



Analysis of Developer Survey for Tech Trends

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Dec 04, 2022

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EXECUTIVE SUMMARY



- Our IT Company's team of consultants need to consistently update their skills with the latest technologies in order to stay competitive and effective
- We collect data coming from a survey to analyze and determine future technology relevancy
- The surveys will be containing info such developers' current job, demographics, and interests to dictate future trends
- The resulting difference for current and desired(future) numbers alongside certain demographics factors can infer relevancy
- The resulting technologies will be sorted narrowed down to indicate importance and relevancy even further

INTRODUCTION



- To predict trends, there are often various complex methods and processes that raises a need for big data points, resources, constant maintenance and calculations for it to be reliable
- We can instead utilize a simple method of asking an individual(s)' background and preference for future tech as a more direct key indicator to predict trends
- This more straightforward method for data acquisition require the quality and scale of the surveys
- Survey response also solely indicates preferences at the time of response, in which major shifts may be tightly coupled with major events in the industry

METHODOLOGY



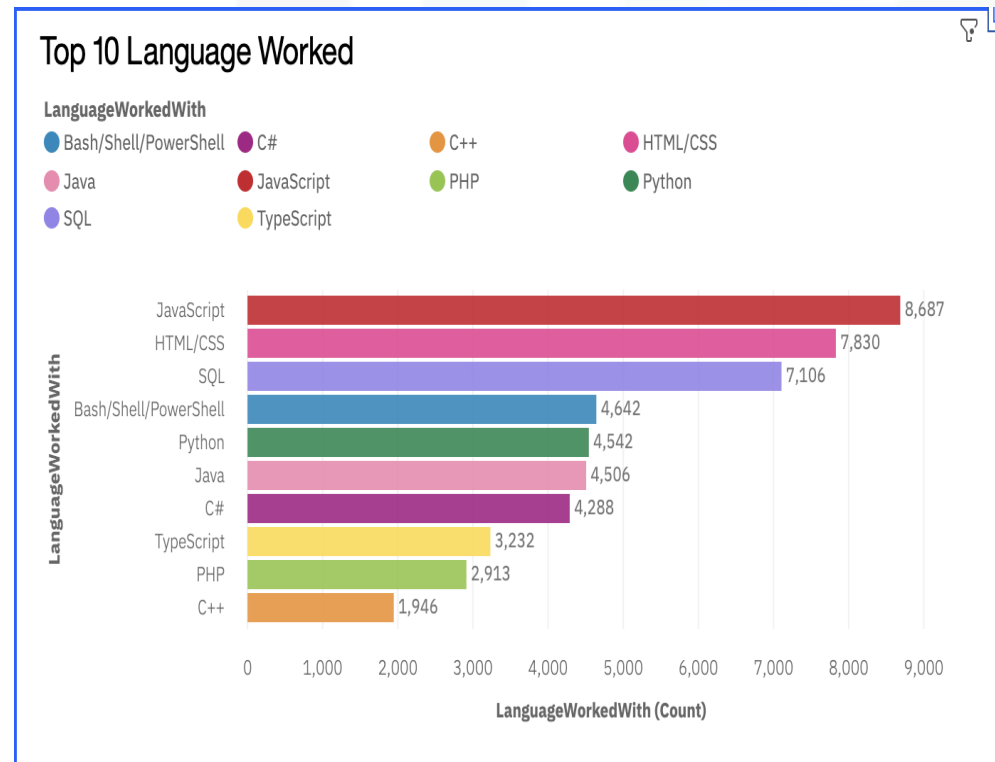
- We will be using StackOverflow's 2019 Developer Survey to gather relevant data points for analysis
- The survey contains responses from developers that are currently involved in certain tech and their wants to be involved in another tech over the next year. It also includes demographics that will be used to determine the tech relevancy such as location
- By comparing the difference in respondent counts in the table pairs for current and desire, we can determine a probable shift in technology use over the next year.
- Data points
 - Current / Desired Programming Languages by Respondent count
 - Current / Desired Databases by Respondent count
 - Current / Desired Platforms by Respondent count
 - Demographics of Respondents by count

RESULTS

- 8 of 10 Programming Languages maintain to be at the top 10 spots on the desired Languages over the next year with more consistent spot placements
- 8 of 10 Databases maintain to be at the top 10 spots over the next year with more shuffled top 10 results
- Top 3 popular Platforms maintain the top 3 spots over the next year
- Only 1 of the top 3 currently used Webframes maintained spot for the top 3 desired Webframes next year

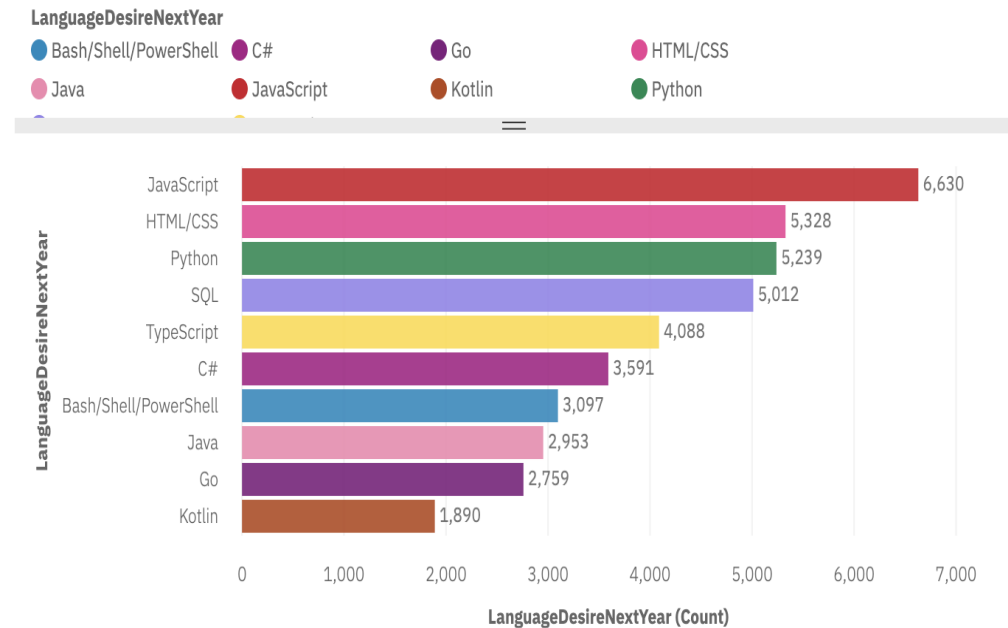
PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year

Top 10 Language Desire NextYear



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- 8 of 10 programming languages maintained the top 10 spots
- The top 10 languages follow the same response with minimal shuffling of ranks
- 2 new promoted emerging languages and 2 demoted languages

Implications

- The major programming languages mostly remains the same
- There might be a slight change of preference for language for a small sample of individuals
- Addition of Go and Kotlin and the removal of php and C++ may be a sign of obsolescence or fad

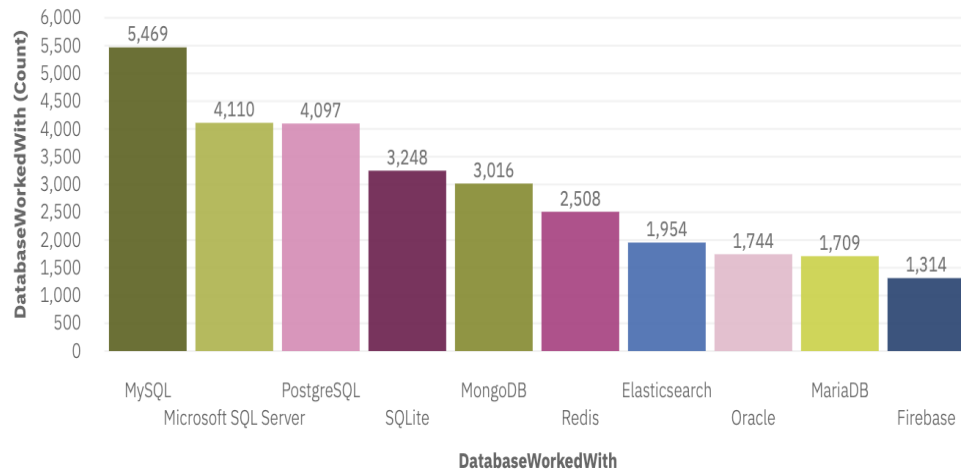
DATABASE TRENDS

Current Year

Top 10 Database Worked

DatabaseWorkedWith

Elasticsearch Firebase MariaDB Microsoft SQL Server MongoDB
MySQL Oracle PostgreSQL Redis SQLite

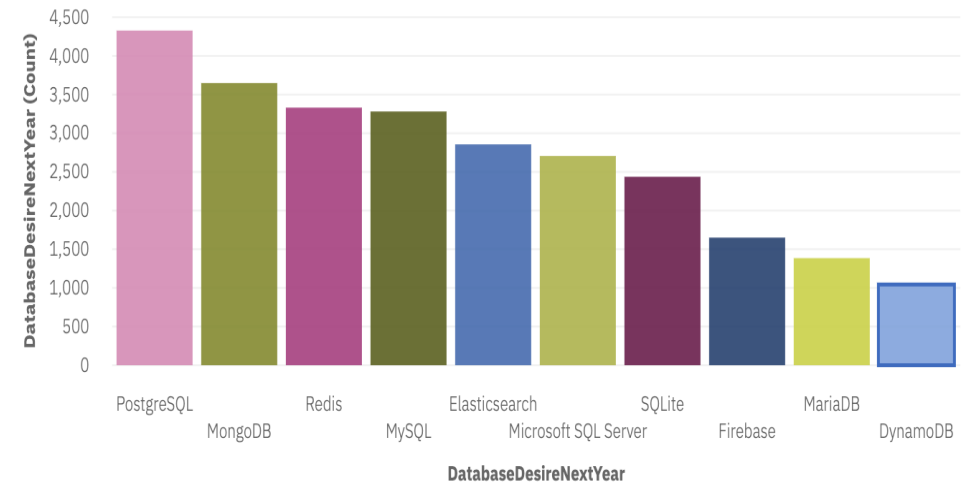


Next Year

Top 10 Database Desire

DatabaseDesireNextYear

DynamoDB Elasticsearch Firebase MariaDB Microsoft SQL Server
MongoDB MySQL PostgreSQL Redis SQLite



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- 8 of 10 Databases remain the in the top 10 spots
- Huge shuffling of ranks among the top 10

Implications

- The major databases may remain relevant for upcoming years
- There may be a major shift in database tech preferences as industry devs become more experienced in big data fields
- The large rank changes may indicate devs preferring one major technology over all others

DASHBOARD



<https://dataplatform.cloud.ibm.com/dashboards/32173b4a-5ff8-4b90-8f2b-5bcfa6a9adab/view/6214eb1a03b72aee4ecff6e4079c2b007c63215ee0bbd551d3d67b4959337497a93f4692c82a4d59d3175032f7ba105ecd>

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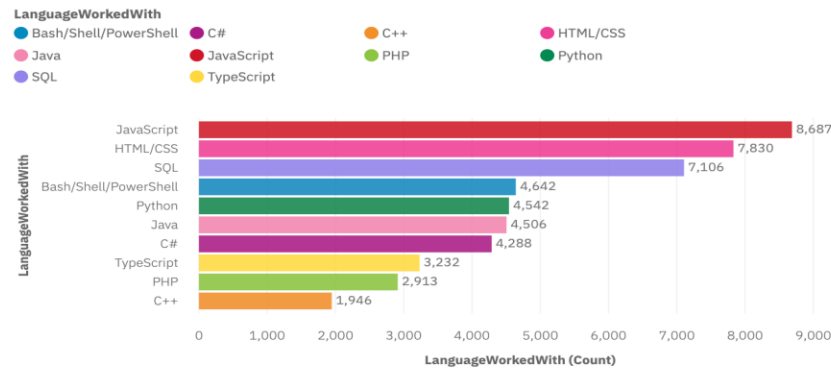
DASHBOARD TAB 1

Filters

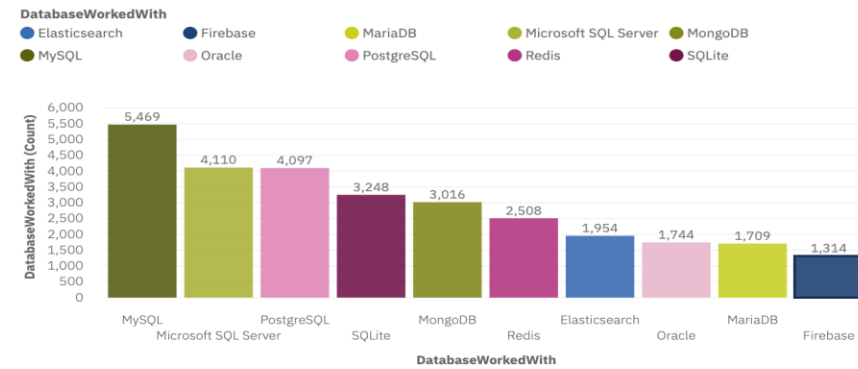
Current Technology Usage

Future Technology Trend

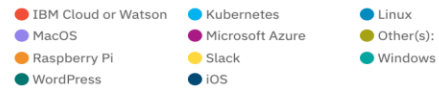
Top 10 Language Worked



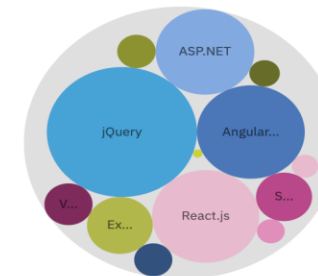
Top 10 Database Worked



Platform Worked With

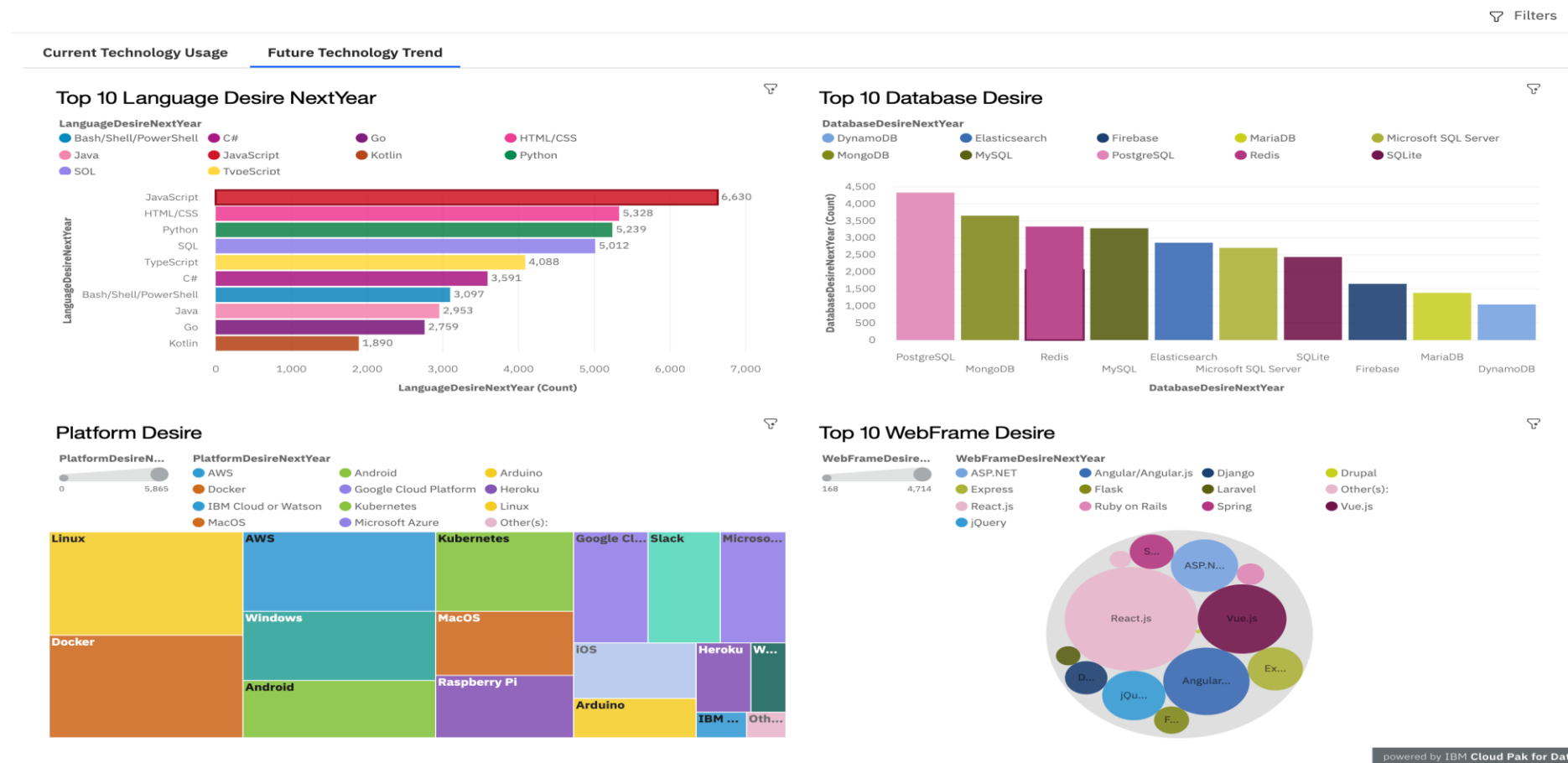


Top 10 WebFrame Worked

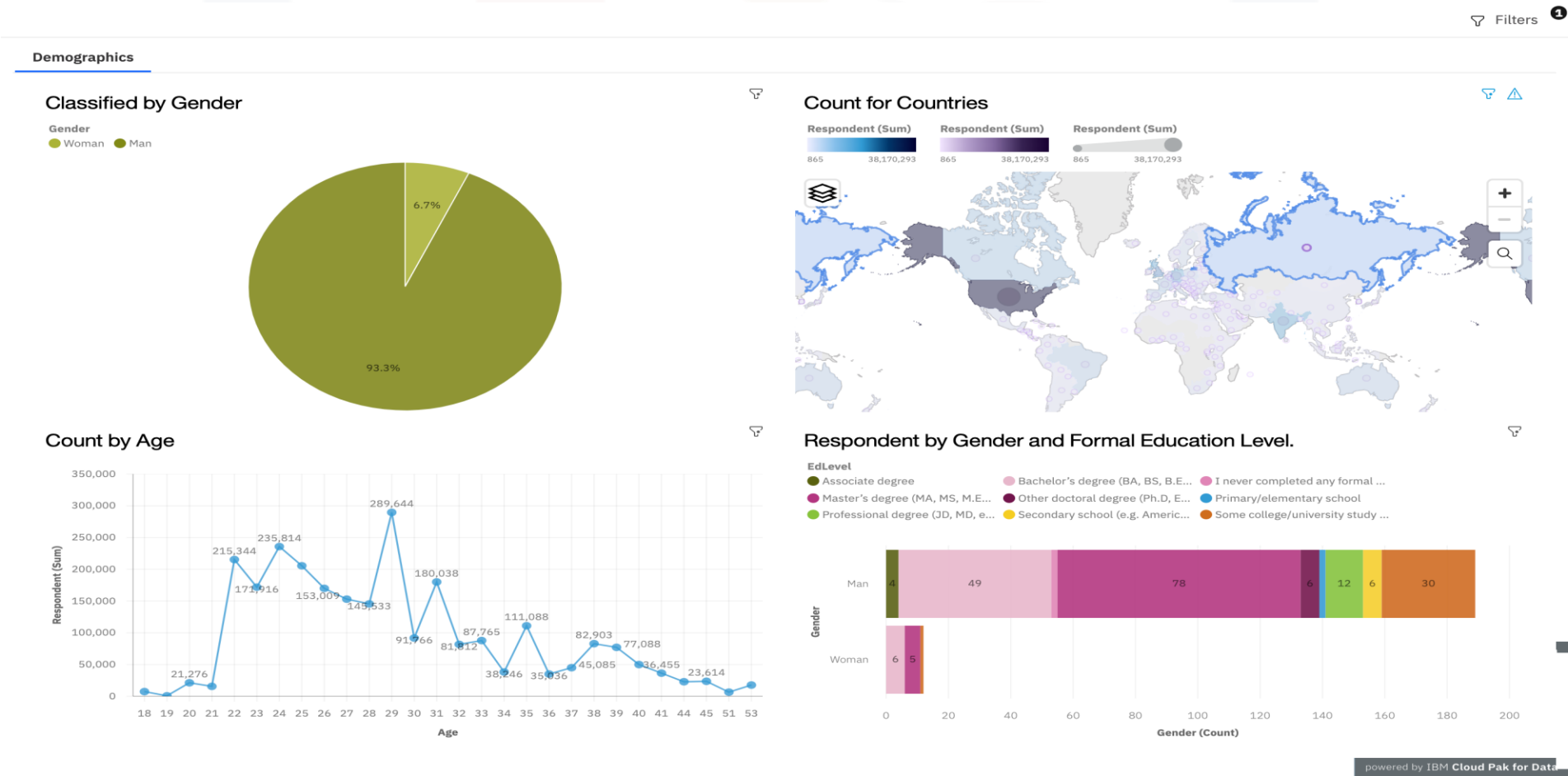


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DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- The tech industry is always changing. It is good to keep up with the latest technologies and trends and prediction indicators may help with prioritization, but not guarantees. A yearly survey is good indicator of predicting emerging tech, but industry adoption may be a better dictator of newer technologies and phasing out older ones.

OVERALL FINDINGS & IMPLICATIONS

Findings

- Language top 10 consistency
- Database top 10 shuffle
- Platform top 3 consistency
- Webframe top 3 change

Implications

- There is no major change in the preferred languages in the industry
- Major databases are maintained but certain databases are becoming more prominent, may need a shift in our focus
- No major change in tech platform preferences in the industry
- This requires a change in focus for 2 major webframes, the industry still be in a state of major shift

CONCLUSION



- It might be beneficial for our IT firm to maintaining their current focus on the programming language and platforms for this year and the year after
- A more complex and granular analysis may be needed for inspecting Database and Webframe technologies in order to have better prediction reliability