<Future Tech Review>

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FEB'24

OUTLINE

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EXECUTIVE SUMMARY

- The most popular technologies are web-based one such as JavaScript, HTML.
- Among all web-based frame works, the hottest areas area React.js and jQuery.
- Windows and Linux still dominate all developing platforms.
- For mobile platform, Android wins by no contest.
- Although MySQL is still the most used database, MongoDB and PostgreSQL show increasing trend of applying in the future.

INTRODUCTION

- The technology market changes quickly every year.
- It is important to catch-up with the latest technology in each field.
- The comparison between current & next year technology trend will provide great inside into the market.
- The study consist of 4 main parts:
  - Top language using
  - Top database using
  - Top platform using
  - Top web frame using

METHODOLOGY

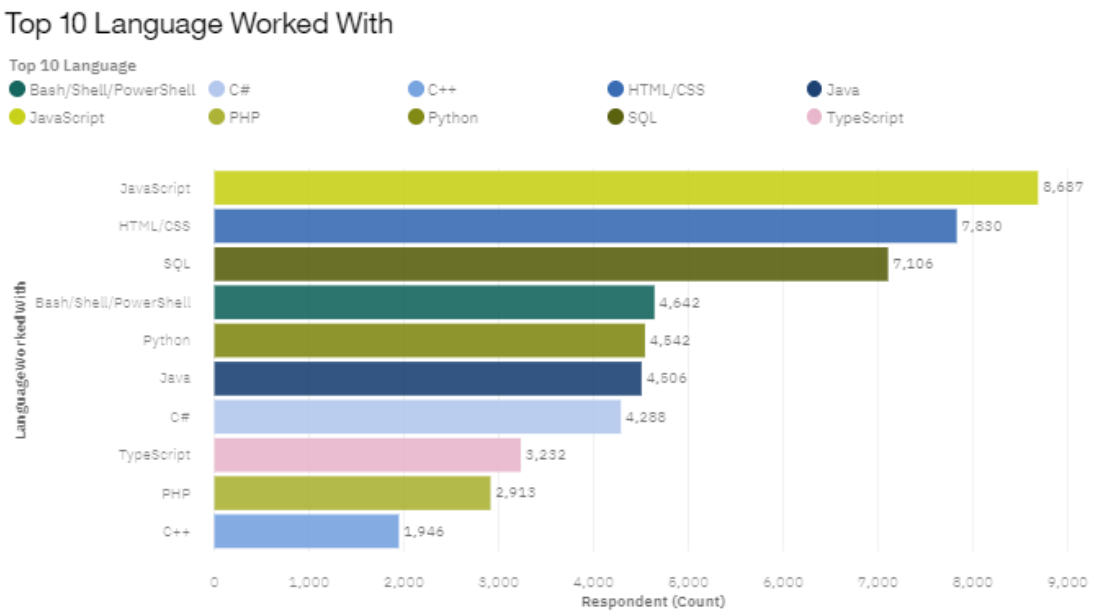
- The technology trend is studied by comparing current and future technology usage.
- The data was from the ‘Stack Overflow Developer Survey 2019’.
- Different type of charts, such as bar, line, pie, tree-map … will be used to visualize the result.
- The IBM dashboard is used to analyses data and create visualization.

RESULTS

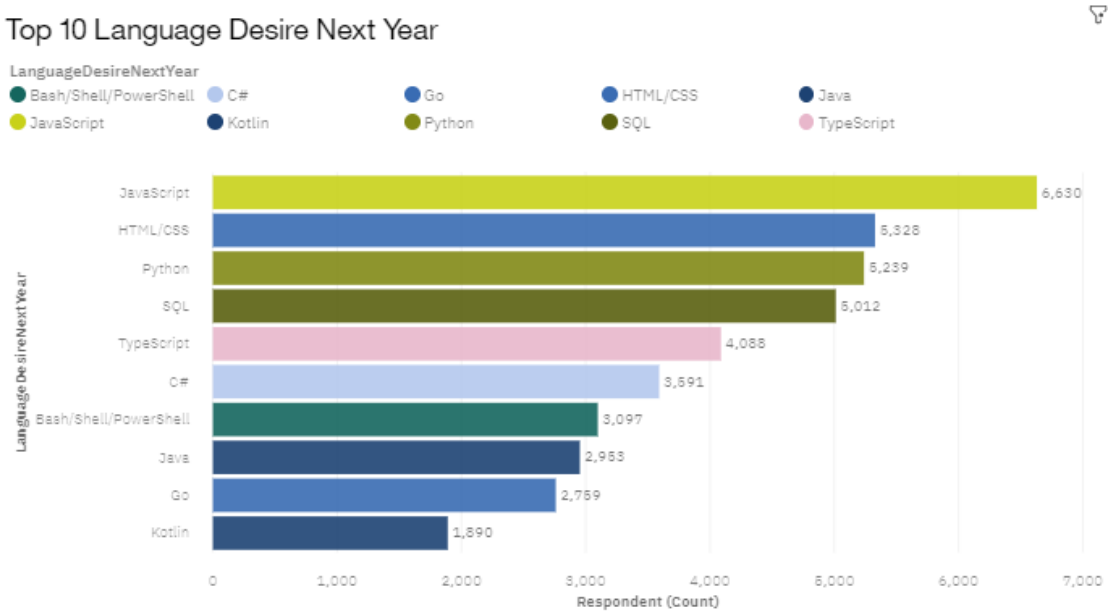
- The results consists of 4 main parts:
  - Programming language trend
  - Database trend
  - Platform trend
  - Web frame trend

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

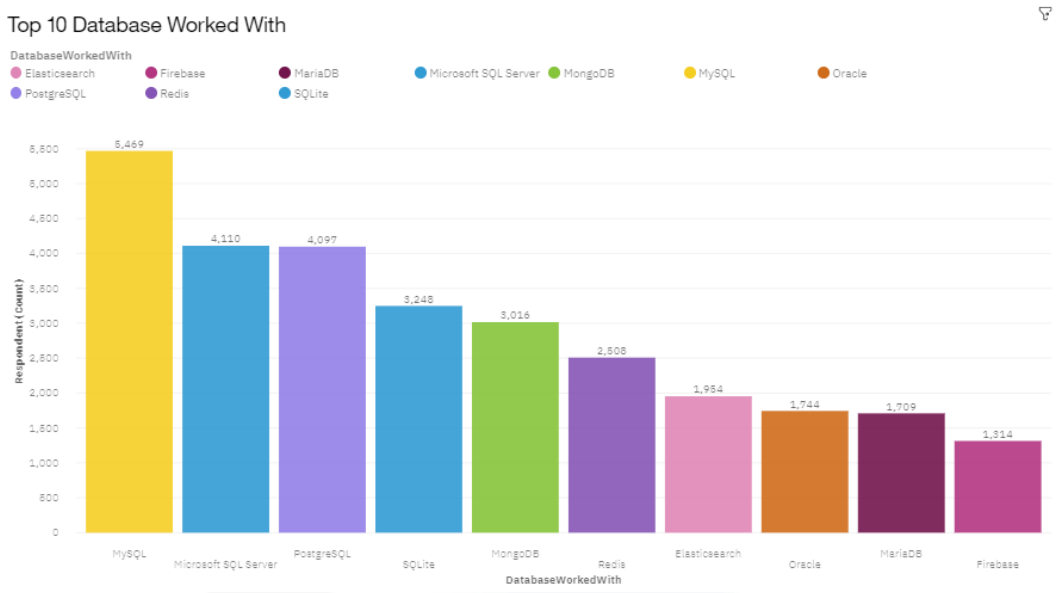
- JavaScript & HTML/CSS are top programming languages for both current and future trend.
- Python moves from 5th position to 3rd position in top 10.
- C++ and PHP area disappearing from top 10.

Implications

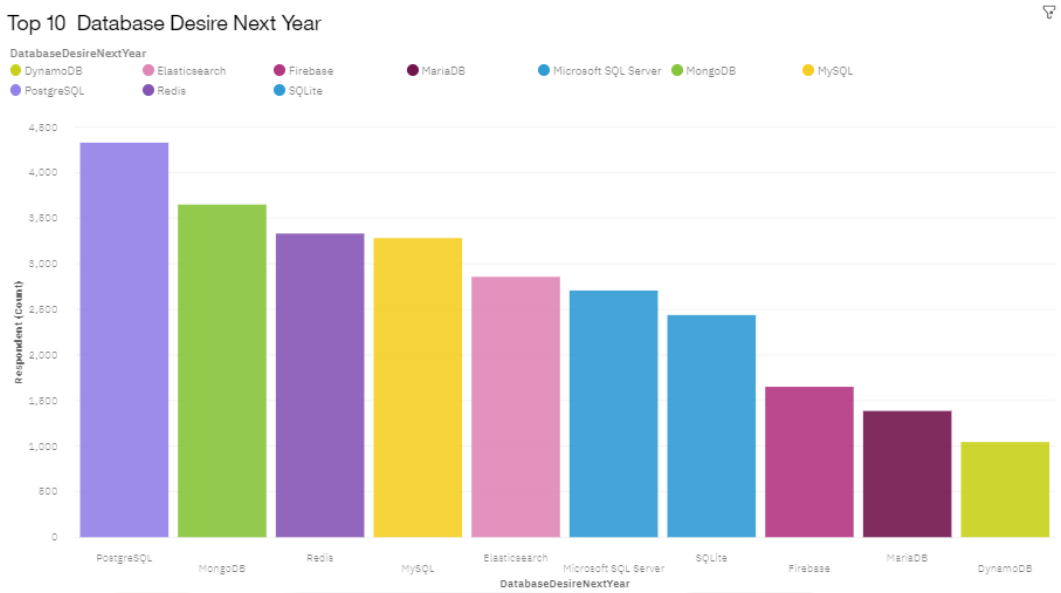
- Web programming languages still stay dominance in near future.
- Python & data science is becoming more and more important.
- Legacy language such as C++, PHP … are gradually falling out of interest.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MongoDB & Redis quickly moves up to No.2 and No.3
- PostgreSQL moves from No.3 to No.1
- MS SQL server drops from No.2 to No.5
- Oracle disappear from top

Implications

- Open source database becomes more and more popular compared with commercial one.
- Non-relational database see increasingly usage in the future.
- Relational database still takes a leading position in the near future.

PLATFORM TRENDS

Current Year

Next Year

PLATFORM TRENDS - FINDINGS & IMPLICATIONS

Findings

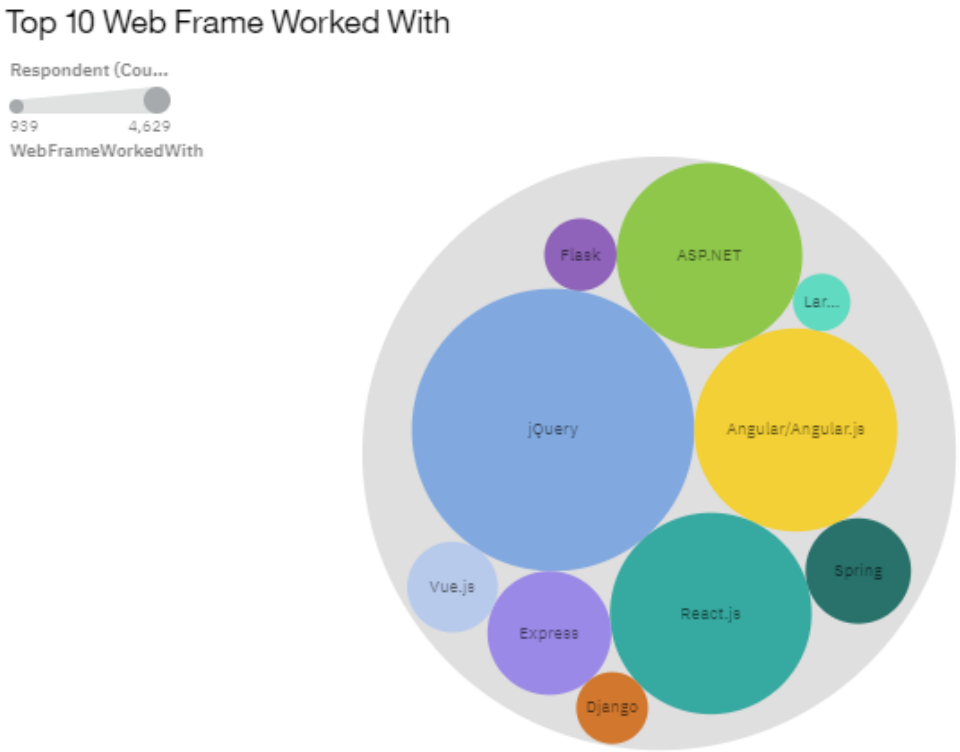
- Windows and Linux still dominates the platform trend.
- Android is No.1 in mobile platform.
- Cloud platform such as Kubernetes, Docker, AWS is getting more and more market share.

Implications

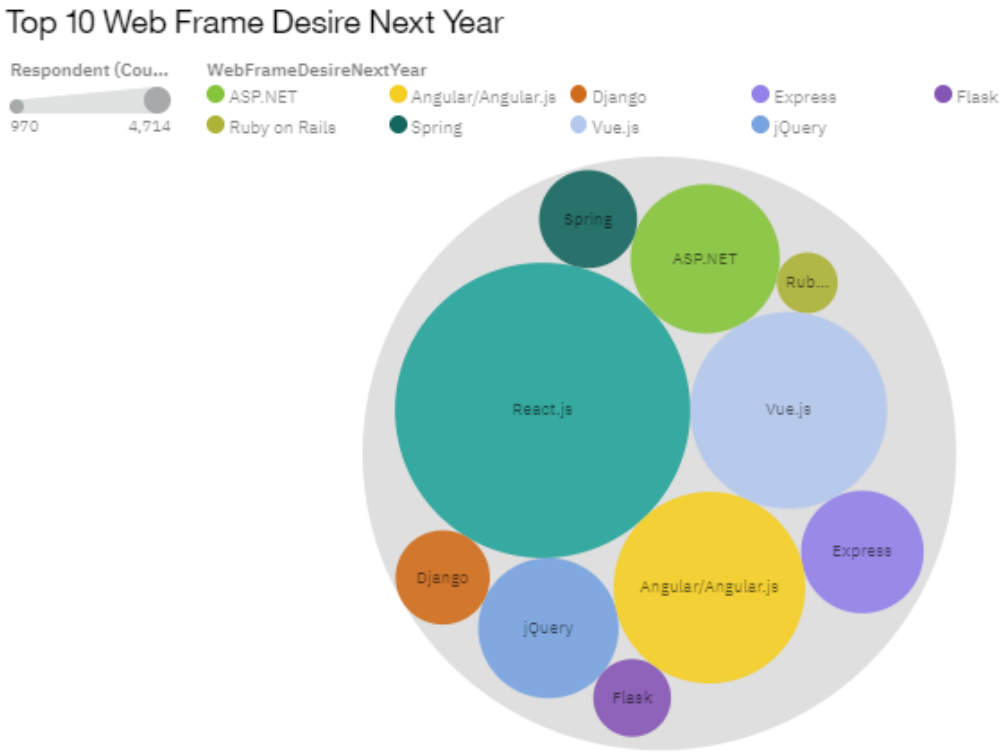
- Windows and Linux are still main developing platform in a foreseeable future.
- The transformation to cloud computing is a non-reversible process.

WEB FRAME TRENDS

Current Year



Next Year



WEB FRAME TRENDS - FINDINGS & IMPLICATIONS

Findings

- jQuery decreases from No.1 to No.4.
- React.js moves up from No.3 to No.1
- Vue.js moves from No.9 to No.3.
- Angular.js stays at same position.

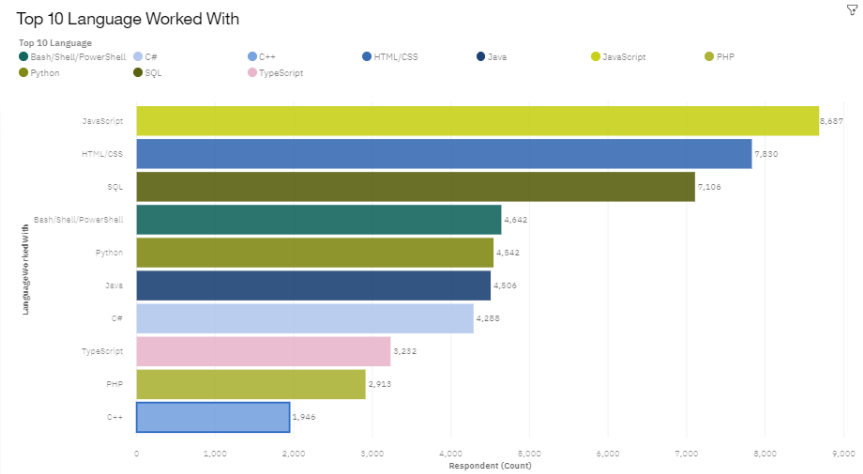
Implications

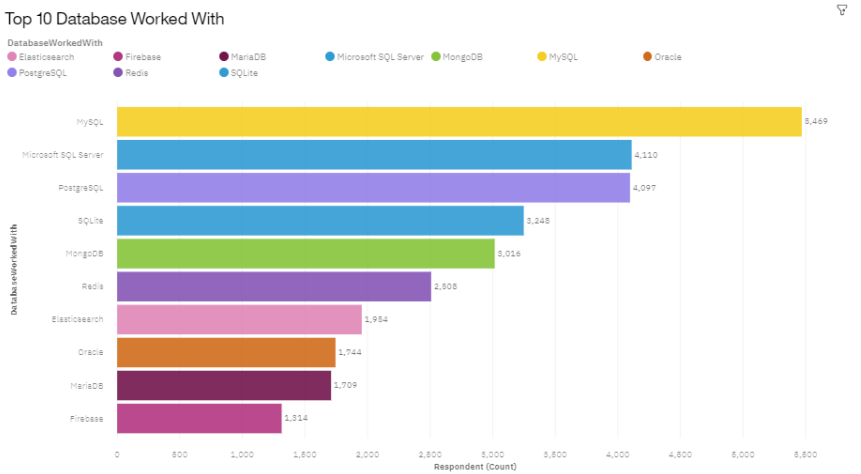
- jQuery quickly loses market share show lack of interest in its future development.
- React.js and Vue.js becomes the new standard for web frame development.

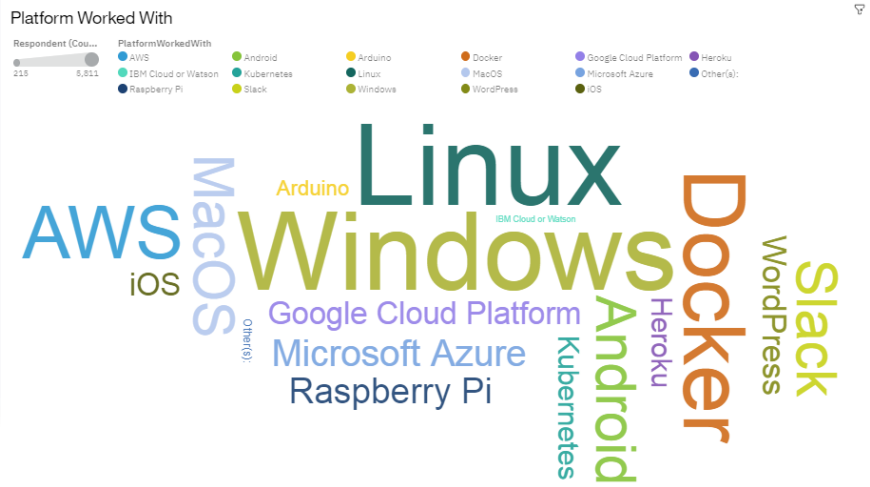
DASHBOARD

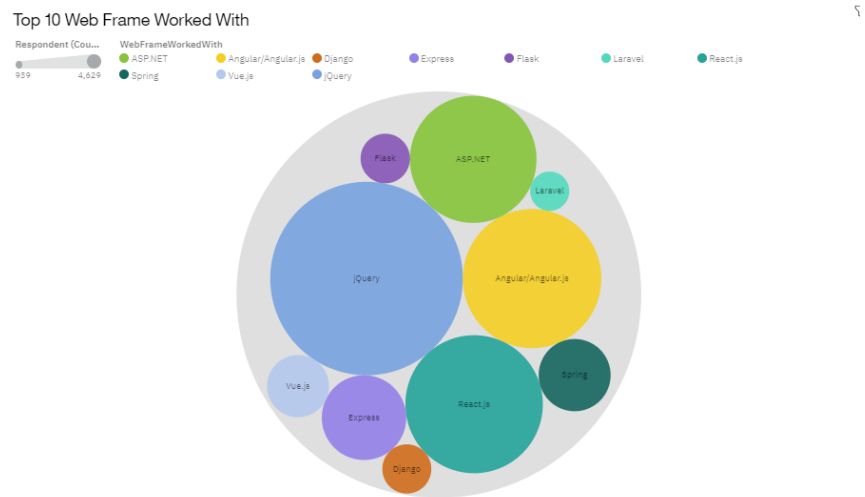
<https://jp-tok.dataplatform.cloud.ibm.com/dashboards/83cb3014-ee84-4967-abe7-525506654097/view/4013f07d3cb710ec54e5c0e407917e0f2b34225ab5bb8156d5d47b490b692097a9691493c87a42528b110460f7ba405cce>

DASHBOARD TAB 1



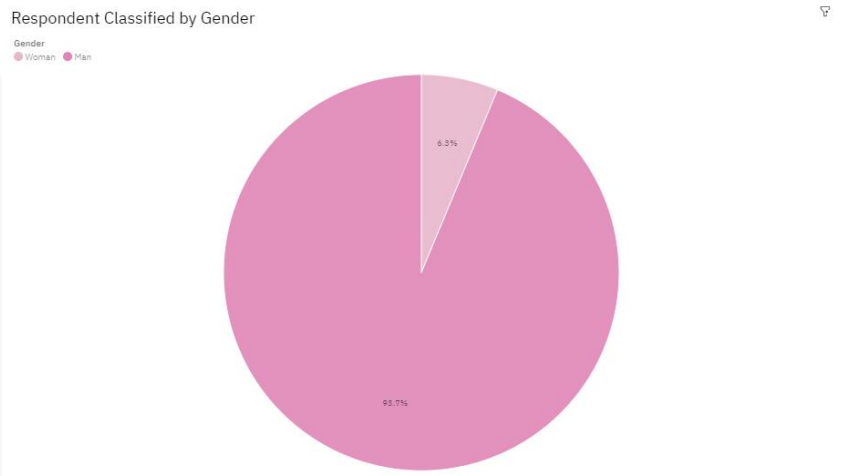


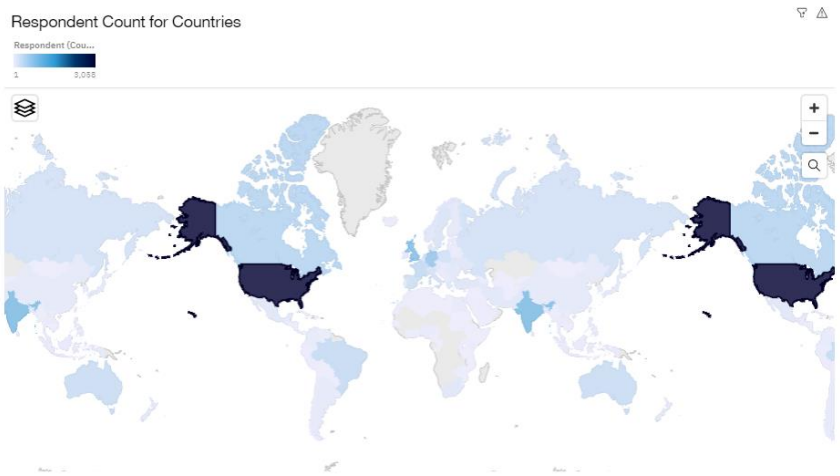


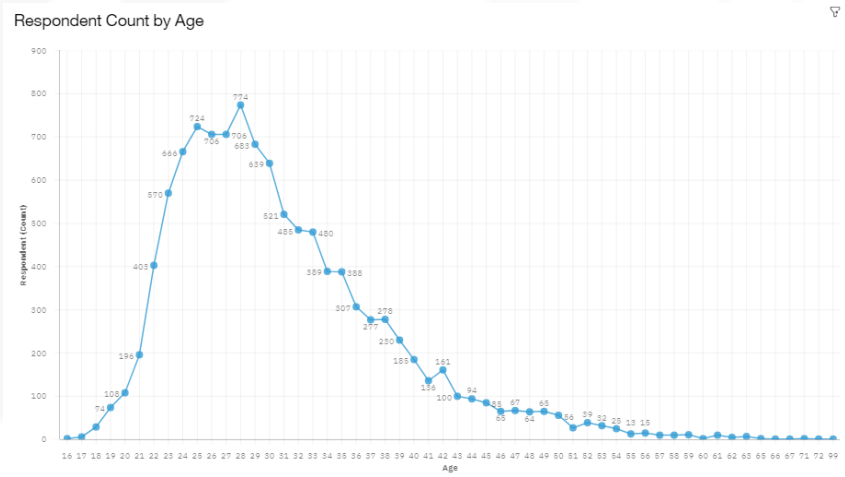


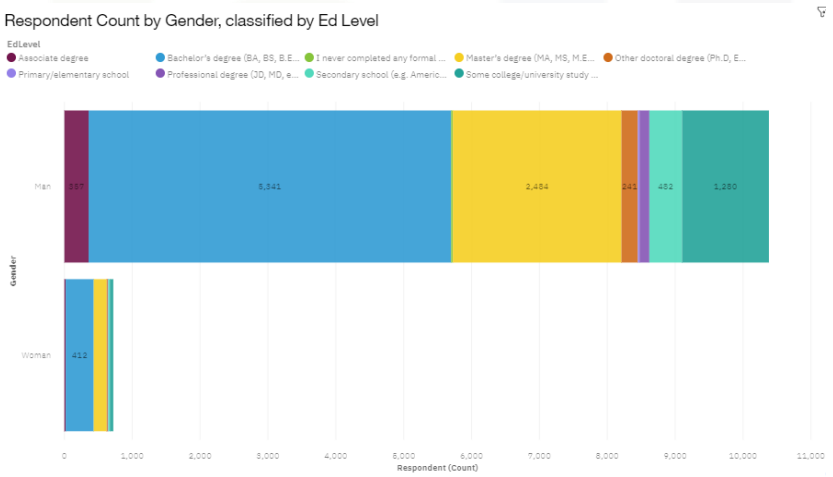
DASHBOARD TAB 2

DASHBOARD TAB 3

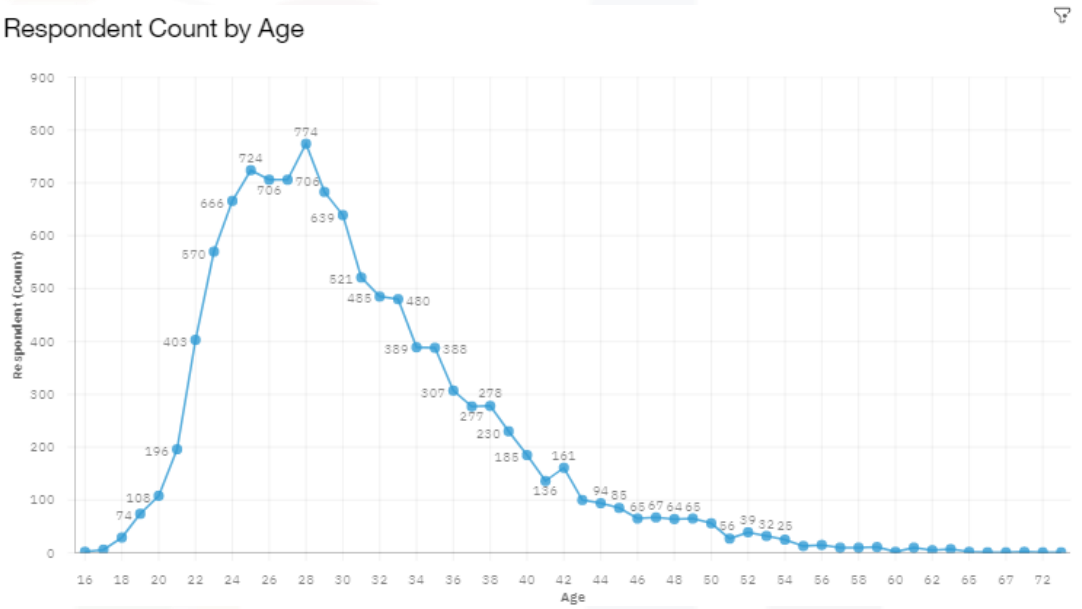








DISCUSSION



- Majority of respondents are at young age (20, 30s) ➔ this could skew the result in favor of new technology.

OVERALL FINDINGS & IMPLICATIONS

Findings

- Web based language stays at No.1
- Non-relational database moves to No.2 & No.3
- Cloud-based platform moves to No.1
- React.js stays at No.1 on web framework.

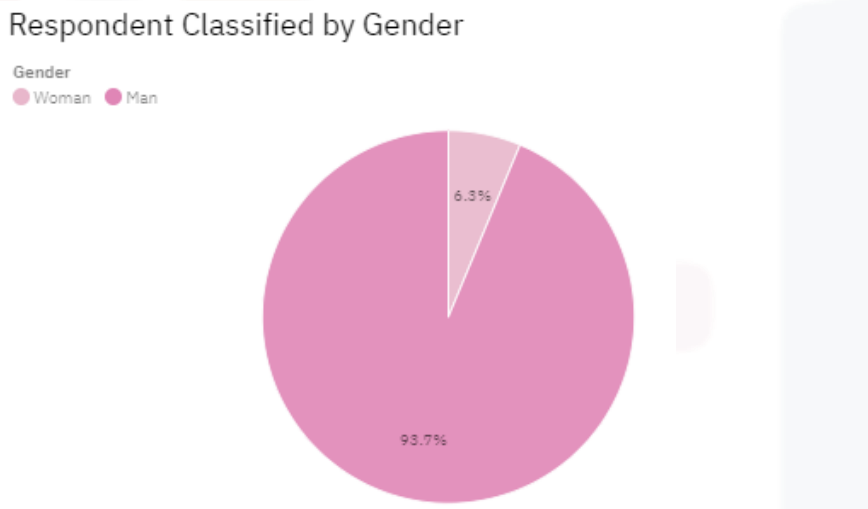
Implications

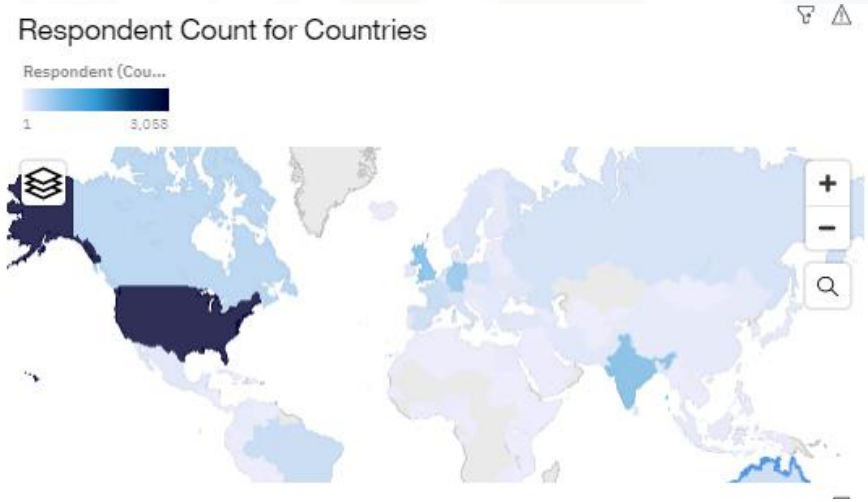
- Web based application is taking over the traditional application.
- Non-relational database sees increasing adoption.
- Cloud-based services become top-choice for platform development.

CONCLUSION

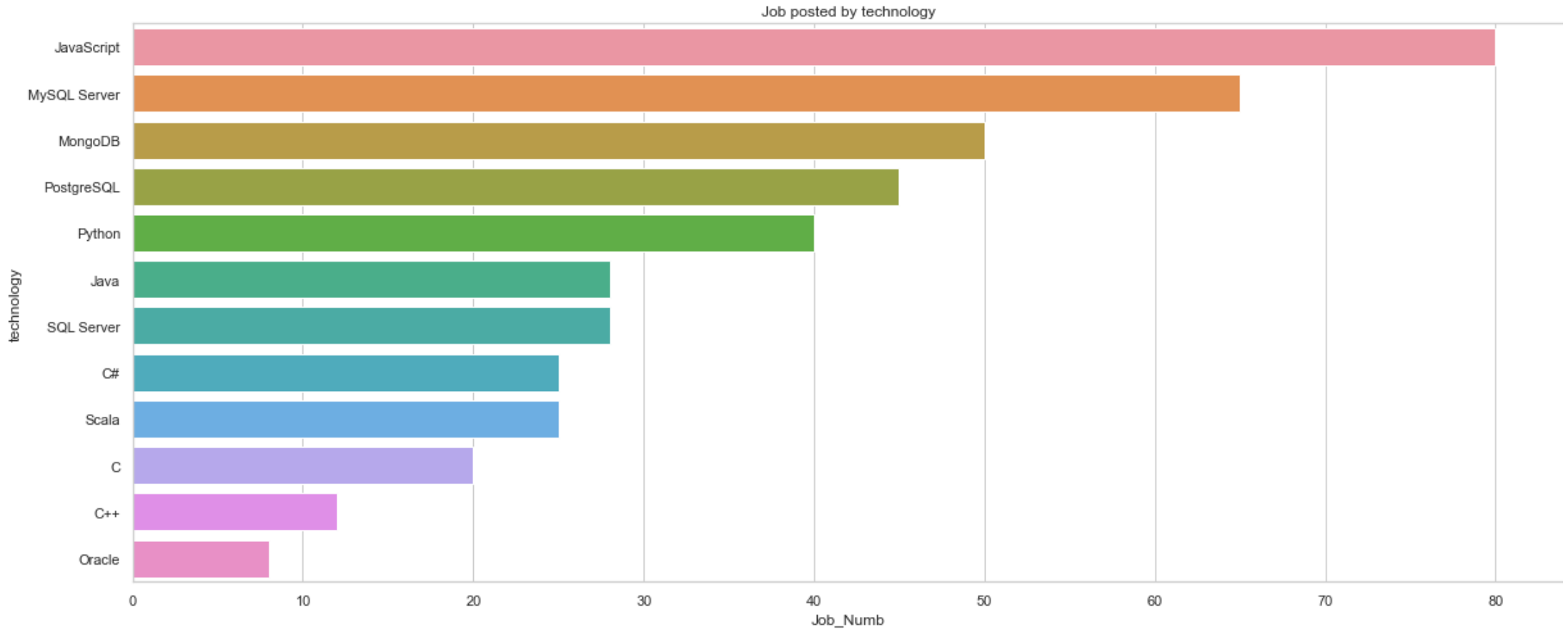
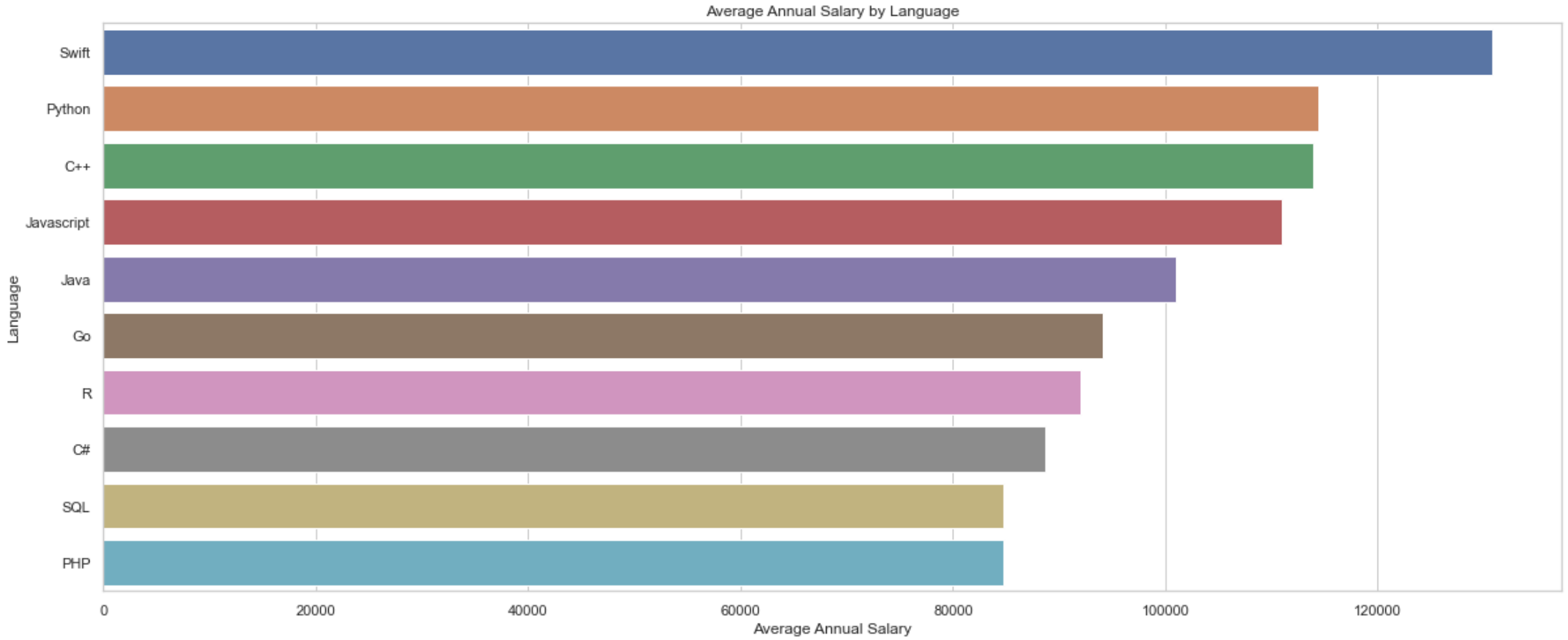
- To stay relevant in the technology field, it's important to learn web-based language & non-relational database.
- Among web framework, React.js is the best to learn for your future.
- Cloud-based service is the right direction for IT investment.

APPENDIX


Respondent Classified by Gender
Gender
Woman
Man
6.3%
93.7%


Respondent Count for Countries
Respondent (Cou...
1
3,058

GITHUB JOB POSTINGS



POPULAR LANGUAGES