



Navigating the Digital Landscape: Insights from a Survey Analysis on Technology Trends and Demographics

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OUTLINE



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EXECUTIVE SUMMARY



- Current Technology Trends
 - Top 10 Language Worked With
 - Top 10 Database Worked With
 - Top 10 Web Frame Worked With
- Future Technology Trends
 - Top 10 Language Desired Next Year
 - Top 10 Database Desired Next Year
 - Top 10 Web Development Frameworks Desired Next Year
 - Platform Desiree Next Year
- Overview of the demographics of the target audience
 - Technological gap between developed and developing countries
 - Gender gap in the job market

INTRODUCTION



- The annual Developer Survey conducted by Stack Overflow stands as the world's most extensive and inclusive examination of individuals engaged in coding globally.
- It's important to note that the survey results may not evenly reflect the entire diversity of the developer community.
- The survey gathered responses from nearly 90,000 developers.
- The primary aim is to discern trends that can provide insights into the future directions of developers.
- Additionally, the survey contributes to the characterization of developers on a global scale.

METHODOLOGY



- Collect survey data & explore its content
 - Stack Overflow Developer Survey
 - Web Scraping
 - APIs
 - Request library
- Data Wrangling
 - Cleaning and preparing data for analysis
- Exploratory data analysis
 - Examining data distribution
 - Investigating correlations
- Data Visualization
 - Highlight distribution of data, relationships, the composition and comparison of data
- Data Analysis Dashboards

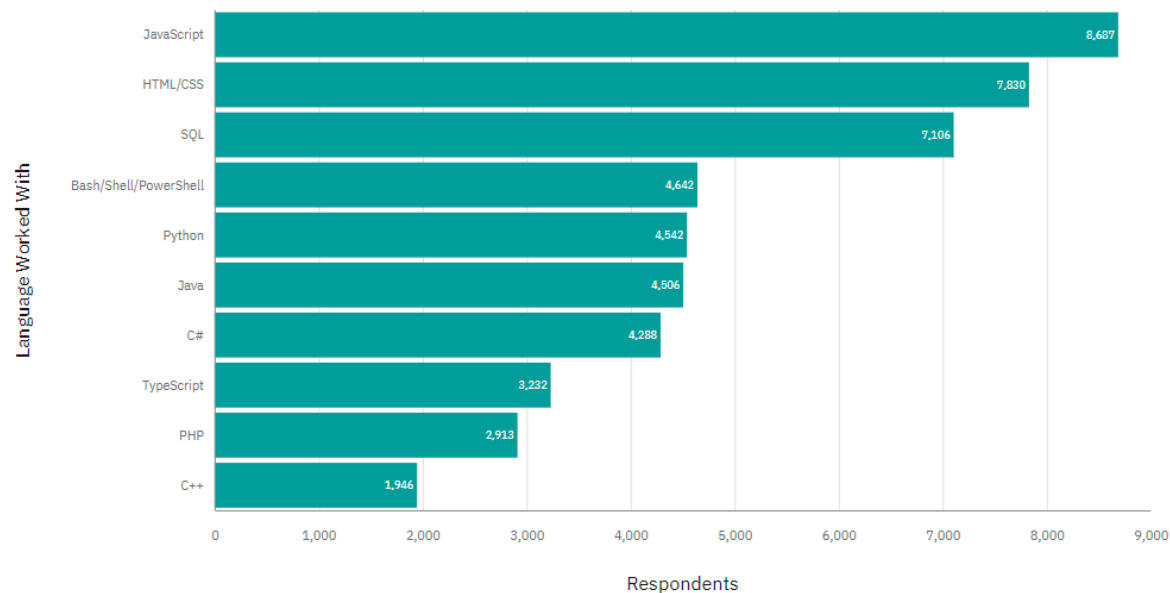
RESULTS



PROGRAMMING LANGUAGE TRENDS

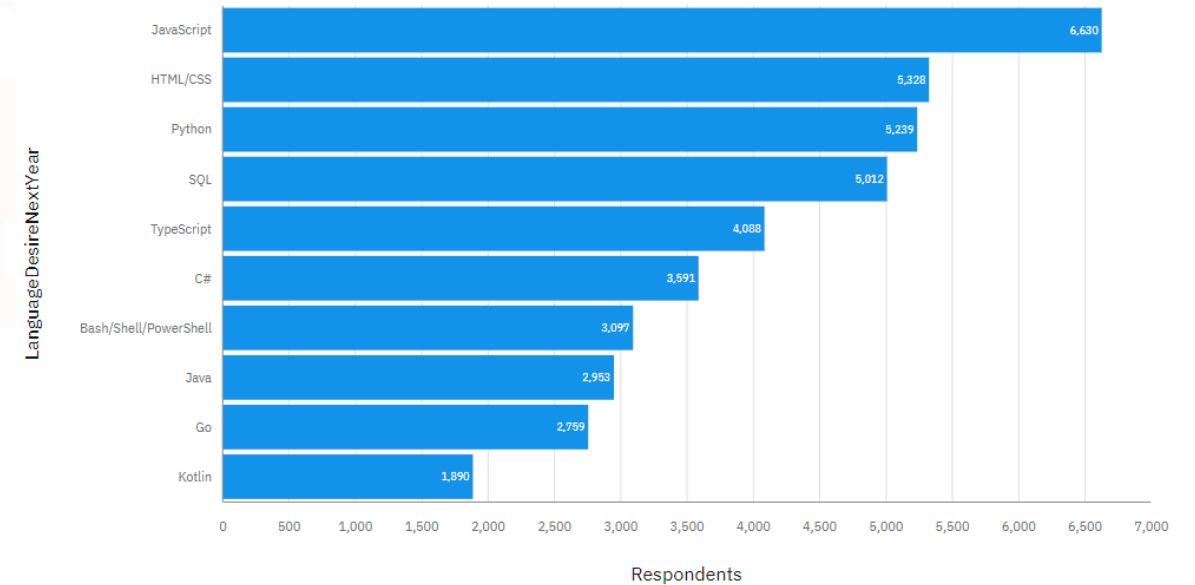
Current Year

Top 10 LanguageWorkedWith



Next Year

Top 10 LanguageDesireNextYear



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Python, the fastest-growing major programming language, has risen in the ranks of programming languages in survey
- This year, JavaScript, HTML/CSS, and SQL take the top three spots

Implications

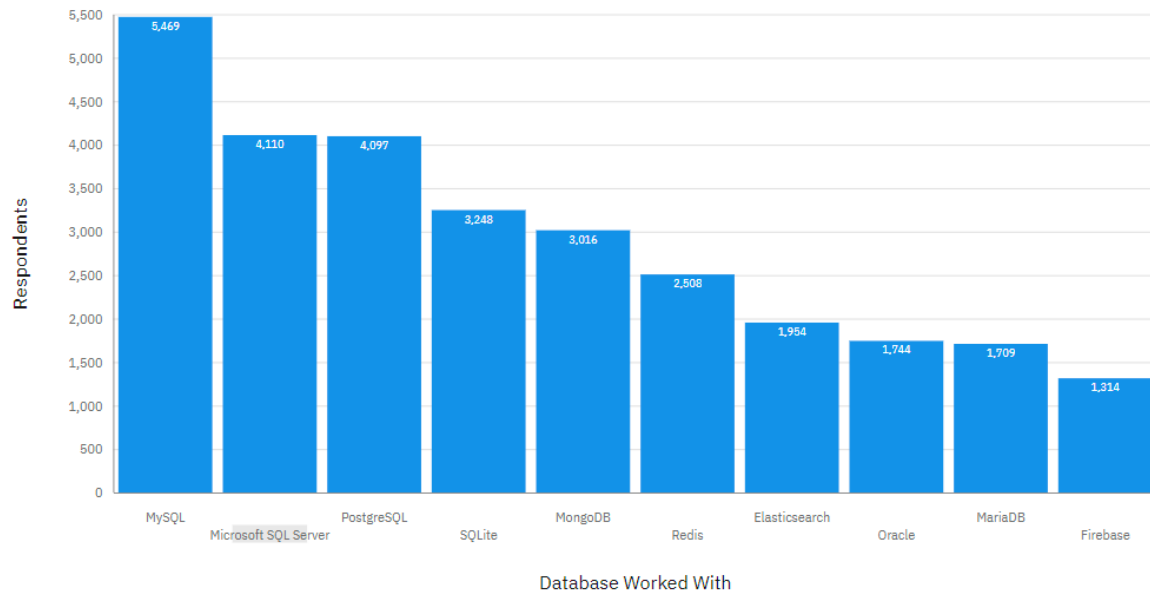
- PHP is rapidly losing popularity and usage
- Java is experiencing a decline in popularity
- TypeScript is anticipated to gain popularity in the coming year

DATABASE TRENDS

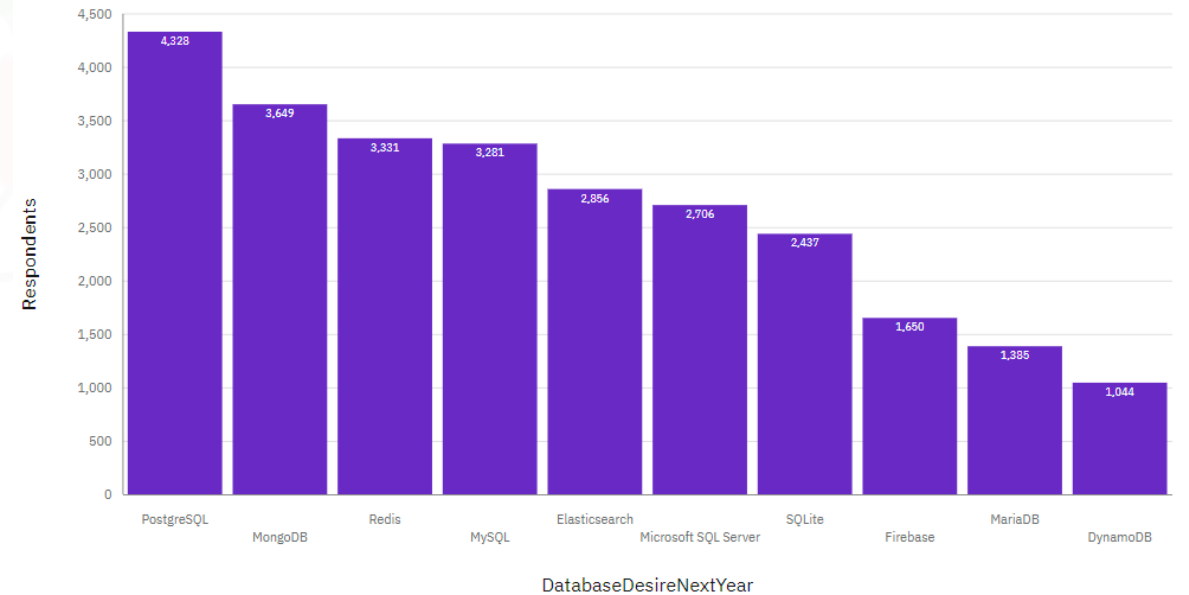
Current Year

Next Year

Top 10 DatabaseWorkedWith



Top 10 DatabaseDesireNextYear



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL stands out as the most widely used database
- PostgreSQL and MongoDB show a growing popularity

Implications

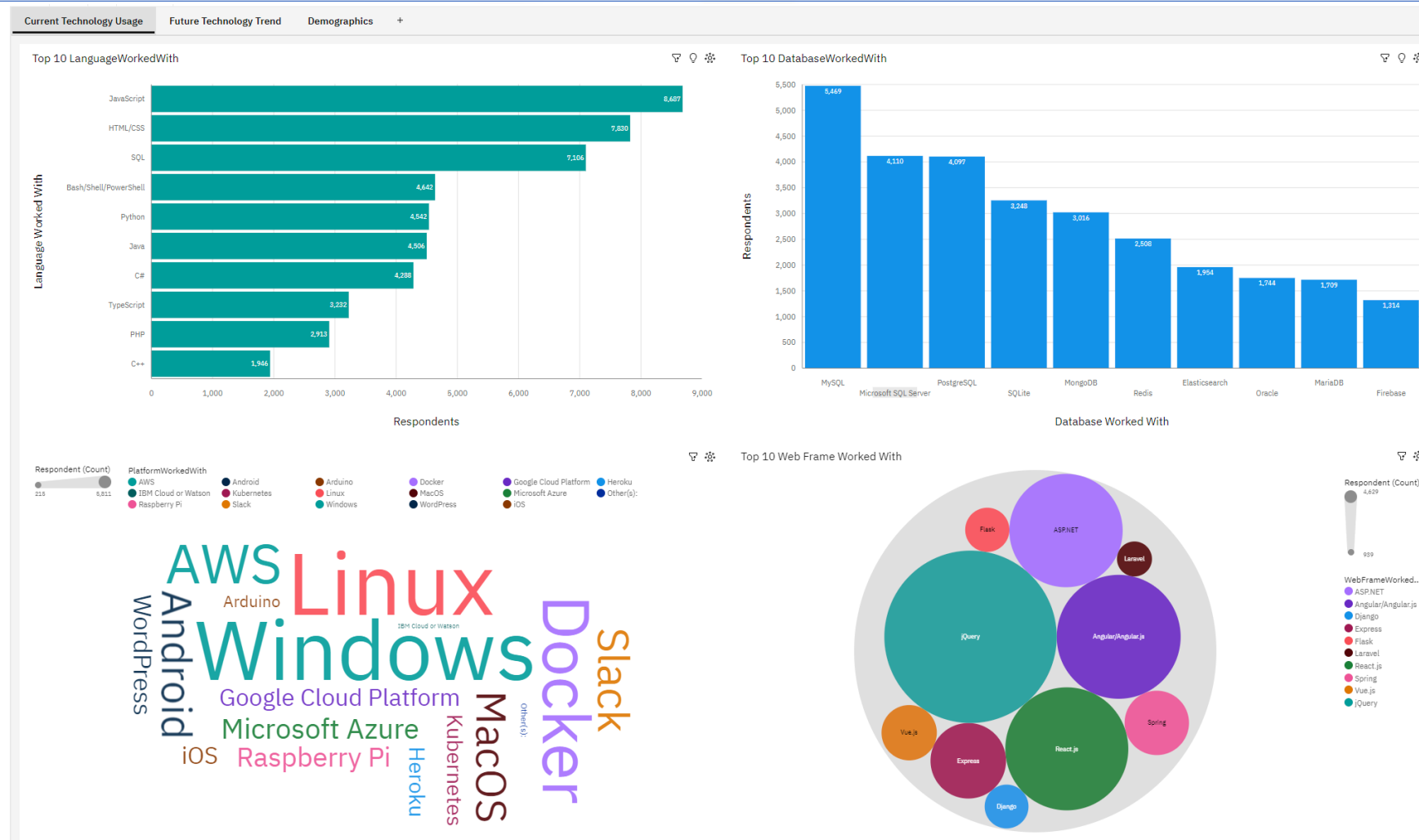
- Microsoft SQL Server and SQLite are losing ground in the market
- PostgreSQL and MongoDB are establishing a strong presence
- Open source databases remain preferable in companies

DASHBOARD

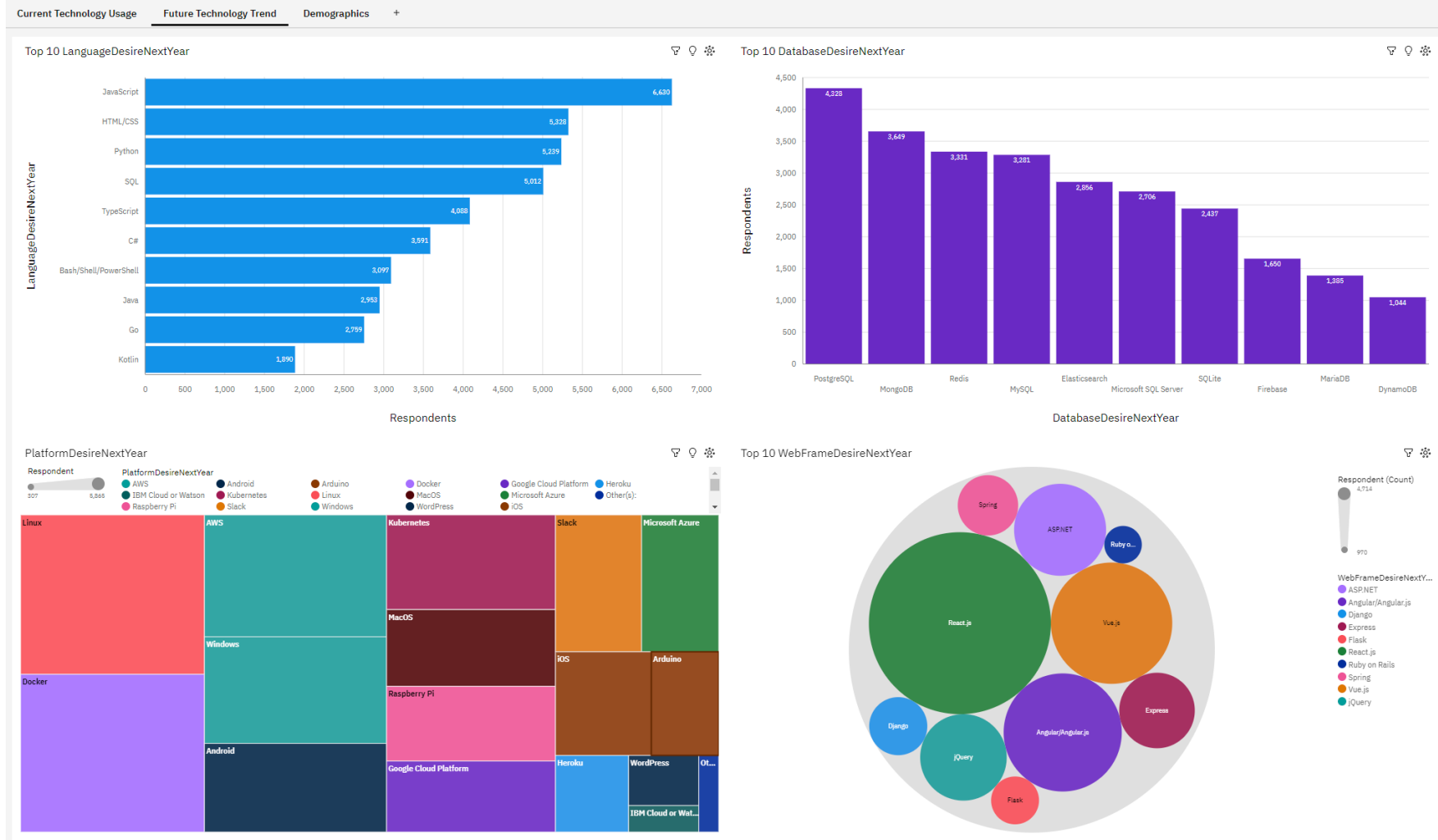


[IBM Cognos Analytics dashboard link](#)

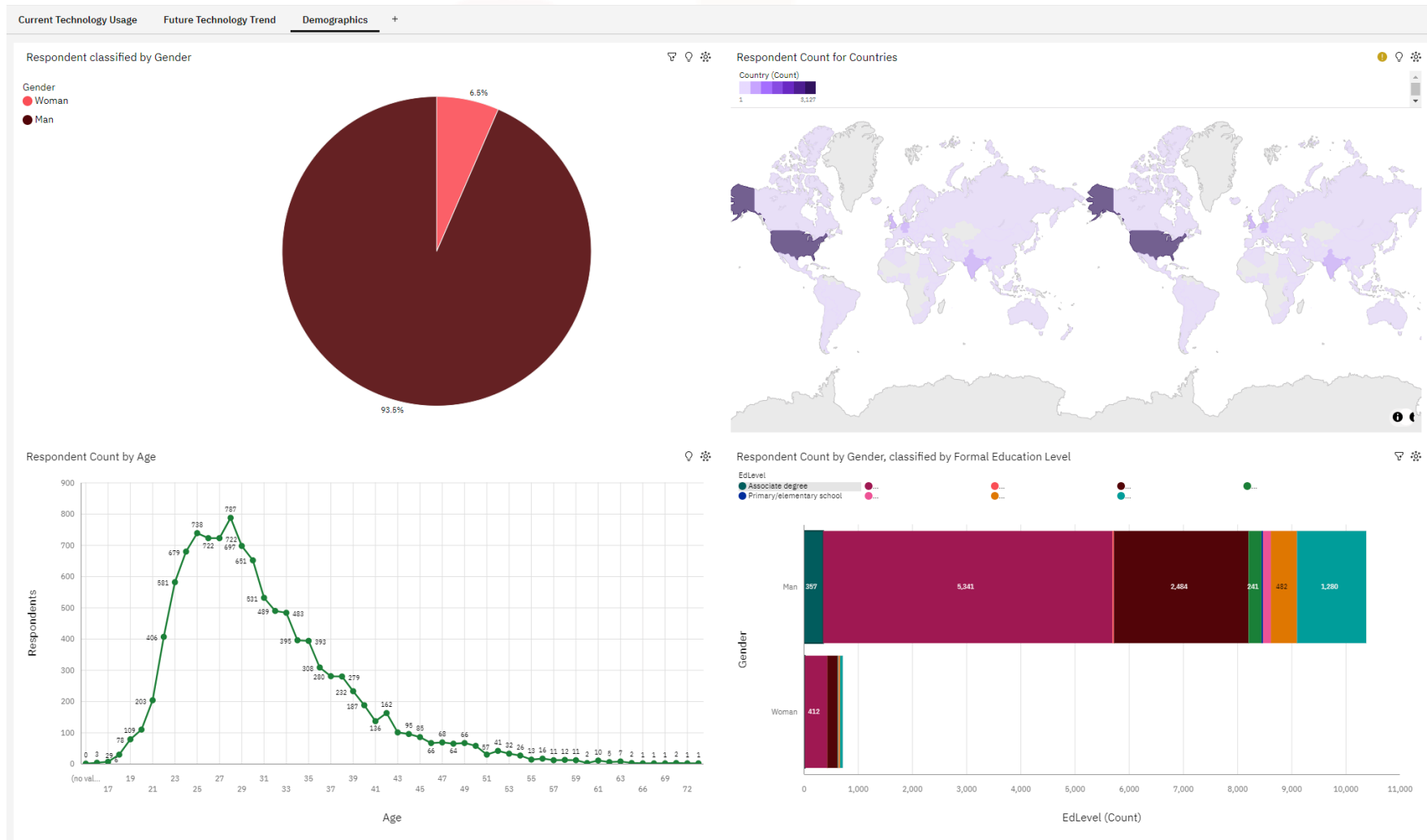
DASHBOARD TAB 1: Current Technology Usage



DASHBOARD TAB 2: Future Technology Trend



DASHBOARD TAB 3: Demographics



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- Python, the fastest-growing major programming language, has ascended in the survey's programming language rankings.
- This year, JavaScript, HTML/CSS, and SQL take the top three spots.
- MySQL stands out as the most widely used database, with PostgreSQL and MongoDB showing growing popularity.

Implications

- PHP is rapidly losing popularity and usage.
- Java is experiencing a decline in popularity.
- TypeScript is anticipated to gain popularity in the coming year.
- Microsoft SQL Server and SQLite are losing ground in the market.
- PostgreSQL and MongoDB are establishing a strong presence.
- Open source databases remain preferable in companies.

CONCLUSION



- Python's rapid ascent solidifies it as the fastest-growing major programming language, joined by JavaScript, HTML/CSS, and SQL in current dominance.
- MySQL leads in databases, with PostgreSQL and MongoDB gaining traction, while Microsoft SQL Server and SQLite decline.
- Significant programming language shifts include PHP's decline, Java's waning popularity, and TypeScript's anticipated rise.
- The database landscape sees open source preferences rising, evident in PostgreSQL and MongoDB's establishment, marking a broader industry trend toward open solutions.

APPENDIX

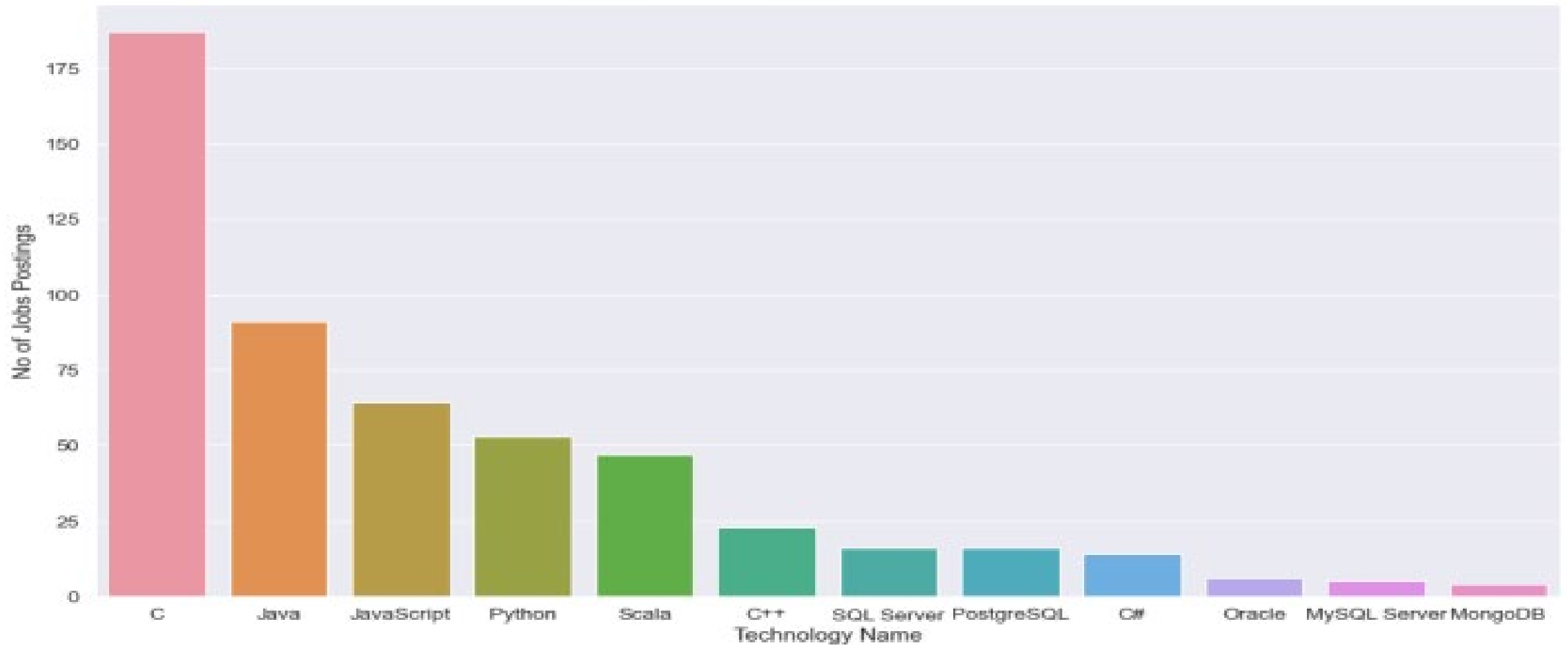


Resources

- Link to the Stack Overflow Developer Survey Data Set 2019: [link](#)
- Link to the Stack Overflow Developer Survey Results 2019: [link](#)
- Link to the Stack Overflow Annual Developer Surveys 2011 - 2023 years: [link](#)



JOB POSTINGS



POPULAR LANGUAGES

