Capstone Project

Part 1

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OUTLINE

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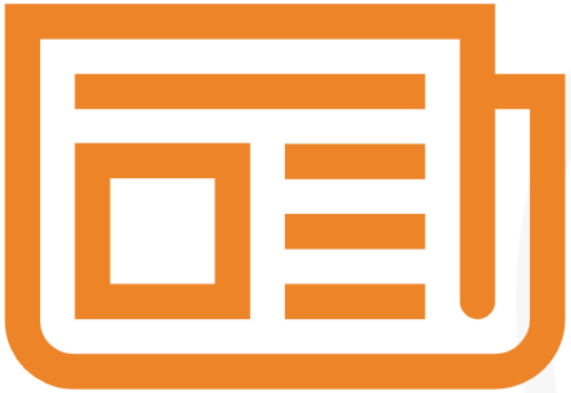
EXECUTIVE SUMMARY

- Trend for programing languages is trending toward web-based/web-dependent languages
- Interest in C-based languages like C# remains strong
- Python rising as a language of interest
- Interest in SQL expected to remain strong

INTRODUCTION

- Programming language and database interests show certain trends rising compared to respondents' prior experiences, information key to anyone seeking work in the technology field
- Swift and Python among highest required languages in recent job postings
- Job postings centered on several cities, primarily:
  - Washington, D.C.
  - Detroit, Michigan
  - Seattle, Washington
  - New York City, New York

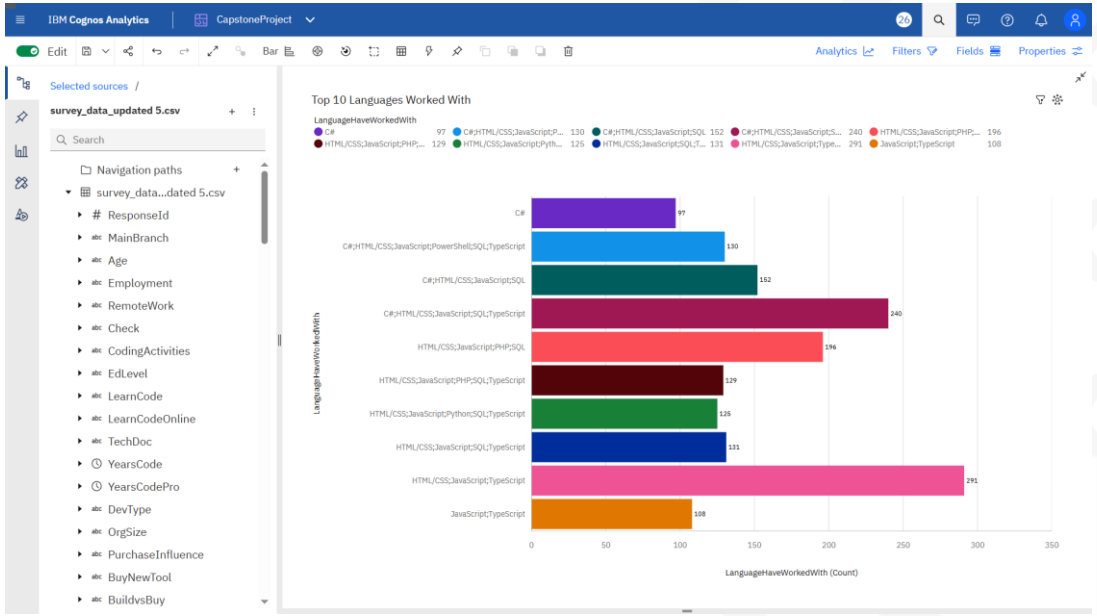
METHODOLOGY



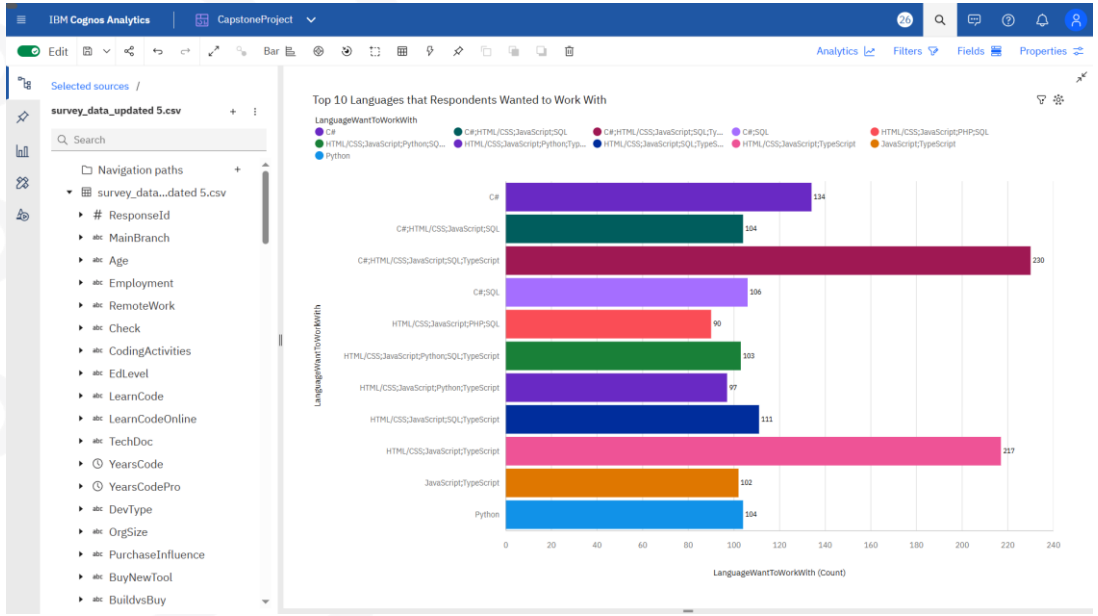
- Survey taken of 18,846 respondents regarding their age, country, job satisfaction, coding languages worked with, etc.
  - Survey results analyzed for likely trends in language and database trends
- Web scraping of job descriptions to provide details regarding languages and salaries associated with them
- Utilitization of API to find most common cities listed for coding jobs

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

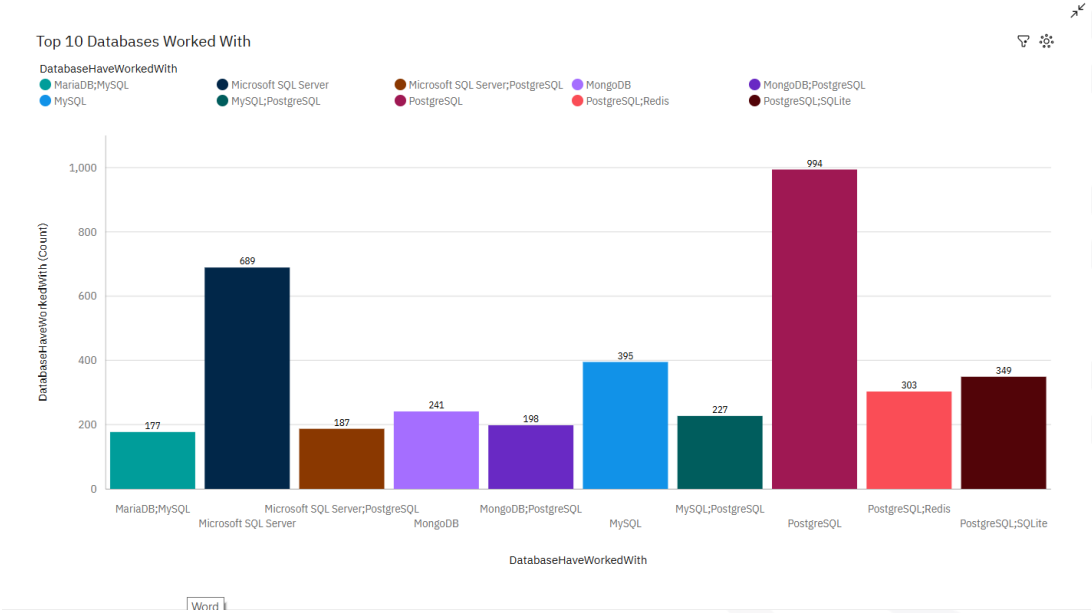
- C# was highly ranked on both lists
- HTML/CSS, Javascript, Python, and Typescript were most often found together on both lists
- Python and C# were a high priority as future languages

Implications

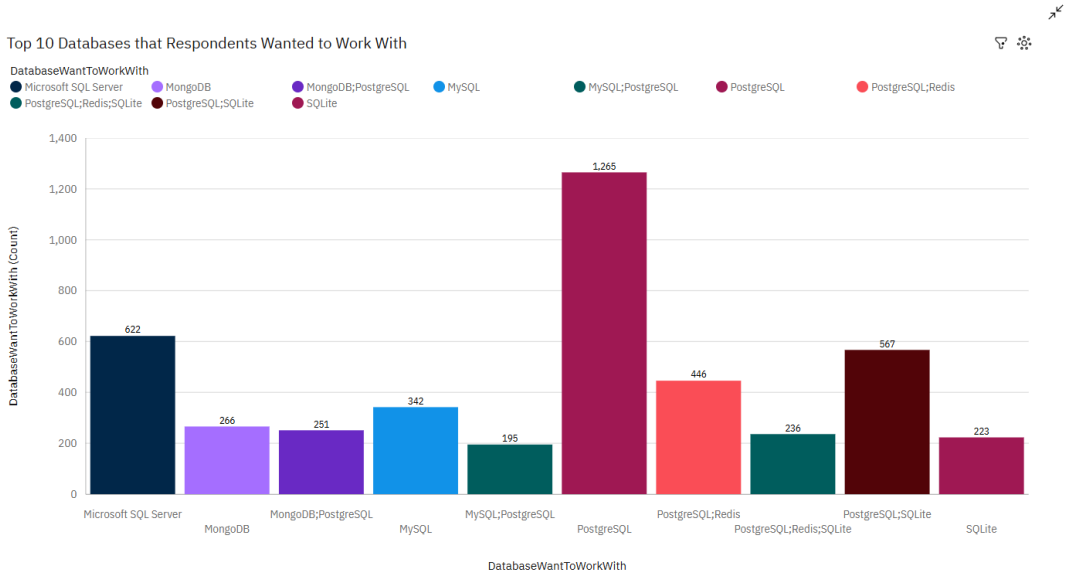
- C# remains valuable and is expected to remain important
- There is a strong trend toward web-heavy development
- Python is viewed as highly important

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Various SQL (MySQL, Microsoft SQL, PostgreSQL, etc.) listed on both lists
- Redis and MongoDB appeared several times on Future list, but at less frequency than prior
- Rise in number of people wanting to work with PostgreSQL vs. already worked with

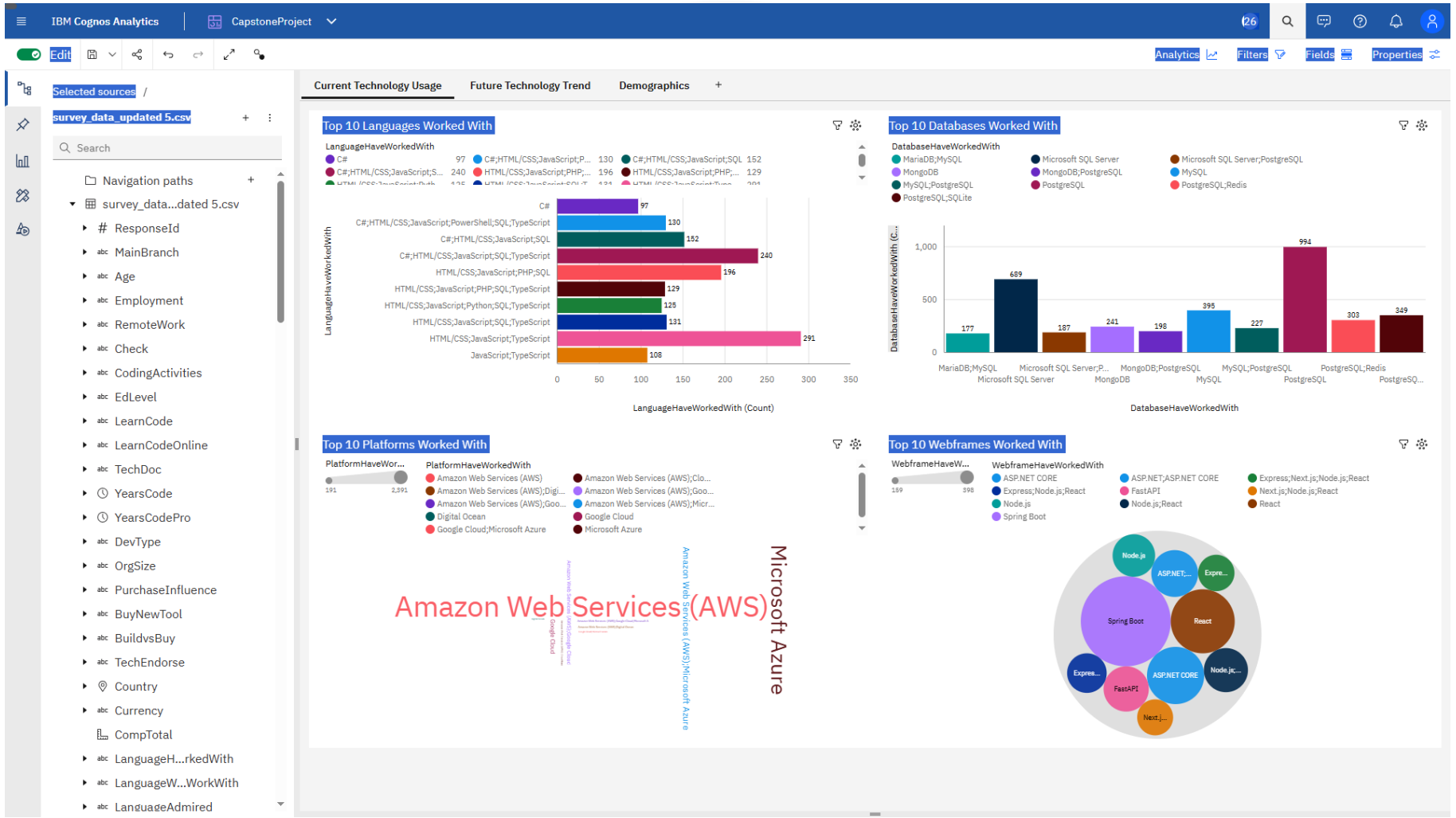
Implications

- Need for SQL databases remains high
- NoSQL databases like Redis and MongoDB waning slightly
- PostgreSQL expected to become more key to know how to work with

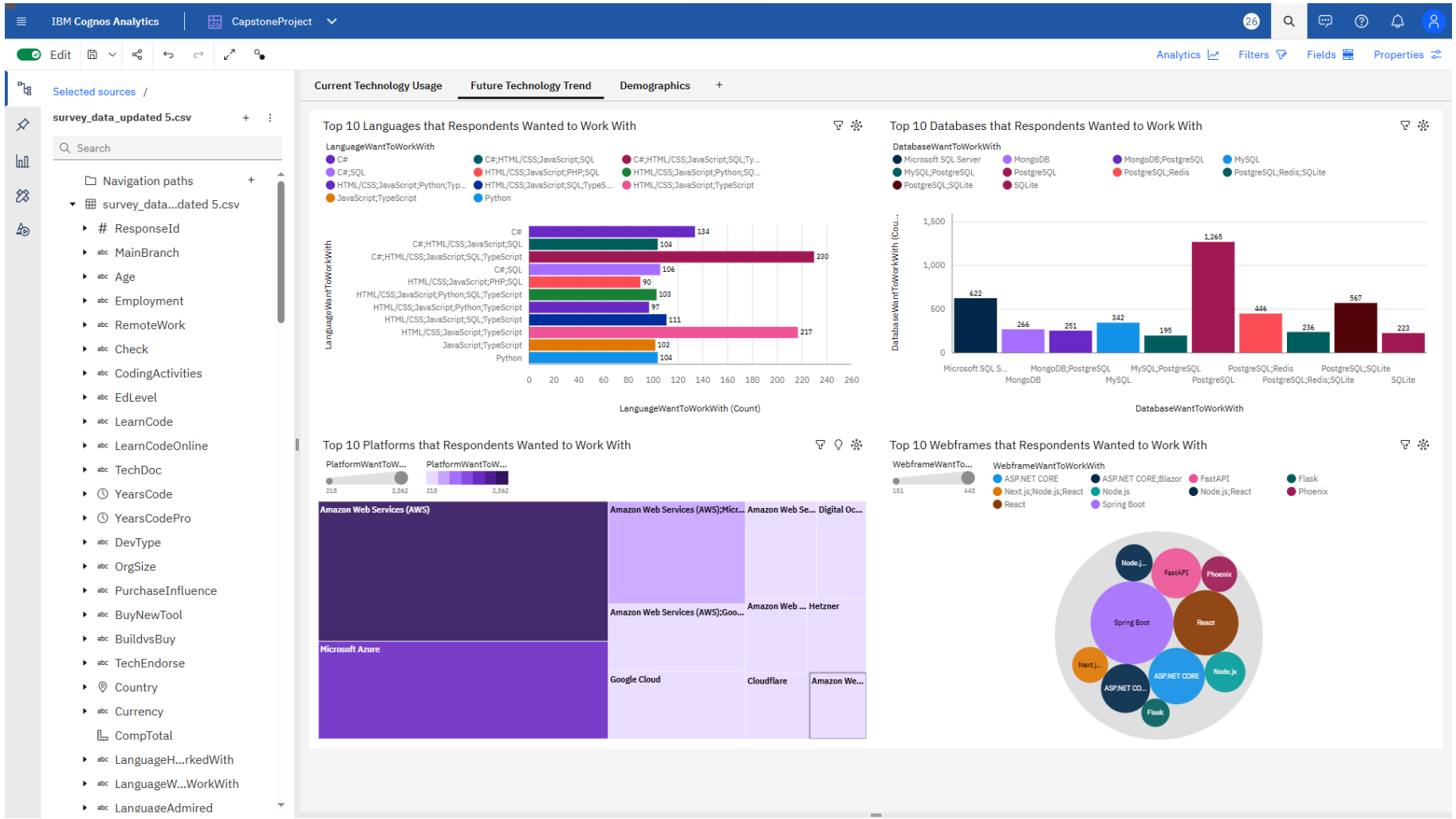
DASHBOARD

The following slides demonstrate the analysis of programming languages, databases, platforms, and webframes that respondents were asked about.

DASHBOARD TAB 1



DASHBOARD TAB 2



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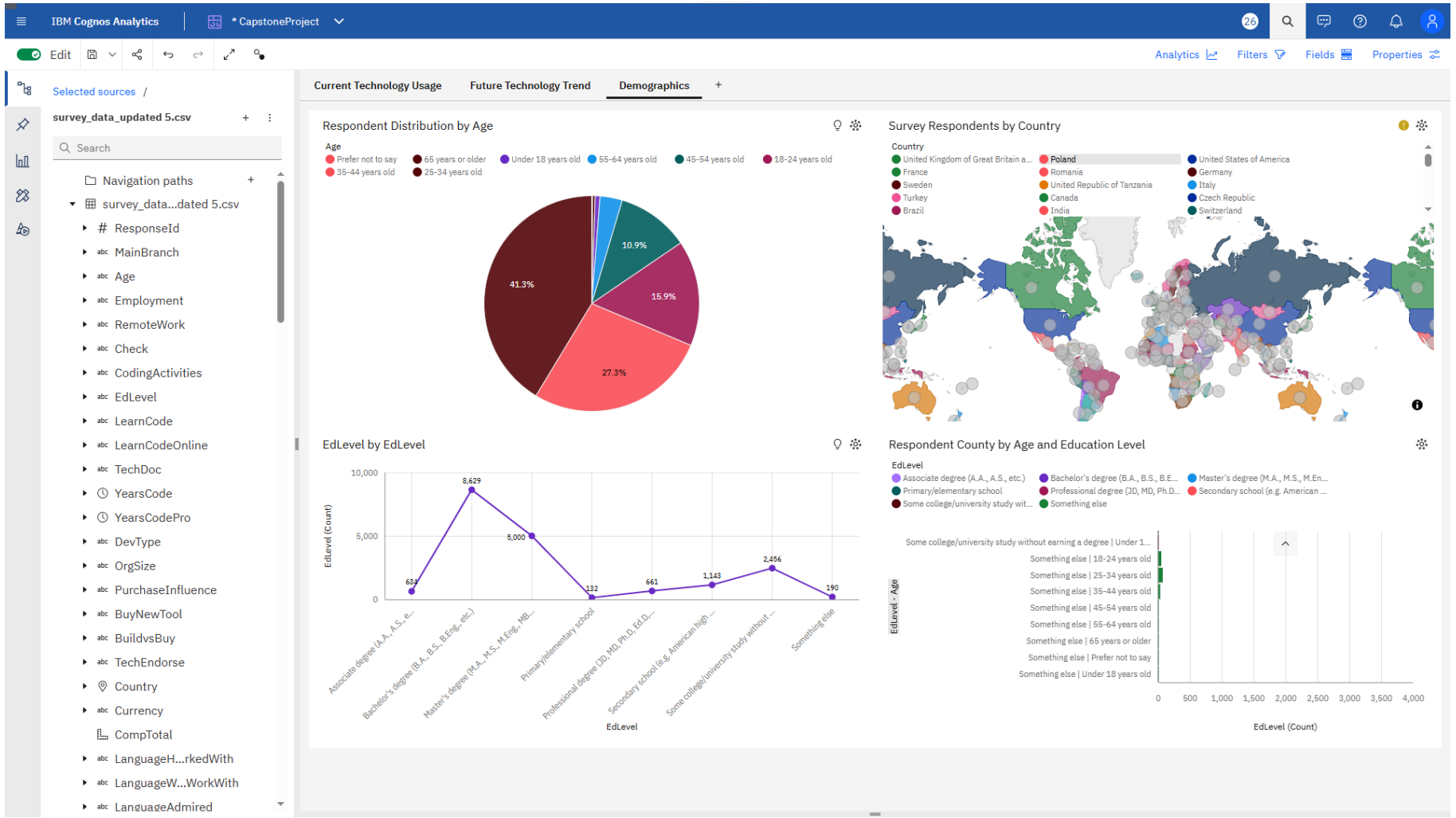
DASHBOARD TAB 3



DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- Skills in C++ and C# remain highly valuable to learn and retain
- Salaries for Python coders are among the highest offered, and interest in Python has also increased

Implications

- Despite being older languages, C languages still integral
- Python appears to become more integral to the tech sector as a whole

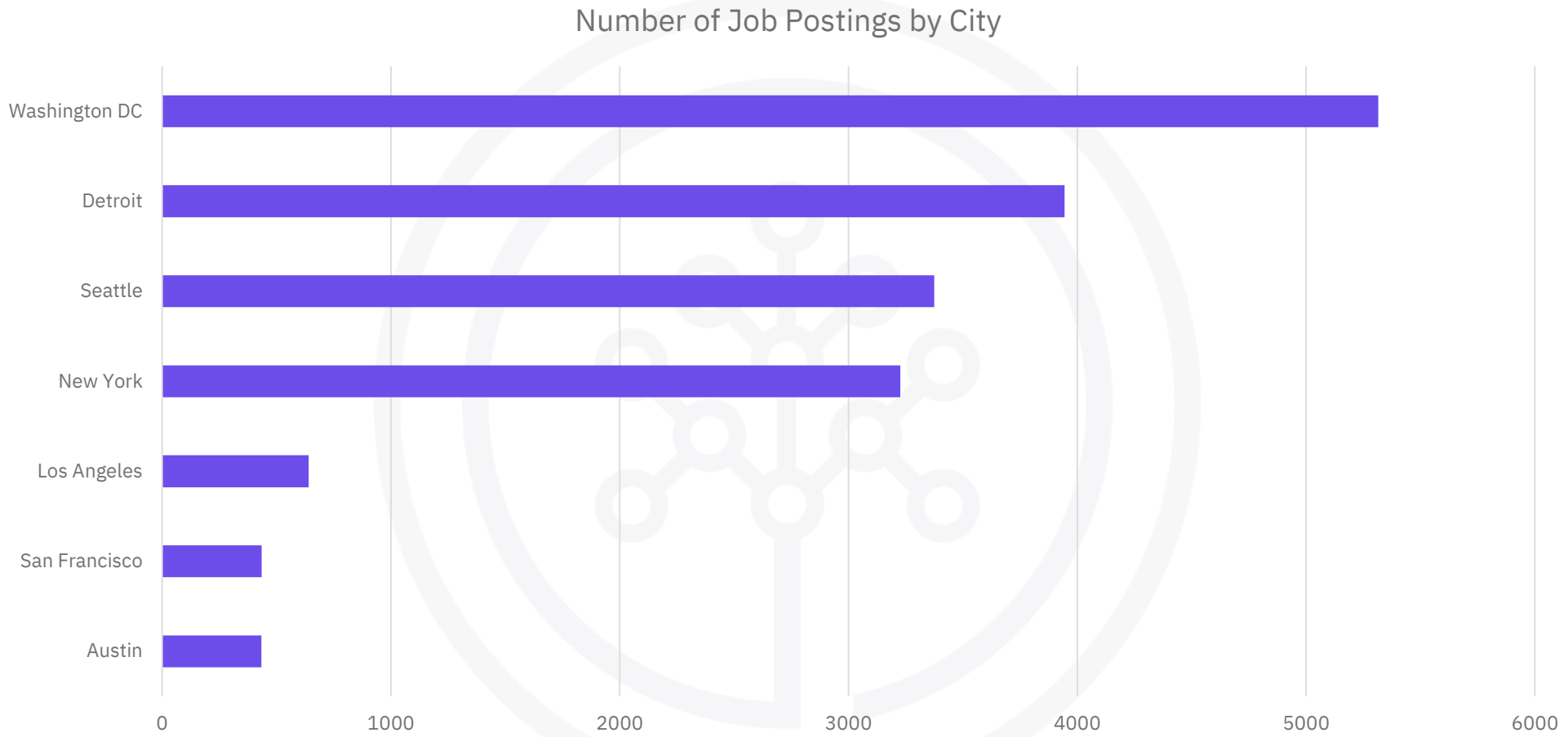
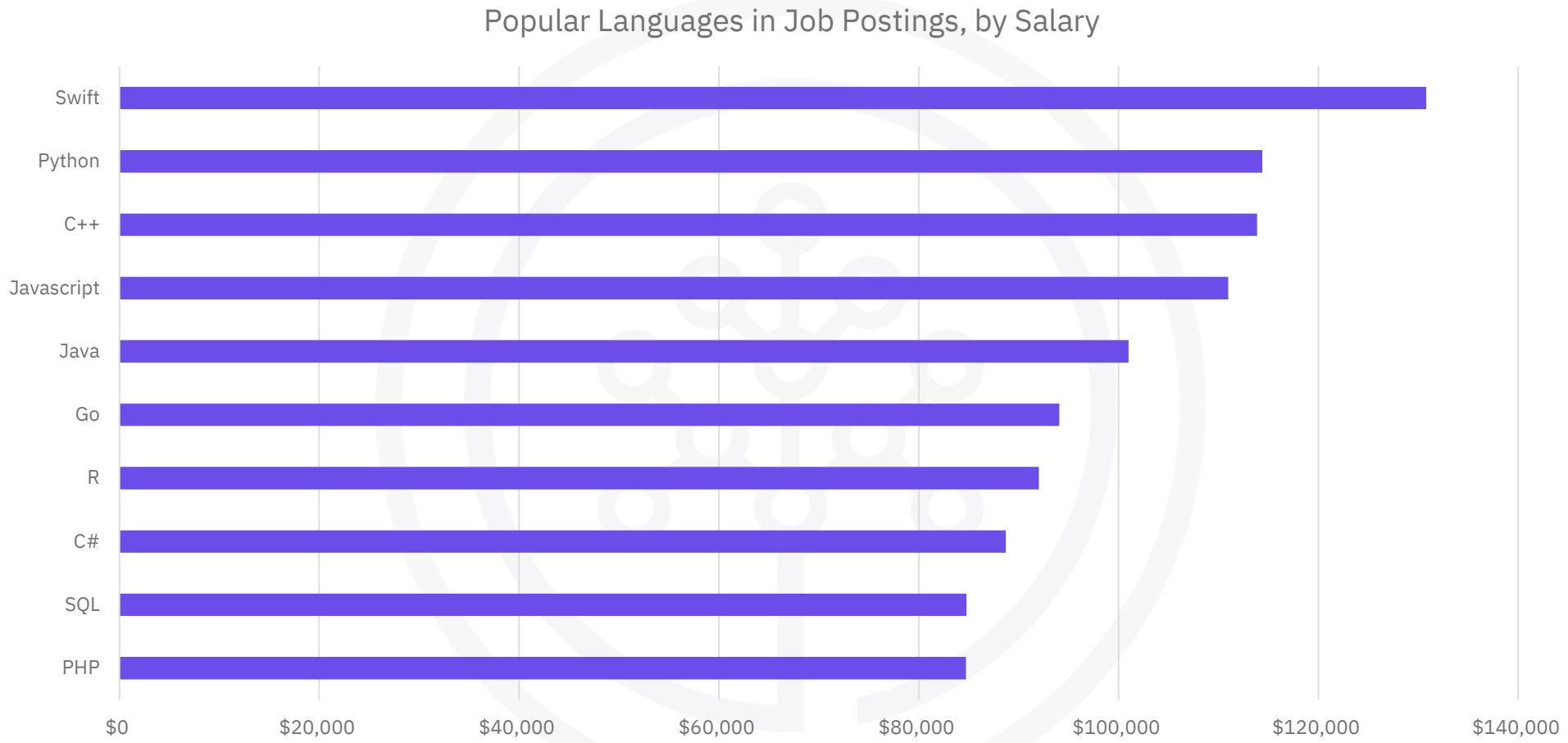
CONCLUSION

- Python is highly important to build skills for when entering or remaining the tech sector

APPENDIX

- Job Postings and Popular Languages bar charts

JOB POSTINGS



POPULAR LANGUAGES