how many employees are in each office and where the office is located:

officecode	jobtitle	employees	country
1	President	1	CA
1	Sales Manager (NA)	1	CA
1	Sales Rep	2	CA
1	VP Marketing	1	CA
1	VP Sales	1	CA
2	Sales Rep	2	MA
3	Sales Rep	2	NY
4	Sale Manager (EMEA)	1	France
4	Sales Rep	4	France
5	Sales Rep	2	Japan
6	Sales Manager (APAC)	1	Australia
6	Sales Rep	3	Australia
7	Sales Rep	2	UK

We can see that:

the main office is in California.

Classicmodels company has 3 offices in the US and 4 abroad.

Offices 2,3,5,7 don't have a sales manager.

Let's see how many customers every office has:

customers	officecode	country
29	4	France
22	NULL	NULL
17	7	UK
15	3	USA
12	1	USA
12	2	USA
10	6	Australia
5	5	Japan

Office 4 (France) has the most customers and office 5 (Japan) has the least.

There are 22 customers who don't have a sales rep, that makes them potential customers instead of active customers.

Let's see if there are sales reps that don't have any customers:

customers	sales_rep	officecode	country
22	no sales rep	no office	no office
10	Pamela Castillo	4	France
9	Barry Jones	7	UK
8	George Vanauf	3	NY
8	Larry Bott	7	UK
7	Foon Yue Tseng	3	NY
7	Gerard Hernandez	4	France
6	Julie Firrelli	2	MA
6	Leslie Jennings	1	CA
6	Leslie Thompson	1	CA
6	Loui Bondur	4	France
6	Martin Gerard	4	France
6	Steve Patterson	2	MA
5	Andy Fixter	6	Australia
5	Mami Nishi	5	Japan
5	Peter Marsh	6	Australia
0	Tom King	6	Australia
0	Yoshimi Kato	5	Japan

Tom King from office 6 and Yoshimi Kato from office 5 don't have any customers,
I recommend talking to their superiors (William Patterson and Mami Nishi) to
understand why they don't have customers.

Pamela Castillo has the most customers (10).

I want to see active customers VS potential customer by country:

active customers	potential customers	country
3	10	Germany
0	2	Portugal
5	2	Spain
1	1	Ireland
0	1	Israel
0	1	Netherlands
0	1	Poland
0	1	Russia
2	1	Singapore
0	1	South Africa
2	1	Switzerland
5	0	Australia
2	0	Austria
2	0	Belgium
3	0	Canada
2	0	Denmark
3	0	Finland
12	0	France
1	0	Hong Kong
4	0	Italy
2	0	Japan
4	0	New Zealand
3	0	Norway
1	0	Philippines
2	0	Sweden
5	0	UK
36	0	USA

45% of all potential customers are from Germany.

Let's estimate how much money the company would make if every customer had a
sales rep:

active_customers	active_and_potential_customers	growth_pct	average_monthly_revenue	potential_monthly_revenue
100	122	122	295128	360056

The company would make $360,056 a month if all customers had a sales rep.

Let's check if we have a sales rep that can reach out to the potential customers:

customernumber	customer_country	employeename
114	Australia	Andy Fixter
276	Australia	Andy Fixter
282	Australia	Andy Fixter
333	Australia	Andy Fixter
471	Australia	Andy Fixter
382	Austria	Pamela Castillo
452	Austria	Pamela Castillo
314	Belgium	Pamela Castillo
381	Belgium	Pamela Castillo
233	Canada	Foon Yue Tseng
202	Canada	George Vanauf
260	Canada	George Vanauf
145	Denmark	Pamela Castillo
227	Denmark	Pamela Castillo
186	Finland	Larry Bott
311	Finland	Larry Bott
334	Finland	Larry Bott
103	France	Gerard Hernandez
119	France	Gerard Hernandez
171	France	Gerard Hernandez
209	France	Gerard Hernandez
242	France	Gerard Hernandez
256	France	Gerard Hernandez
146	France	Loui Bondur
172	France	Loui Bondur
250	France	Loui Bondur
350	France	Loui Bondur
353	France	Loui Bondur
406	France	Loui Bondur
223	Germany	NULL
247	Germany	NULL
273	Germany	NULL
307	Germany	NULL
335	Germany	NULL
361	Germany	NULL
409	Germany	NULL
443	Germany	NULL
459	Germany	NULL
477	Germany	NULL
128	Germany	Barry Jones
259	Germany	Barry Jones
415	Germany	Barry Jones
211	Hong Kong	Mami Nishi
348	Ireland	NULL
189	Ireland	Barry Jones
481	Israel	NULL
249	Italy	Pamela Castillo
278	Italy	Pamela Castillo
386	Italy	Pamela Castillo
473	Italy	Pamela Castillo
177	Japan	Mami Nishi
398	Japan	Mami Nishi
303	Netherlands	NULL
323	New Zealand	Peter Marsh
357	New Zealand	Peter Marsh
412	New Zealand	Peter Marsh
496	New Zealand	Peter Marsh
121	Norway	Barry Jones
167	Norway	Barry Jones
299	Norway	Barry Jones
385	Philippines	Mami Nishi
125	Poland	NULL
169	Portugal	NULL
369	Portugal	NULL
480	Russia	NULL
206	Singapore	NULL
148	Singapore	Mami Nishi
166	Singapore	Peter Marsh
356	South Africa	NULL
237	Spain	NULL
465	Spain	NULL
141	Spain	Gerard Hernandez
216	Spain	Martin Gerard
344	Spain	Martin Gerard
458	Spain	Martin Gerard
484	Spain	Martin Gerard
144	Sweden	Barry Jones
448	Sweden	Barry Jones
293	Switzerland	NULL
298	Switzerland	Martin Gerard
376	Switzerland	Martin Gerard
187	UK	Larry Bott
201	UK	Larry Bott
240	UK	Larry Bott
324	UK	Larry Bott
489	UK	Larry Bott
151	USA	Foon Yue Tseng
168	USA	Foon Yue Tseng
181	USA	Foon Yue Tseng
424	USA	Foon Yue Tseng
455	USA	Foon Yue Tseng
456	USA	Foon Yue Tseng
131	USA	George Vanauf
175	USA	George Vanauf
319	USA	George Vanauf
328	USA	George Vanauf
447	USA	George Vanauf
486	USA	George Vanauf
173	USA	Julie Firrelli
204	USA	Julie Firrelli
320	USA	Julie Firrelli
339	USA	Julie Firrelli
379	USA	Julie Firrelli
495	USA	Julie Firrelli
124	USA	Leslie Jennings
129	USA	Leslie Jennings
161	USA	Leslie Jennings
321	USA	Leslie Jennings
450	USA	Leslie Jennings
487	USA	Leslie Jennings
112	USA	Leslie Thompson
205	USA	Leslie Thompson
219	USA	Leslie Thompson
239	USA	Leslie Thompson
347	USA	Leslie Thompson
475	USA	Leslie Thompson
157	USA	Steve Patterson
198	USA	Steve Patterson
286	USA	Steve Patterson
362	USA	Steve Patterson
363	USA	Steve Patterson
462	USA	Steve Patterson

My recommendations are:

- Hire a sales rep that speaks fluent German to provide a service to customers 223,247,273,307,335,361,409,443,459,477 or even consider opening an office in Germany.
- Barry Jones takes customer 348 (he's already selling to customer 189 that's in Ireland).
- Gerard Hernandez takes customer 481 that's in Israel (one customer isn't worth hiring a Hebrew speaker sales rep for).
- Martin Gerard takes customer 303 that's in Netherlands (one customer isn't worth hiring a Dutch speaker sales rep for).
- Martin Gerard takes customers 169 and 369 that's in Portugal (he's already selling to Spanish customers).
- Gerard Hernandez takes customers 237 and 465 that's in Spain (he's already selling to Spanish customers).
- Martin Gerard takes customer 293 that's in Switzerland (he's already selling to Swiss customers).