1. the gender breakdown of employees in the company

gender	count
Male	8911
Female	8090
Non-Conforming	481

- There are more male employees than female and non-(gender)conforming employees.

2. the race/ethnicity breakdown of employees in the company

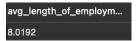|	
White	4987
Two or More Races	2867
Black or African American	2840
Asian	2791
Hispanic or Latino	1994
American Indian or Alaska Native	1051
Native Hawaiian or Other Pacific Islander	952

- the most dominant race amongst the employees is white, and the least dominant are American Indian and Native Hawaiian

3. the age distribution of employees in the company

age_group	gender	count
18-24	Female	620
18-24	Male	697
18-24	Non-Conforming	31
25-34	Female	2290
25-34	Male	2472

age_group	count
18-24	1348
25-34	4897
35-44	5026
45-54	4865
55-64	1346

- the youngest employee is 22, the oldest is 59
- the most dominant age group amongst the employees is 35-44, followed by 25-34 and 45-54; the least dominant age groups are 18-24 and 55-64

4. how many employees work at headquarters versus remote locations

location	count
Headquarters	13107
Remote	4375

- around 75% of the employees work at headquarters, only around 25% work remotely

5. the average length of employment for employees who've been terminated
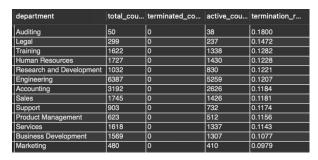- 8.0192 / around 8 years

avg_length_of_employm...
8.0192

6. the gender distribution variation across departments

department	gender	count
Accounting	Female	1175
Accounting	Male	1375
Accounting	Non-Conforming	76
Auditing	Female	19
Auditing	Male	19
Business Development	Female	593
Business Development	Male	672
Business Development	Non-Conforming	42
Engineering	Female	2442
Engineering	Male	2671
Engineering	Non-Conforming	146
Human Resources	Female	672
Human Resources	Male	721
Human Resources	Non-Conforming	37
Legal	Female	107
Legal	Male	125
Legal	Non-Conforming	5

Marketing	Female	206
Marketing	Male	199
Marketing	Non-Conforming	5
Product Management	Female	227
Product Management	Male	272
Product Management	Non-Conforming	13
Research and Develo...	Female	404
Research and Develo...	Male	401
Research and Develo...	Non-Conforming	25
Sales	Female	648
Sales	Male	739
Sales	Non-Conforming	39
Services	Female	647
Services	Male	661
Services	Non-Conforming	29
Support	Female	337
Support	Male	368
Support	Non-Conforming	27
Training	Female	613
Training	Male	688
Training	Non-Conforming	37

- Fairly equal gender distribution across the departments; although, there seems to be more male employees than female employees across the departments
- Non-(gender)conforming employees are the least dominant gender across all the departments

7. the department with the highest turnover rate

department	total_cou...	terminated_co...	active_cou...	termination_r...
Auditing	50	0	38	0.1800
Legal	299	0	237	0.1472
Training	1622	0	1338	0.1282
Human Resources	1727	0	1430	0.1228
Research and Development	1032	0	830	0.1221
Engineering	6387	0	5259	0.1207
Accounting	3192	0	2626	0.1184
Sales	1745	0	1426	0.1181
Support	903	0	732	0.1174
Product Management	623	0	512	0.1156
Services	1618	0	1337	0.1143
Business Development	1569	0	1307	0.1077
Marketing	480	0	410	0.0979

- highest turnover rate = Auditing department, with termination rate of 0.1800
- Marketing and Business Development have the lower turnover rates

8. the distribution of employees across locations by state

location_sta...	count
Ohio	14144
Pennsylvania	892
Illinois	698
Michigan	550
Indiana	545
Kentucky	347
Wisconsin	306

- A large no. of employees are located in Ohio (81% of the employees)

9. how the company's employee count has changed over time based on hire and term dates

year	hires	terminations	net_change	net_change_perc...
2000	211	26	185	87.68
2001	1082	197	885	81.79
2002	1012	162	850	83.99
2003	1088	198	890	81.80
2004	1087	200	887	81.60
2005	1038	188	850	81.89
2006	1069	182	887	82.97
2007	1058	153	905	85.54
2008	1061	145	916	86.33
2009	1094	154	940	85.92
2010	1050	137	913	86.95
2011	1057	119	938	88.74
2012	1059	115	944	89.14
2013	1042	97	945	90.69
2014	1014	91	923	91.03
2015	1011	89	922	91.20
2016	1076	72	1004	93.31
2017	1043	61	982	94.15
2018	1090	55	1035	94.95
2019	1038	54	984	94.80
2020	967	38	929	96.07

- The net change in employees has increased from years 2000 – 2020 (by around 8%) – over the years, terminations of employees have generally decreased, whilst around 1000 hires have been made per year

10. the tenure distribution for each department (the length of time employees work for the department)

department	avg_tenure
Engineering	8
Services	8
Human Resources	9
Business Development	9
Sales	8
Support	8
Auditing	9
Training	8
Accounting	9
Research and Development	8
Product Management	9
Legal	9
Marketing	8

- the average tenure across all the departments seems to be around 8/9 years

EXTRA NOTE:

- 967 records showed negative ages – we excluded these records in our analysis, we used ages above 18 in our SQL queries
- The dataset included termdates with dates into the future (e.g., 2066) – we excluded these records in our analysis, ensuring that we used termdates less than or equal to the current date, in our SQL queries