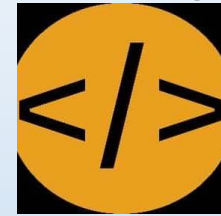# *Code and create bootcamp Capstone project*

DATA ANALYSIS:GROUP 5

OCTOBER, 2025

GROUP NAME:TEAM INFO SCOUTS.
GROUP TOPIC: DS JOB HR ANALYTICS

MEMBERS:

EDEH OGECHUKWU EVELYN-CCB/DA/060 ~ (*group captain*)

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JOB DESCRIPTION:

- The dataset represents job listings for Data Science and Analytics roles from multiple companies

The goal is to help the HR analytics team and

career advisory units understand:

- What factors influence salary estimates and company ratings.
- Which industries and locations offer the best opportunities, and
- How company attributes like size, founding year, and ownership affect

job prospects.

Proposed Solution Overview:

- Team info scouts aims to clean and anaylze the "DS Jobs dataset" using Excel and SQL to revealkey factors influencing salaries,ratings,and job trends,and more importantly to present insights visually.

Approach (SQL + Excel)

SQL: Cleaning +salary parsing + group aggregations.

EXCEL: Visualization + KPI dashboards+ interactive slicers.

Combined quantitative & visual story telling for HR decision making.

Row Labels	Average salary	Average rating
Startup	123774.19	4.21
Established	123706.02	3.72
Mid_age	119337.13	3.95
Grand Total	366817.34	11.88

City	Job count	Average salary
Boston	24	122583.33
Chicago	22	121318.18
New York	50	136680
San Francisco	69	119224.64
Washington	27	138555.56
Grand Total	192	638361.71

Industry	Sum of average_salary	Sum of avg_rating
Accounting	124666.67	4.17
Advertising & Marketing	117608.7	3.8
Aerospace & Defense	132695.65	3.78
Architectural & Engineering Services	154833.33	3.6
Banks & Credit Unions	127562.5	3.69
Biotech & Pharmaceuticals	122871.21	3.68
Cable, Internet & Telephone Providers	99500	2.9
Chemical Manufacturing	128166.67	3.37
Colleges & Universities	117833.33	3
Computer Hardware & Software	120219.3	4.24
Construction	74750	3.4
Consulting	131052.63	3.91
Consumer Electronics & Appliances Store	129500	3.5
Consumer Products Manufacturing	119000	3.6
Department, Clothing, & Shoe Stores	107000	3.5
Electrical & Electronic Manufacturing	145500	3.47
Energy	110800	3.7
Enterprise Software & Network Solution:	119918.6	4.09

Industry	Average salary	Average rating
Publishing	271500	4.7
Health, Beauty, & Fitne	203750	4
Food & Beverage Store	183000	3.7
Hotels, Motels, & Reso	183000	3.5
State & Regional Agenc	183000	3.2
Wholesale	177000	2.63
Other Retail Stores	167333.33	3.67
Architectural & Engine	154833.33	3.6
Electrical & Electronic	145500	3.47
Transportation Equipm	140000	4.6
Research & Developme	136205.88	3.87
Aerospace & Defense	132695.65	3.78
Video Games	132666.67	4.47
Express Delivery Servic	132000	3.2
Federal Agencies	131437.5	3.97
Consulting	131052.63	3.91
Consumer Electronics &	129500	3.5

Executive Summary

Average Salary
$123,663.69

Average Rating
3.8

Top 3 Industries

Food & Beverage Stores	183,000
Health, Beauty, & Fitness	203,750
Publishing	271,500

500 + Data Science & Analytics job listings analysed

Objective : understand salary & rating drivers, top industries & location

Average salary ≈ $123k

Average rating ≈ 3.8

Tech & Finance = best combination of pay + rating
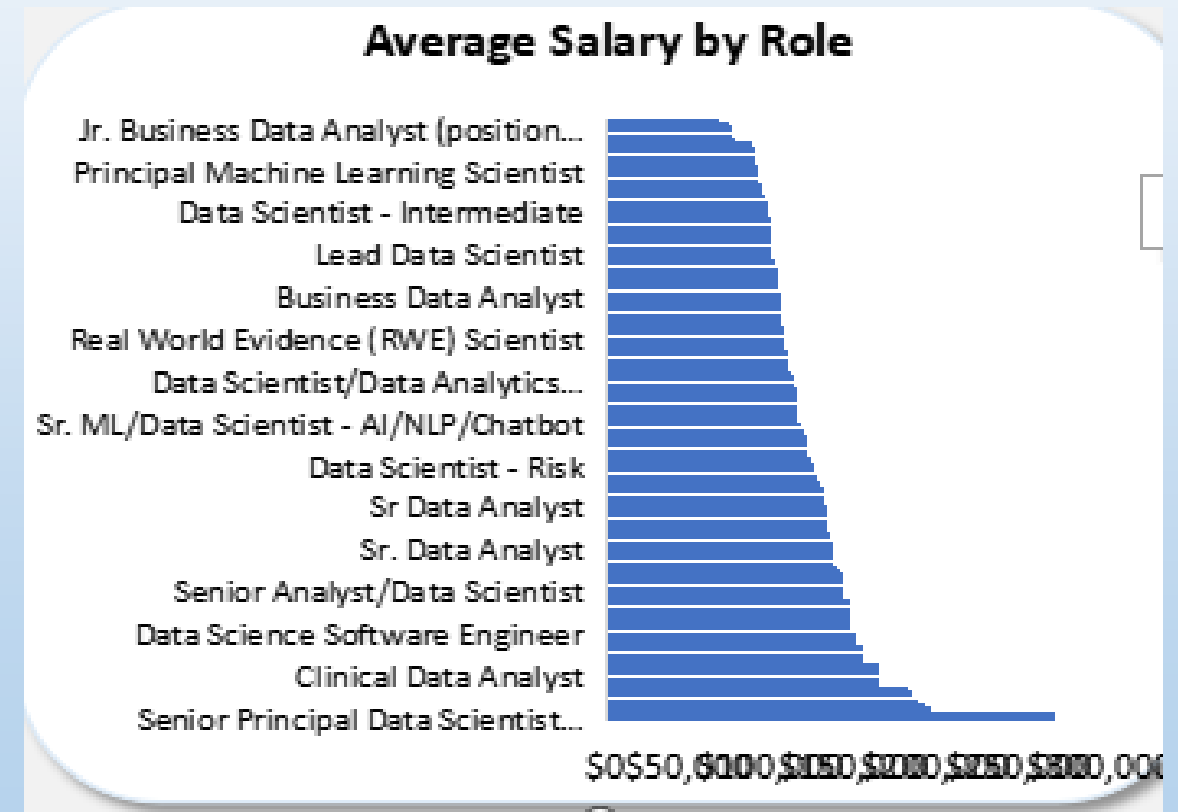
Established firms pay ≈ 20 % more than startups

Problem 1:
Question: *Which job tittles have highest average salary estimates?*

Top 5 ROLES by Average Salaries:

1)Senior Data Scientist- $271k

2) ML Engineer- $197k

3)Data Science Manager- $188k

4)Data Engineer- $164k

5)Data Scientist- $154k

Chart

Average Salary by Role

Jr. Business Data Analyst (position...
Principal Machine Learning Scientist
Data Scientist - Intermediate
Lead Data Scientist
Business Data Analyst
Real World Evidence (RWE) Scientist
Data Scientist/Data Analytics...
Sr. ML/Data Scientist - AI/NLP/Chatbot
Data Scientist - Risk
Sr Data Analyst
Sr. Data Analyst
Senior Analyst/Data Scientist
Data Science Software Engineer
Clinical Data Analyst
Senior Principal Data Scientist...

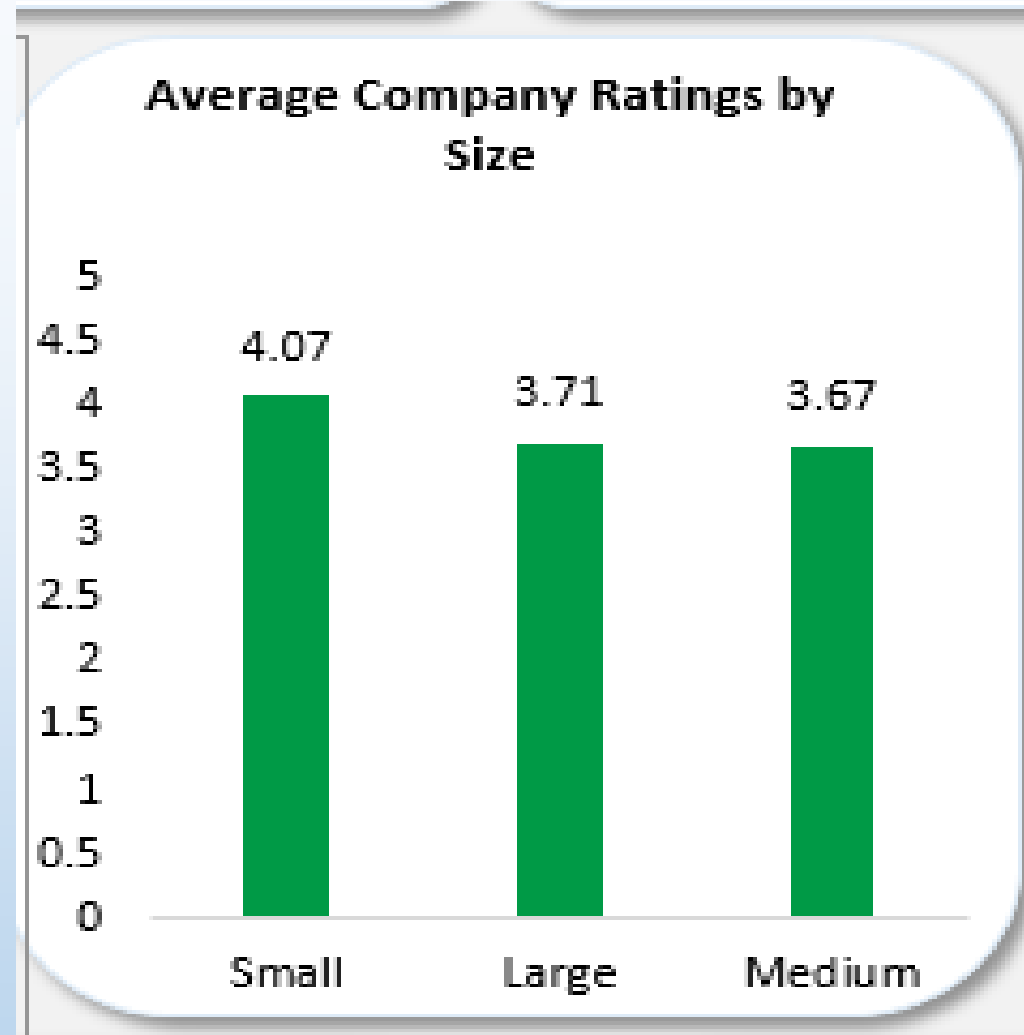$0 $50,000 $100,000 $150,000 $200,000 $250,000 $300,000

Problem 2:
Question: *Do larger companies tend to have higher Glassdoor ratings?*
Company sizes vs Ratings:

Large Companies(>5000 Employees) _3.71

Medium Companies (500-5000 Employees)_3.67

Small Companies(<500 Employees)_4.07

Average Company Ratings by Size

Problem 3:
Question: *Do larger companies tend to have higher Glassdoor ratings?*

Industry & Sector Analysis

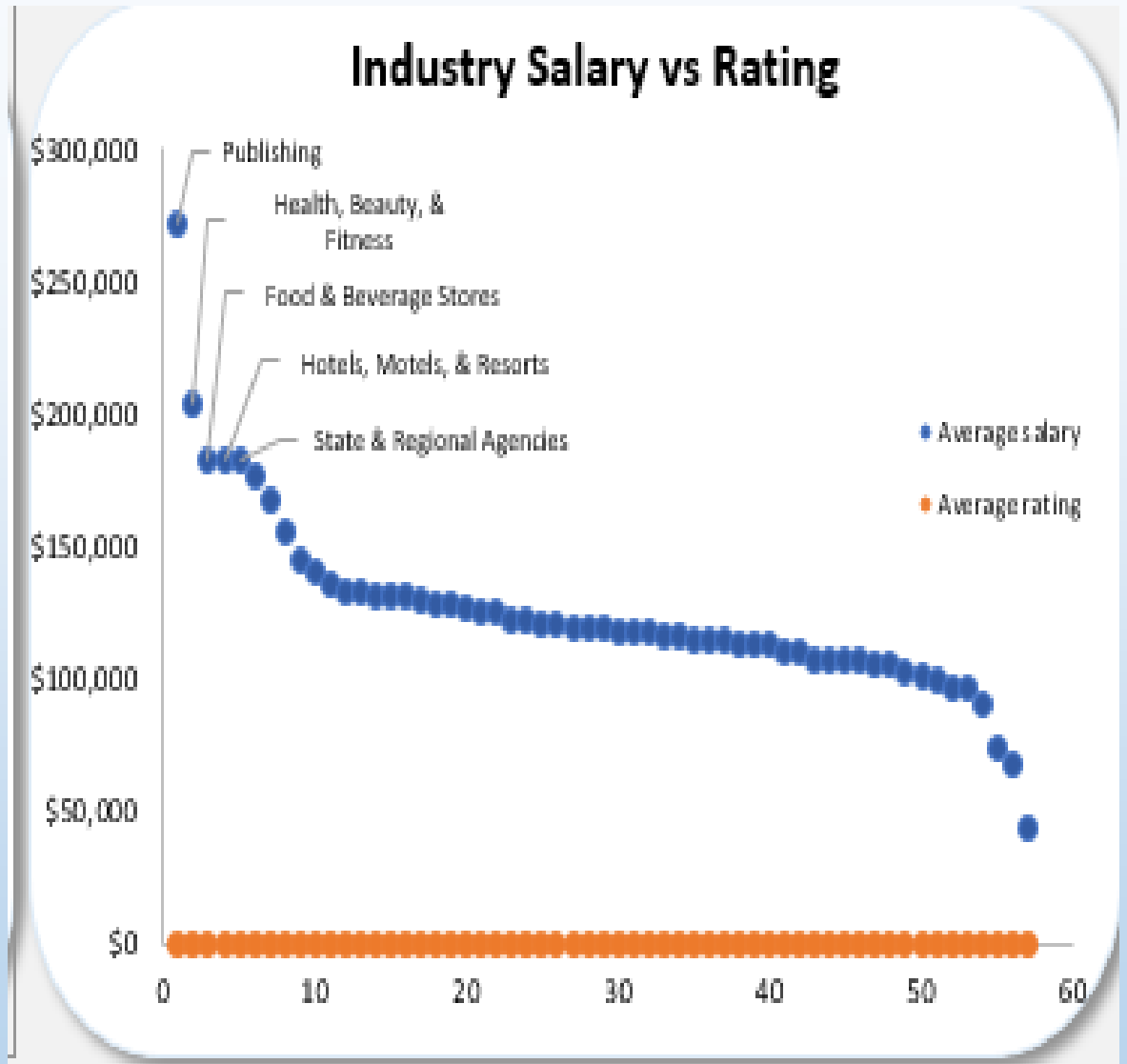**Publishing -**

Health , Beauty ,& Fitness –

Food and Beverages Stores

Hotels, Motels,& Resorts -

State & Regional Agencies –

Whole sale –

Architectural &Engineering -

Aerospace & Defense -

Problem 4:
Question: *which U.S. cities offer the most Data science job opportunities and best pay*?
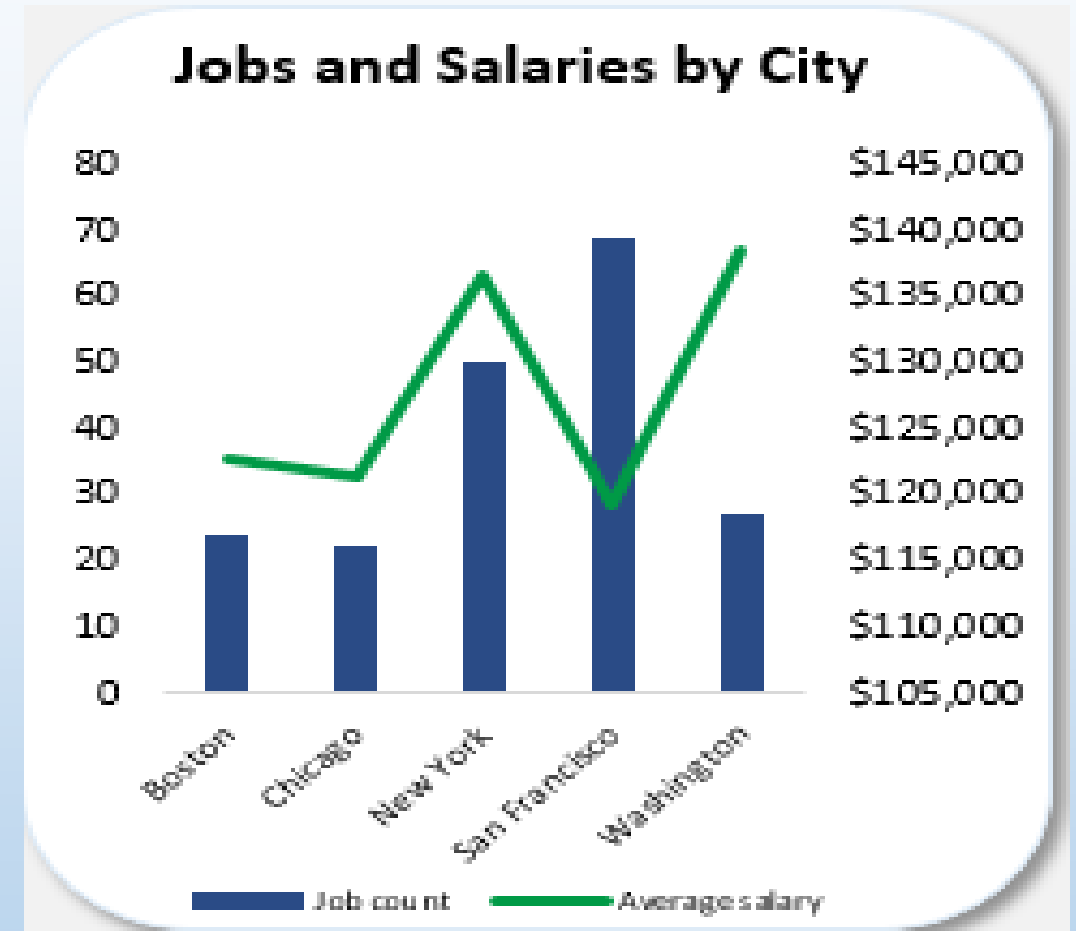
Location& market opportunities

San Francisco

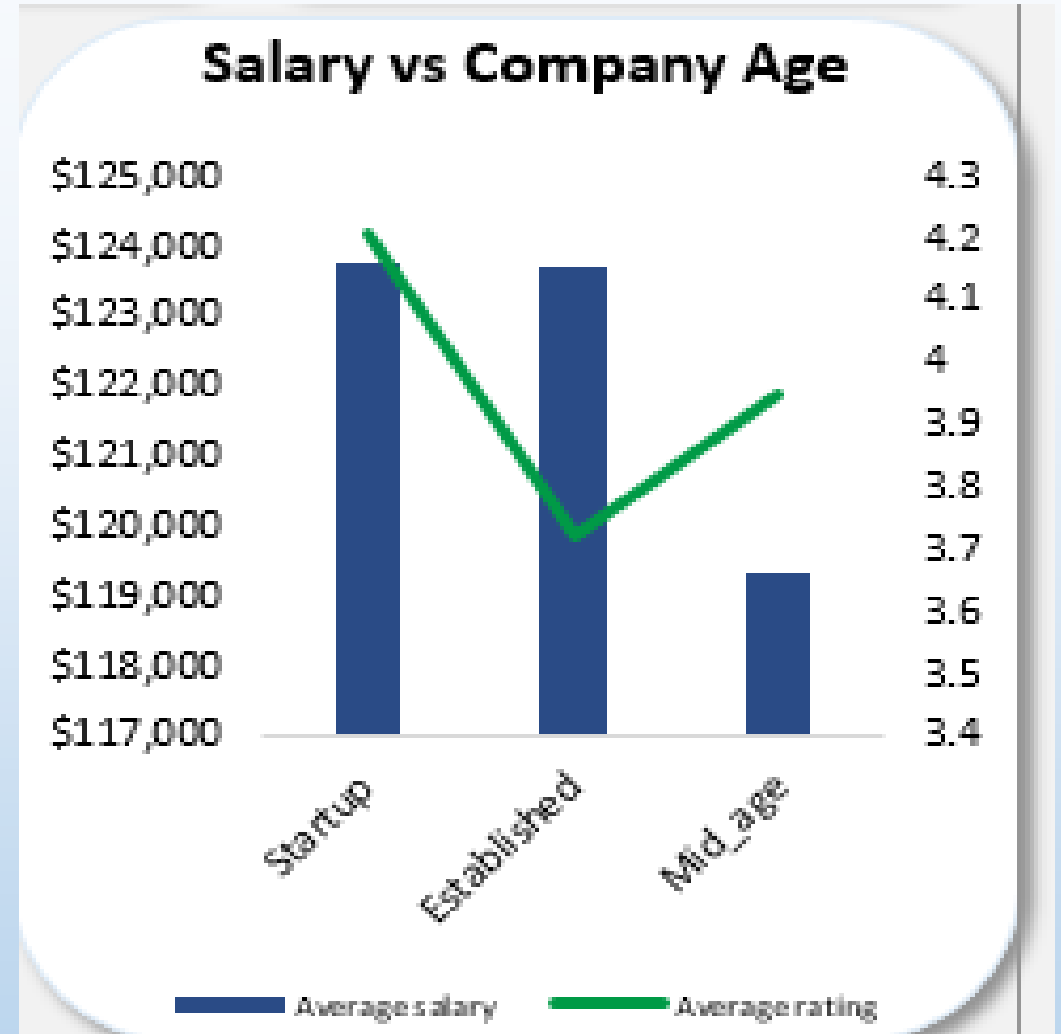**New York**

Washington

Boston

Chicago

Problem 5:
Question: *Do older, more established companies offer higher salaries?*

Company Age vs Salary:

Start ups (≤ 5 yrs)   **$123,774**
                4.2

Mid-age (6–15 yrs)   **$123,706**
                3.72

Established (> 15 yrs)   **$119,337**
                3.95

Recommendations:

Recruitment for high value roles should be btw Senior Data Scientist &ML Engineers.

Focus on top cities (San Francisco ,New York city, Washington)

Keep Salaries competitive in Health and Finance Sectors.

Highlight growth potential to attract talent to start-ups.

Implement a skill-based hiring strategy (to align required skills with salary levels)

Develop a data driven compensation dashboard to continuously monitor pay equity and market trends.

Thanks for having us