IPM652: Final Group Presentation
ANALYTICAL AVENGERS

Rob Pitney
Nayeon Kwak
Philip Kudryavtsev
Snehal Khaire
Palash Bhatt
Zihan Song

Table of Contents

Part 1

INTRODUCTION

#We analyzed LinkedIn job postings
to offer new graduates a comprehensive analysis,
enabling them to find a job
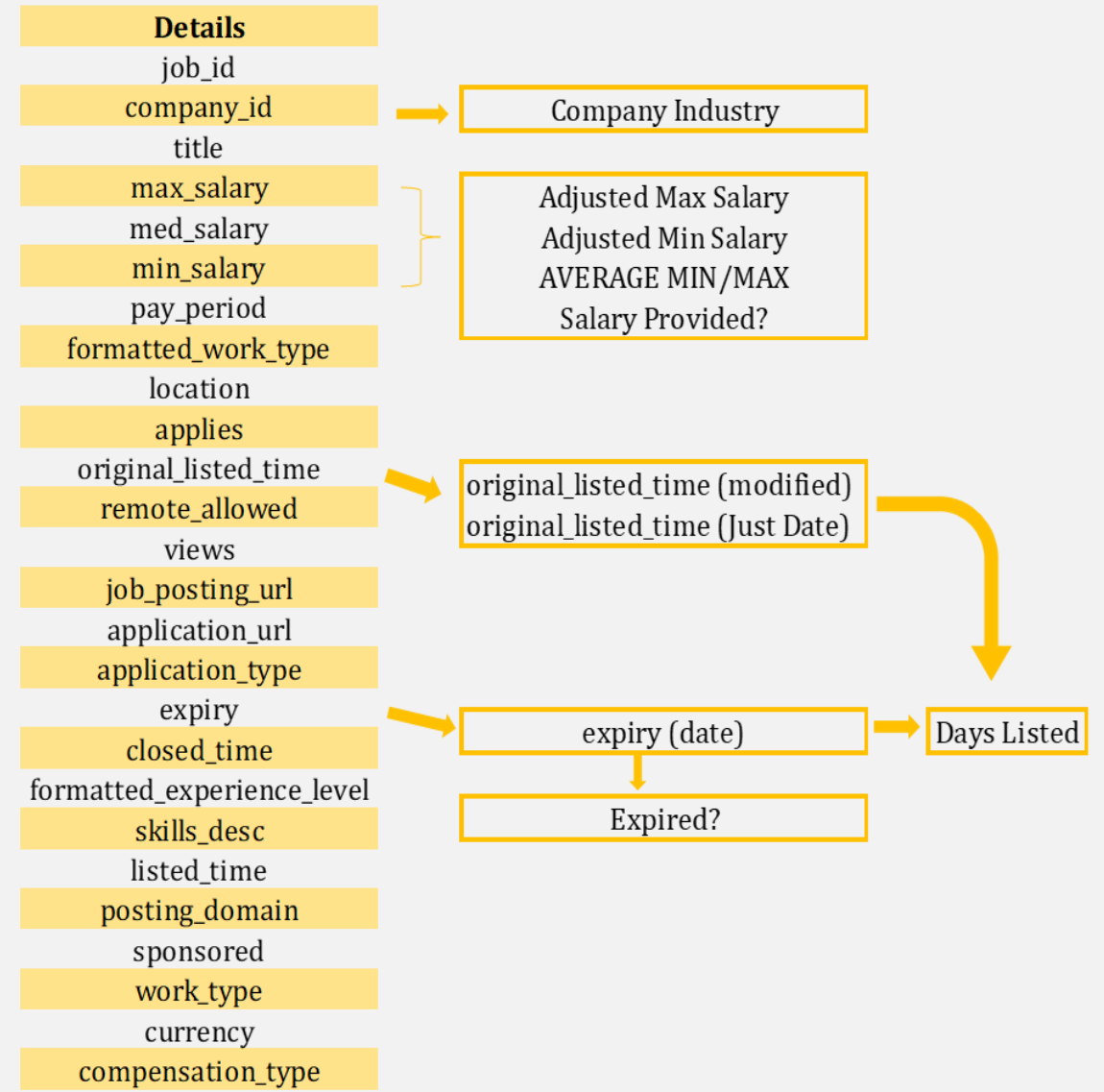that aligns better with their skills and preferences

Part 2

DATA COLLECT & CLEAN UP

DATA COLLECT & CLEAN UP

DATASET :
LinkedIn Job Postings - 2023

- Kaggle Dataset

- Range : June – August 2023
  (33,000+ Datapoints)

Part 3

ANALYSIS

ANALYSIS

- Salary by Industry
- Job Types and Flexibility

- Geographical Job listings
- Average Compensation by State

| Salary Analysis | Industry Analysis | Geography Analysis |

- Most Competitive Industries
- Most Competitive Job Postings
- Overview of Job Skills in Demand
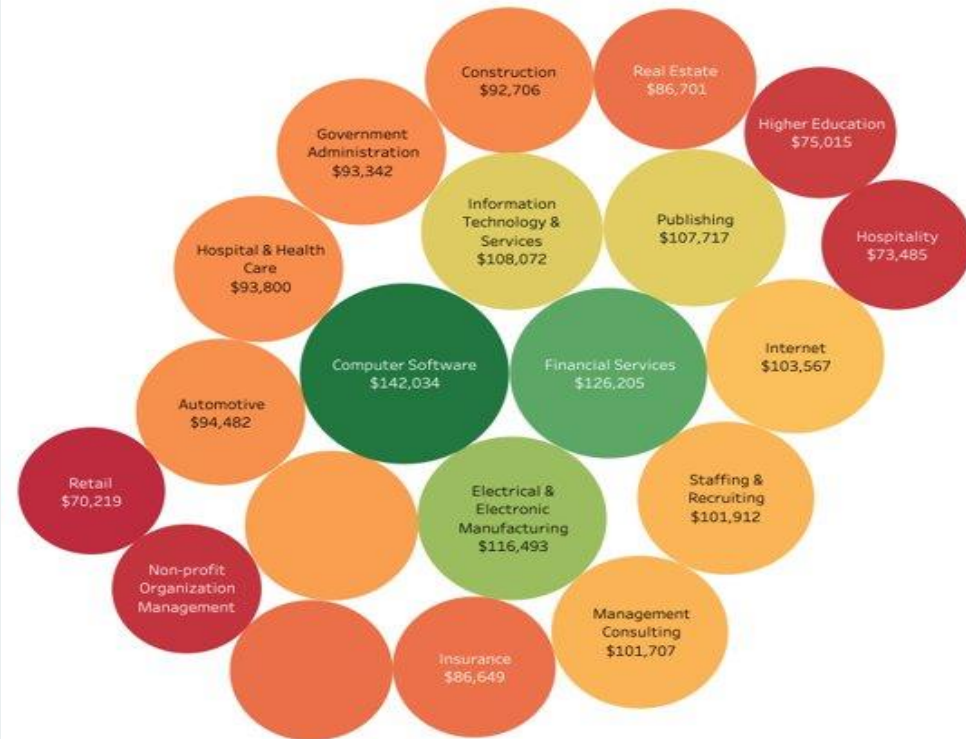- Most In-Demand Skills
- Hiring Velocity

ANALYSIS

Salary Analysis

Salary by Industry

- Top salaries fall within Computer Soft ware, Financial Services and Electronic & Electronic Manufacturing Industries

- **Recommendation:**

  Cater skills and knowledge towards these industries

Avg. Full-Time and Contract Salary by Industry

Construction $92,706

Real Estate $86,701

Higher Education $75,015

Government Administration $93,342

Information Technology & Services $108,072

Publishing $107,717

Hospitality $73,485

Hospital & Health Care $93,800

Computer Software $142,034

Financial Services $126,205

Internet $103,567

Automotive $94,482

Staffing & Recruiting $101,912

Retail $70,219

Electrical & Electronic Manufacturing $116,493

Non-profit Organization Management

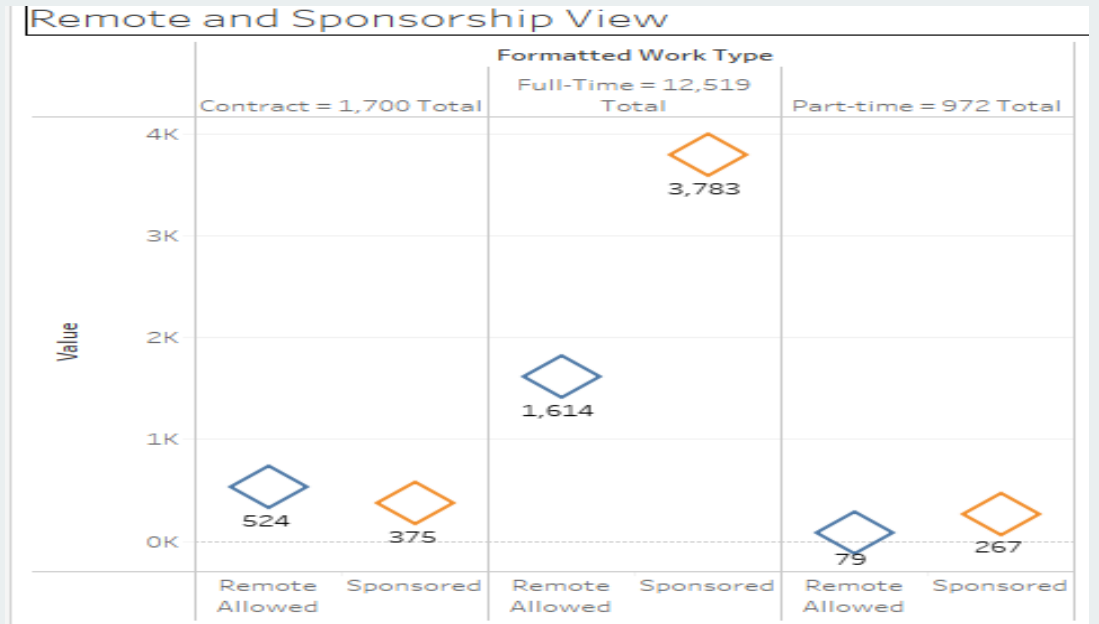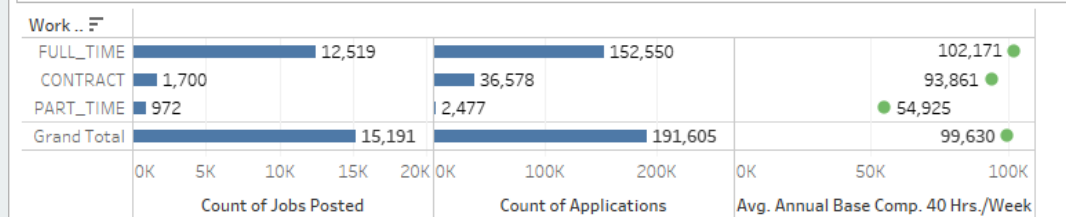Management Consulting $101,707

Insurance $86,649

ANALYSIS

Job Types and Flexibility

Job Types and Flexibility

- 98%+ of postings = Full-time, Contract or Part-time (Temporary, Interns, Other < 2%)

- Avg. Annual Comp:
    - Full-time $102K + Benefits (approx. 25 – 35%)
    - Contract $ 94K no benefits
    - Part-Time $ 55K if 40-hour week

- **H1B1 Sponsorship** is advertised as available for 30%of full-time positions, 27% of part-time postings and 22% of contract roles

- **WAH** is advertised on 13% of full-time, 8% of part-time, and **31% of contract roles**

Remote and Sponsorship View

Work Type Analysis

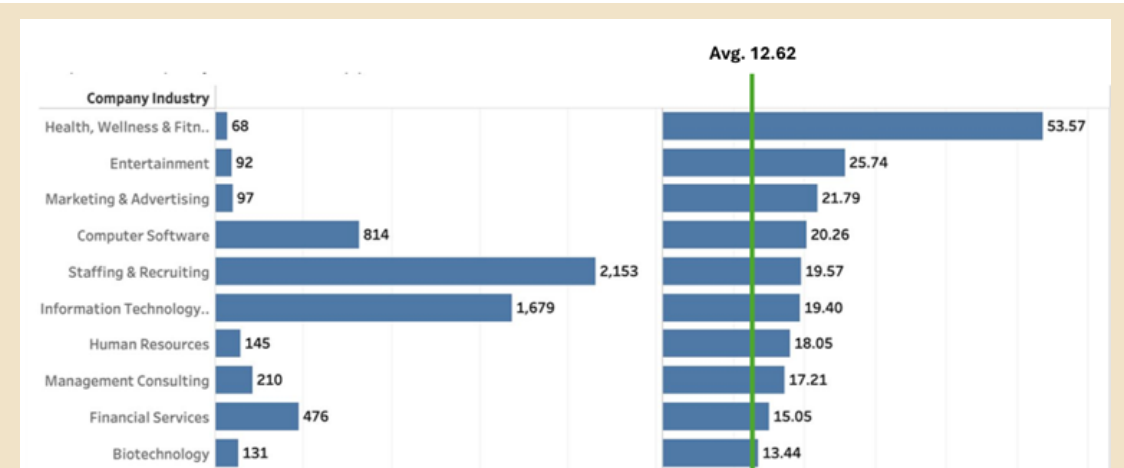| Work ..	Count of Jobs Posted	Count of Applications	Avg. Annual Base Comp. 40 Hrs./Week
FULL_TIME	12,519	152,550	102,171
CONTRACT	1,700	36,578	93,861
PART_TIME	972	2,477	54,925
Grand Total	15,191	191,605	99,630

ANALYSIS

Industry Analysis

Most Competitive Industries

- On average, a job posting gets 12.6 applies

- **Conclusion:**
  These industries require applicants to stand out

- **Recommendation:**
  - Strong networking
  - Learn key skills
  - Make your resume stand out

The most competitive industries are
- Staffing & Recruiting
- Information Technology
- Computer Software
- Financial Services
- Management Consulting
- Human Resources
- Biotechnology
- Marketing & Advertising
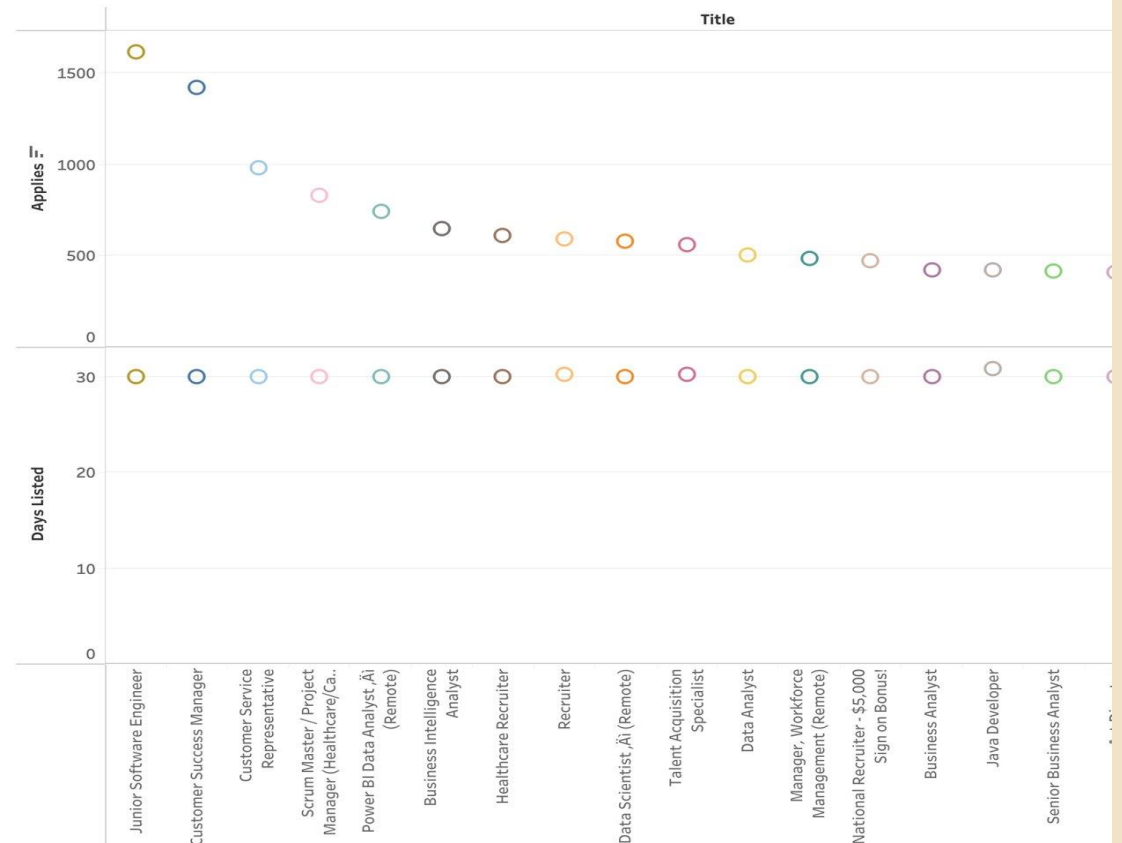- Entertainment
- Health, Wellness & Fitness

ANALYSIS

Industry Analysis

Most Competitive Job Postings

- Top 20 most applied to Job postings by applies show that on average, **jobs are live for 30 days**

- These roles show a common theme in requiring **hard skills**, such as analytics and engineering, as well as **interpersonal skills**, communication and selling

- **Conclusion:**
  Jobs on average are live for 30 days and most sought after jobs require technical skills

- **Recommendation:**

  - Track when jobs were posted to understand time constraint

  - Make sure your resume strongly presents necessary skills

Top 20 Apply Rate Jobs

ANALYSIS

Industry Analysis

Overview of Job Skills in Demand

- **Top 5 industries that demand the most diverse skills** are:
  - Staffing & Recruiting
  - Information Technology & Services
  - Hospital & Health Care
  - Computer Software
  - Retail
- **Among all industries, the most in-demand skills** are:
  - IT technology skills
  - Sales skills
  - Management skills
  - Manufacturing skills
  - Engineering skills

Job Skills In Demand Overview

Company Industry (job!skills)

Skill Abr	Staffin..	Inform..	Hospit..	Compu..	Retail	Financi..	Constr..	Transp..	Real Es..	Publis..	Gran..
IT	603	978	163	350	69	93	66	42	36		2,400
SALE	169	159	62	201	386	193	30	33	89	162	1,484
MGMT	187	98	118	53	230	48	146	137	114		1,131
ENG	325	374	44	221	25	32	38	25	8		1,092
BD	128	146	37	161	295	81	28	29	10	162	1,077
HCPR	219	18	758	3	25			1	1		1,025
MNFC	174	88	99	40	202	31	136	134	62		966
OTHR	92	203	174	106	135	51	24	43	31	2	861
FIN	271	76	28	21	58	180	7	13	24		678
ACCT	290	28	24	17	55	30	8	11	20		483
PRJM	131	88	17	63	9	7	41	13	12		381
MRKT	94	66	17	80	23	31	4	7	22		344
ADM	152	40	73	9	11	14	10	4	21		334
ANLS	106	82	52	9	4	24		1	1		279
RSCH	83	63	52	6	1	6		1			212
CUST	71	20	10	18	44	22		5	9		199
HR	98	25	16	18	17	9	4	4			191
ADVR	7	6		9	1	1		1		161	186
DSGN	67	43	5	15	18	3	8	5	3		167
CNSL	37	54	4	51	1	10	5		1		163
STRA	52	13	2	47	5	8	6	2	3		138
QA	43	37	1	10	3	8	2	6	13		123
ART	43	23	5	14	22	3	5	3	2		120
PRDM	31	19	6	36	3	10		2	1		108
SUPL	32	14	10	20	14		3	9	2		104
GENB	19	4	8	52	5	10	2		4		104
LGL	53	18	4	8	1	7	1	3			95
WRT	20	33	5	8	1	5		6			78
PR	19	25	7	10	1	5		5			72
EDU	12	13	13	13	6	3		1			61
TRNG	8	5	11	13	8	5		1	1		52
SCI	32	11	4	2							49
PRCH	24	3	7	2	4		2	2	1		45
PROD	26	5			1		1	3	1		37
DIST	5	1	1	18		1	1		5		32
Gran..	3,723	2,879	1,837	1,704	1,684	931	577	557	492	487	14,871

Count of Skill Abr broken down by Company Industry (job!skills) vs. Skill Abr. The view is filtered on Company Industry (job!skills), which keeps 10 of 141 members.
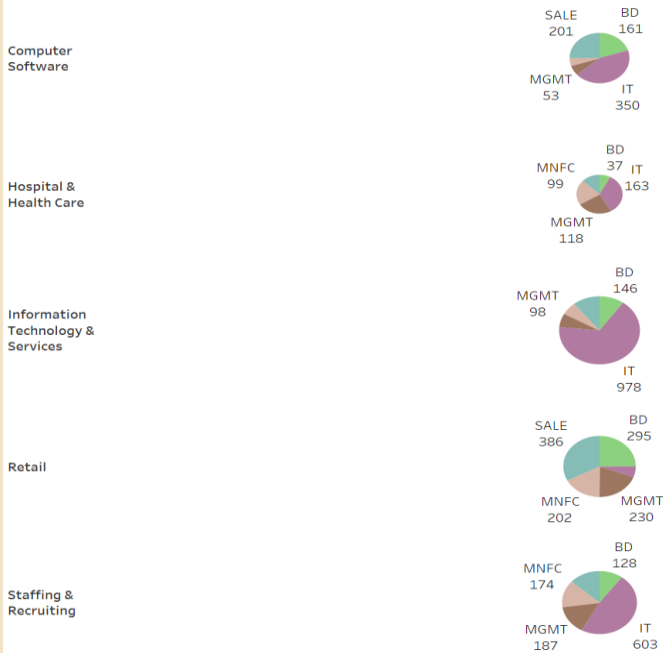
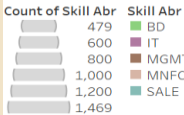# ANALYSIS

Industry Analysis

Most In-Demand Skills

•**Computer Software:**
IT skills, Sales skills, and Business Development skills

•**Hospital & Health Care:**
IT skills, Management skills, and Manufacturing skills

•**Information Technology & Services:**
IT skills, Business Development skills, and Management skills

•**Retail:** Sales skills, Business Development skills, and Management skills

•**Staffing & Recruiting:**
IT skills, Management skills, and Manufacturing skills

•**Conclusion:**
Need for a blend of technical, interpersonal, and managerial proficiencies

•**Recommendations for Job Seekers:**

•Cultivate a diverse skill set tailored to industry demands
•Prioritize continuous upskilling to stay relevant
•Stay updated on industry trends for informed decision-making

Top 5 skills In Demand In Industries

Company In..

Computer Software
- SALE 201
- BD 161
- MGMT 53
- IT 350

Hospital & Health Care
- MNFC 99
- BD 37
- IT 163
- MGMT 118

Information Technology & Services
- MGMT 98
- BD 146
- IT 978

Retail
- SALE 386
- BD 295
- MNFC 202
- MGMT 230

Staffing & Recruiting
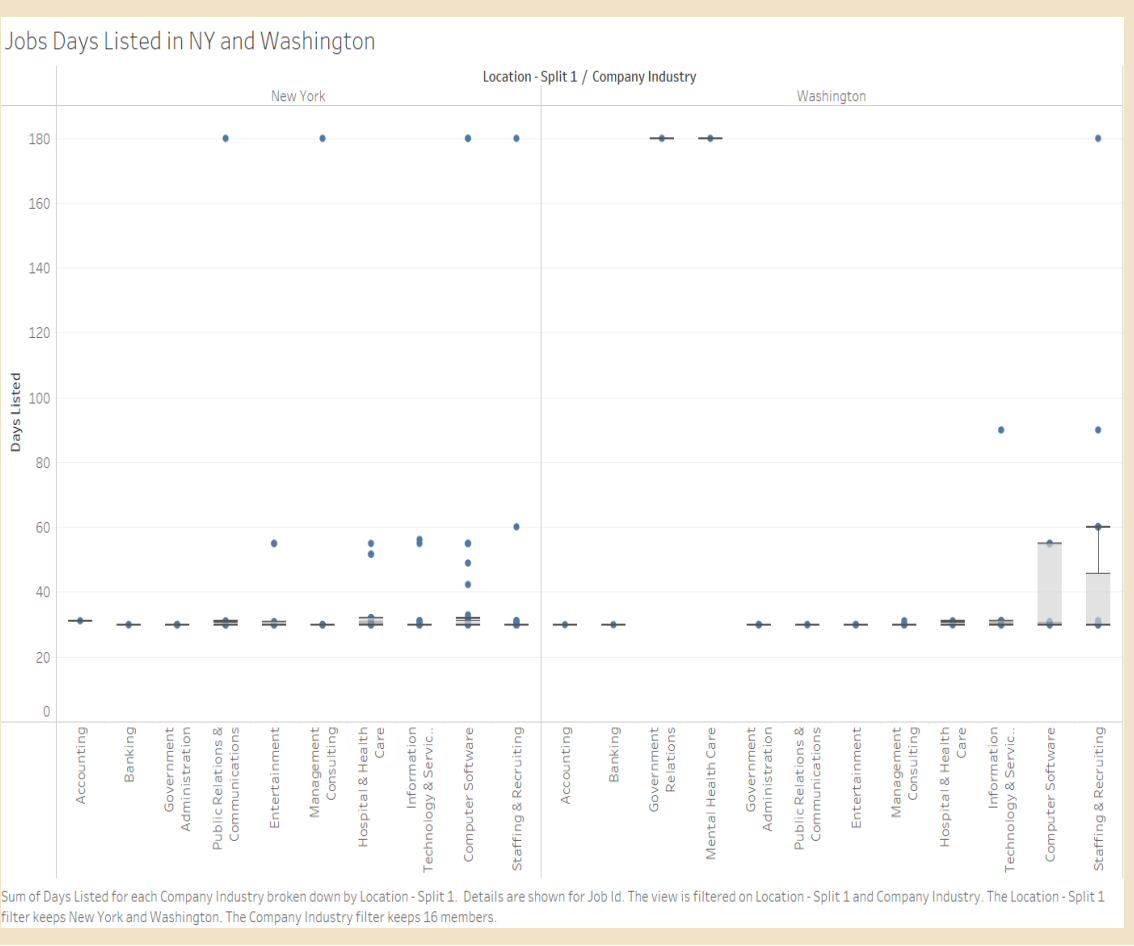- MNFC 174
- BD 128
- MGMT 187
- IT 603

Skill Abr and count of Skill Abr broken down by Company Industry (job!skills). Color shows details about Skill Abr. Size shows count of Skill Abr. The marks are labeled by Skill Abr and count of Skill Abr. The view is filtered on Company Industry (job!skills) and Skill Abr. The Company Industry (job!skills) filter keeps Computer Software, Hospital & Health Care, Information Technology & Services, Retail and Staffing & Recruiting. The Skill Abr filter keeps BD, IT, MGMT, MNFC and SALE.

Count of Skill Abr   Skill Abr
479   ▪ BD
600   ▪ IT
800   ▪ MGMT
1,000   ▪ MNFC
1,200   ▪ SALE
1,469

ANALYSIS

Industry Analysis

Hiring Velocity

- As the number of days, a job listing stays active increases the hiring velocity slows down

- **Recommendation:**
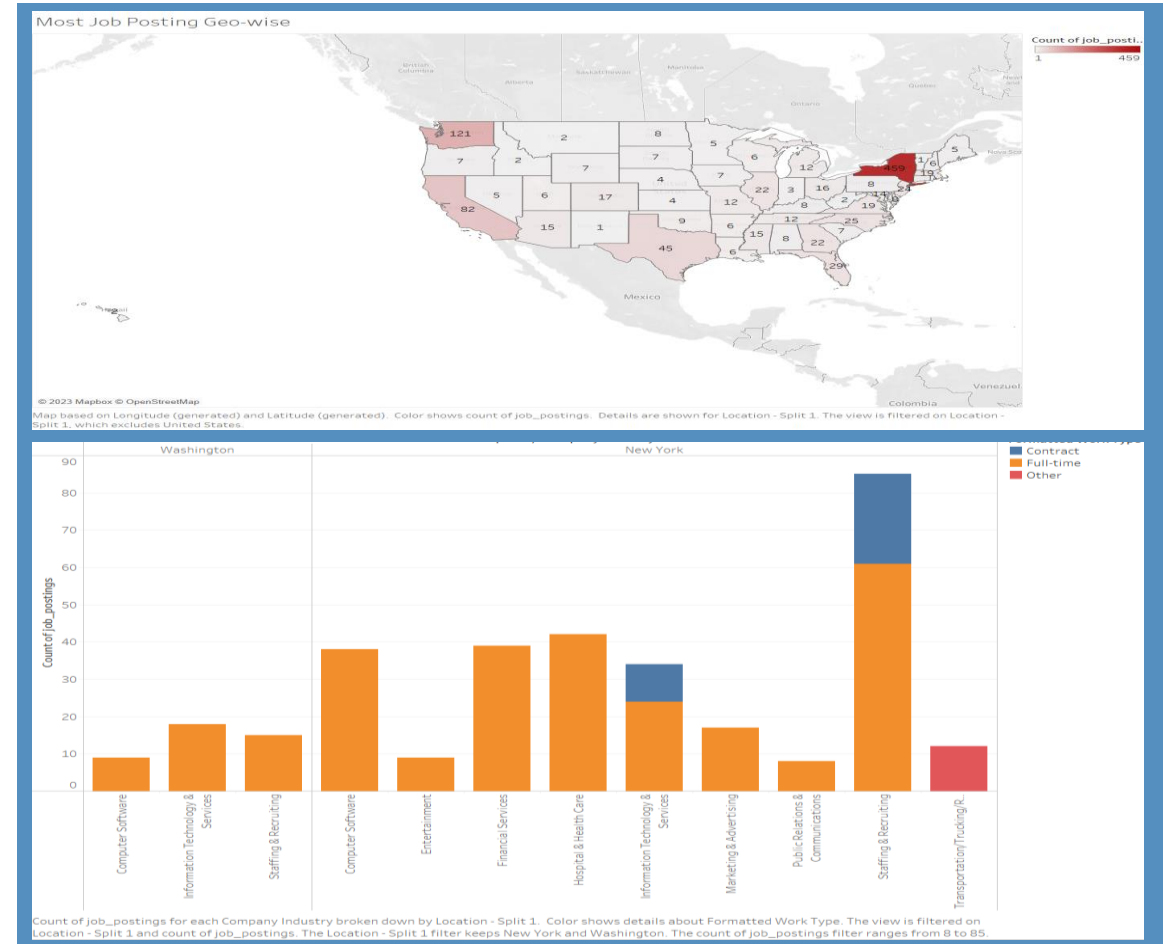
Hiring velocity is faster in highly competitive cities

Jobs Days Listed in NY and Washington

ANALYSIS

Geography Analysis

Geographical Job listings

- August saw an increase in the number of listings

- New York and Washington saw the most number of job listings

- New York shows more diverse job listings industry wise compared to Washington

- **Recommendation:**

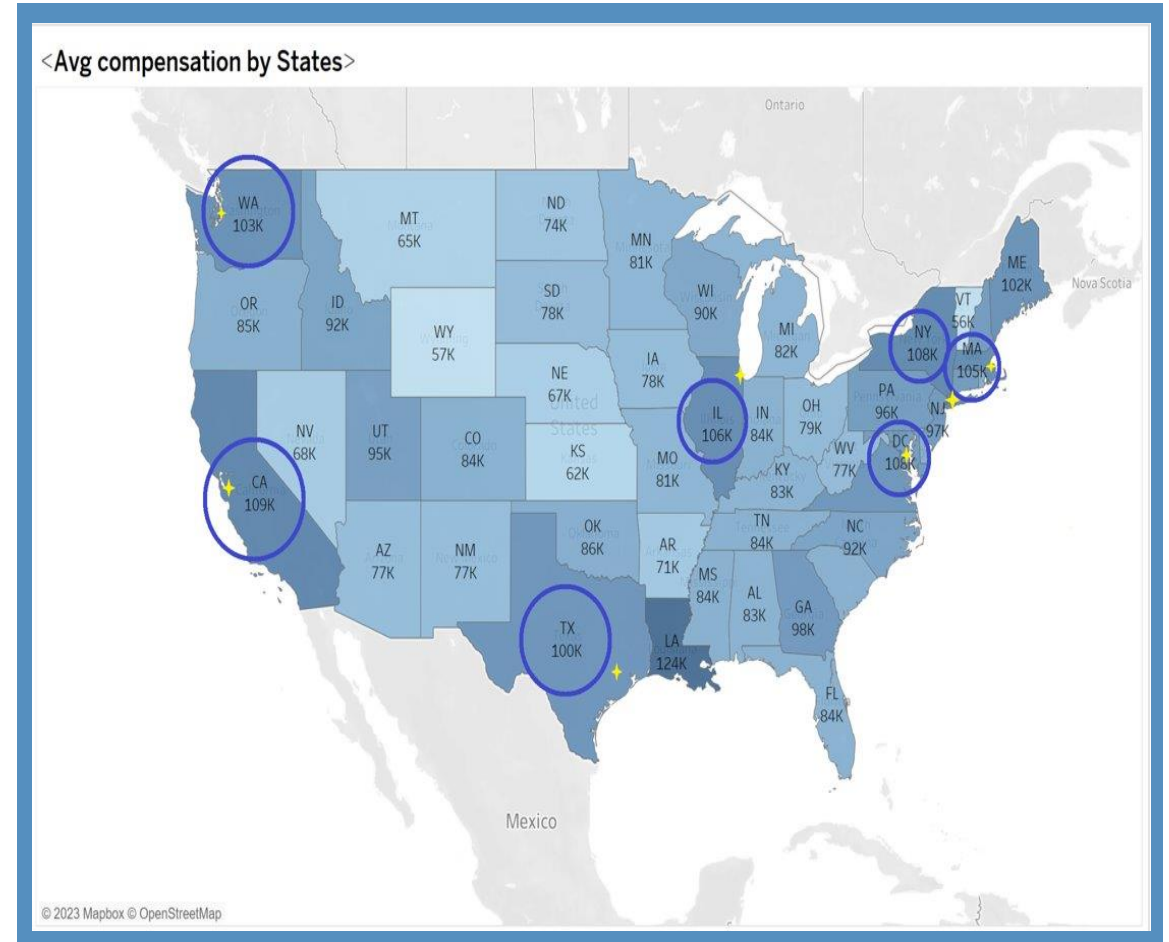Being in job-rich cities boosts your job consideration

Most Job Posting Geo-wise

Map based on Longitude (generated) and Latitude (generated). Color shows count of job_postings. Details are shown for Location - Split 1. The view is filtered on Location - Split 1, which excludes United States.

Count of job_postings for each Company Industry broken down by Location - Split 1. Color shows details about Formatted Work Type. The view is filtered on Location - Split 1 and count of job_postings. The Location - Split 1 filter keeps New York and Washington. The count of job_postings filter ranges from 8 to 85.

ANALYSIS

Geography Analysis

Average Compensation by State

•According census, the Income U.S (2022): **$74,580**, while Cost Of Living :**$40,446**.

•States exceeding 100K surpass the U.S. average income by more than **30%**, and average COL **$48,293, 20% higher** than the average U.S COL

•'Louisiana' and 'Maine' were observed to exceed the 100K . COL in these two states is **$37,737**, which is about 90% of the U.S. average COL.

<Avg compensation by States>

ANALYSIS

Geography Analysis

Average Compensation by State

• According census, the Income U.S (2022): **$74,580**, while Cost Of Living :**$40,446**.

• States exceeding 100K surpass the U.S. average income by more than **30%**, and average COL **$48,293, 20% higher** than the average U.S COL

• 'Louisiana' and 'Maine' were observed to exceed the 100K . COL in these two states is **$37,737**, which is about 90% of the U.S. average COL.
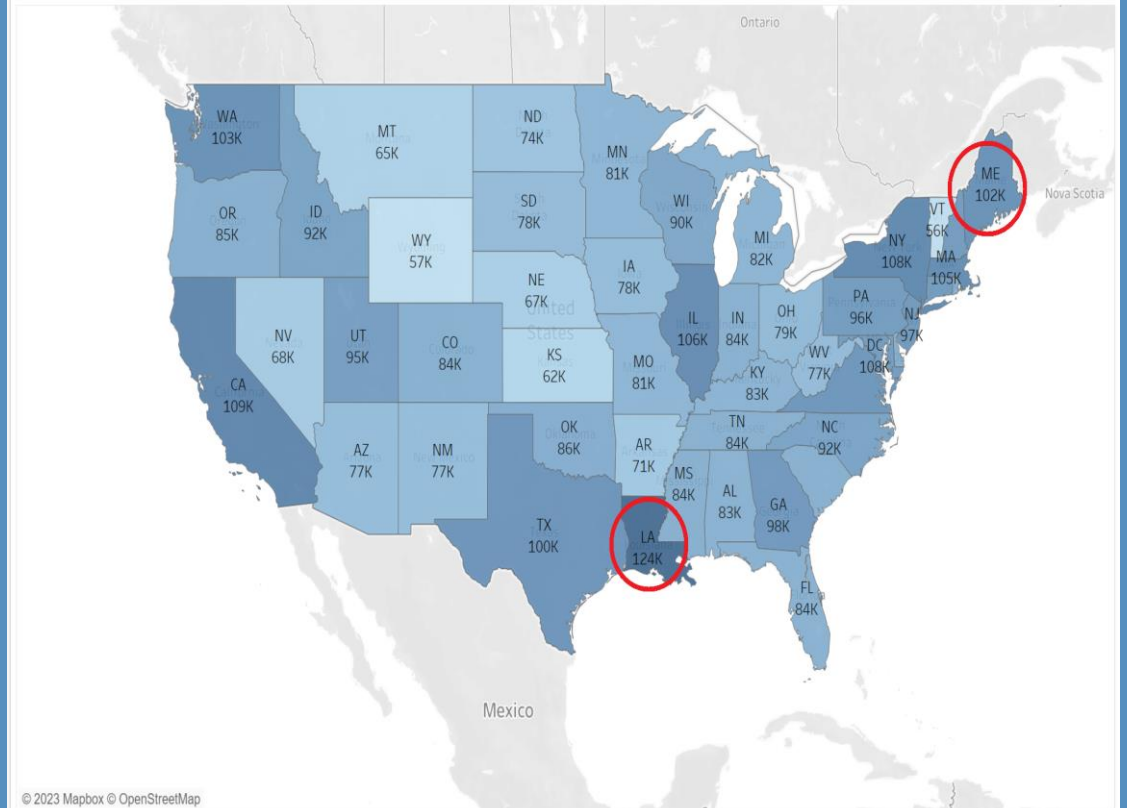

<Avg compensation by States>

WA 103K · MT 65K · ND 74K · MN 81K · OR 85K · ID 92K · SD 78K · WI 90K · MI 82K · NY 108K · MA 105K · ME 102K · WY 57K · IA 78K · PA 96K · NV 68K · UT 95K · CO 84K · NE 67K · IL 106K · IN 84K · OH 79K · WV 77K · DC 108K · NJ 97K · CA 109K · KS 62K · MO 81K · KY 83K · TN 84K · NC 92K · AZ 77K · NM 77K · OK 86K · AR 71K · MS 84K · AL 83K · GA 98K · TX 100K · LA 124K · FL 84K

© 2023 Mapbox © OpenStreetMap

Part 4

CONCLUSION

CONCLUSION

LI = Marketplace for Professionals, Full-Time and Contract positions

Highest by Industry: Staffing & Recruiting; Information Technology; Computer Services; Financial Services; and Management Consulting

LI, though a known name brand, only a small slice of the total job market. 33K postings for 3 months

Average Annual compensation varies greatly by state,
1 – 2.5 units (50K to 125K), certainly correlated to cost of living and industry

30-day postings – Act , do not hesitate, use it

We, (Bentley Students in IPM 652)
are positioned to Be a Force for Good in Business
and poised to compete on the Linked In Marketplace

Q&A