Insights Dashboard: Technology Usage and Demographics

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EXECUTIVE SUMMARY

- The Top 10 Programming Languages (Current and Future)
- The Top 10 Databases (Current and Future)
  - MySQL – Most Popular Database
  - SSMS (Microsoft) – 2nd Most Popular
  - PostgreSQL – 3rd Most Popular
- Developer Platform Usage (Current and Future)
- The Top 10 Desired Web Frameworks (Current and Future)

INTRODUCTION

- Today's Fast-Paced Digital Landscape Demands Businesses to Stay Up-to-Date with the Latest Technology Trends.
- To Keep Up with These Trends, It's Important to Know the Top Programming Languages and Databases.
- Analyzing the Usage of Developer Platforms and Identified the Top 10 Desired Web Frameworks That Developers Are Using Currently and Will Use in the Future.
- Making Informed Decisions:
  - By Staying Up-to-Date with Technology Trends, Businesses Can Make Informed Decisions about Technology Adoption.
  - They Can Either Choose to Adopt New Technology or Remain with Their Current Technology Depending on What Suits Their Business Needs Best.

METHODOLOGY

- Research Top Programming Languages and Databases to Identify Trends in Usage and Popularity.
- Analyze Developer Platform Usage to Identify the Top 10 Desired Web Frameworks.
- Evaluate Findings and Create a List of the Top 10 Programming Languages, Databases, and Web Frameworks.
- Discuss the Importance of Staying Up-to-Date with Technology Trends and Making Informed Decisions about Technology Adoption.

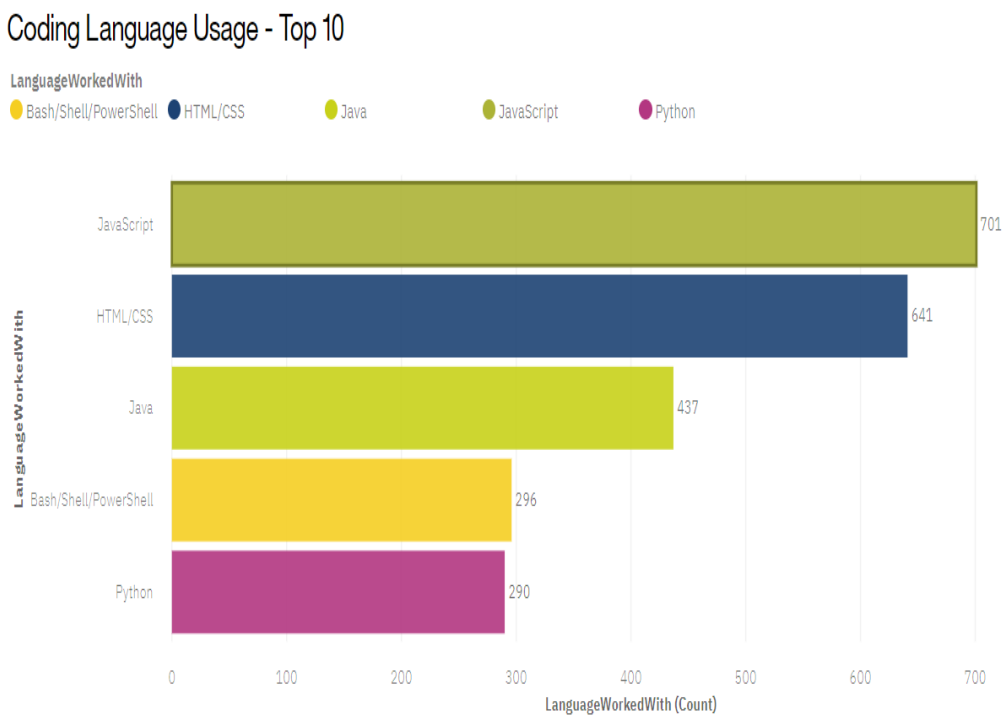
RESULTS

The analysis results consist of four main parts, each providing valuable insights into the latest technology trends:

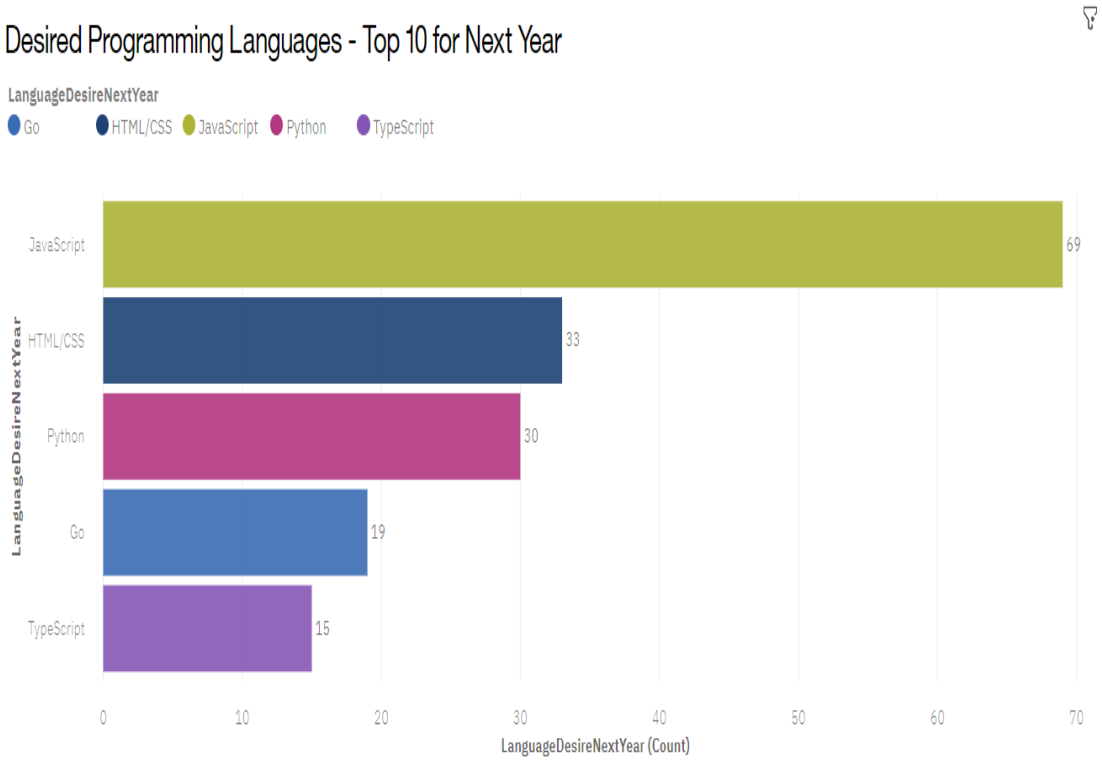
- **Programming Language Trend**: Identifies top programming languages in high demand and likely to continue growing in popularity.
- **Database Trend**: Explores the most popular databases among developers to inform businesses on which database management systems to adopt.
- **Platform Trend**: Analyzes developer platform usage and identifies top 10 desired web frameworks for businesses looking to stay up-to-date with the latest technology.
- **Web Framework Trend**: Examines top 10 desired web frameworks and their features, benefits, and drawbacks to help businesses select the most appropriate framework for their projects.

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

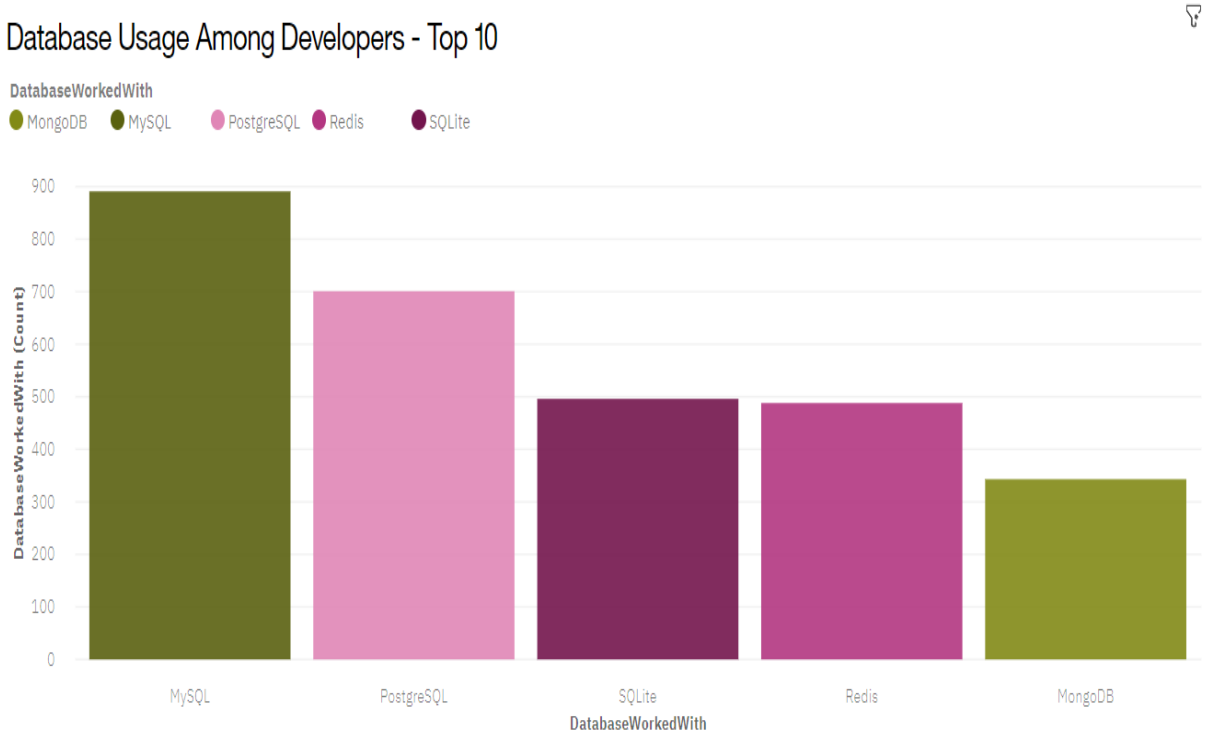
- JavaScript and HTML are the most widely used and stable programming languages for users in the future.
- The increase in popularity of JavaScript is particularly noteworthy compared to other languages.
- Python is also expected to perform well in rankings next year.

Implications

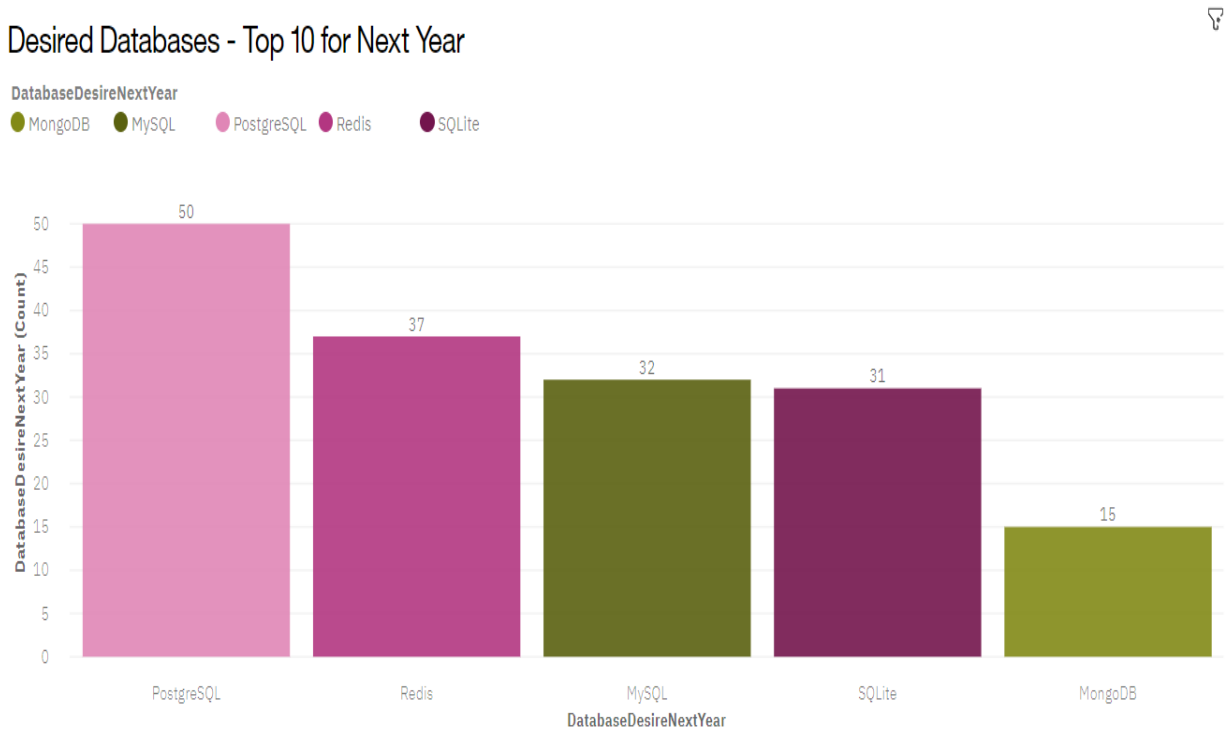
- JavaScript's versatility and interactivity make it a great programming language for creating dynamic and interactive websites.
- Python's simplicity and productivity make it an easy-to-learn language that can save time and resources for developers.
- Both JavaScript and Python have large and active communities of developers who contribute to open-source projects and share knowledge and best practices.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL and PostgreSQL are the most widely used databases among users currently.
- The usage of SQLite and Redis is not significantly different
- However, PostgreSQL is expected to increase in popularity and surpass MySQL as the second most used database, while Redis is predicted to jump to rank two in the future.

Implications

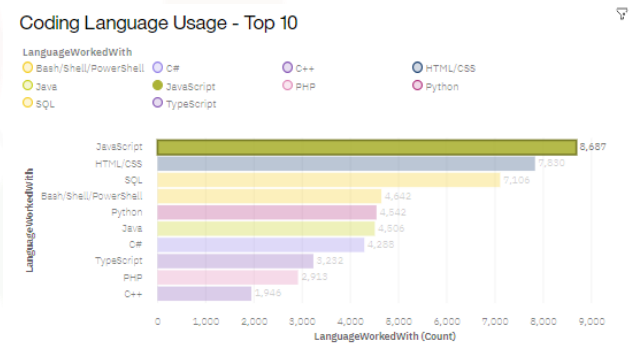
- PostgreSQL is gaining popularity for its advanced features and flexibility, while MySQL is losing popularity due to its limitations in scalability and performance.
- Redis is becoming popular for real-time applications, while SQLite remains popular for mobile and embedded apps.
- SQLite may not be suitable for larger or more complex applications.

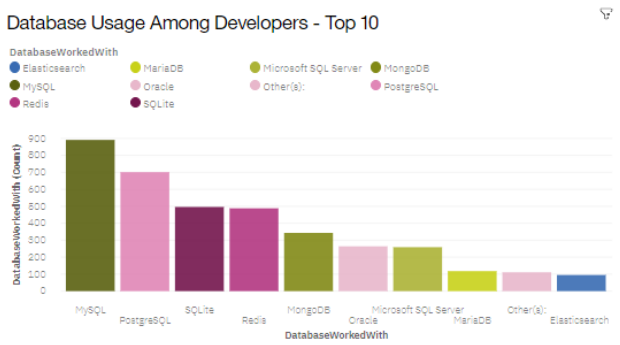
DASHBOARD

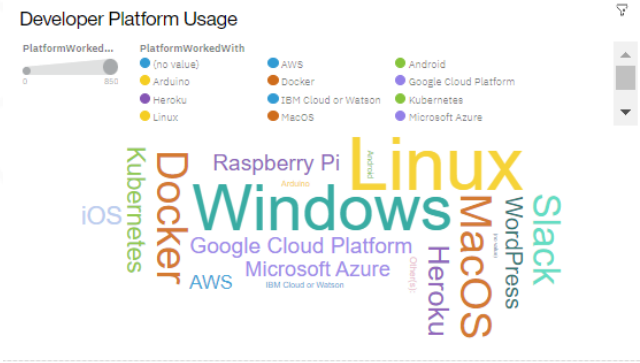
Access real-time data through the dashboard link:

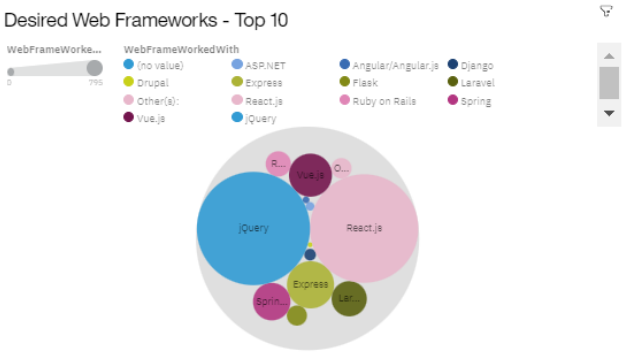
https://dataplatform.cloud.ibm.com/dashboards/0a2c945a-0c9e-4041-b954-c5a676afc24e/view/7514dc2d6eb86ee04ccaf2e4079e2a017937275ee1bb845786817b490b662797f3381194c8264a09d8425031f2e9445c9a

DASHBOARD TAB 1









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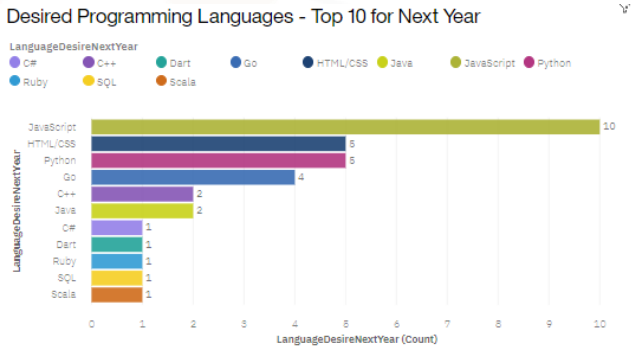

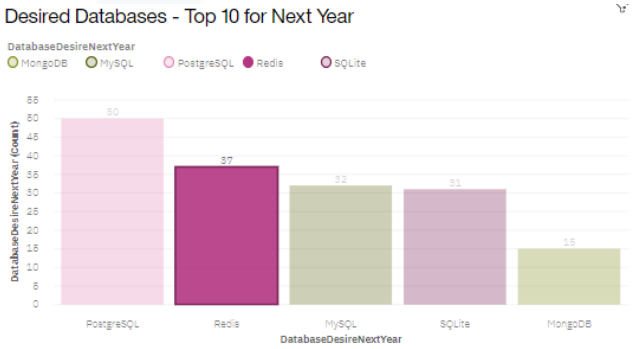

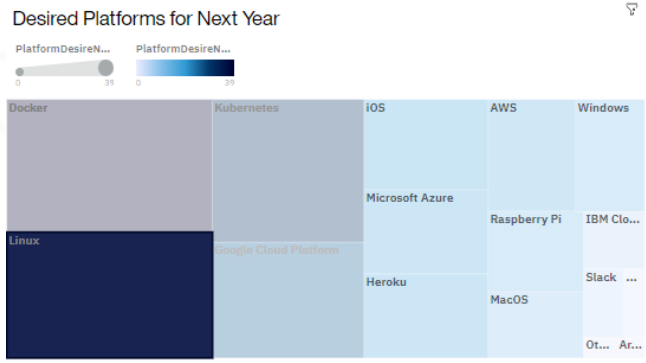

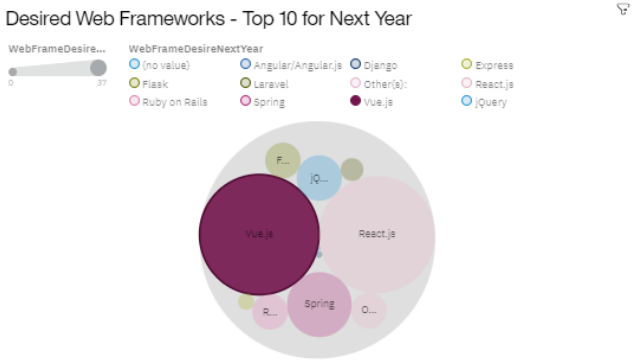

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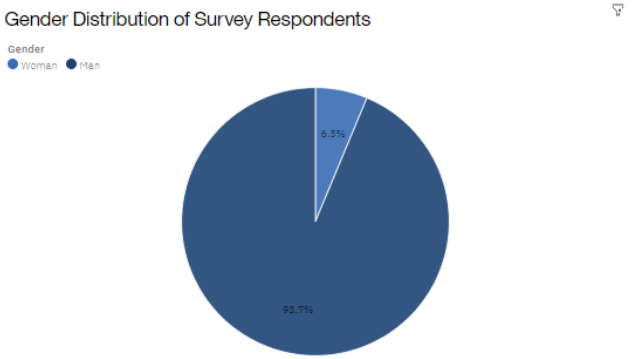
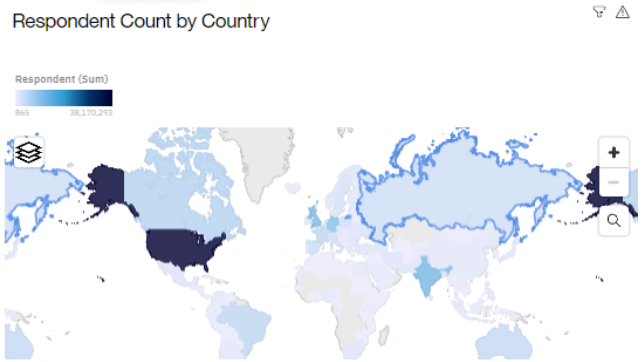
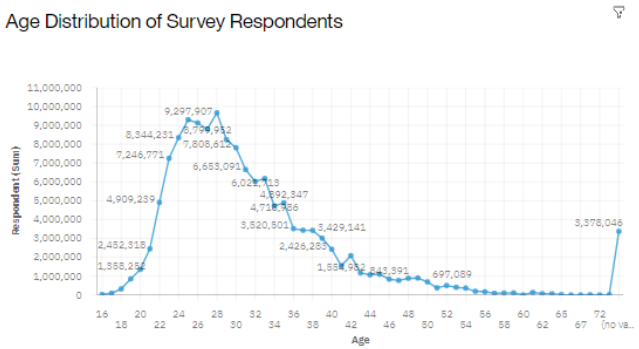
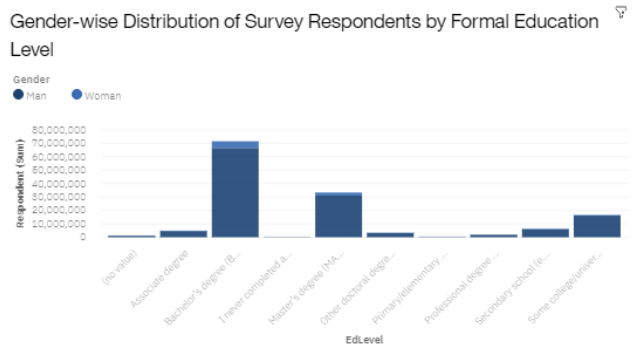








DISCUSSION

- The report comprises three tabs containing data on the trends of coding languages, database systems, web frameworks, and data platforms, both presently and in the future. Additionally, demographic information is provided to showcase the distribution of respondents by gender.

OVERALL FINDINGS & IMPLICATIONS

Findings

JavaScript and HTML are the most popular and stable programming languages, with increasing popularity for JavaScript in particular.

MySQL is currently the most widely used database, but PostgreSQL and Redis are predicted to gain in popularity in the near future.

Python is also expected to perform well in popularity rankings next year.

Implications

PostgreSQL is gaining popularity while MySQL is losing popularity.

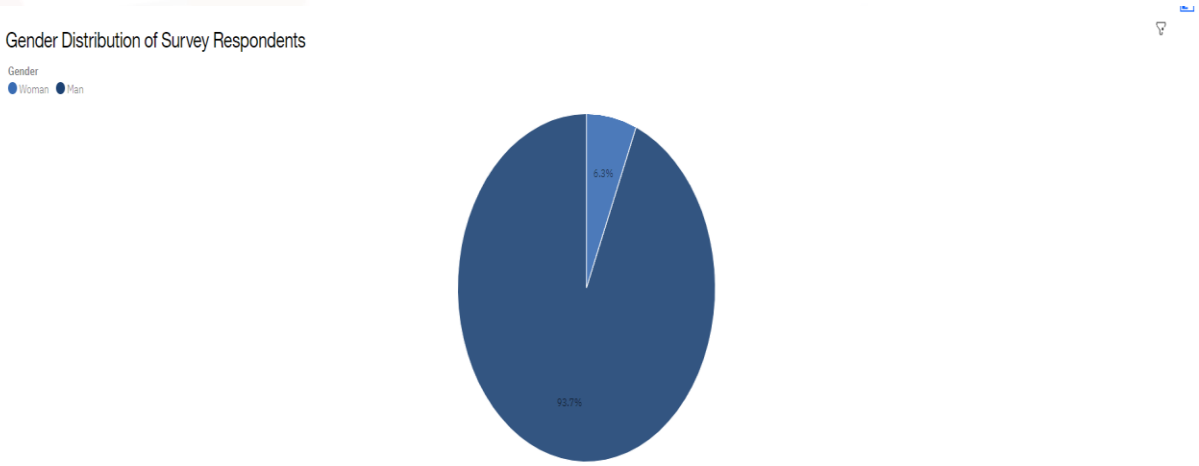
Redis is popular for real-time apps and SQLite for mobile/embedded apps.

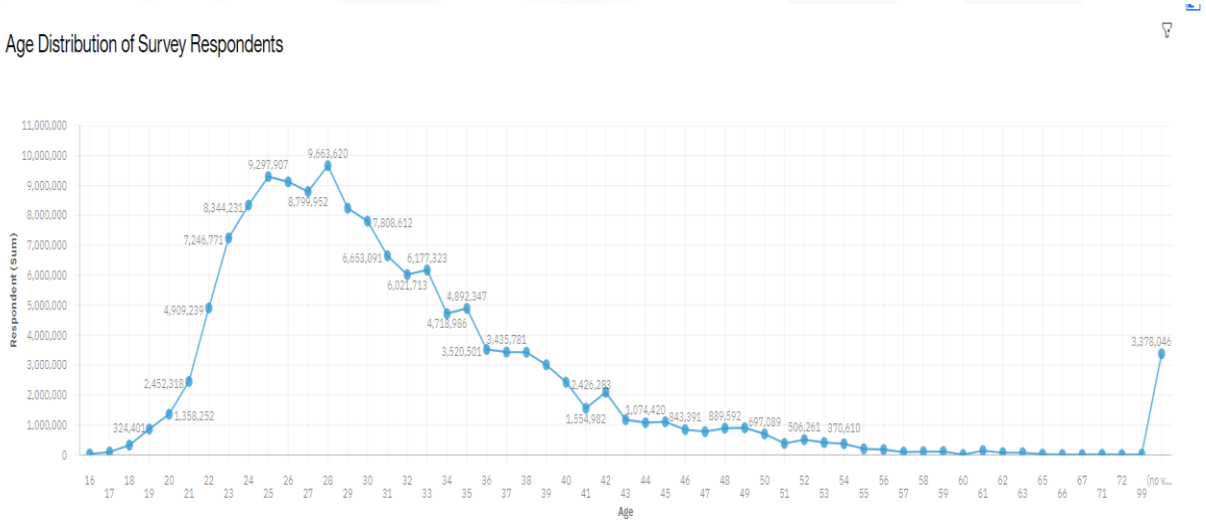
JavaScript and Python have large developer communities and are suited for different purposes.

CONCLUSION

- Users should understand that developers choose programming languages and databases based on specific project needs.
- JavaScript is a solid choice for dynamic and interactive website.
- Python is an excellent option for users looking for an easy-to-learn language that can save time and resources.
- PostgreSQL is gaining popularity for its advanced features and flexibility, while Redis and SQLite remain popular for specific use cases.
- By considering these factors, users can make more informed decisions about which technologies are best suited to their specific needs.

APPENDIX

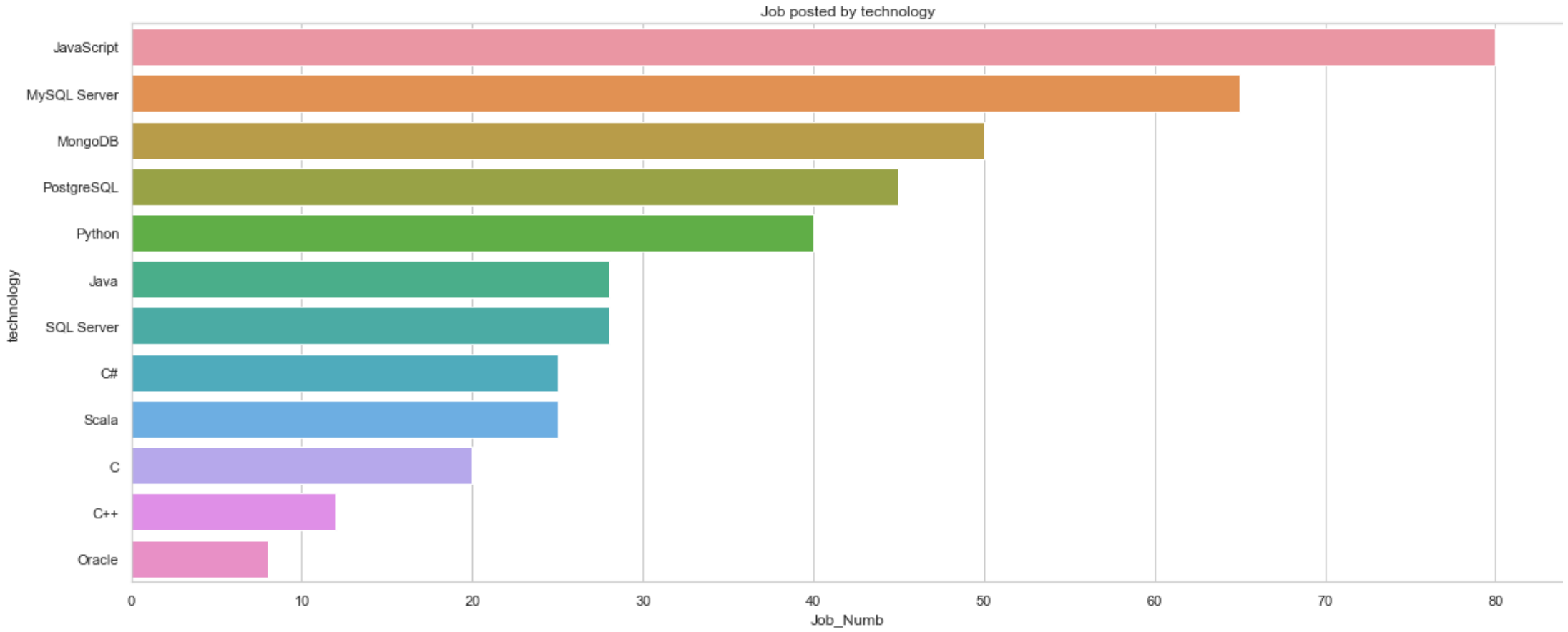




IBM Developer

SKILLS NETWORK

JOB POSTINGS



POPULAR LANGUAGES