

Technology Usage and Preferences Trends Among Respondents: An Analytical Report

R Lalitha Narayana 03-06-2024

## OUTLINE



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



### EXECUTIVE SUMMARY



- 1. HTML/CSS, Bash/Shell/PowerShell, and C# are the most popular programming languages, making up 68.4% of the responses.
- 2. Microsoft SQL Server and MySQL are the dominant databases, representing 40.2% of the database-related responses.
- 3. Docker is the leading platform, used by 18.4% of respondents.
- 4. jQuery, Angular/Angular.js, and ASP.NET are the top web frameworks, accounting for 55% of the responses.
- 5. The United States has the highest number of respondents, with men significantly outnumbering women.
- 6. Age 28 is the most represented age group among respondents from the United States.

### INTRODUCTION



- 1. The report aims to analyze trends in technology usage and preferences.
- 2. It covers programming languages, databases, platforms, and web frameworks.
- 3. Data is collected from over 11,000 respondents across various demographics.
- 4. Key insights into the technology landscape and future preferences are highlighted.
- 5. The analysis also includes demographic trends, focusing on age and gender distribution.

## METHODOLOGY



- 1. Data was gathered from a large-scale survey with over 11,000 respondents.
- 2. Responses were categorized by technology type: programming languages, databases, platforms, and web frameworks.
- 3. Percentages and counts were calculated for each category to identify trends.
- 4. Demographic data, including country, gender, and age, was also analyzed.
- 5. Statistical methods were used to identify unusually high counts and preferences.

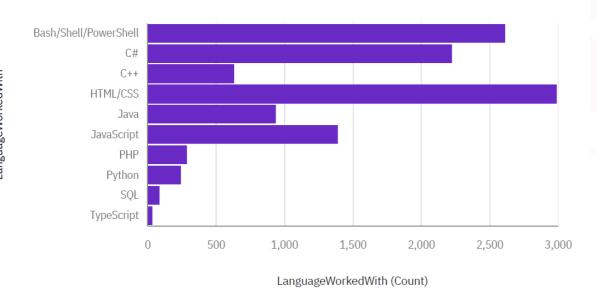
### RESULTS

- 1. HTML/CSS is the most frequently used programming language at 26.1%.
- 2. Microsoft SQL Server and MySQL are the top databases, used by 21.2% and 19% of respondents, respectively.
- 3. Docker is the most popular platform, with an 18.4% usage rate.
- 4. jQuery leads web frameworks at 19.8%, followed by Angular/Angular.js and ASP.NET.
- 5. The United States has the highest respondent count, with a significant gender disparity.
- 6. Age 28 is the most common age among respondents from the United States.

## PROGRAMMING LANGUAGE TRENDS

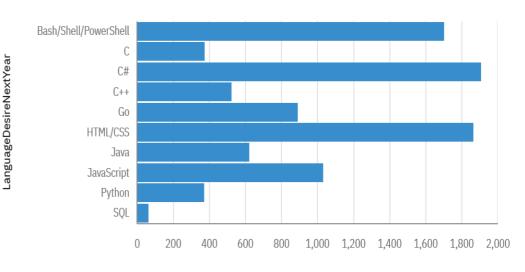
# Current

#### Top 10 LanguageWorkedWith



#### Next

Top 10 LanguageDesireNextYear



LanguageDesireNextYear (Count)

# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

#### **Findings**

- 1. HTML/CSS, Bash/Shell/PowerShell, and C# are the top programming languages.
- 2. These three languages account for 68.4% of responses.
- 3. There is a strong interest in continuing to use these languages in the future.

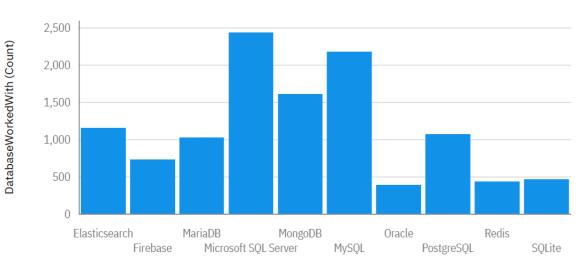
#### **Implications**

- 1. Companies should ensure they have strong expertise in HTML/CSS, Bash/Shell/PowerShell, and C#.
- 2. Training programs should focus on these languages to meet demand.
- 3. Future development projects should consider these languages for better alignment with industry trends.

## DATABASE TRENDS

### Current

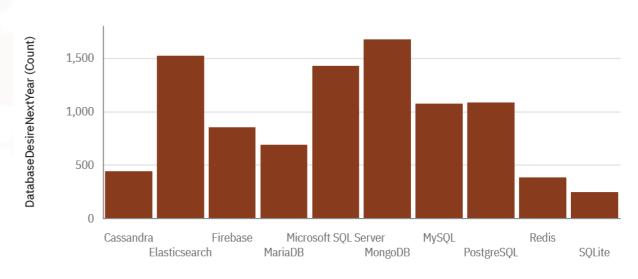
Top 10 DatabaseWorkedWith



DatabaseWorkedWith



Top 10 DatabaseDesireNextYear



DatabaseDesireNextYear

### DATABASE TRENDS - FINDINGS & IMPLICATIONS

#### Findings

- 1. Microsoft SQL Server and MySQL are the most commonly used databases.
- 2. Together, they make up 40.2% of database-related responses.
- 3. MongoDB, Elasticsearch, and Microsoft SQL Server are the most desired databases for the next year.

#### **Implications**

- 1. Database management and development should prioritize skills in SQL Server and MySQL.
- 2. Organizations should invest in MongoDB and Elasticsearch to align with future preferences.
- 3. Training and certification programs should emphasize these databases.

## **DASHBOARD**

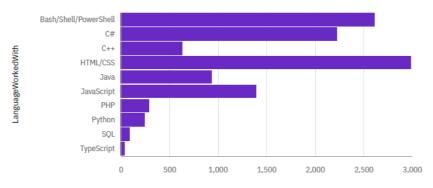


## DASHBOARD TAB 1

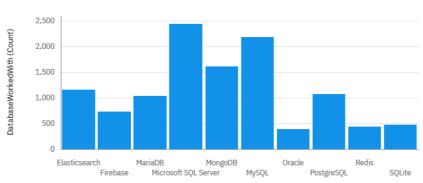
Current Technology Usage







Top 10 DatabaseWorkedWith



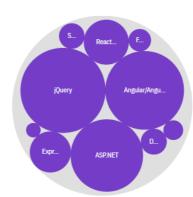
LanguageWorkedWith (Count) DatabaseWorkedWith

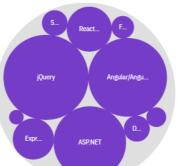
WebFrameWorked..

#### PlatformWorkedWith



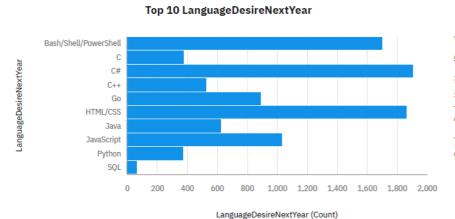
Top 10 WebFrameWorkedWith



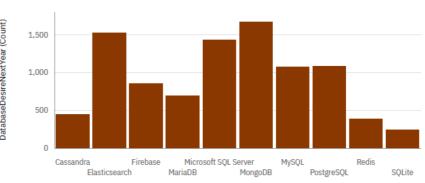


## DASHBOARD TAB 2





Top 10 DatabaseDesireNextYear

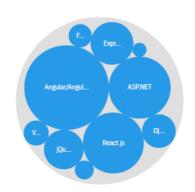


DatabaseDesireNextYear

#### PlatformDesireNextYear

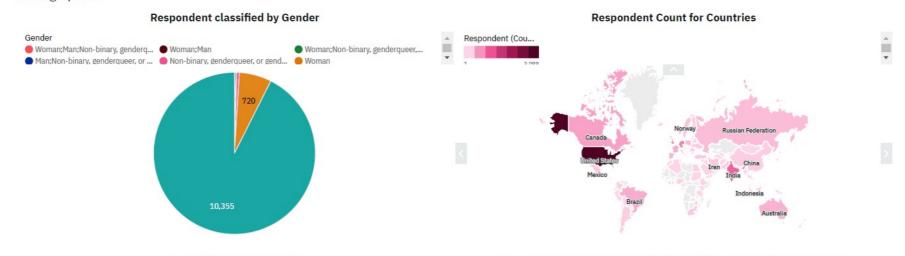


Top 10 WebFrameDesireNextYear

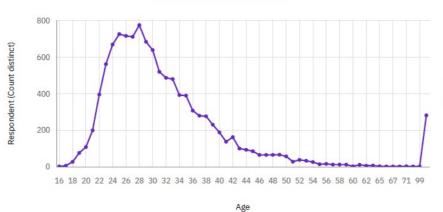


## DASHBOARD TAB 3

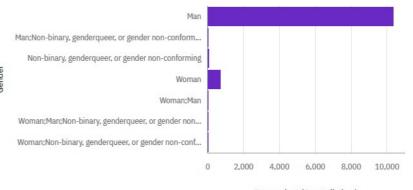
#### Demographics



#### Respondent Count by Age



#### Respondent Count by Gender(classified by Formal Education Level)



Respondent (Count distinct)



### **DISCUSSION**



- 1. The dominance of certain technologies suggests a trend towards standardization in the industry.
- 2. The gender disparity in the United States highlights a need for increased diversity efforts.
- 3. Age-specific trends can help tailor recruitment and training programs.
- 4. Preferences for future technologies indicate areas for strategic investment.
- 5. The analysis provides a roadmap for aligning organizational skills with industry trends.

## OVERALL FINDINGS & IMPLICATIONS

#### Findings

- 1. HTML/CSS, SQL Server, and Docker are the leading technologies in their categories.
- 2. The United States has the highest number of respondents, with significant gender and age trends.
- 3. Future technology preferences show a strong inclination towards MongoDB, Docker, and Angular/Angular.js.

#### **Implications**

- 1. Organizations should focus on these leading technologies for current and future projects.
- 2. Diversity initiatives should be prioritized in the tech industry, especially in the United States.
- 3. Investment in training for future-preferred technologies will provide a competitive edge.

## CONCLUSION



- 1. HTML/CSS, Bash/Shell/PowerShell, and C# are critical skills in today's tech landscape.
- 2. SQL Server and MySQL dominate database usage but future preferences are shifting.
- 3. Docker is a key platform, with strong future demand for Docker, AWS, and Android.
- 4. There are significant demographic trends in technology usage, particularly in the United States.
- 5. The report provides actionable insights for aligning with current and future technology trends.