



Analytics Software Trends

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OUTLINE



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EXECUTIVE SUMMARY



- The goal is to identify trends in emerging technologies
- A survey was used to collect data
- Javascript remains hugely popular
- Python is rapidly emerging as a popular programming language
- PostgreSQL is also rapidly emerging as a database system
- The database market is highly volatile

INTRODUCTION



- Data science is a rapidly evolving industry
- Companies must keep up with evolving technology to stay competitive
- Which data analysis technologies are on the rise?
- Which data analysis technologies are declining in popularity?

METHODOLOGY



- Users of StackOverflow were asked to fill out a survey composed of a series of questions
- Some data was scraped from web pages
- The survey responses were then collated and cleaned via Python
- The dataset was uploaded to IBM Watson Studio and visualized in a dashboard via IBM Cognos

RESULTS

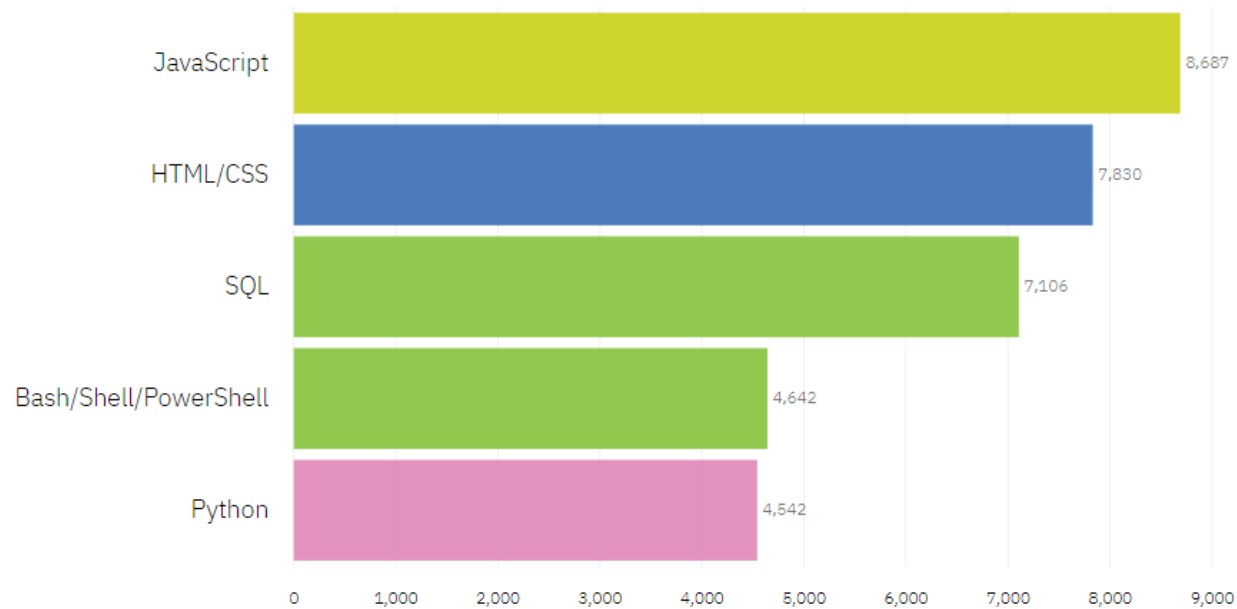


PROGRAMMING LANGUAGE TRENDS

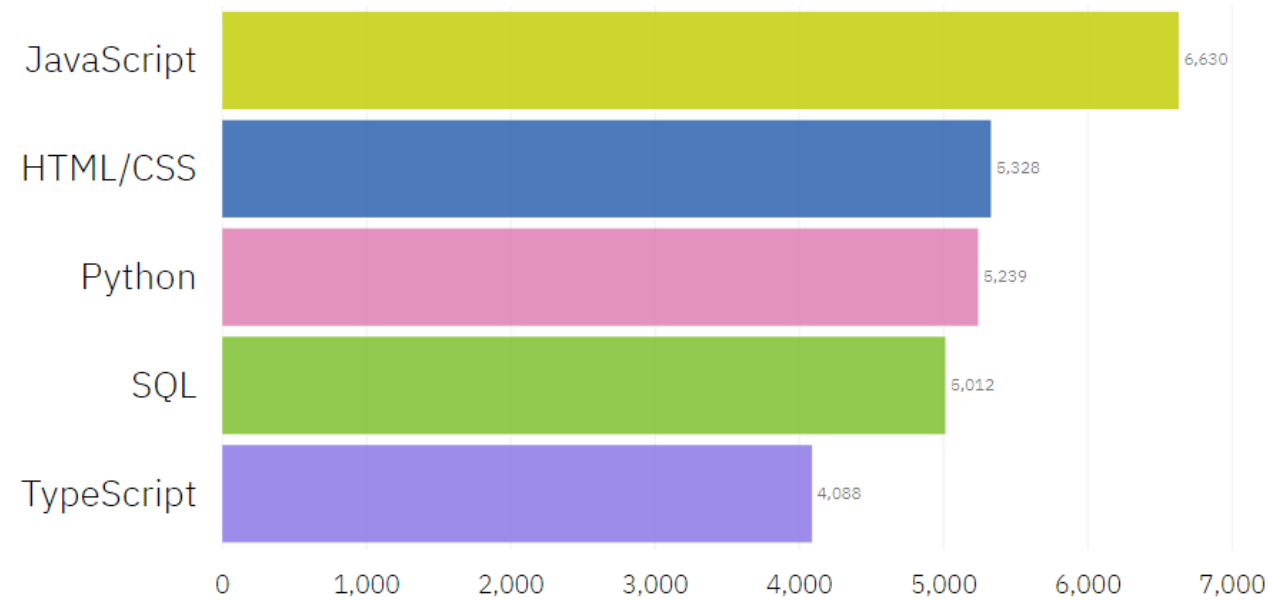
Current Year

Next Year

Top 5 Languages For Last Year



Top 5 Languages For Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Javascript has the most responses, both for last year and next year
- Python is fifth in usage last year, but the third most popular for next year
- Bash/Shell/PowerShell was third in usage last year, but not in the top five for next year

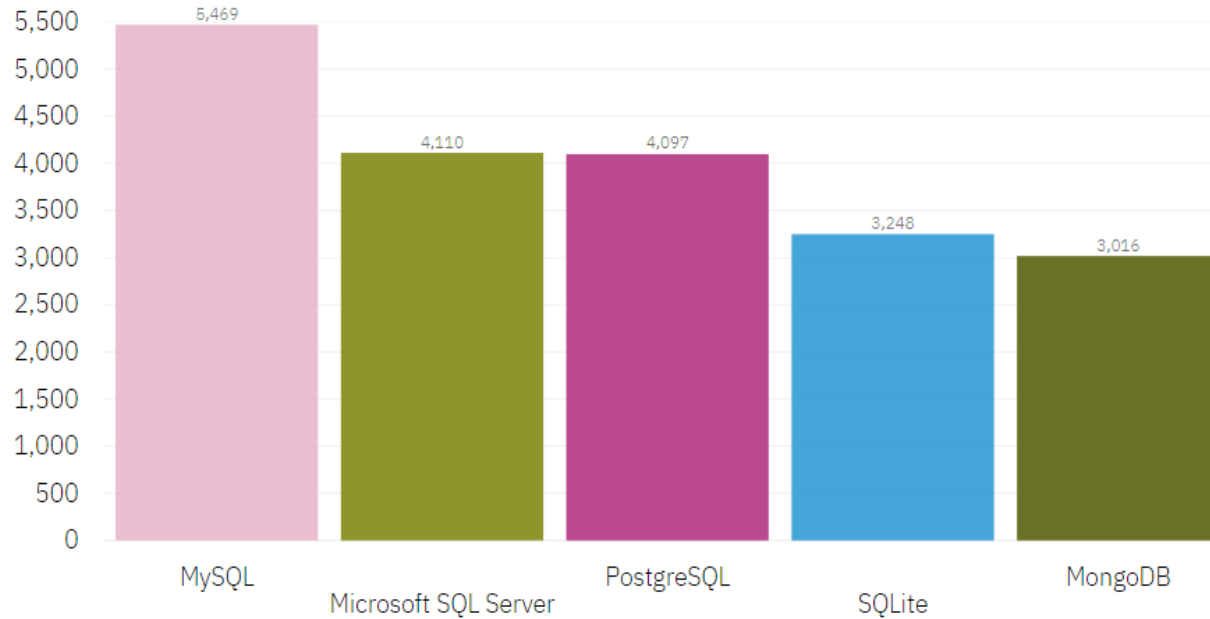
Implications

- Javascript's popularity remains stable
- Python is becoming more popular
- Bash/Shell/PowerShell is dramatically becoming less popular

DATABASE TRENDS

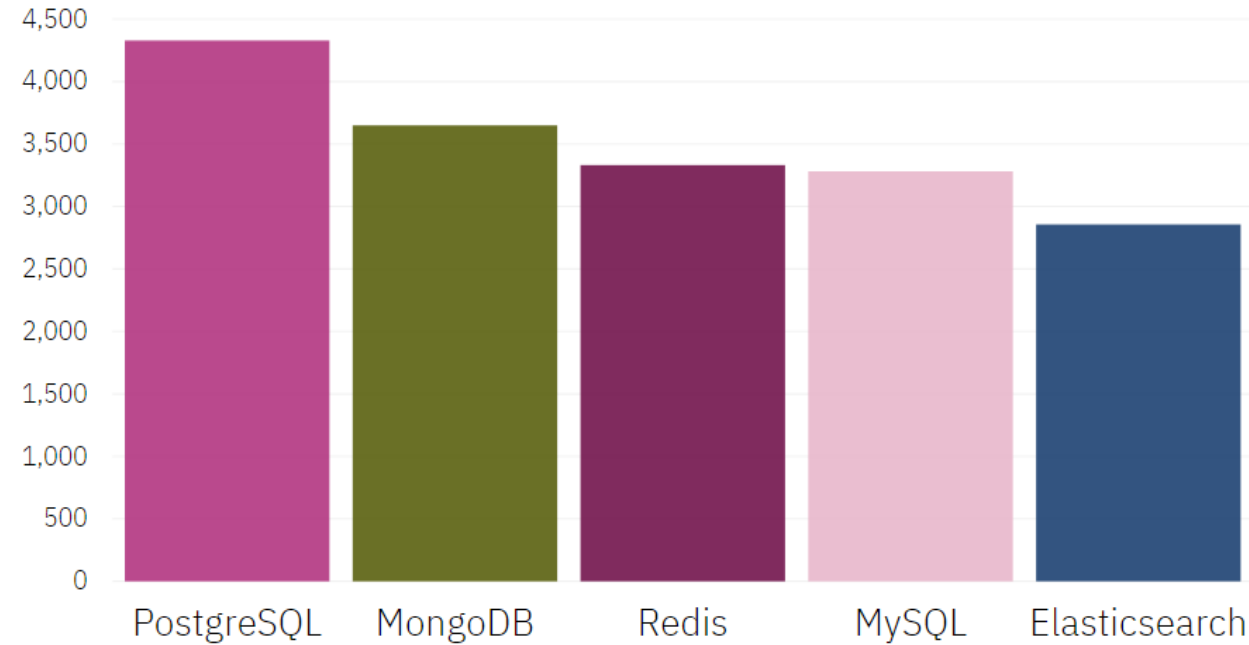
Last Year

Top 5 Databases For Last Year



Next Year

Top 5 Databases For The Future



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL had the most responses for last year, but far less for next year
- PostgreSQL has the most responses for next year
- Large variation between last year and next year

Implications

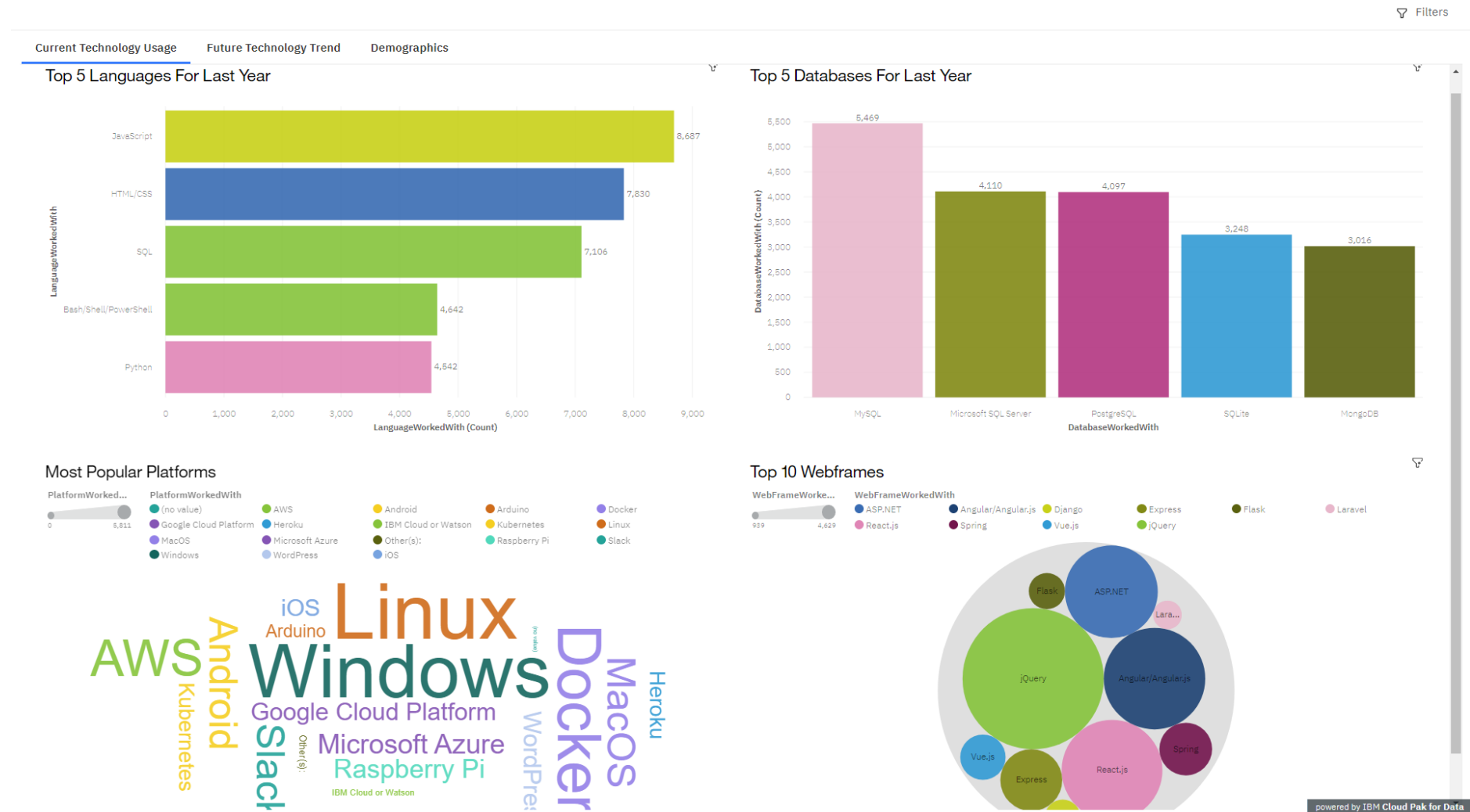
- MySQL is losing popularity dramatically
- PostgreSQL is gaining popularity dramatically
- There is a great deal of volatility in database popularity

DASHBOARD

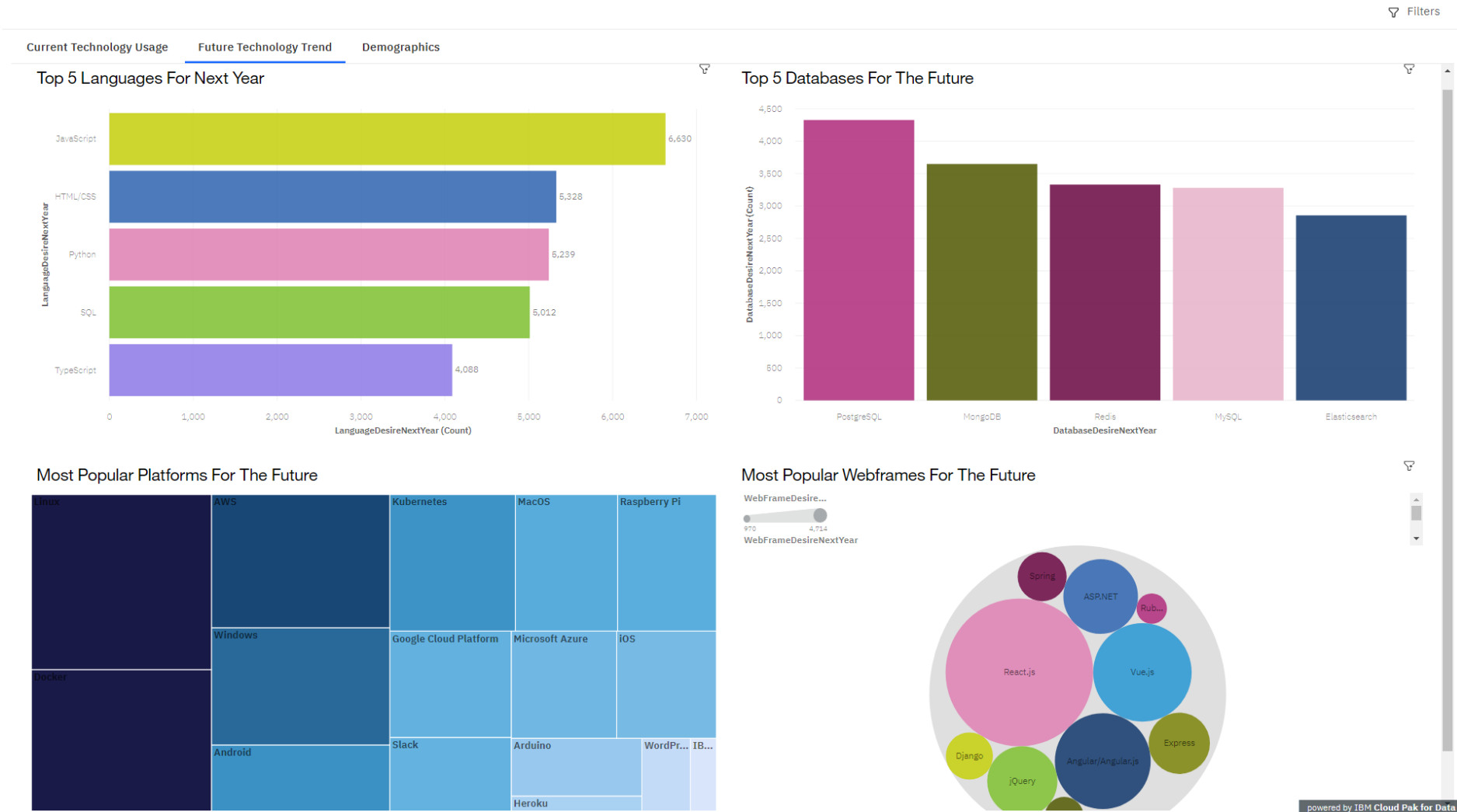


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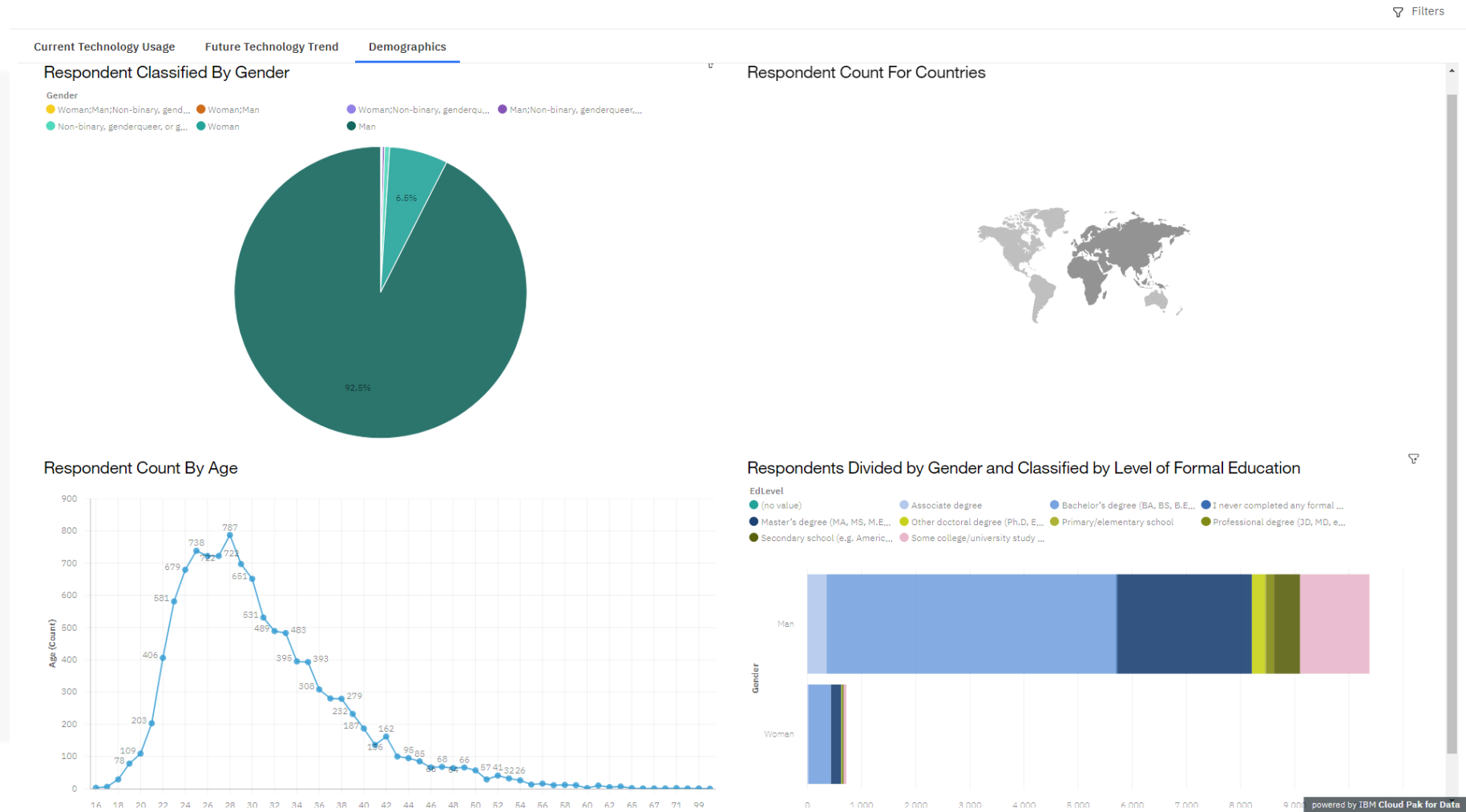
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- Python is becoming more popular while Typescript and Bash are declining
- PostgreSQL, though not widely used, is very popular
- Large discrepancy between popularity of databases for last year and in the future

Implications

- Python is becoming more useful to companies, while Typescript and Bash are less sought after
- PostgreSQL is a rapidly emerging database system
- The database market is highly volatile

CONCLUSION

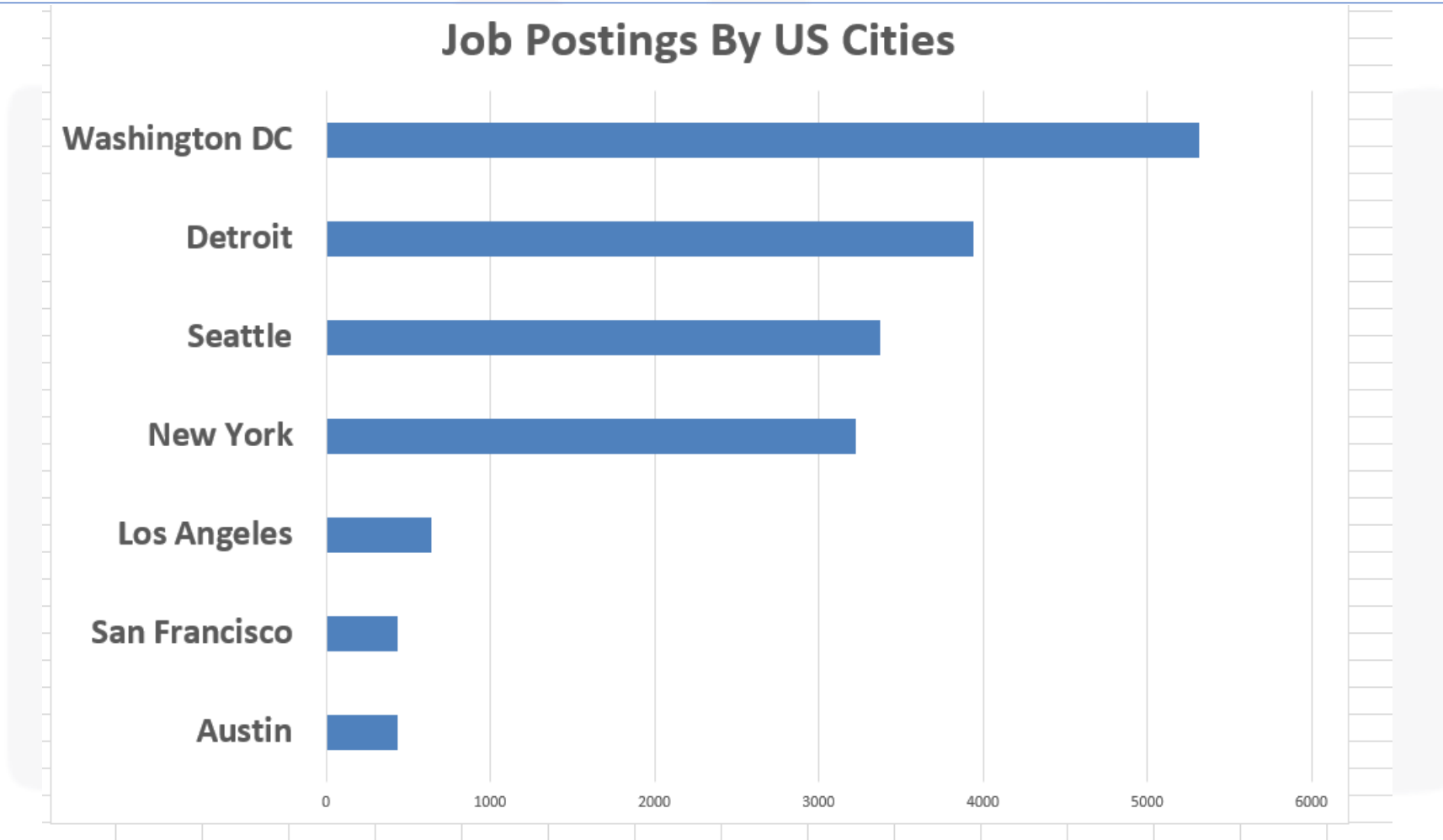


- For programming languages, Python is emerging as one of the most popular in the industry
- Javascript remains a hugely popular language
- For database systems, PostgreSQL is also emerging as one of the most popular in the industry
- Bash/Shell/PowerShell is becoming less prevalent
- The database market is highly volatile and very competitive

APPENDIX



JOB POSTINGS



BEST-PAID LANGUAGES

