The Background

Aaron's Recruiting Company is a 5 year old staffing firm focused strictly on the IT industry and direct-hire placements for clients in multiple states. They had a record-breaking year and became profitable for the first time. The company is made up of the executive team, 11 recruiters, and 7 salespeople. The salespeople interact with hiring managers to understand their needs and create job orders. The job orders are then introduced to the recruiters to find candidates for the open positions. The work has essentially been a "free for all". Salespeople are allowed to target any clients and any job they want. Recruiters are allowed to recruit for any client and any type of skill set they want. Metrics are tracked on how many initial contacts are being made, how many clients and candidates are being spoken to, and how many of those contacts turn into revenue (job orders and placements). The fee charged by the firm is a flat 25% of the base salary accepted. Employees are paid a base salary + 10% commission on their placement fees. Placement fees are split 50/50 between the salesperson and the recruiter.

The Project

The executive team wishes to continue becoming more profitable. They believe in order to do this, there needs to more of a structure around the team. For example – which salesperson should work with which client and which recruiter should focus on which skill set? They also want a better understanding of the clients to then target growing business using established relationships, rather than adding one off clients with no true long term partnership potential.

Questions To Be Answered

1. Which clients should be targeted the most and which have the best chance to become long term partners?
2. Should we hire Director Level employees to strategize and manage groups of recruiters and salespeople to for a more sound structure?
3. Which salespeople should be dedicated to the targeted clients once decided?
4. Which recruiters should be dedicated to certain skill sets and certain clients?
5. Who are the struggling producers and how can we improve upon their performance?
6. How should top performers be rewarded/incentivized for the successful year and continued improvement?
7. Are there any new areas of business to target with established clients?

The Analysis

1. **Which clients should be targeted the most and which have the best chance to become long term partners?**
   As shown on the Executive Overview page, our highest grossing clients are listed in order and should be the first to be targeted for long term relationships. However, we should also consider the fill ratio for clients with less job orders. In the Client Overview page, we can see clients 2, 4, 20, 26, 52, 35, and 29 all had fill ratios of 90% or greater. This means we successfully placed candidates in more than 90% of their open jobs indicating a strong relationship and solid understanding of company needs.

2. **Should we hire Director Level employees to strategize and manage groups of recruiters and salespeople to for a more sound structure?**
   Before hiring outside Directors, we should consider internal promotion. Recruiters 1 and 3 were our 2 top producers in the recruiting division and the same goes for salespeople 2 and 4. Consider discussing promotion and team leadership with these 4 individuals before external hiring.

3. **Which salespeople should be dedicated the targeted clients for building partnerships?**
   By viewing the Sales Overview page, we can click individual employee tabs and view the clients they received the most job orders from. Consider the top clients and discuss with the specific salesperson bringing in the most jobs orders with those clients about putting more effort into those targets, rather than searching for new business.

4. **Which recruiters should be dedicated to certain skill sets and certain clients?**
   By viewing the Recruiter Overview page, we can click individual recruiters to see their top skill sets placed and who they were placed with. Consider taking the top 3-4 recruiters and having them focus on their most successful types of jobs with the targeted clients mentioned above.

5. **Who are the struggling producers and how can we improve upon their performance?**
   Salesperson 5 and recruiters 2 and 7 were the lowest in gross margin generated. Their weekly/monthly contact and interaction metrics were also low. Consider partnering them with a more successful team member for mentorship and conducting weekly or biweekly one on ones to discuss issues they are having, strategy and education, if needed. It's also recommended to take notice of which clients and skill sets they are having the most success with and have them dedicate more time to where they are seeing the most success. It is important to clearly define their metrics and goals and ensure they are on the right path to achieving those. Revaluate in 3-6 months after these actions are taken.

6. **How should top performers be rewarded/incentivized for the successful year and continued improvement?**
   With the amount of profit generated, there is enough budget to give every employee a $5-10k raise on their base salary as reward for an incredible year. It's also recommended to implement incentive programs. These could be tiered promotions based on their gross margin generated. For example, commission % could increase to 15% after $300k of gross margin has been

generated, and then another increase to 20% after $600k is generated. There could also be a small bonus qaurterly structure implemented for those struggling to influence their daily work efforts.

With a crazy market, it's important to have continuous discussions with these employees and to conduct market research to ensure they are being compensated appropriately, especially when they are profitable.

7. **Are there any new areas of business to target with established clients?**
Contracting and consulting are 2 primary areas our competitors succeed in. It's recommended to consult with a legal representative and implement a new agreement that allows the company to place and employ W2 contractors. The top salespeople then need to be educated on how to pitch these ideas to clients and to learn how to identify these opportunities based on their client's roadmaps and goals.

The Data and Technical Work

IMPORTANT NOTE: The data used in this analysis is dummy data and does not reflection the information of any legitimate organization. The data was populated randomly in an Excel spreadsheet. The MySQL Database shown below was created to showcase SQL skills and does not contain any data related to this analysis.

Date_added - The date the job order was created by the salesperson

Job_skill – the top skill required by the client for the job order. Only placements included a job skill

Company_id – the ID given to a specific client for which the job order was created

Salary – the base salary the placement received when the job offer was accepted

Recruiter_id – the recruiter whose candidate accepted the job offer

Salesperson_id – the salesperson who created the job order

Fill – yes/no if the job offer was accepted by a candidate represented by the firm

Accept_date – the date the offer was accepted

Time_to_fill – the amount of days between the job order creation and the offer acceptance

Fee – the amount owed to the recruiting firm. Every placement is a 25% fee of the base salary

The job_orders data looks like this in the spreadsheet with a new column to calculate the fee.

	A	B	C	D	E	F	G	H	I	J
1	date_added	job_skill	compan	salary	recruit	salespe	fill	accept_d	time_t	fee
2	1/4/2021		cl0028			sp0007	NO			0
3	1/4/2021		cl0031			sp0004	NO			0
4	1/4/2021		cl0030			sp0002	NO			0
5	1/4/2021	Power BI	cl0039	120000	rec0007	sp0001	YES	1/27/2021	23	30000
6	1/6/2021		cl0029			sp0002	NO			0
7	1/6/2021	Power BI	cl0039	125000	rec0010	sp0003	YES	2/2/2021	27	31250
8	1/7/2021		cl0038			sp0004	NO			0
9	1/7/2021	C#/.NET	cl0019	135000	rec0009	sp0006	YES	2/21/2021	45	33750
10	1/7/2021	CIO	cl0035	275000	rec0006	sp0003	YES	3/20/2021	72	68750

Recruiter, Salesperson and client performance metrics were randomly inputted as well.

	A	B	C	D	E	F	G
1	recruiter_id	avg_weekly_c	avg_weekl	avg_weekl	ave_weekl	avg_monthly_placem	
2	rec0001	80	7	8	5	4	
3	rec0002	64	4	3	3	1	
4	rec0003	91	9	7	5	5	
5	rec0004	83	11	6	4	3	
6	rec0005	74	5	3	3	2	
7	rec0006	79	6	5	2	2	

	A	B	C	D
1	sp_id	avg_weekl	avg_monthly_jobs_added	
2	sp0001	54	6	
3	sp0002	62	8	
4	sp0003	48	6	
5	sp0004	59	9	
6	sp0005	43	3	

	A	B	C	D	E
1	client_id	jobs_adde	candidates	candidates_offered	
2	cl0001	2	6	1	
3	cl0002	1	3	1	
4	cl0003	5	2	0	
5	cl0004	2	5	2	
6	cl0005	14	36	9	
7	cl0006	3	12	2	
8	cl0007	7	7	4	
9	cl0008	5	3	2	
10	cl0009	1	0	0	

Finally, employee costs were also generated to calculate the costs of the year.

|	A	B	C	D	E	F	G	H	I
1	Employee	Base Salar	10% comn	1.4x Taxes	Health Insu	Licensing	Resources	Phone Bills	Total
2	rec0001	75000	75131.25	30000	10000	10000	2500	900	203531.3
3	rec0002	62000	19346.88	24800	5000	10000	2000	900	123146.9
4	rec0003	58000	109556.3	23200	4500	10000	2700	900	207956.3
5	rec0004	53000	56887.5	21200	11000	10000	2500	900	154587.5
6	rec0005	51000	37875	20400	8000	10000	1800	900	129075

To demonstrate database/SQL knowledge, the database below was created using a star schema to show what an actual database might look like for this company. The job orders table acts as a fact table with recruiter, salesperson, client and candidate info acting as dimension tables linked with foreign keys.
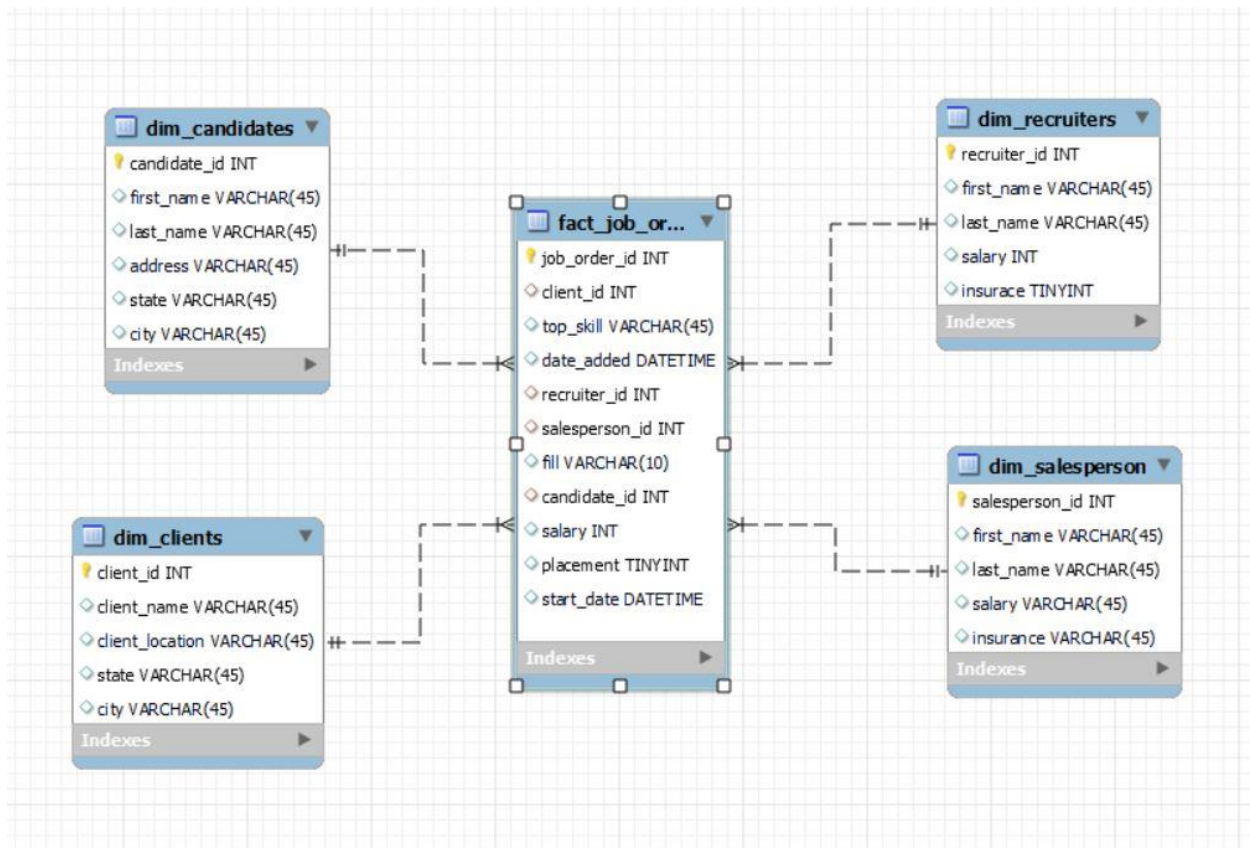
We would then use a simple SQL query to obtain the information in the first excel image above.


```
1 •   SELECT *
2     FROM `fact_job_orders`
3     WHERE date_added >= '2021-01-01' AND date_added <= '2021-12-31'
4
```

In PowerBI, the data from the spreadsheet was modeled in a star schema with relationships linking to the job orders table.
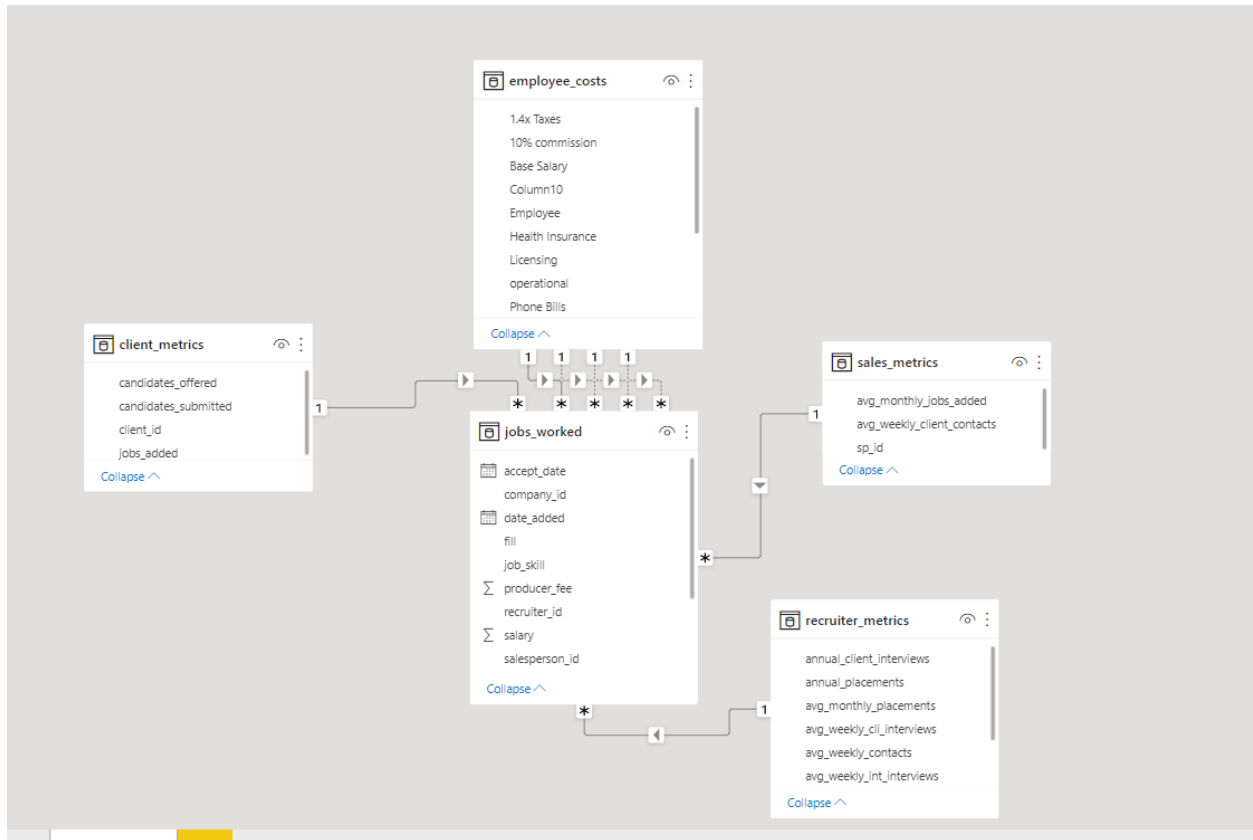
With the data cleaned and properly modeled, there were only a few quick and simple measure to create for the visuals.

Project complete.