

# Technology in Trend

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# OUTLINE

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- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

# EXECUTIVE SUMMARY

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- Examine the current trend of technology
  - Based upon
    - Programming languages
    - Databases
    - Web frames
  - Distribution upon
    - Gender
    - Demographic
    - Age
- Male are more representing in tech-industry
- Developed countries has more potential career opportunities
- Top used programming languages and databases has slight or little changes over time.

# INTRODUCTION

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- Which part of the world has more developers?
- Which language mostly used in their career?
- What database platform got more market share in the industry?
- What are the top desired platforms and languages?
- The dataset we are using comes from the following source: [2019-stack-overflow-developer-survey-results](#) under a [ODbL: Open Database License](#).

# METHODOLOGY

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- Collect data
  - By API from external resources
  - By Web-scraping
- Organizing Data
  - Validate and clean (duplicates and missing values)
  - Sort and store in data frames (Normalizing)
- Analyze
  - Data distributions and correlations
- Visualize
  - Matplotlib/Seaborn
  - Cognos Dashboard

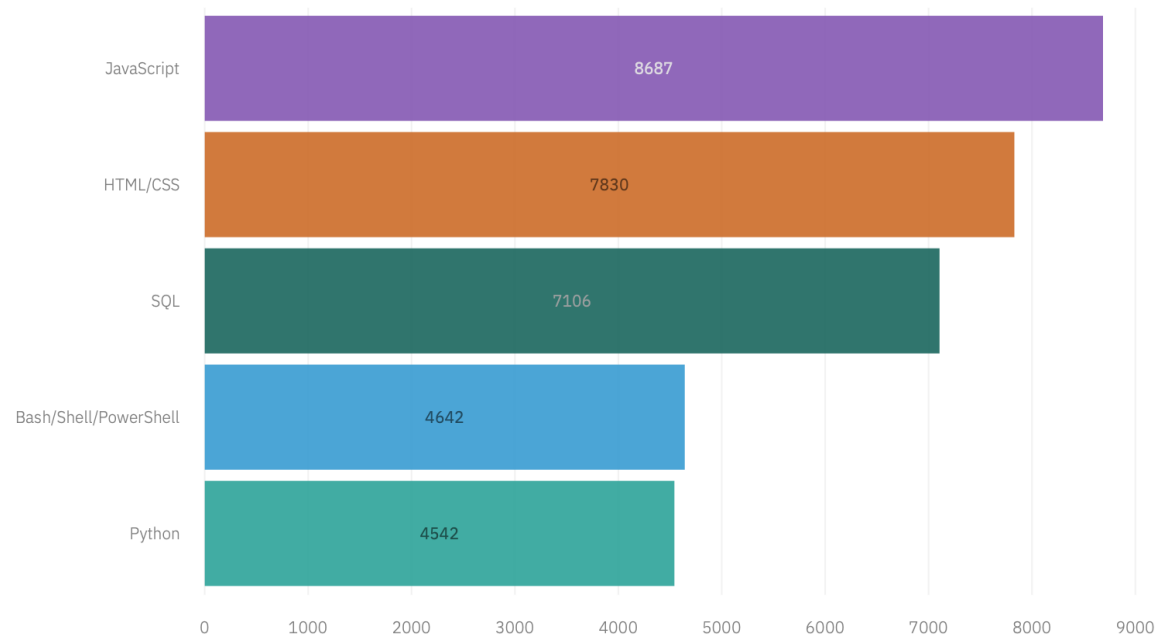


# RESULTS

# PROGRAMMING LANGUAGE TRENDS

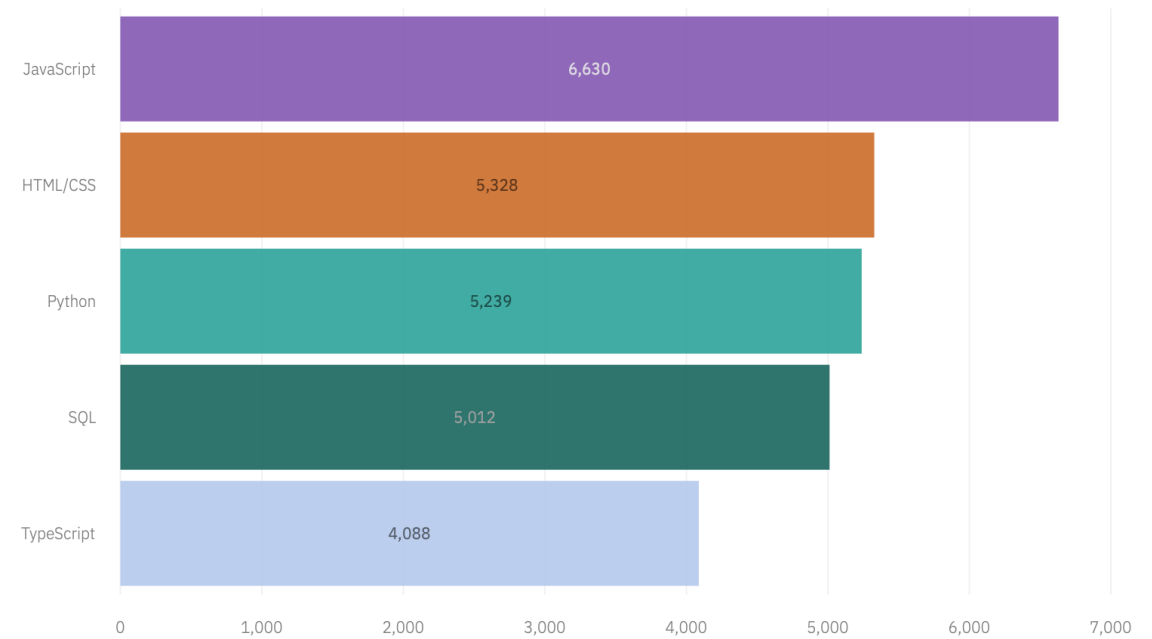
## Current Year

Top 5 Language worked with



## Next Year

Top 5 Languages Desire Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Java script, Python and SQL are still in Top 5.
- Working with HTML/CSS has 2nd largest group though it's not a programming language.
- Python has the most interest rate of 15% to change career.

## Implications

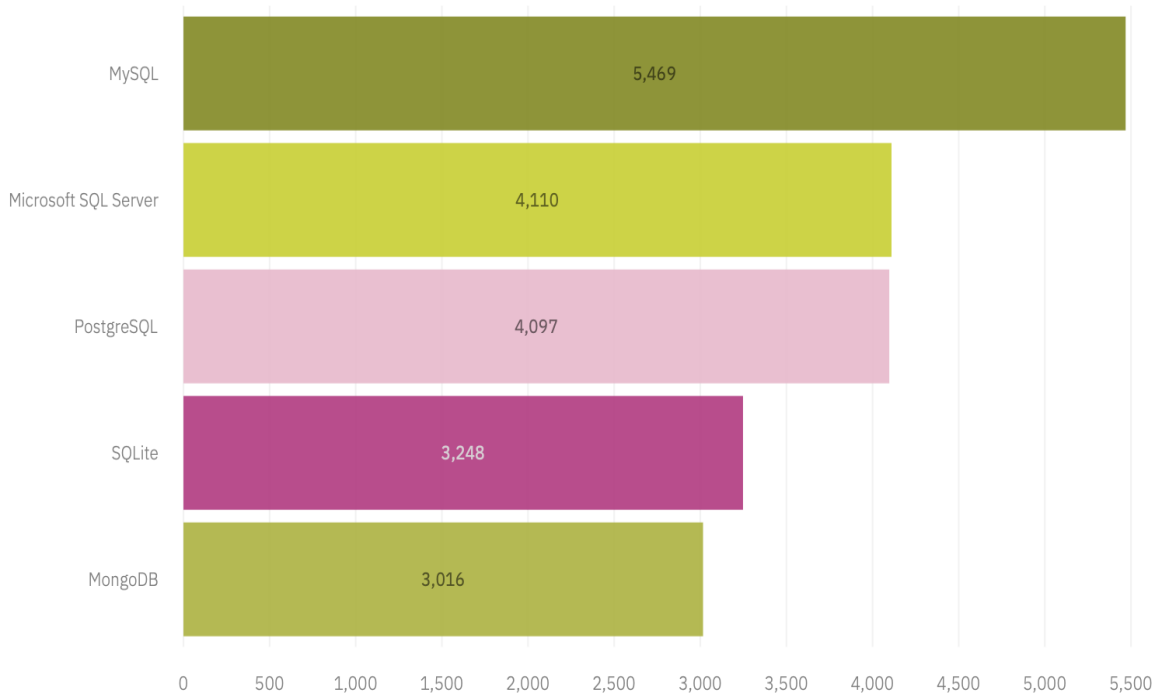
- Changing Language has less interest as there is only one language in and out in Top 5 position.
- Python is the most popular with 15% interest rate to change career.
- JavaScript still the top position to adapt.



# DATABASE TRENDS

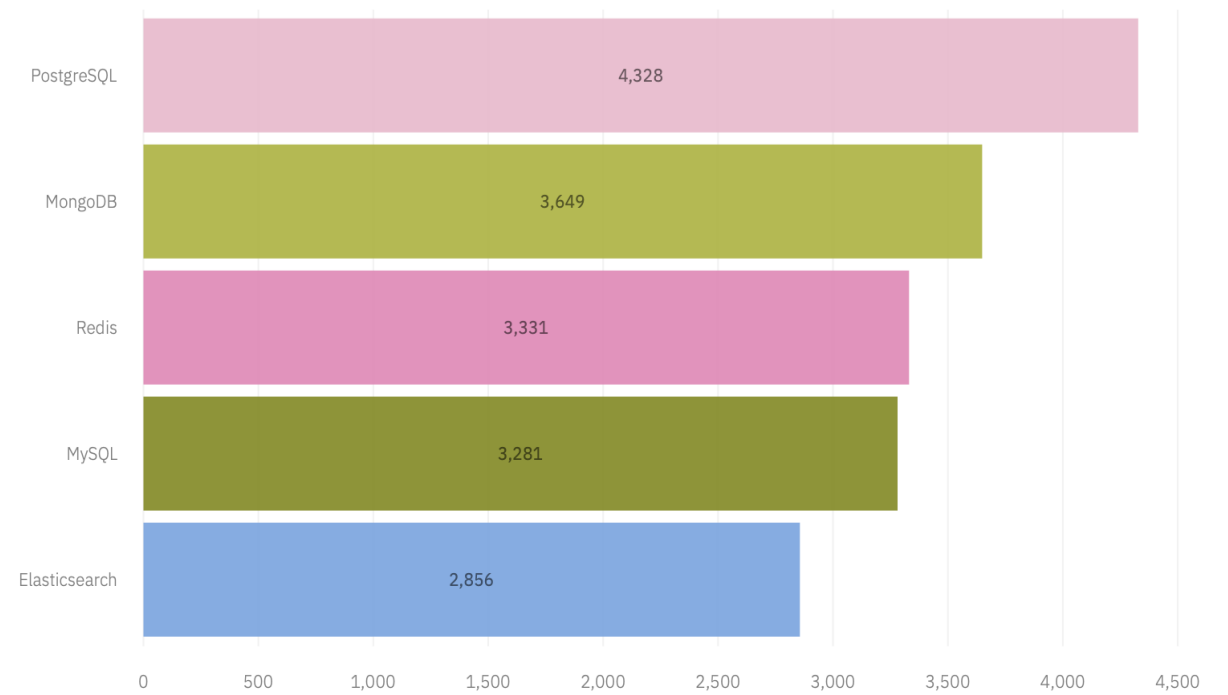
## Current Year

Top 5 Database worked with



## Next Year

Top 5 Database Desire Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Microsoft SQL server lost his position of 2nd after a year change.
- MySQL also drop interest rate of 40%
- New servers like Redis and Elasticsearch take places in Top 5

## Implications

- PostgreSQL and MongoDB become more interested by developers to change.
- MySQL and Microsoft SQL server needs improvement and update changes.

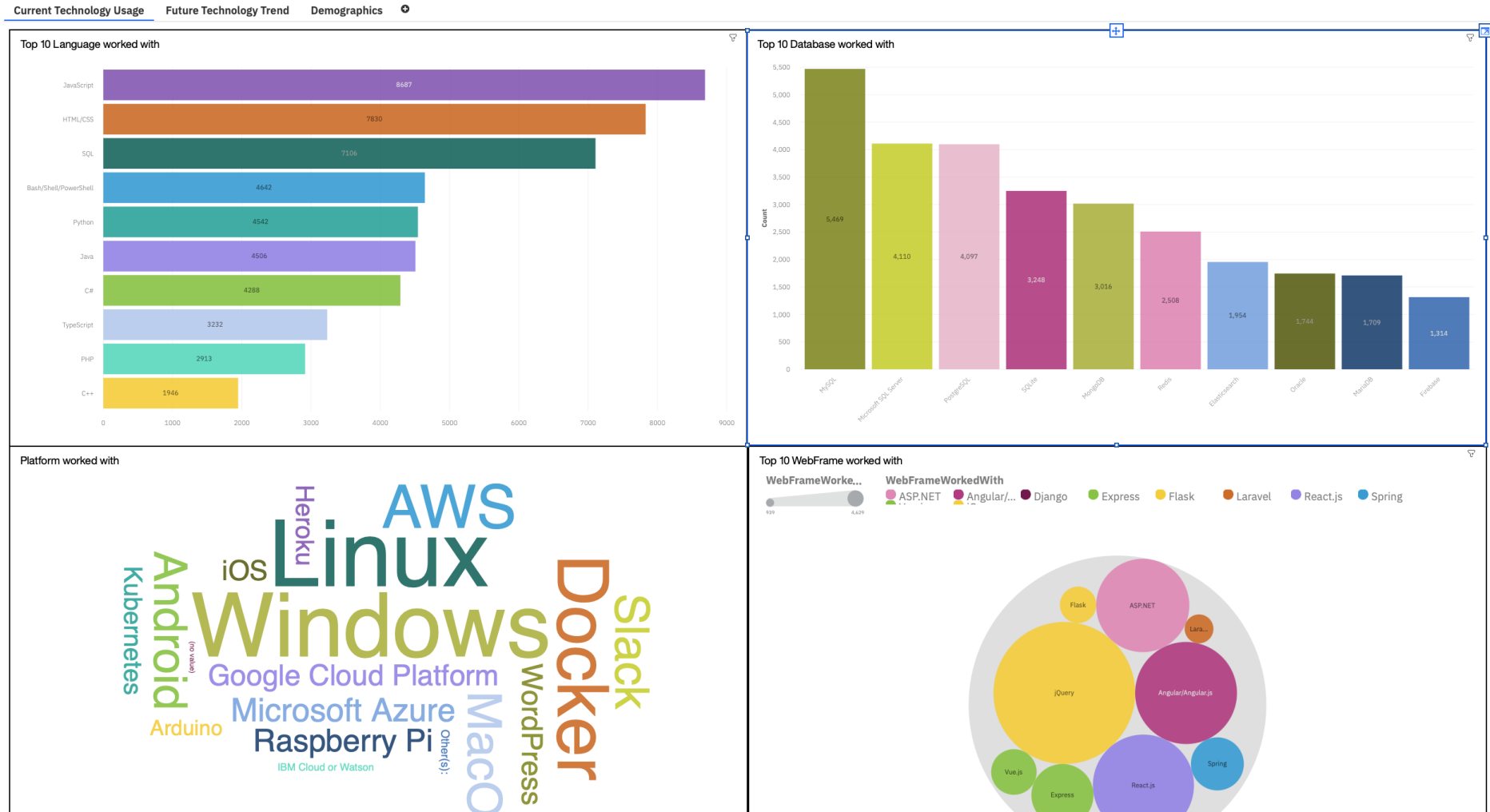
# DASHBOARD

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[Cognos Dashboard View Here](#)

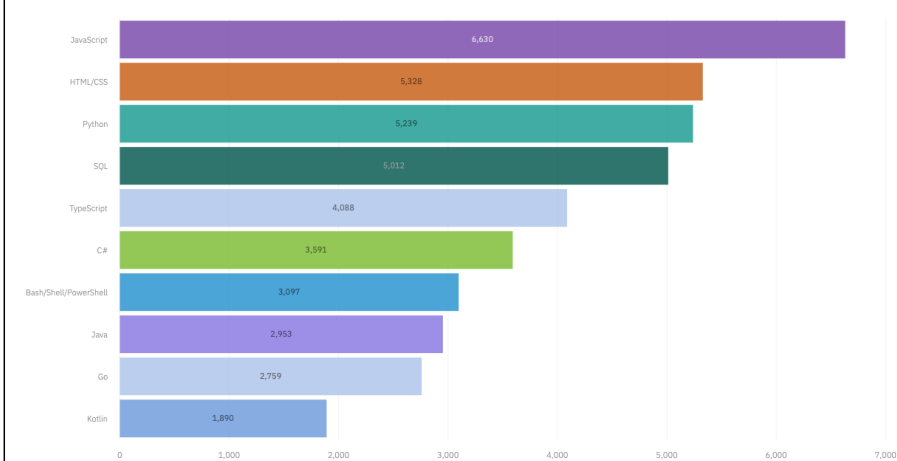
# DASHBOARD TAB 1



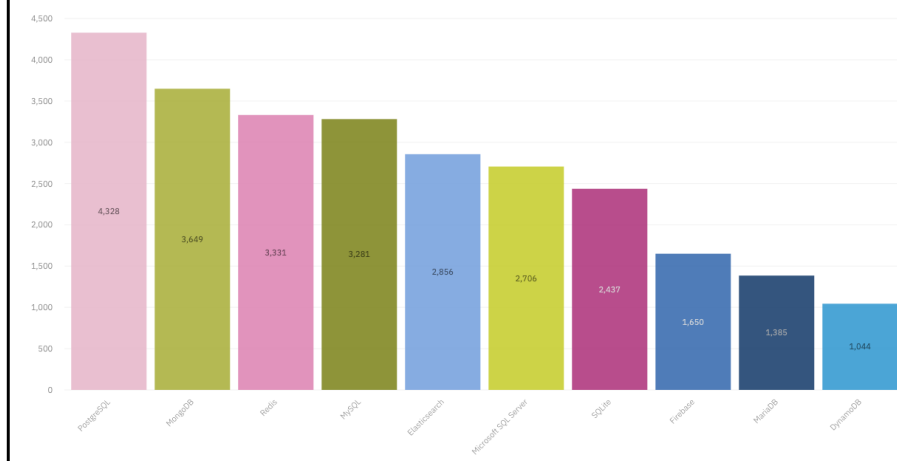
# DASHBOARD TAB 2

Current Technology Usage Future Technology Trend Demographics

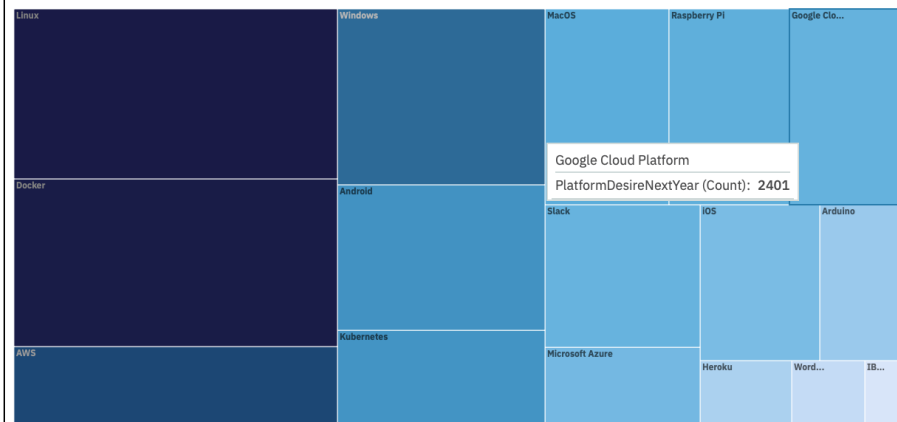
Top 10 Languages Desire Next Year



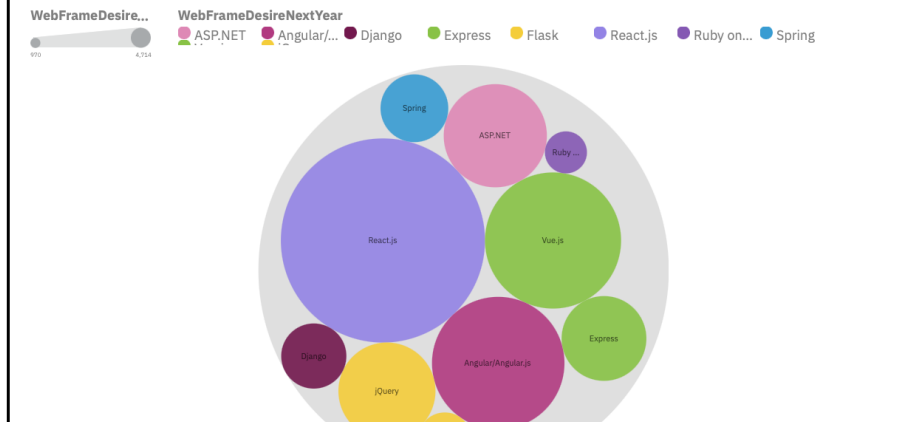
Top 10 Database Desire Next Year



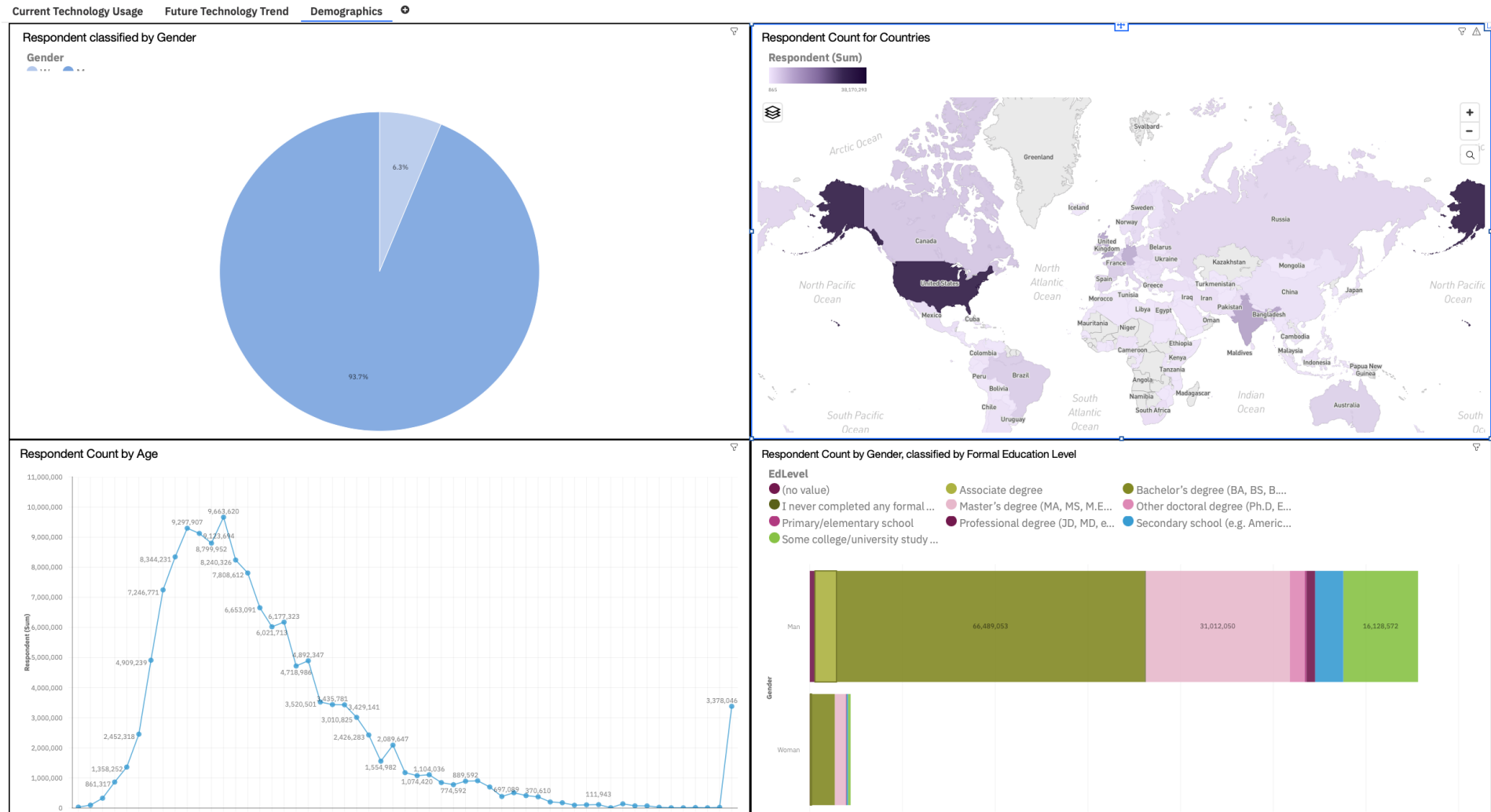
Platform Desire Next Year



Top 10 WebFrame Desire Next Year



# DASHBOARD TAB 3



# DISCUSSION

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# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- Male are more presenting with almost 94%
- Countries like US,UK, India, Germany and Australia has more active tech-industry
- Developers are with at least bachelor degree and in the range of 24 to 30 years old at peak.
- Linux, Windows, Dockers, AWS, Android are the most used tech-platforms.

## Implications

- Developed countries has more career potential for developers.
- Tech-industry is filled with youngsters so innovation is essential to survive in this industry.
- Also formal education might be needed to enter the industry.



# CONCLUSION

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- JavaScript, Python and SQL are top 3 languages to pursue in this industry.
- Developed countries has more career potential for developers
- Innovation is essential to survive in the industry as the interests are changing time by time.

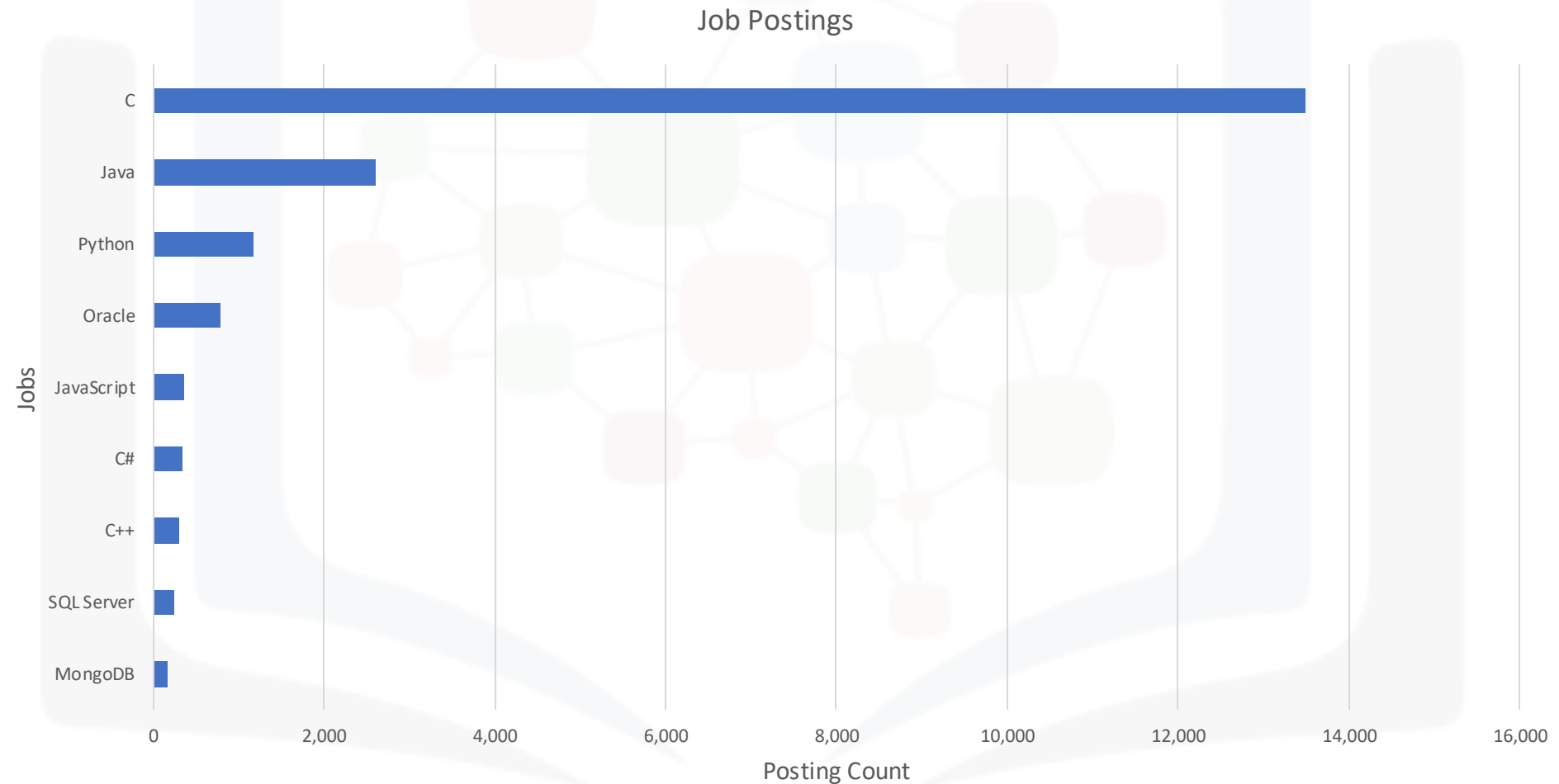
# APPENDIX

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- Include any relevant additional charts, or tables that you may have created during the analysis phase.

# JOB POSTINGS



# POPULAR LANGUAGES

