Project Overview: Google Looker Studio Dashboard

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OUTLINE

- Executive Summary
- Overview of the project goals and objectives.
- Key findings or insights from the data analysis.
  - Trends identified in the current technology usage.
  - Insights into the future technology trends.
  - Demographic breakdown of survey participants.
- Methodology used in the data collection and analysis.
- Key visualizations and dashboards created to display findings.
- Conclusions and recommendations based on the analysis.

EXECUTIVE SUMMARY

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INRODUCTION

- Overview of the project background.
- Importance of the research or analysis.
- Objectives of the study or project.
- Research questions or hypotheses:
  - Specific questions explored.
  - Expected outcomes or findings.

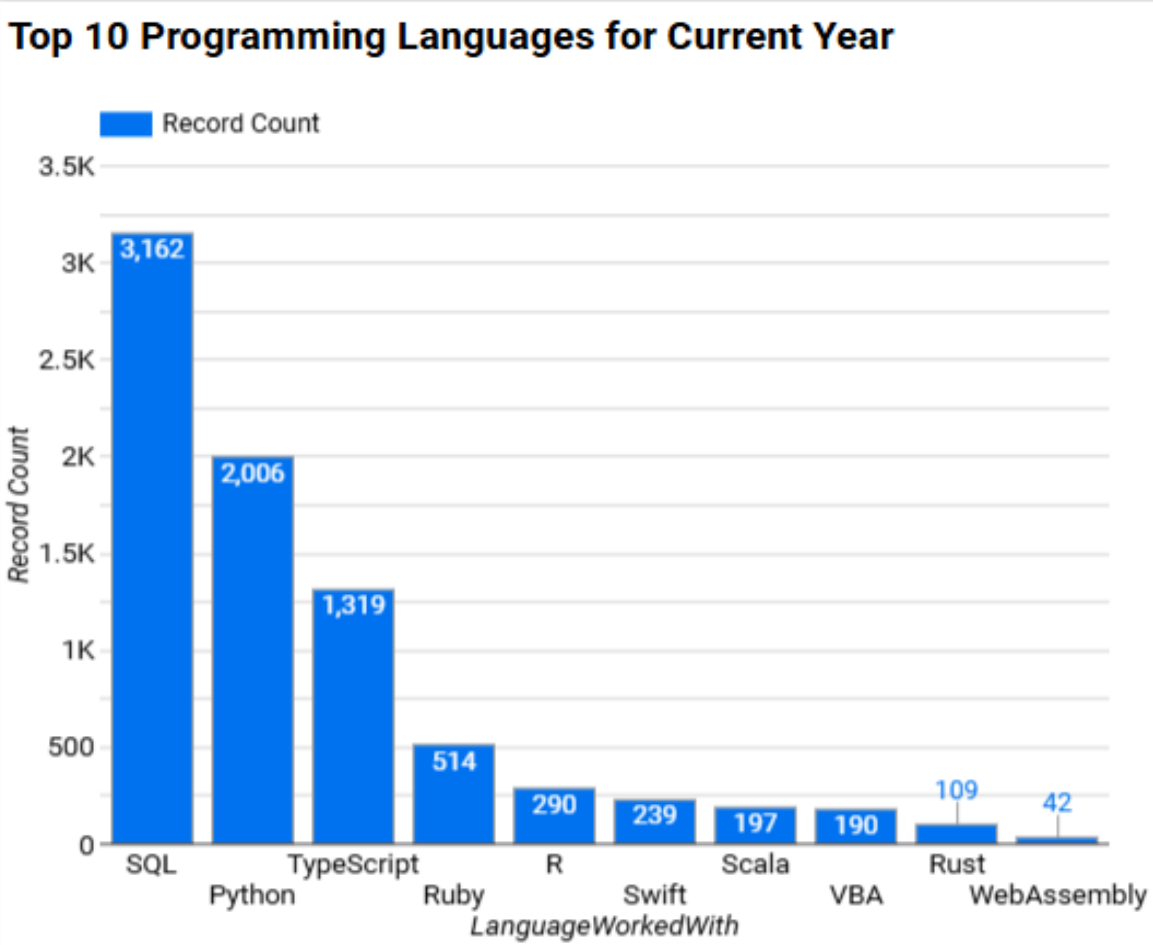
METHODOLOGY

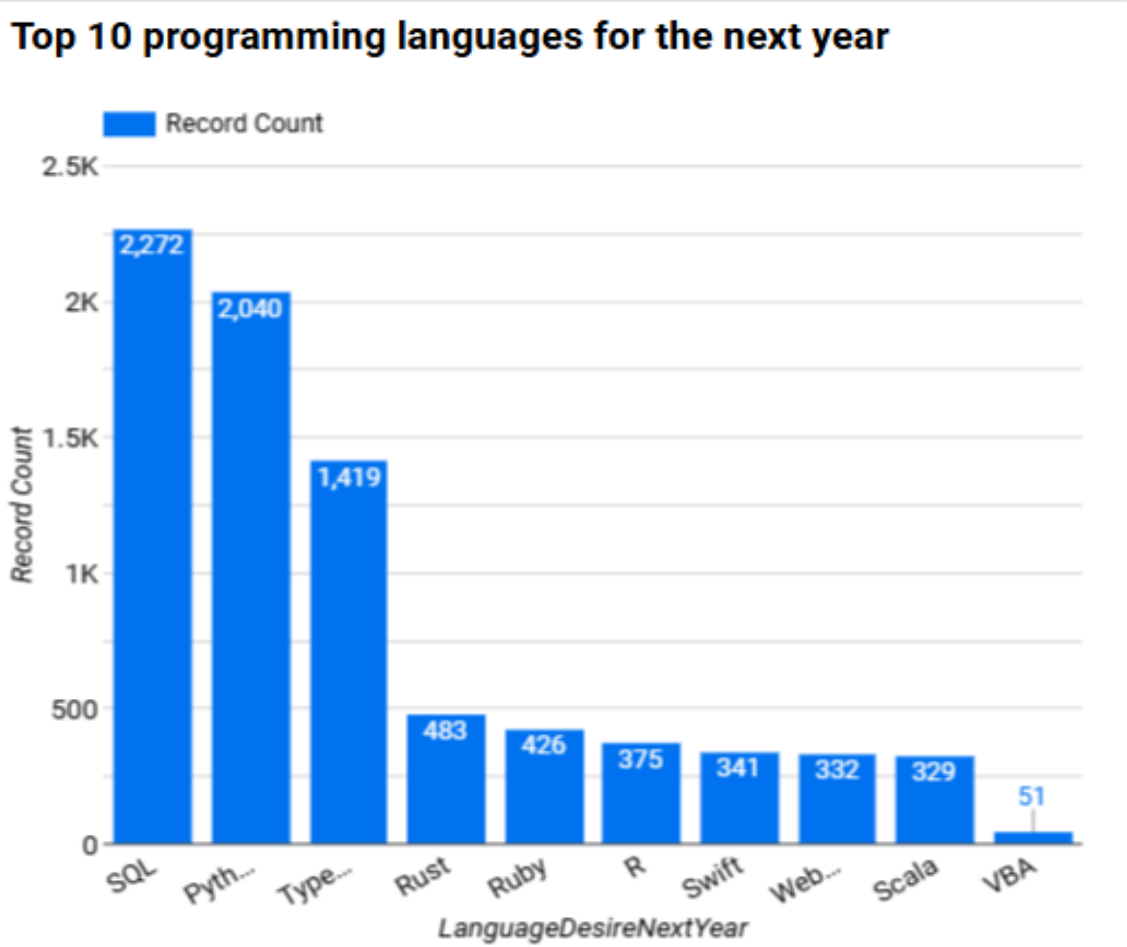
- Overview of the project approach.
- Data Collection.
  - Survey or data source used.
  - Data collection techniques (e.g., online survey, interview).
- Analysis process:
  - Tools or software used for data analysis.
  - Key techniques applied (e.g., statistical methods, trend analysis).
- Key insights derived from the data.

RESULTS

- Key findings from the data analysis.
- Insights into trends or patterns observed.
- Any significant outliers or data points.
- Summary of the data analysis process and outcomes.

PROGRAMMING LANGUAGE TRENDS





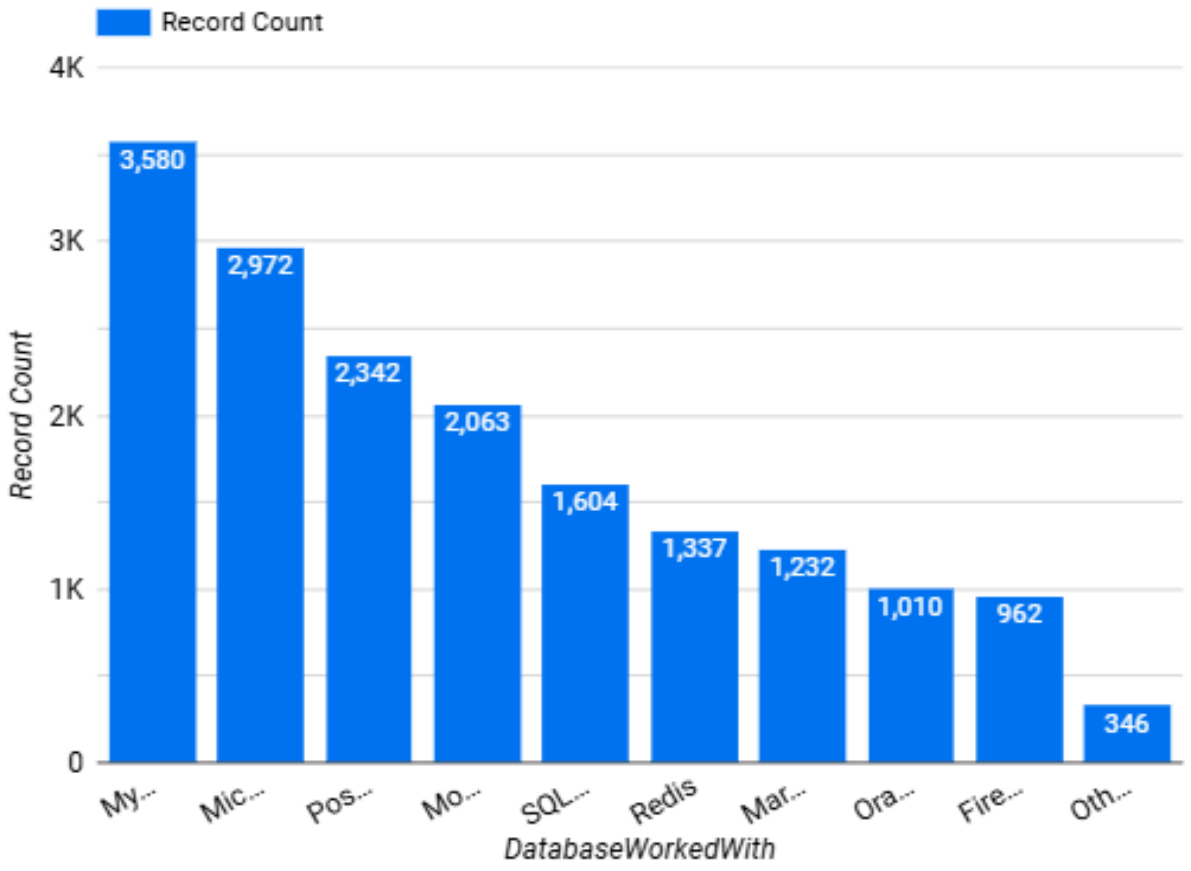
PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

- **Findings**:
- VBA, TypeScript, and Swift are the top 3 languages, showing strong current usage.
- SQL, Scala, and Ruby maintain steady usage, highlighting their ongoing relevance.
- Rust, R, and Python are gaining traction, showing a rise in interest.

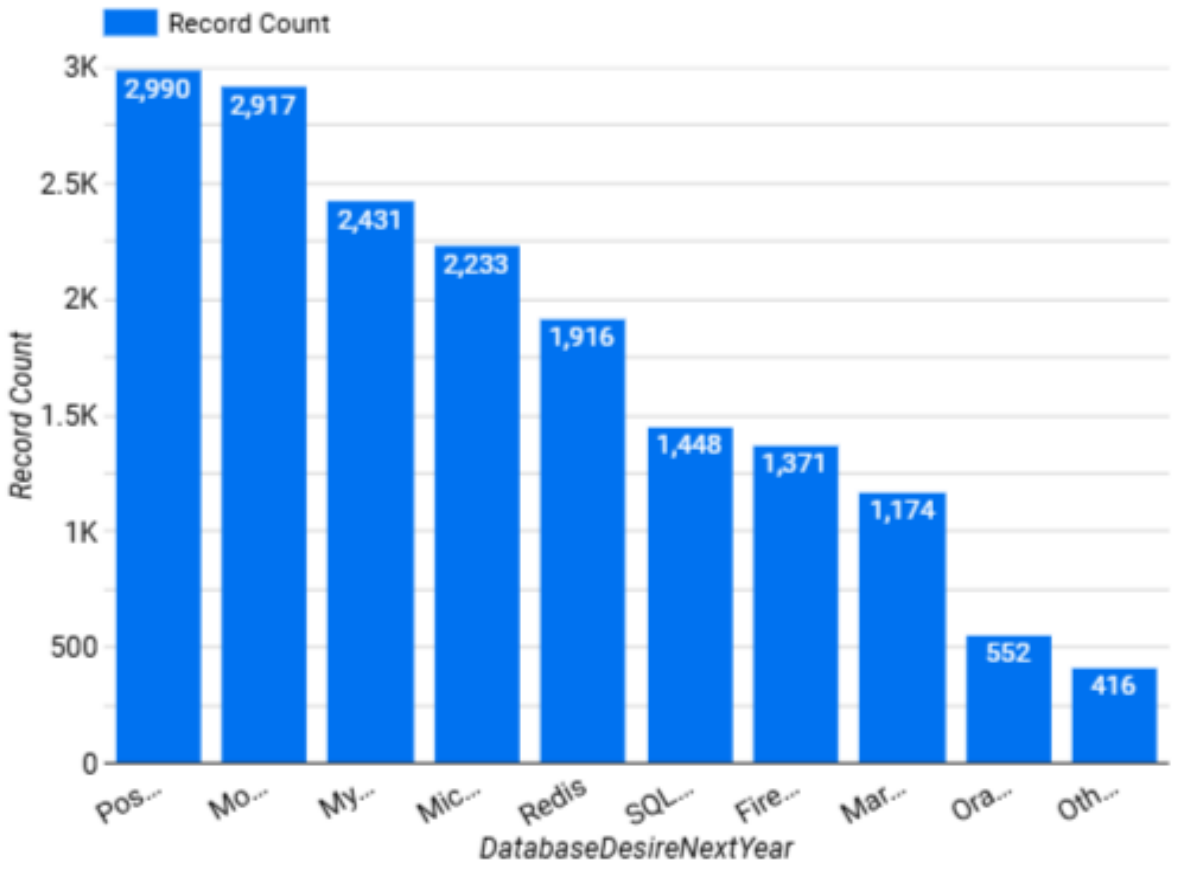
- **Implications**:
- Strong demand for web development and automation skills, with TypeScript and VBA leading.
- SQL remains essential for data management, while Scala and Ruby are favored in specific industries.
- Growing interest in emerging languages like Rust and Python suggests future trends toward performance and data analysis.

DATABASE TRENDS

Top 10 Databases for the Current Year



Top 10 Databases for the Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

- **Findings**:
  - MySQL, Microsoft SQL Server, and PostgreSQL remain the top choices for relational database management systems.
  - NoSQL options such as MongoDB and Firebase are growing rapidly due to their flexibility in handling unstructured data.
  - Redis, Oracle, and MariaDB maintain steady usage, with Redis gaining popularity for caching and fast data retrieval.
  - Firebase and others are seeing increasing adoption, especially in cloud-based and real-time applications.

- **Implications**:
  - Traditional SQL databases like MySQL and PostgreSQL will continue to be crucial for businesses with structured data requirements.
  - The rise of NoSQL databases like MongoDB and Firebase reflects the growing demand for applications with dynamic, unstructured data storage needs.
  - Redis is becoming a go-to solution for caching, enhancing performance for applications requiring real-time data access.
  - As cloud-native and real-time applications grow, Firebase and similar technologies will be key to scalable, flexible solutions.

DASHBOARD

LINK

View the Looker Studio Dashboard [GitHub Link]

DASHBOARD TAB 1

Top 10 Programming Languages

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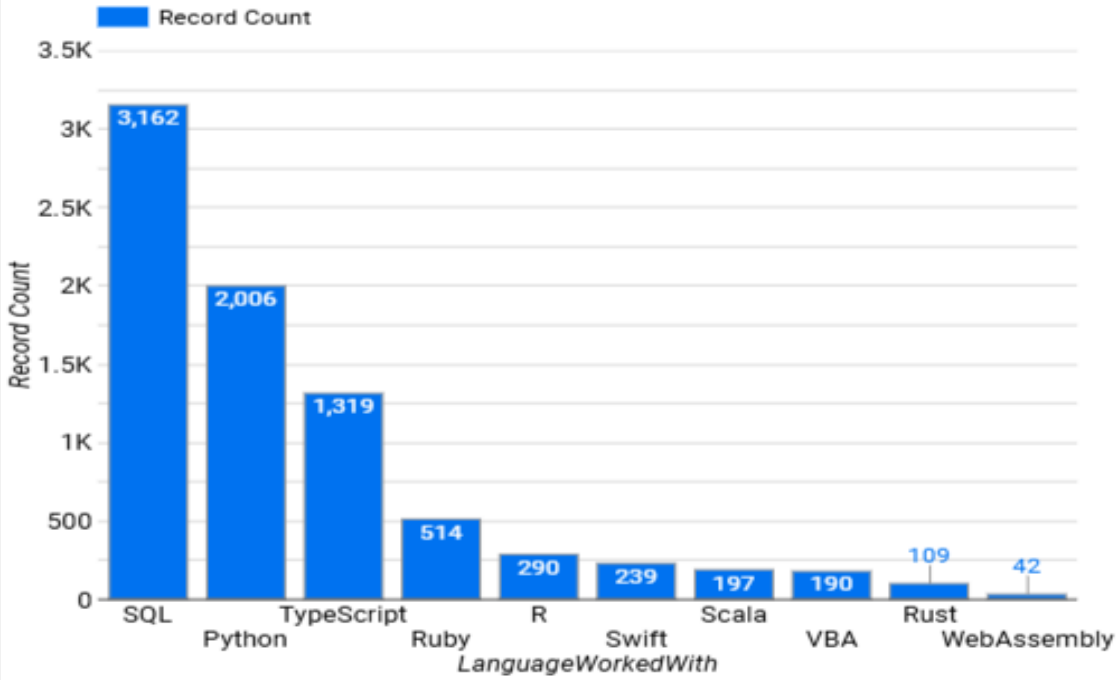
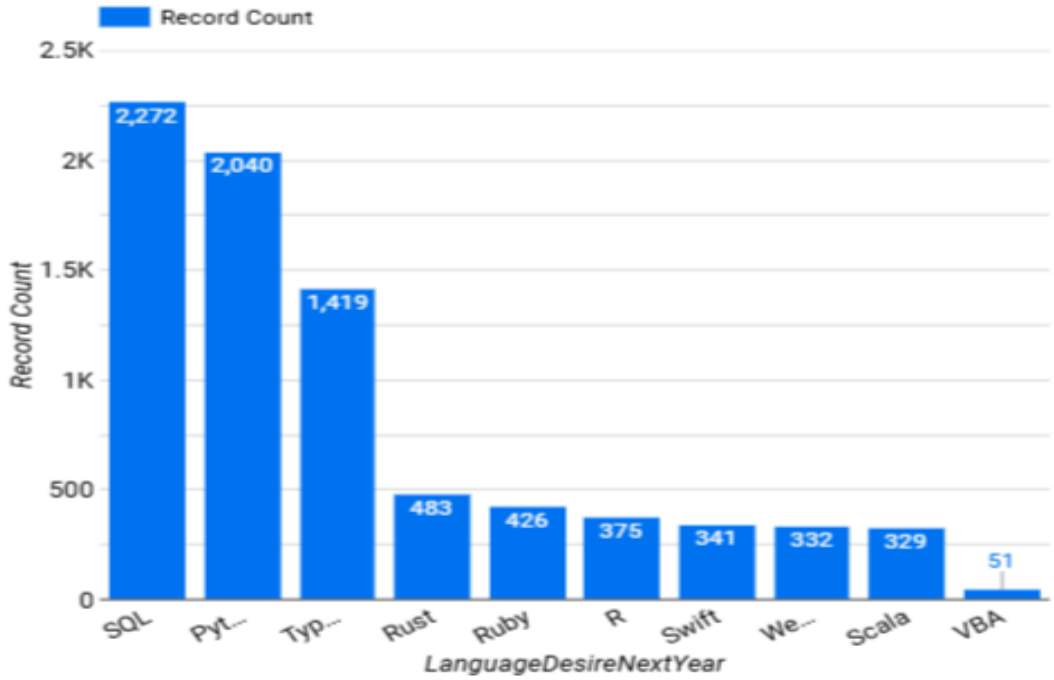
Top 10 Programming Languages for Current Year



Top 10 programming languages for the next year



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Databases

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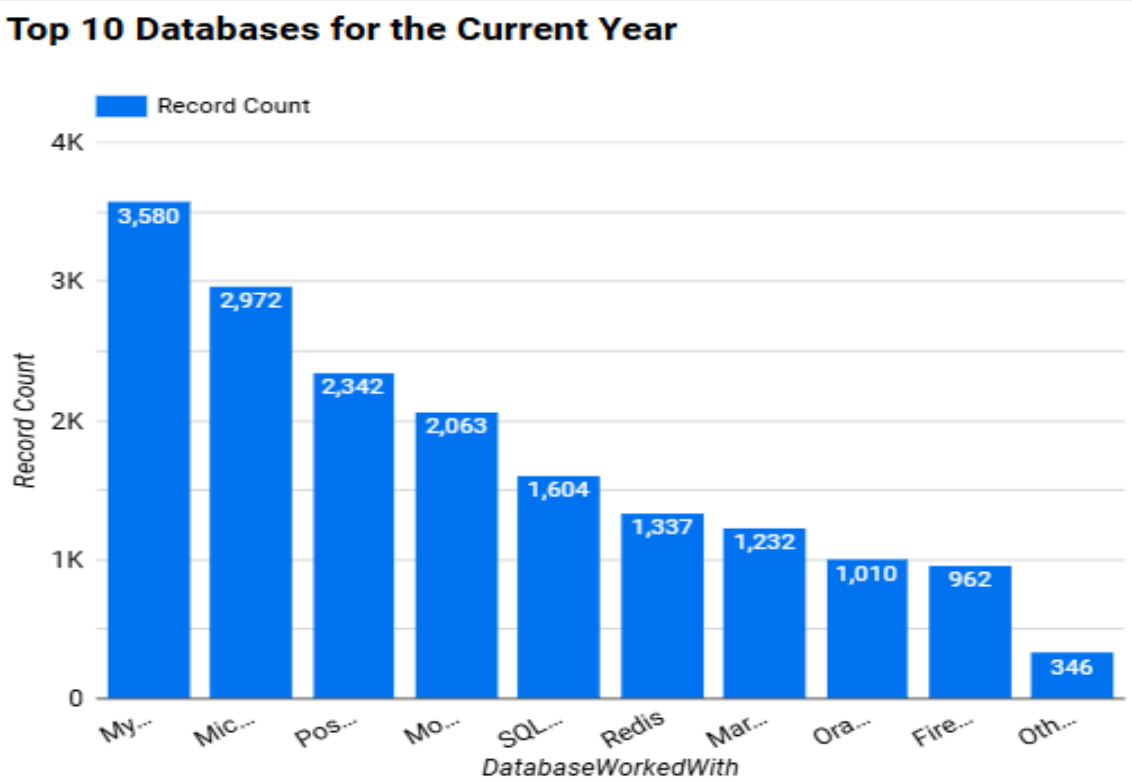
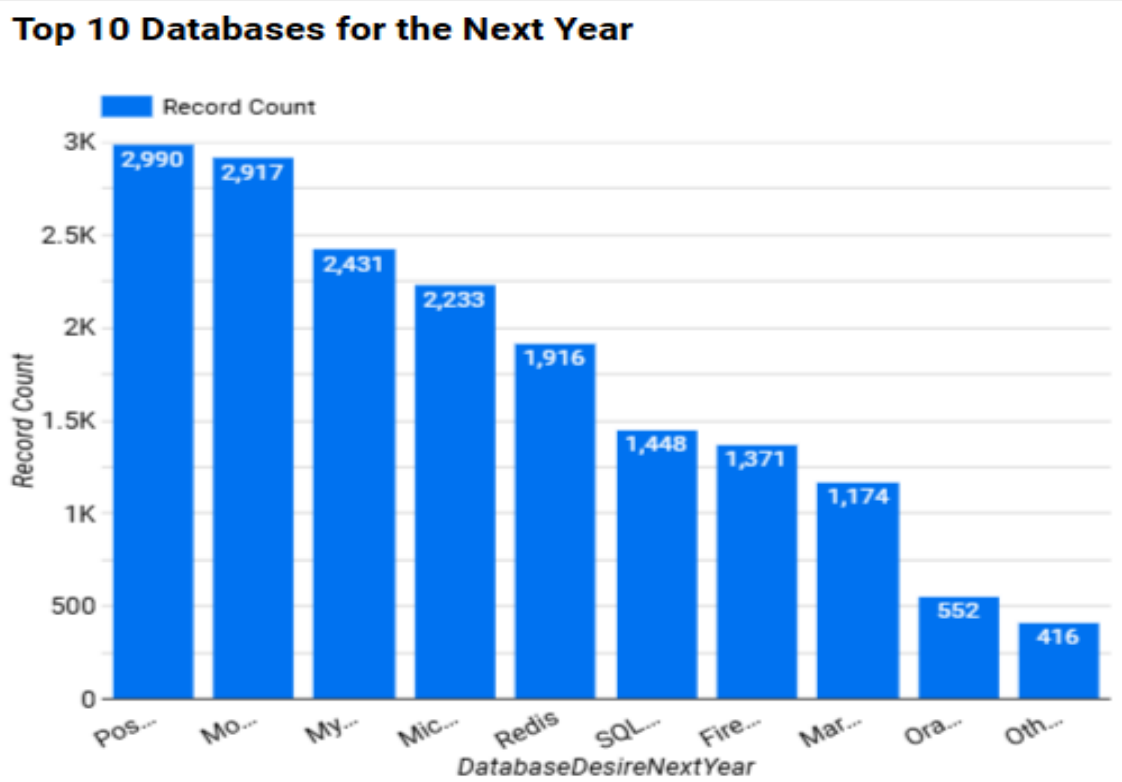




DISCUSSIONS

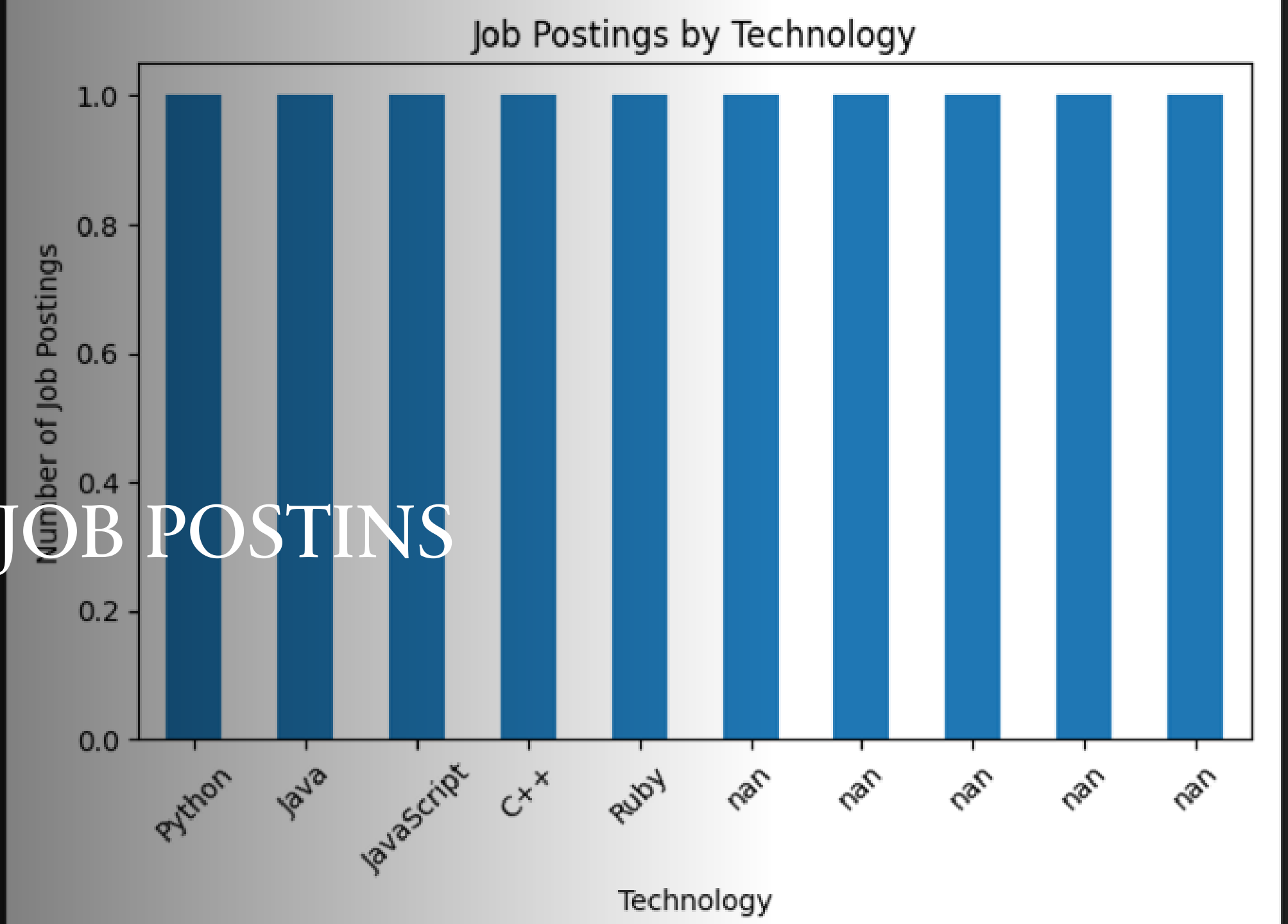
- **Key Insights**
- Programming Languages: VBA, TypeScript, and Swift are growing, highlighting future tech focus areas.
- Databases: MySQL and Microsoft SQL Server dominate; MongoDB and Redis are rising in popularity.
- **Challenges**
- Ensuring data accuracy and normalizing trends across different surveys was challenging.
- Limited representation of some technologies in the data set.
- **Implications**
- Companies need to invest in NoSQL databases like MongoDB and Redis.
- Upskilling in TypeScript, Swift, and Rust will be essential for developers.
- **Next Steps**
- Dive deeper into industry-specific tech trends.
- Explore more diverse data sources for better insights.

OVERALL FINDINGS & IMPLICATIONS

- **Overall Findings**
- Programming Languages: TypeScript, Swift, and VBA are on the rise, indicating a shift towards web and mobile development.
- Databases: MySQL and SQL Server remain popular, but MongoDB and Redis are growing, pointing to a shift towards NoSQL solutions.
- **Implications**
- For Developers: Focus on learning TypeScript, Swift, and Rust for future job opportunities.
- For Companies: Adapting to NoSQL technologies like MongoDB will be essential for scaling and handling diverse data needs.

CONCLUSION

- The analysis of **programming languages** and **databases** reveals emerging trends that will shape the future of technology.
- **TypeScript**, **Swift**, and **VBA** are growing rapidly, while **NoSQL** databases like **MongoDB** and **Redis** are becoming essential.
- Developers should focus on upskilling in these technologies, while businesses should adapt their infrastructure to meet evolving needs.


Job Postings by Technology
Number of Job Postings
1.0
0.8
0.6
0.4
0.2
0.0
Python
Java
JavaScript
C++
Ruby
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