STACK OVERFLOW DEVELOPER SURVEY 2019

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Monday, 02 September,2024

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OUTLINE

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

EXECUTIVE SUMMARY

- Data collection and analysis
- Methodology Steps:
  - **Data Extraction**
  - **Exploratory Data Analysis**
  - **Data Visualization**
  - **Presentation**
- Reports presentation supported with graphs and trends.
- Discussion of overall findings and implications regarding the results previously analyzed.
- Final conclusion in data driven decision making process.

INTRODUCTION

- The dataset which is used is “Stack Overflow’s Annual Developer Survey” which is the largest and most comprehensive survey of coders around the world.
- It contains nearly 90,000 developers.
- Although results don’t represent everyone in the developer community evenly.
- Trends to predict where the developers are going.
- Characterization of the developers around the world.

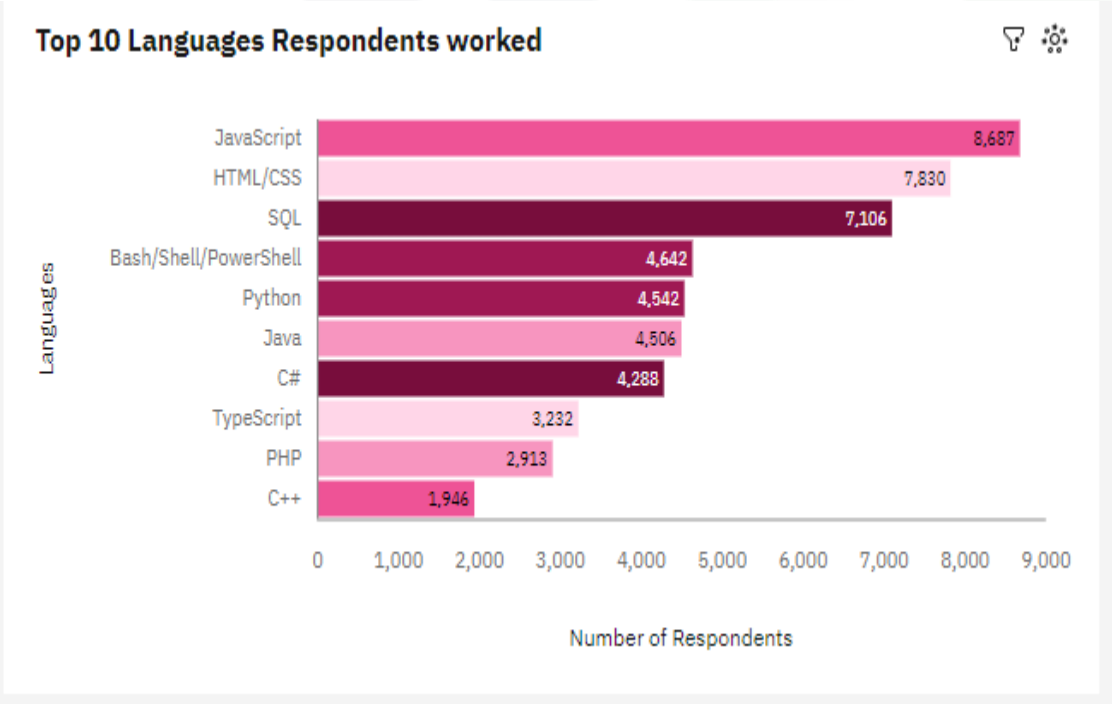
METHODOLOGY

- Data Collection from various sources:
  - Web Scraping
  - APIs
  - Databases
- Data Wrangling
- Exploratory Data Analysis
  - Analyzing data distribution
  - Handling Outliers
  - Correlations
- Data Visualization
  - Highlight distribution of data, relationships, the composition and comparison of data.
- Dashboards

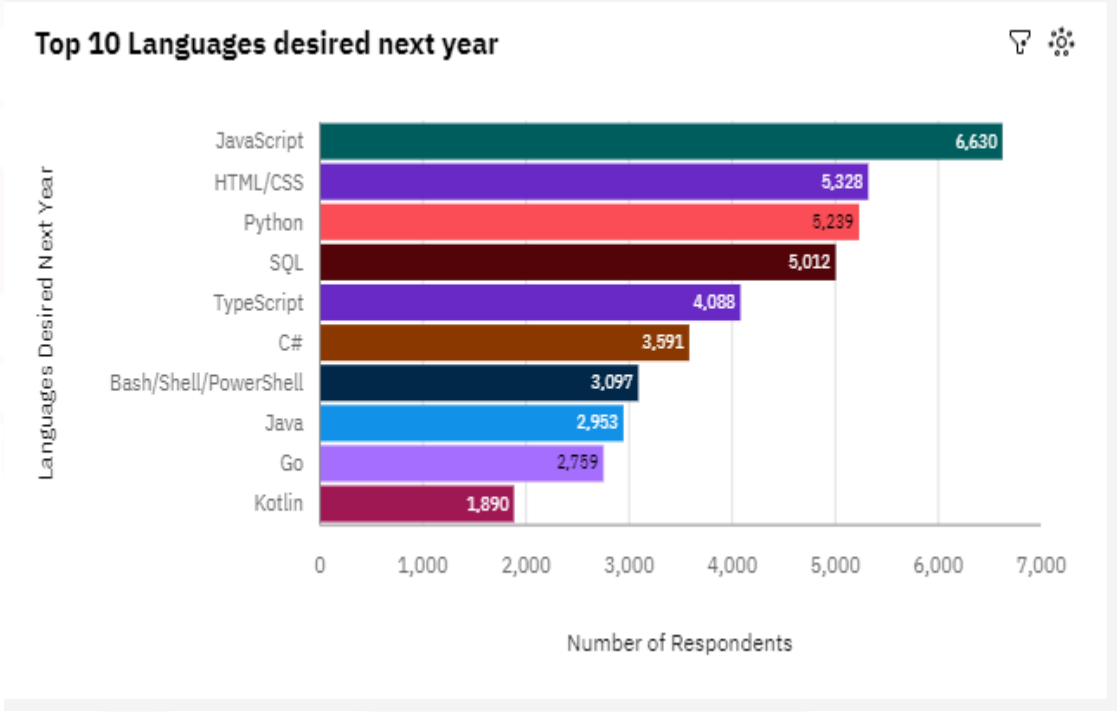
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

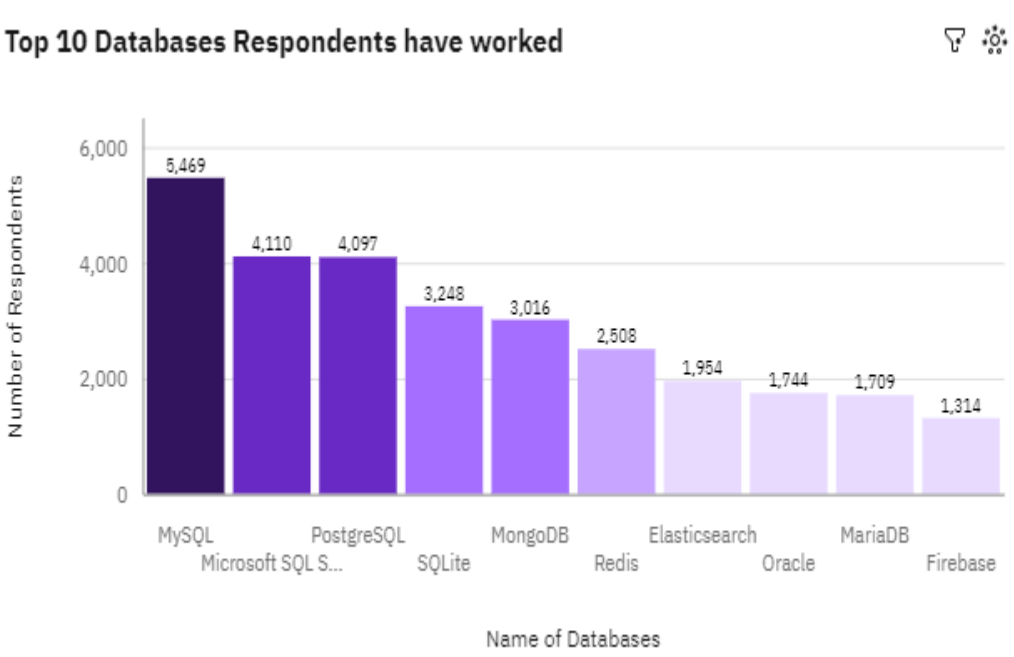
- JavaScript is the leading language
- Python is the fastest-growing
- Great interest in TypeScript

Implications

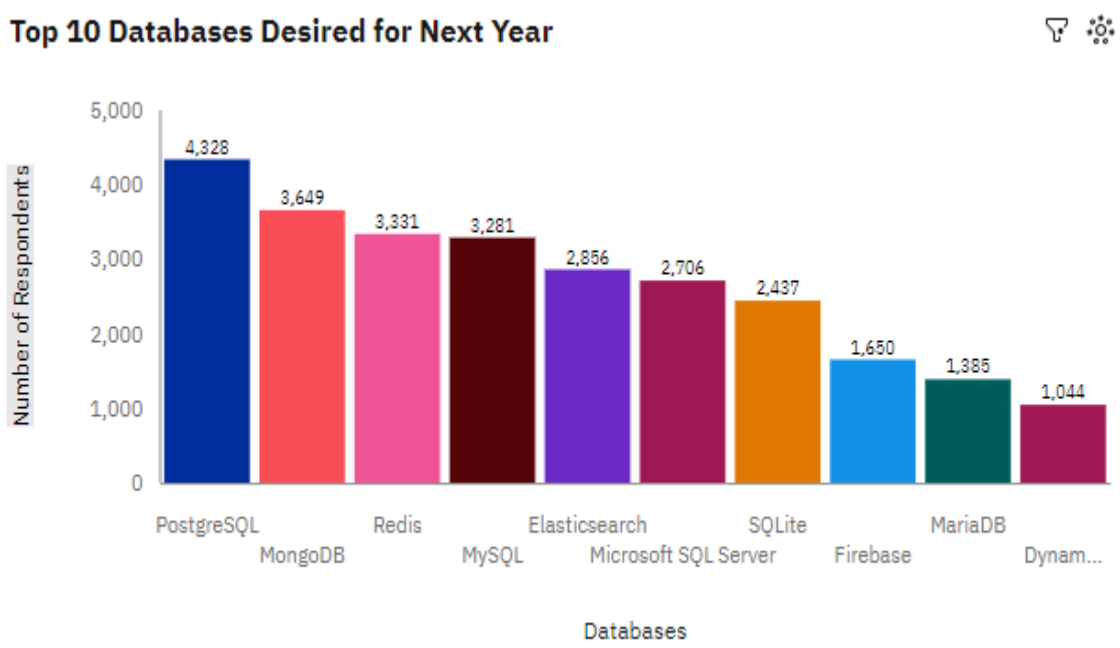
- Possibility of Developers migration from JavaScript to TypeScript

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most used database.
- Lack of interest in Microsoft SQL Server and SQLite
- Increasing interest in PostgreSQL and MongoDB.

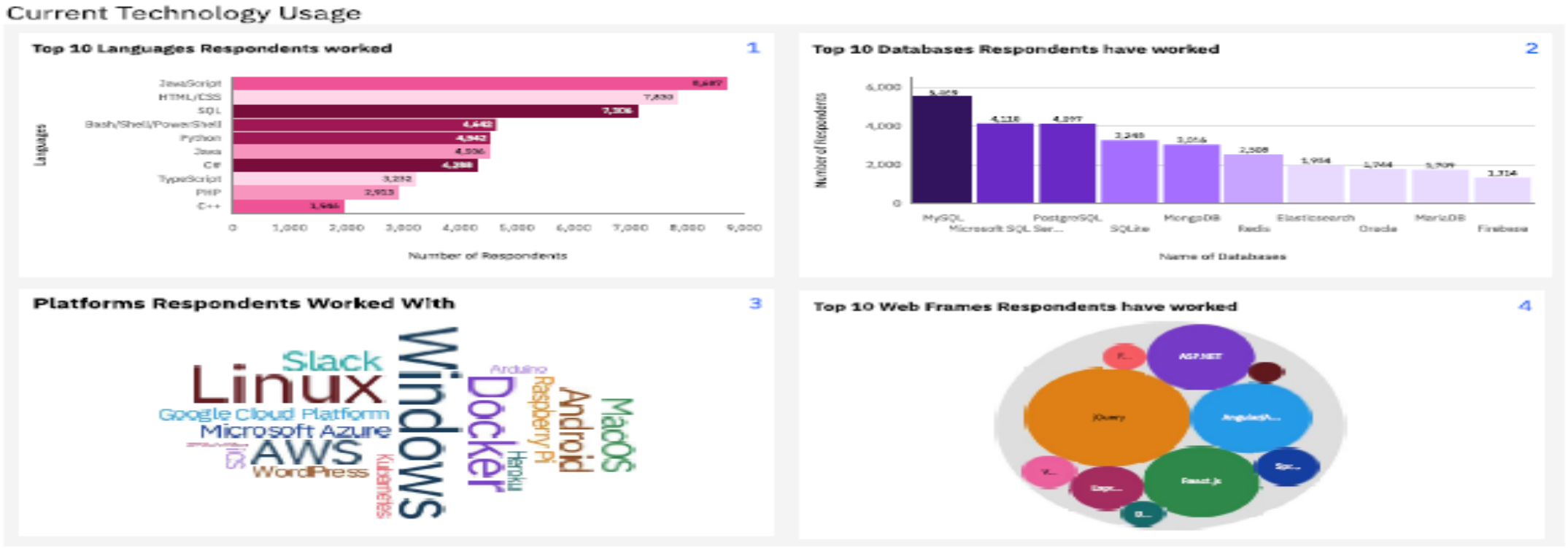
Implications

- Microsoft SQL Server and SQLite losing ground in the market.
- PostgreSQL and MongoDB establishment in the market.

DASHBOARD

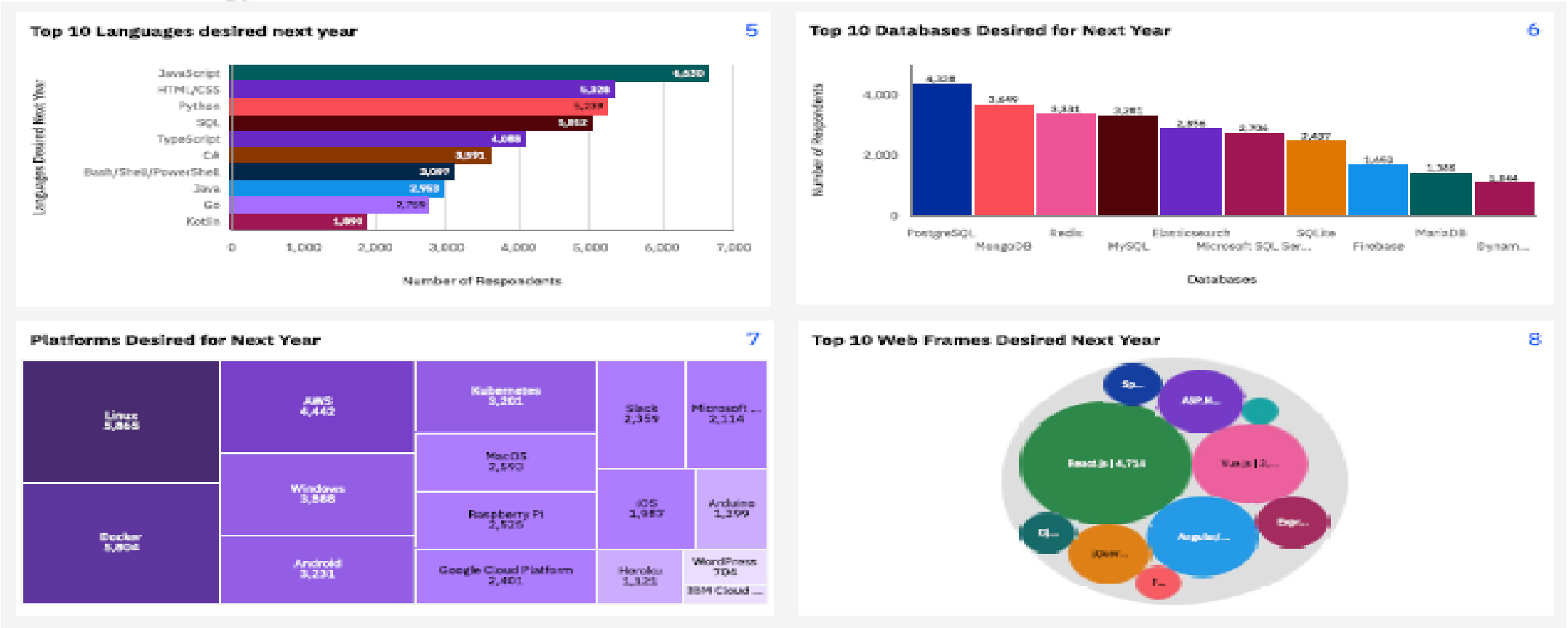
https://github.com/Arbaz-39/IBM-Data-Analyst-Capstone-Project/blob/main/Final_Dashboard.pdf

CURRENT TECHNOLOGY USAGE

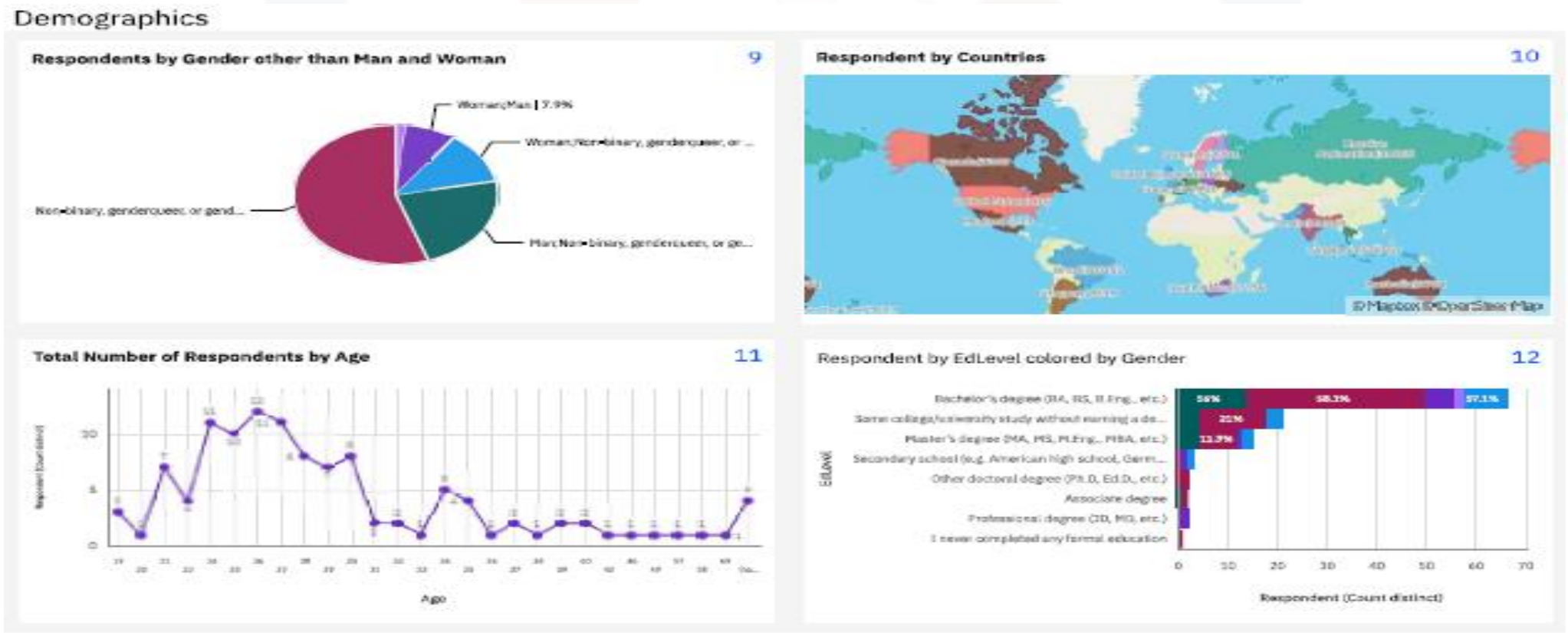


FUTURE TECHNOLOGY TRENDS

Future Technology Trend



DEMOGRAPHICS



DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript widely used and TypeScript getting popular.
- Over 90% young male developers.
- Developers mostly located in developed countries.

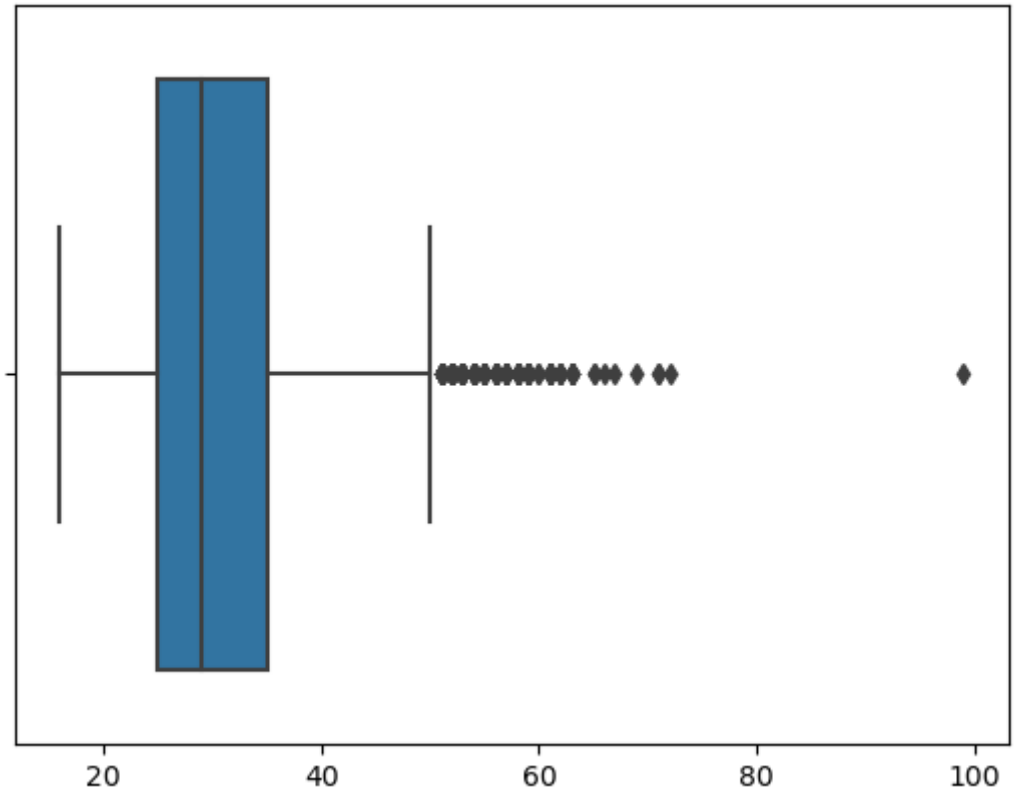
Implications

- JavaScript and TypeScript web frames gaining followers.
- Global polarization of developers location and gender.
- Young developers without postgrad studies on its majority.

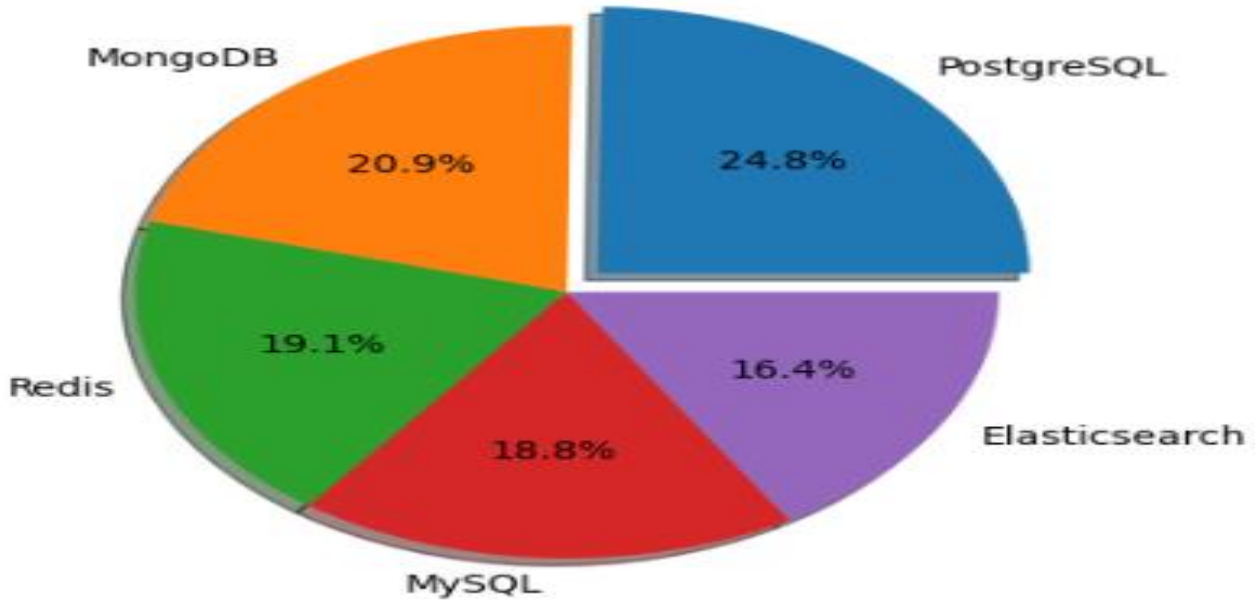
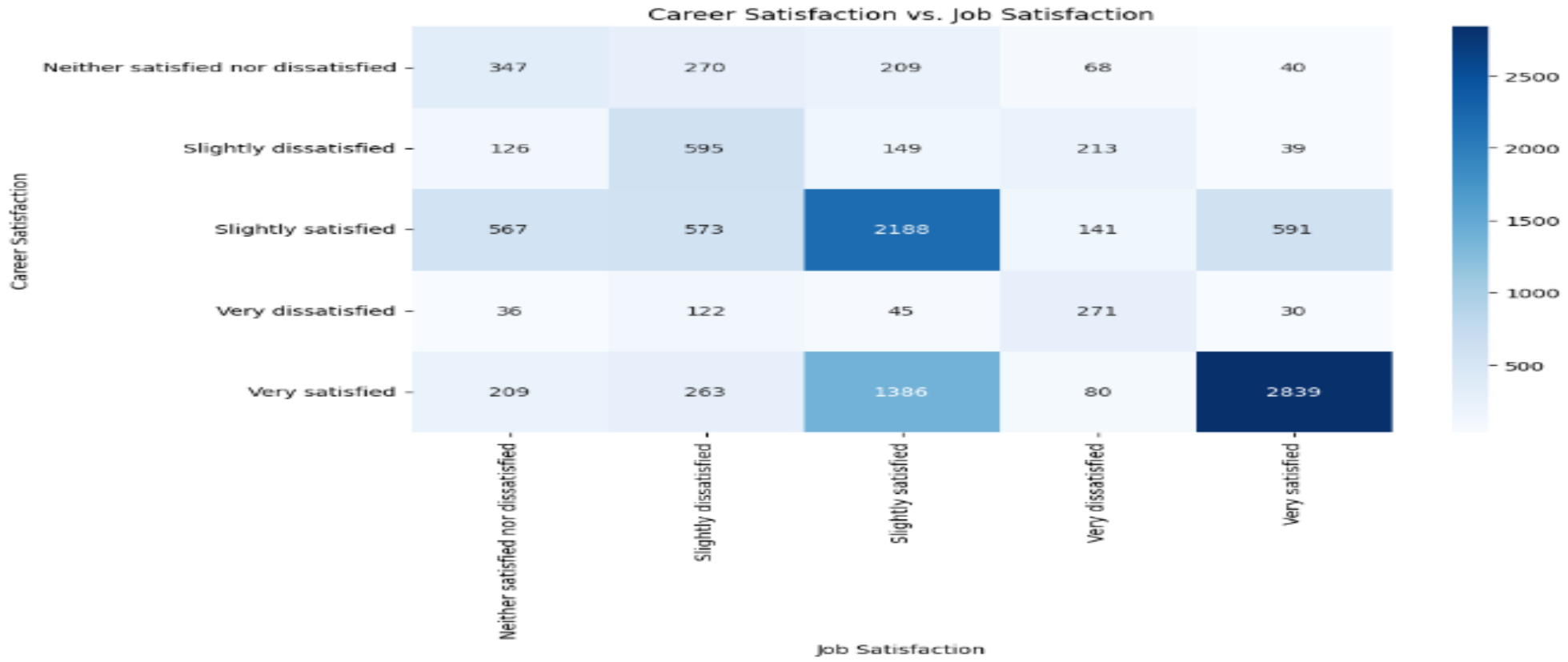
CONCLUSION

- Developers are people with very marked characteristics.
- A good idea of popularity trends of different tools, platforms and languages can be obtained.
- There is a job done to spread accessibility of this labor market to countries in development.

Age Distribution



Top 5 Databases



Job Satisfaction Vs Career Satisfaction