STACK OVERFLOW DEVELOPER SURVEY DATA ANALYSIS

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OUTLINE

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

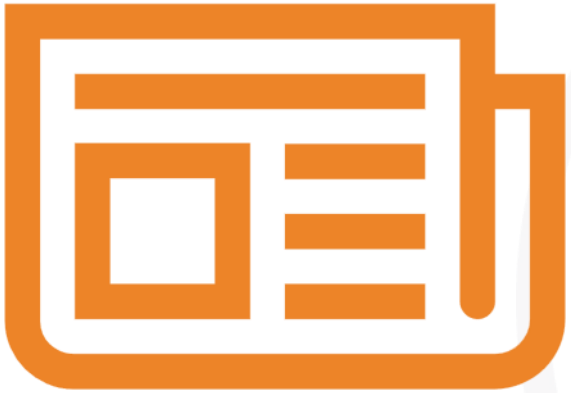
EXECUTIVE SUMMARY

- Contextualization of Data and analysis goal.
- Methodology Description
  - Data Gathering
  - Data Analysis
  - Data Visualizations
- Results presentation with the aid of visual representations
- A comprehensive discussion of the key findings and their implications based on the presented results
- Final conclusion summarizing the insights and outcomes derived from the research.

INTRODUCTION

- This presentation aims to analyze the prevailing technologies used by developers
- The analysis is designed to support data-driven decision-making regarding technology investments
- Furthermore, the report highlights developers' geographic distribution and other key demographic details to inform hiring and training strategies.
- Target Audience: Human Resource and IT Head

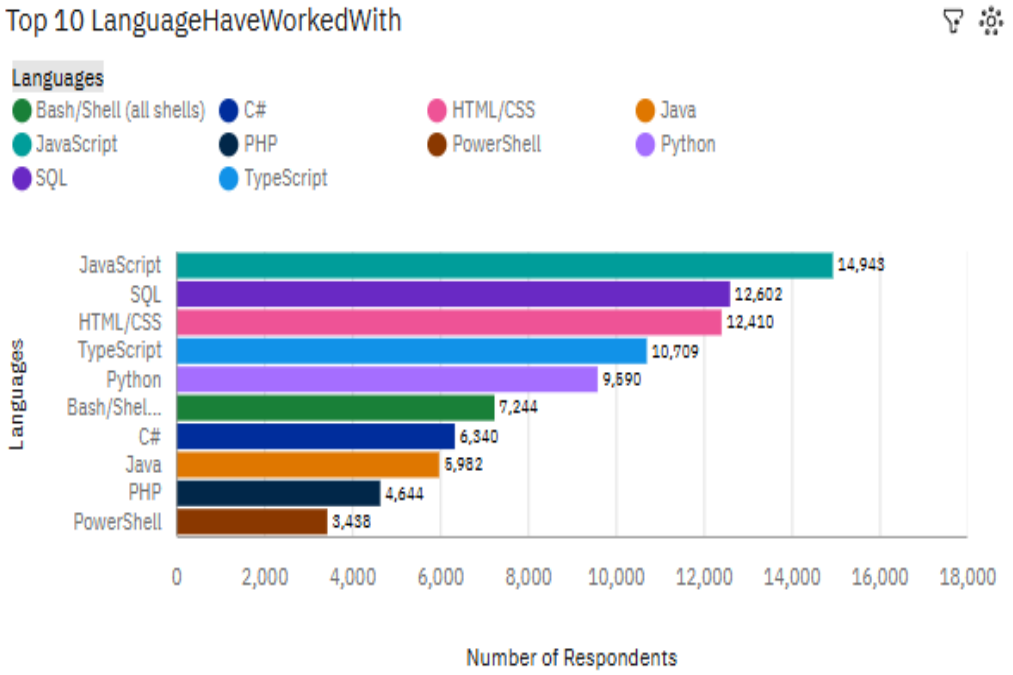
METHODOLOGY



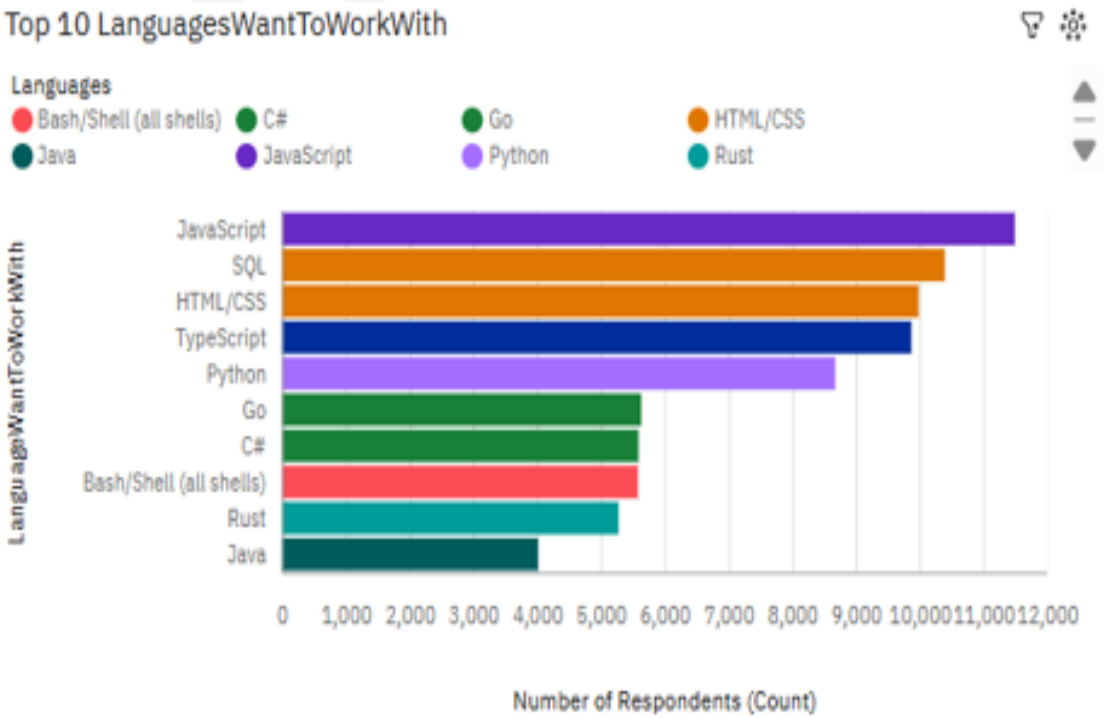
- Collect survey data and explore its contents
  - Web Scraping
  - Request library
  - APIs
- Data Wrangling
- Exploratory Data Analysis
  - Finding How The Data is Distributed
  - Finding Correlation
  - Finding Outliers
- Data Visualization
  - Highlighting relationships, data distribution and its comparisons
- Dashboards

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

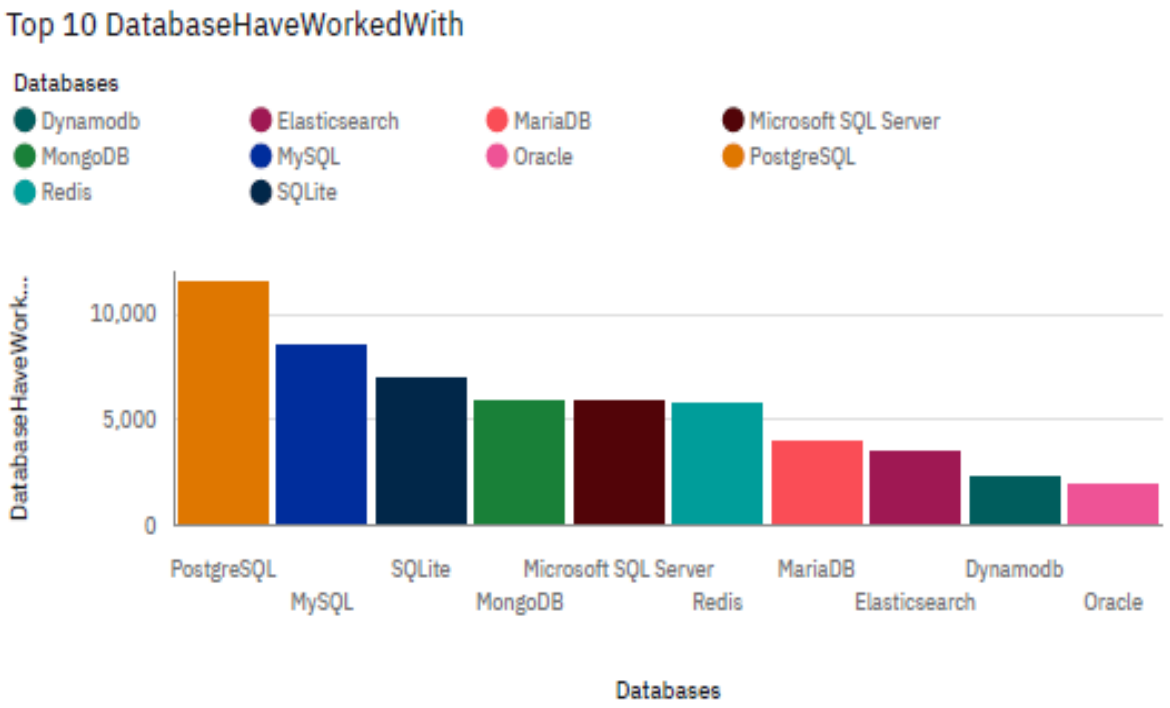
- JavaScript remains the top language to learn
- Rust fast-growing
- Go language on the rise

Implications

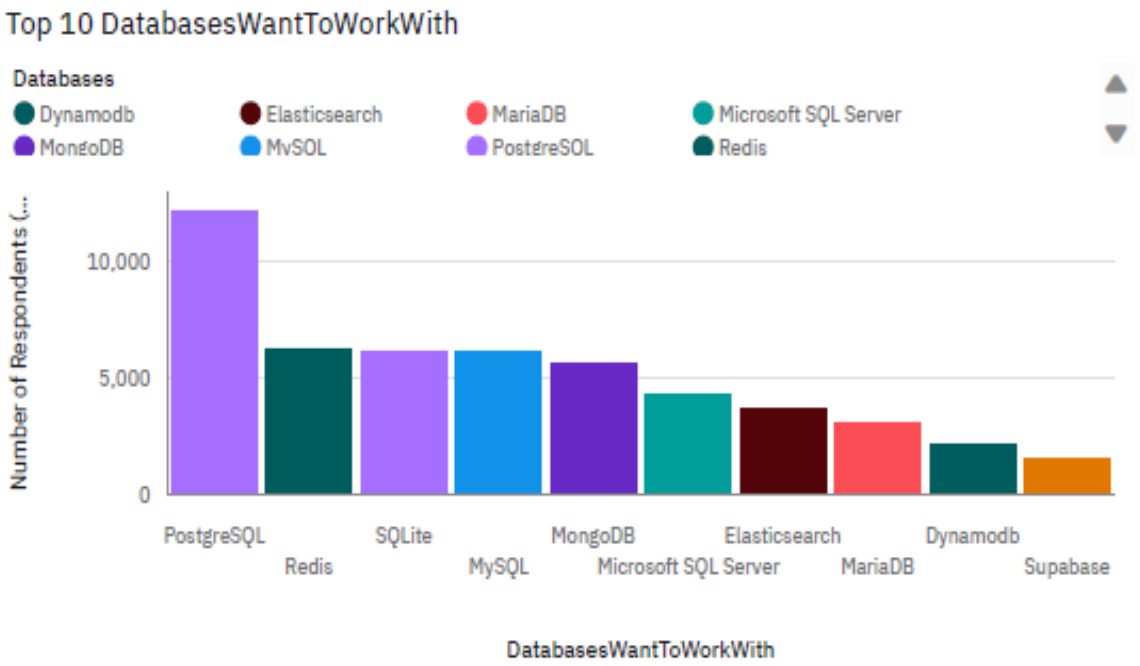
- PowerShell & PHP no more in the top 10
- Possible Developers migration from JavaScript to TypeScript
- Java is seeing a decline

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- PostgreSQL as most used database.
- Lack of interest in Oracle and Microsoft SQL Server .
- Increasing interest in Redis and MySQL.

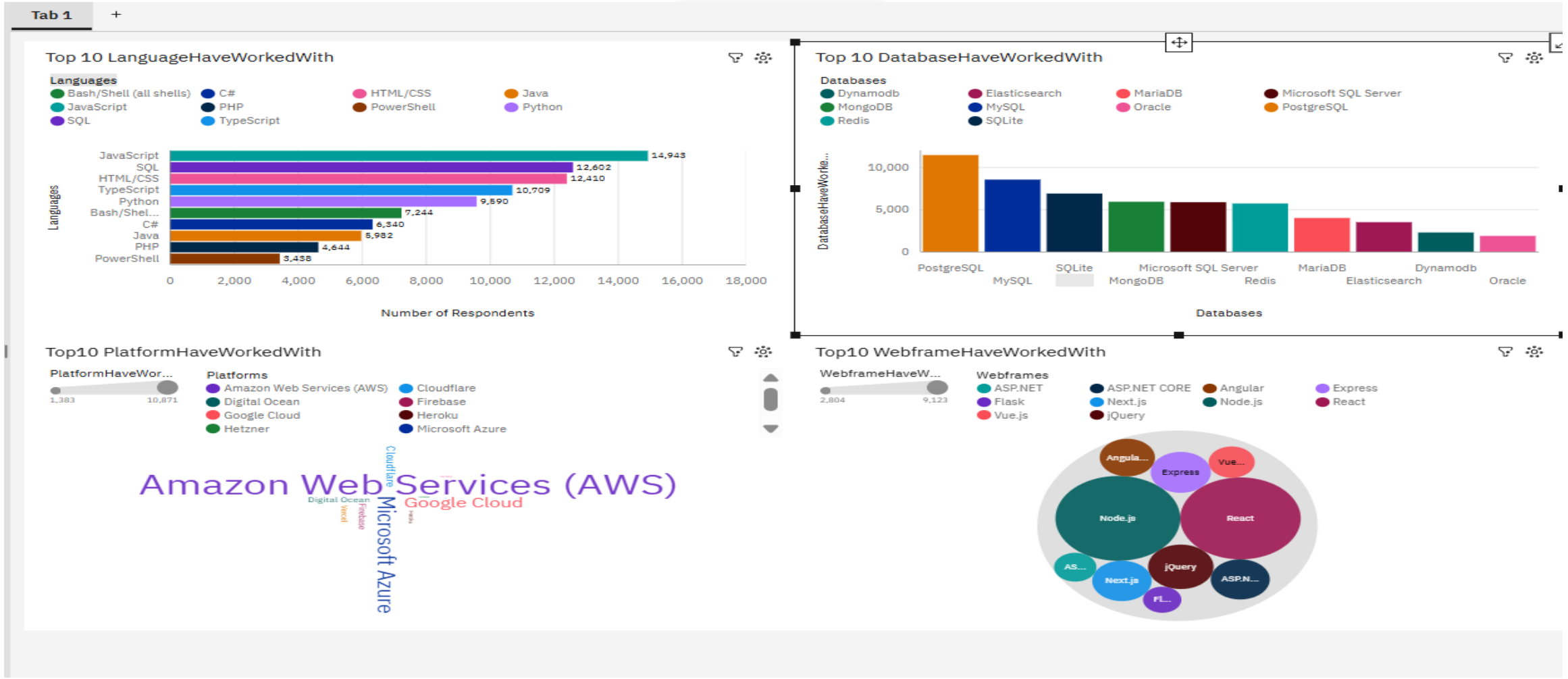
Implications

- Oracle losing ground in the market.
- MySQL establishment in the market
- Supabase entered the race

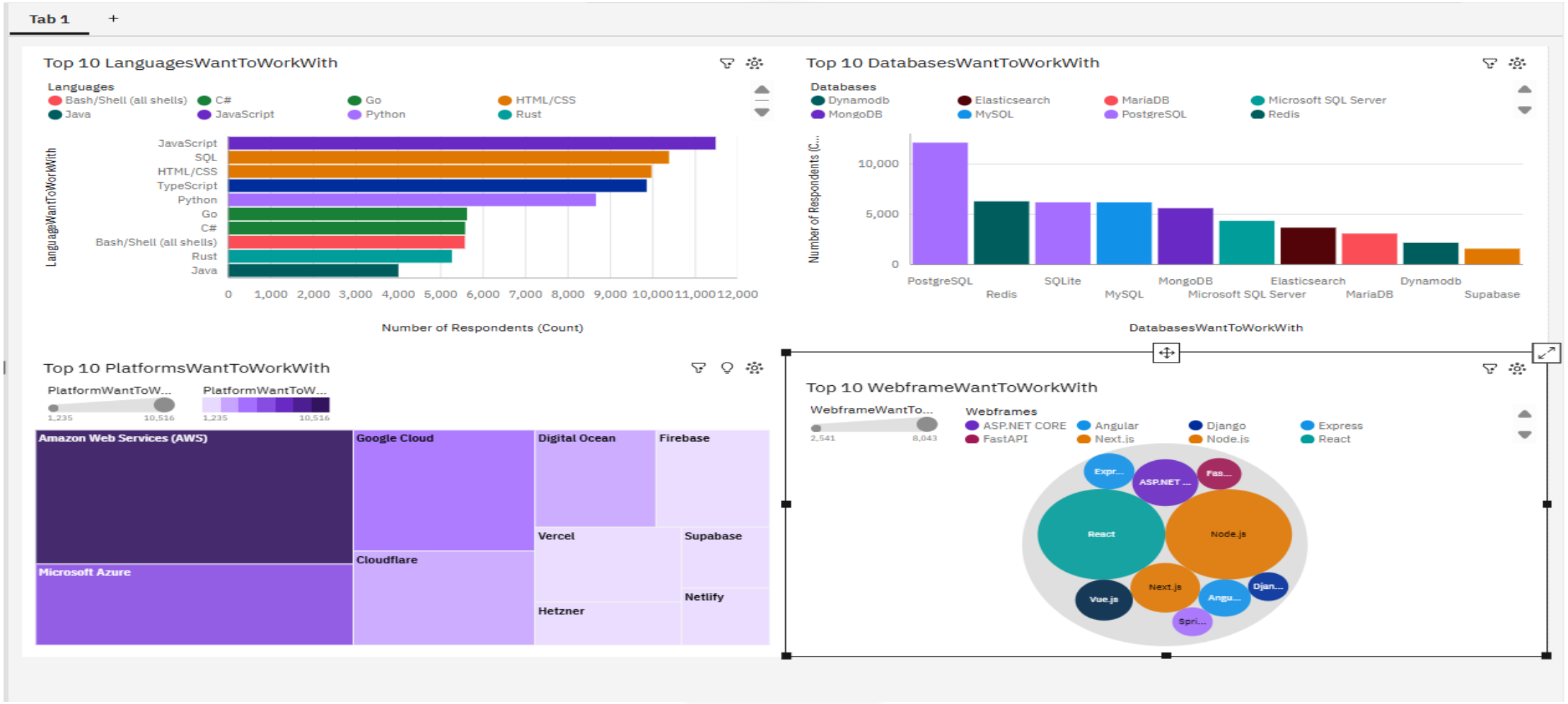
DASHBOARD

Following 3 slides contains Dashboards

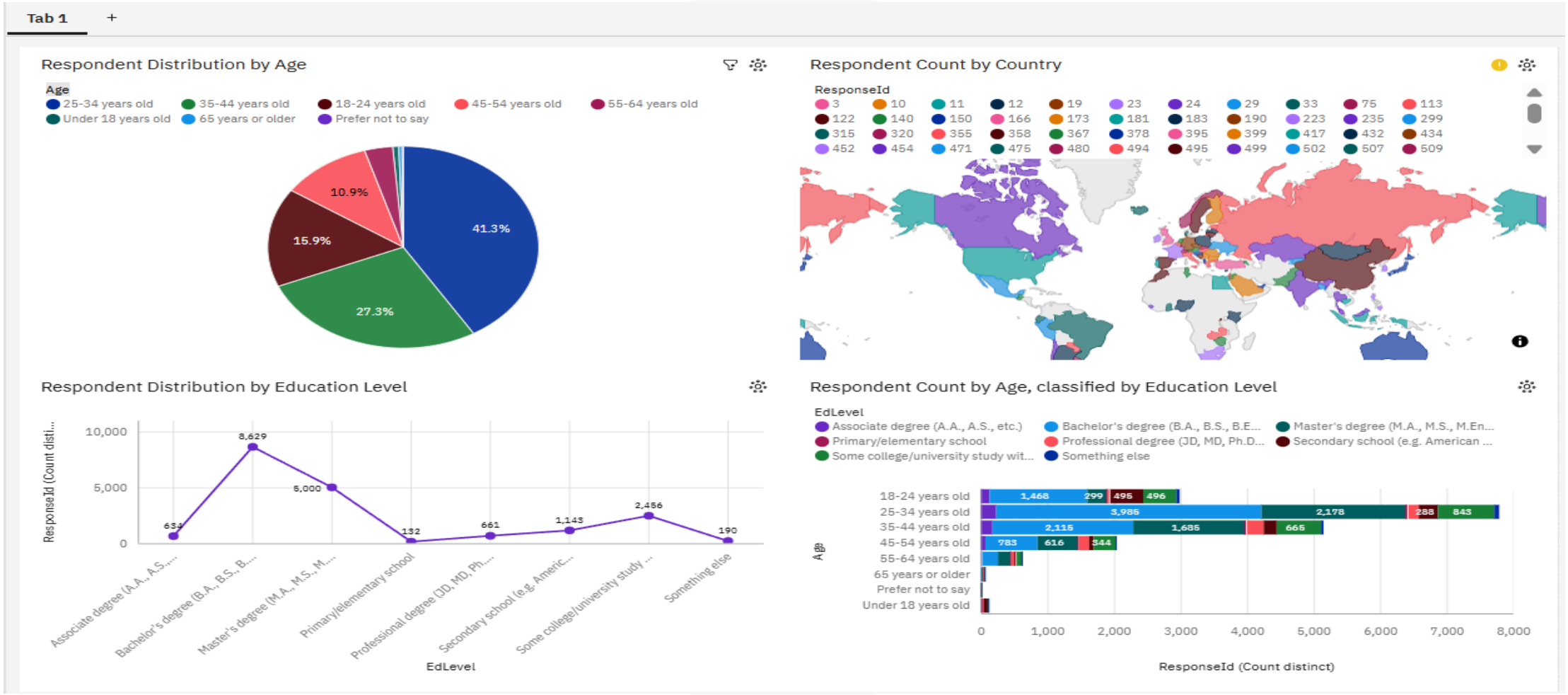
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION

- JavaScript emerges as the most widely used programming language among developers.
- PostgreSQL ranks as the leading database utilized by developers.
- Amazon Web Services stands out as the most commonly used platform.
- Node.js and React are the top web frameworks developers have worked with.

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript is widely used and MySQL getting popular.
- Over 41% of developers are 25-34 years old.
- Developers mostly located in developed countries.

Implications

- PowerShell is getting obsolete.
- Young developers without postgrad studies on its majority.
- Digital Talent Gap in underrepresented areas,

CONCLUSION

- Modern, versatile languages like JavaScript and MySQL are dominating the developer landscape.
- Majority of developers are young and hold only undergraduate degrees.
- Legacy tools like PowerShell are declining in relevance, indicating a shift toward newer technologies.
- Clear need to invest in underrepresented regions to bridge the digital talent gap.