



The Present/Future of Tech Review

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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 insights into the market.
- The study consist of 4 main parts:
 - Top languages now and in future
 - Top databases now and in future
 - Top platforms now and in future
 - Top web frames now and in future

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 ... were used to visualize the result.
- The IBM Cognos Analytics dashboard is used to analyze data and create visualization.

RESULTS

The results consists of 4 main parts:

Programming language trend

Database trend

Platform trend

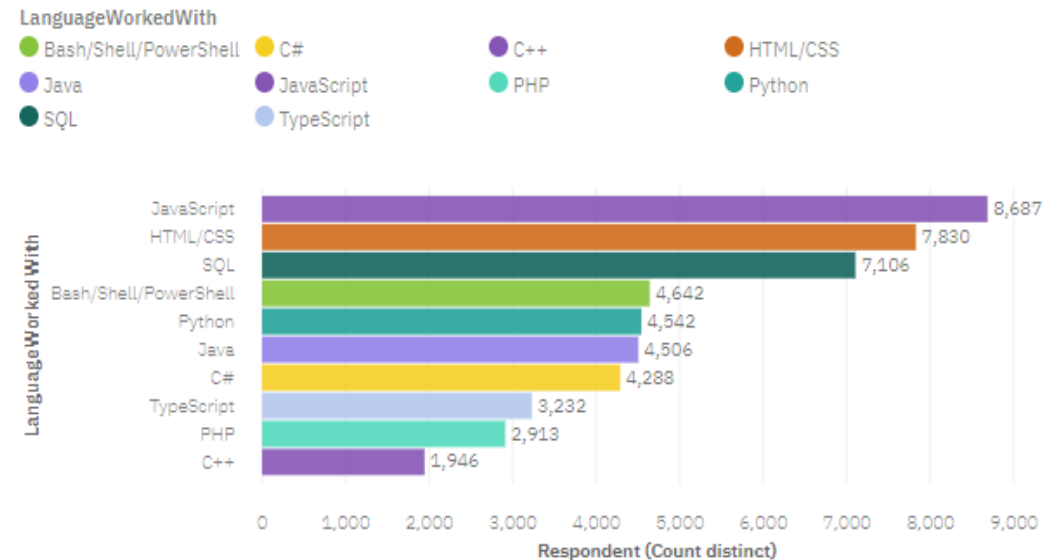
Web frame trend

PROGRAMMING LANGUAGE TRENDS

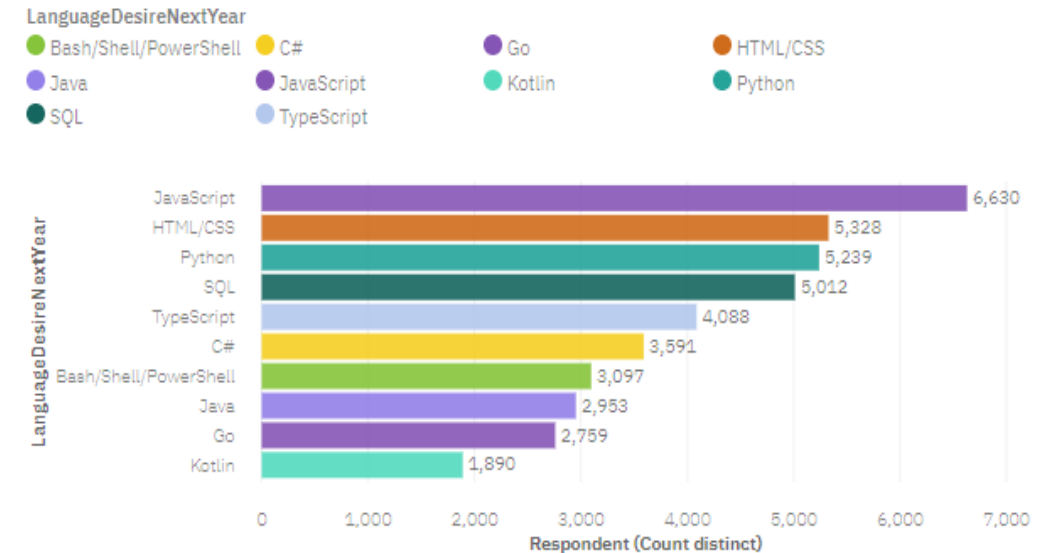
Current Year

Next Year

Top 10 LanguageWorkedWith



Top 10 LanguageDesireNextYear



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 are 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.

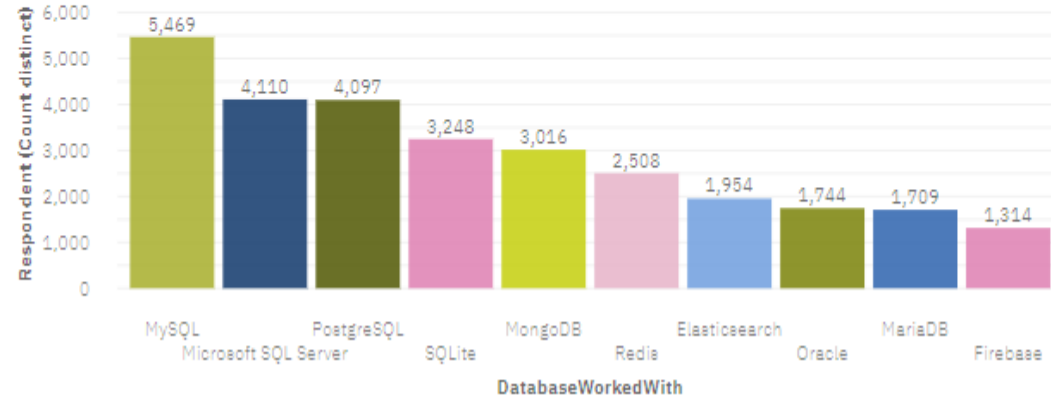
DATABASE TRENDS

Current Year

Top 10 DatabaseWorkedWith

DatabaseWorkedWith

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

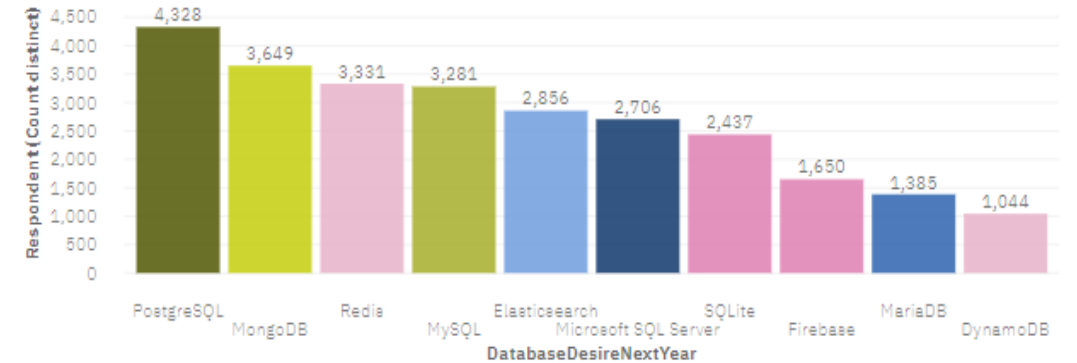


Next Year

Top 10 DatabaseDesireNextYear

DatabaseDesireNextYear

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



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.

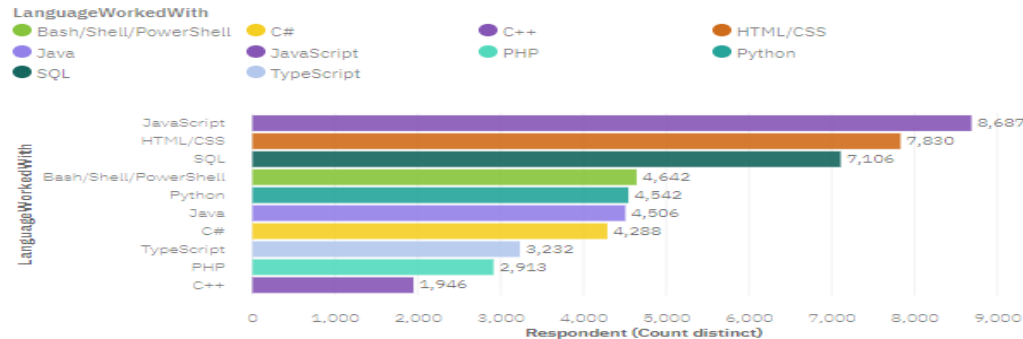
DASHBOARD



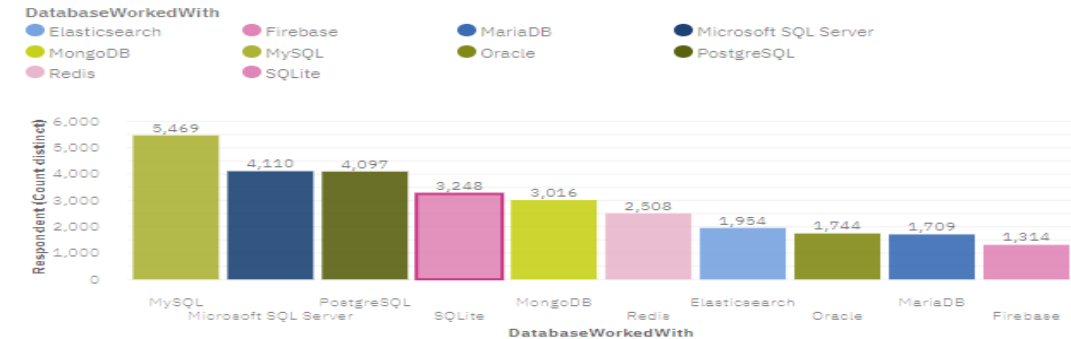
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DASHBOARD TAB 1

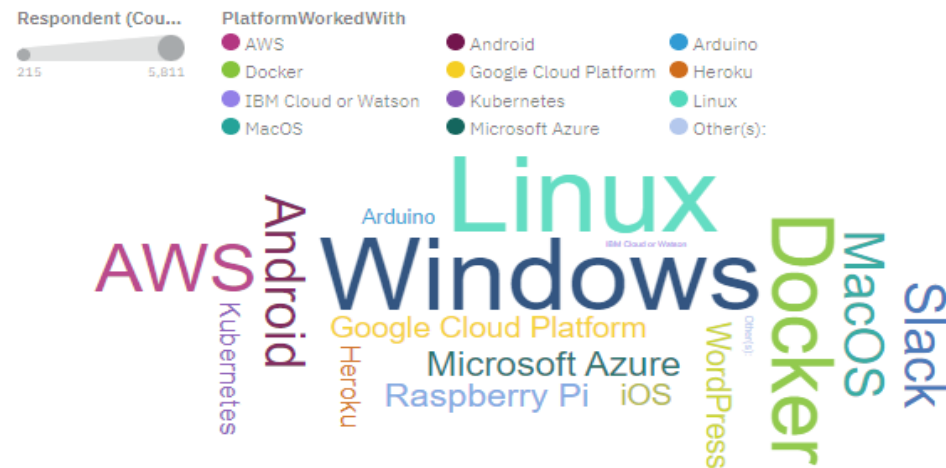
Top 10 LanguageWorkedWith



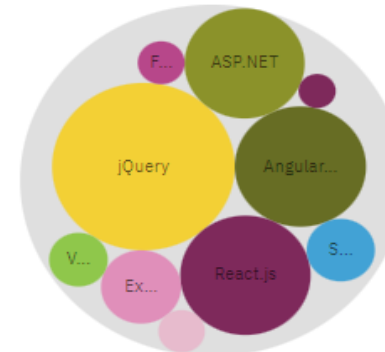
Top 10 DatabaseWorkedWith



PlatformWorkedWith

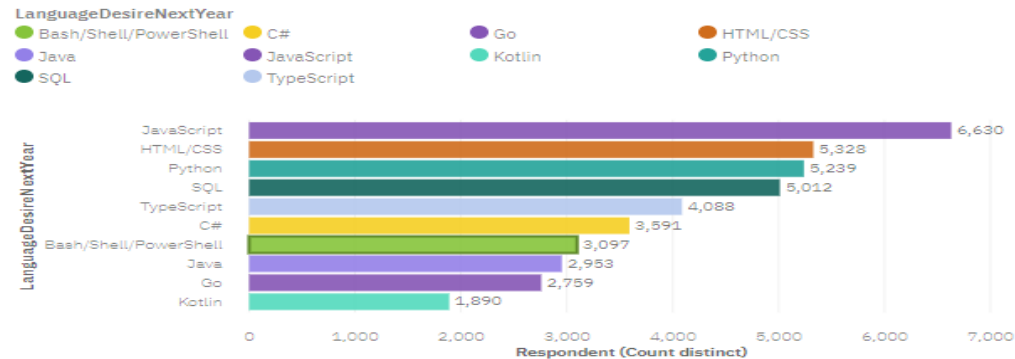


Top 10 WebFrameWorkedWith

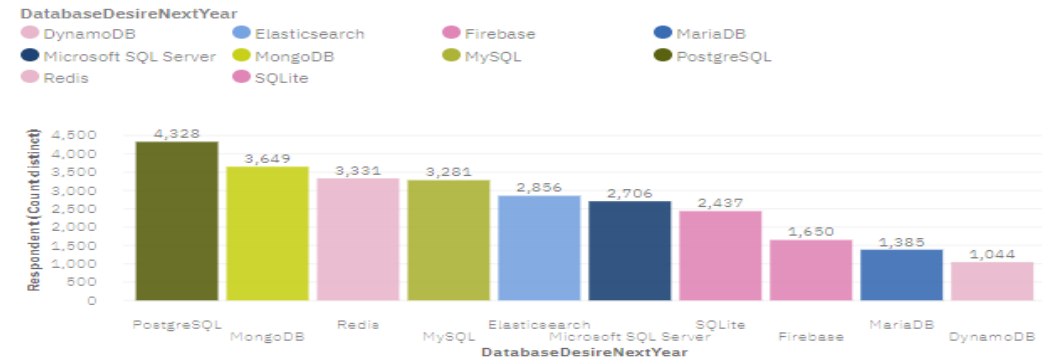


DASHBOARD TAB 2

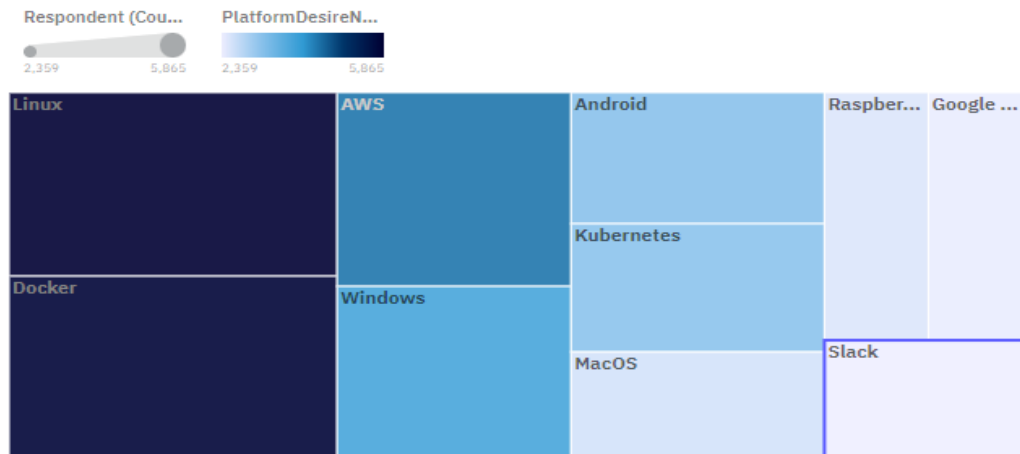
Top 10 LanguageDesireNextYear



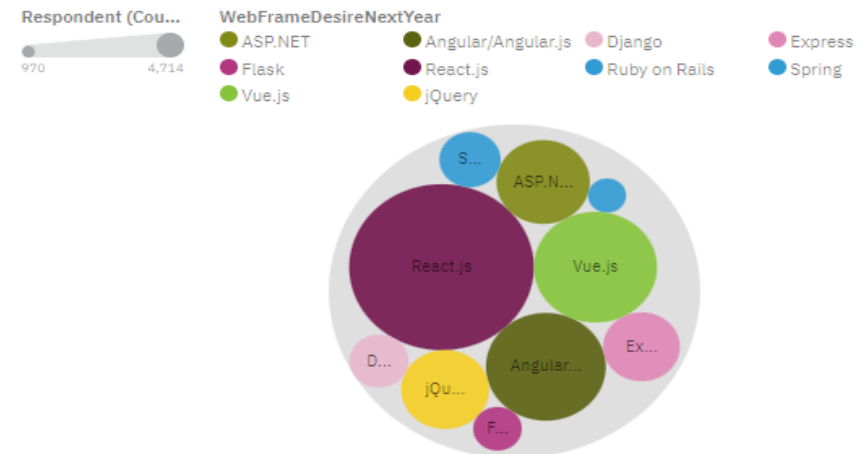
Top 10 DatabaseDesireNextYear



PlatformDesireNextYear



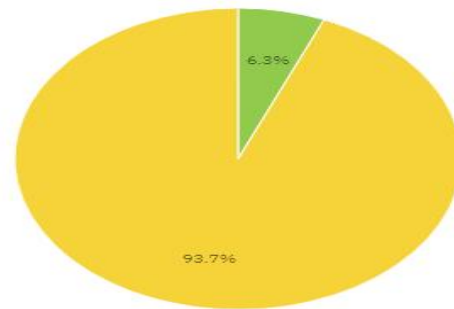
Top 10 WebFrameDesireNextYear



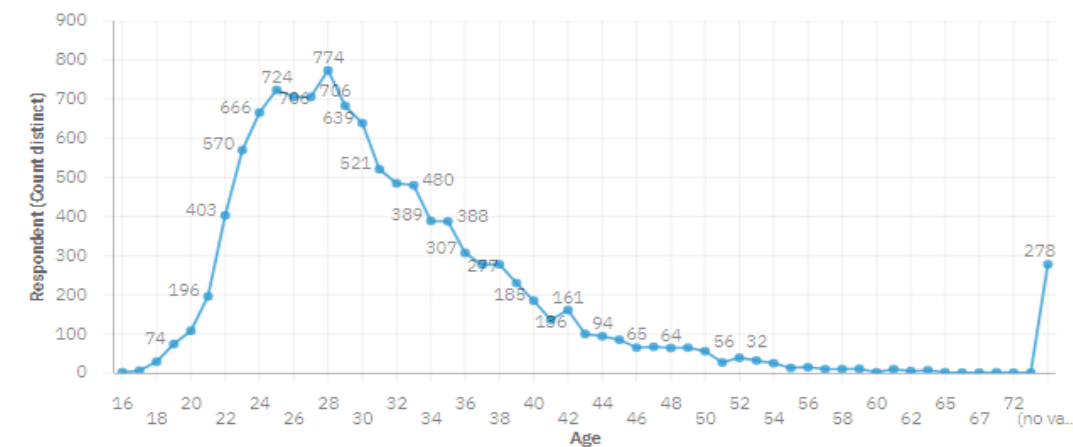
DASHBOARD TAB 3

Respondent classified by Gender

Gender
● Woman ● Man



Respondent Count by Age

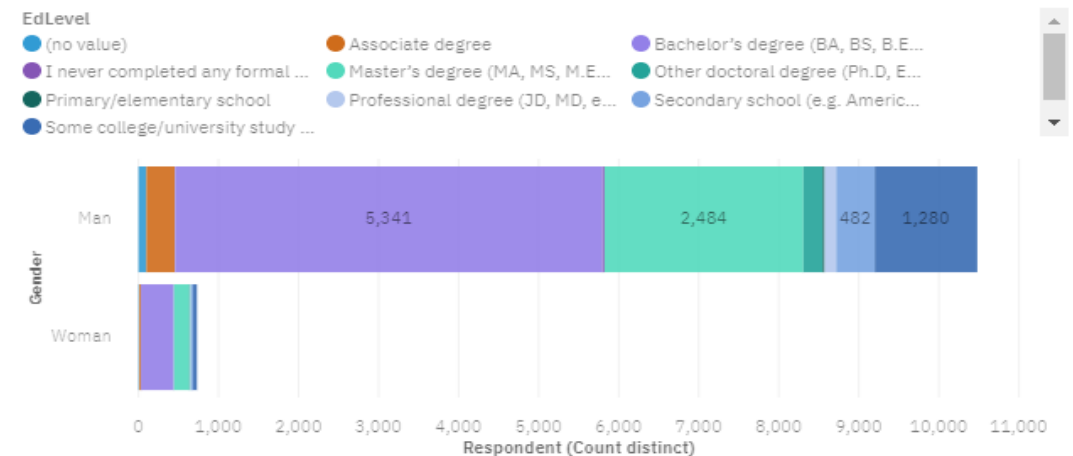


Respondent Count for Countries

Respondent (Cou...
1 2,058



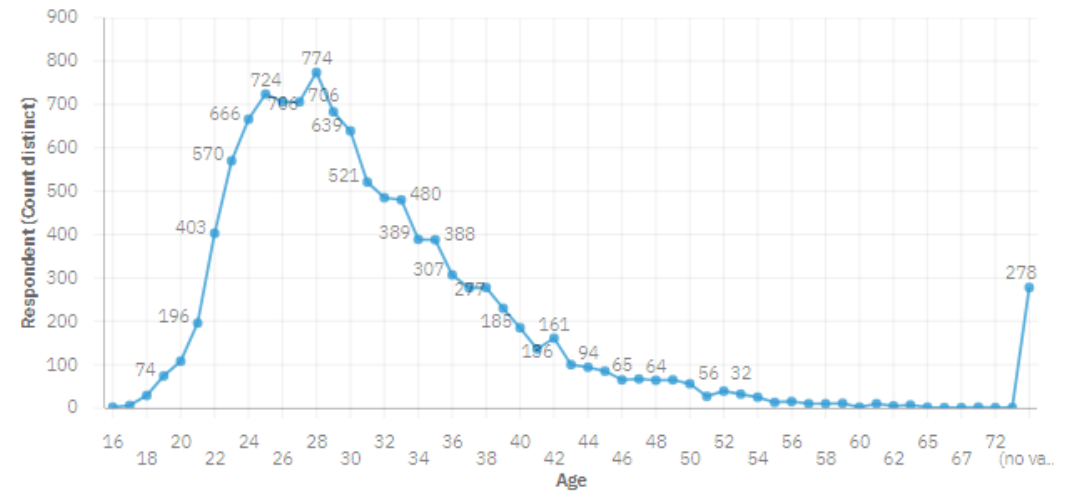
Respondent Count by Gender, classified by Formal Education Level



DISCUSSION



Respondent Count by Age



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

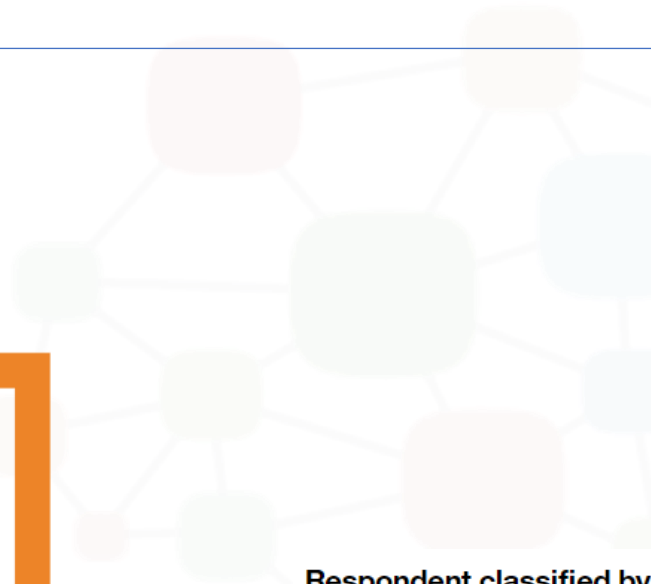
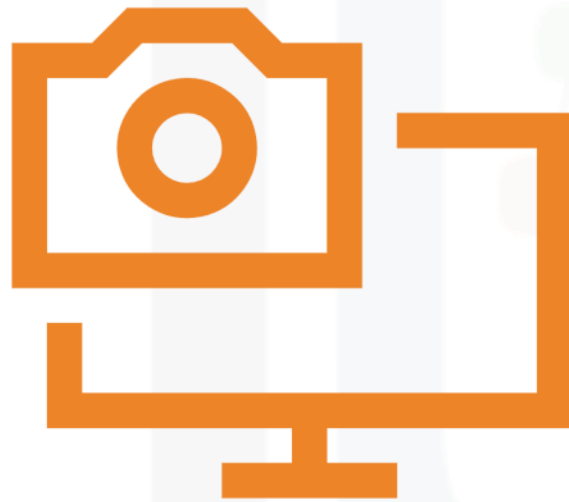
- Web based application is taking over the traditional application.
- Non-relational database sees increasing adoption.
- Cloud-based services become top-choice for platform development.

CONCLUSION

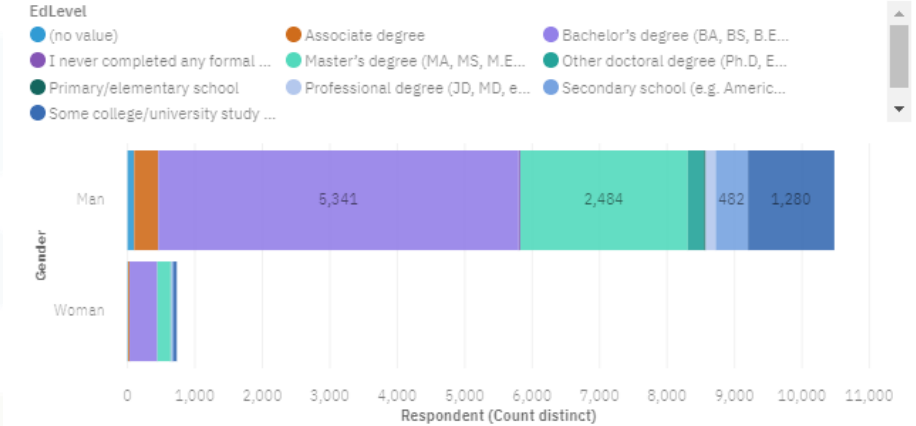


- To stay relevant in the technology field, it's important to learn web-based language & non-relational database.
- Among web framework, React.js is the best to learn for your future.
- Cloud-based service is the right direction for IT investment.

APPENDIX

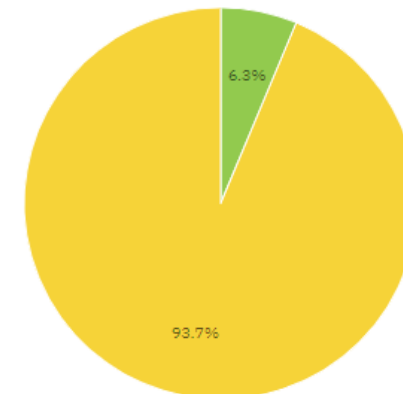


Respondent Count by Gender, classified by Formal Education Level



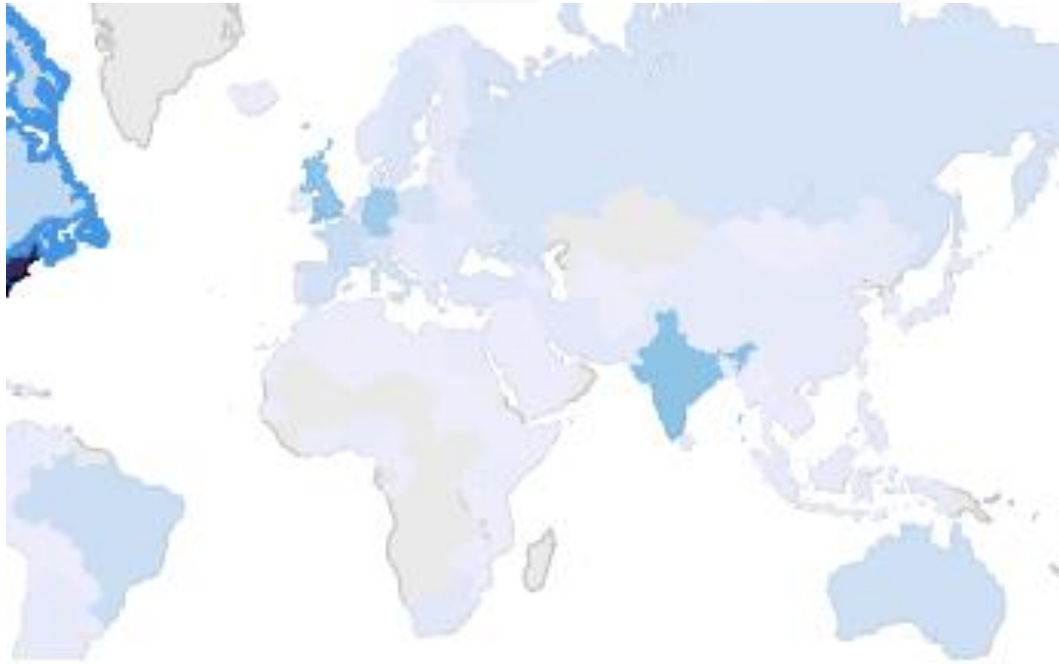
Respondent classified by Gender

Gender
● Woman ● Man



There Seems to be more men in tech than women, Sensitization programs should be held to educate more on the value of women building a career in tech.

African Communities analysis



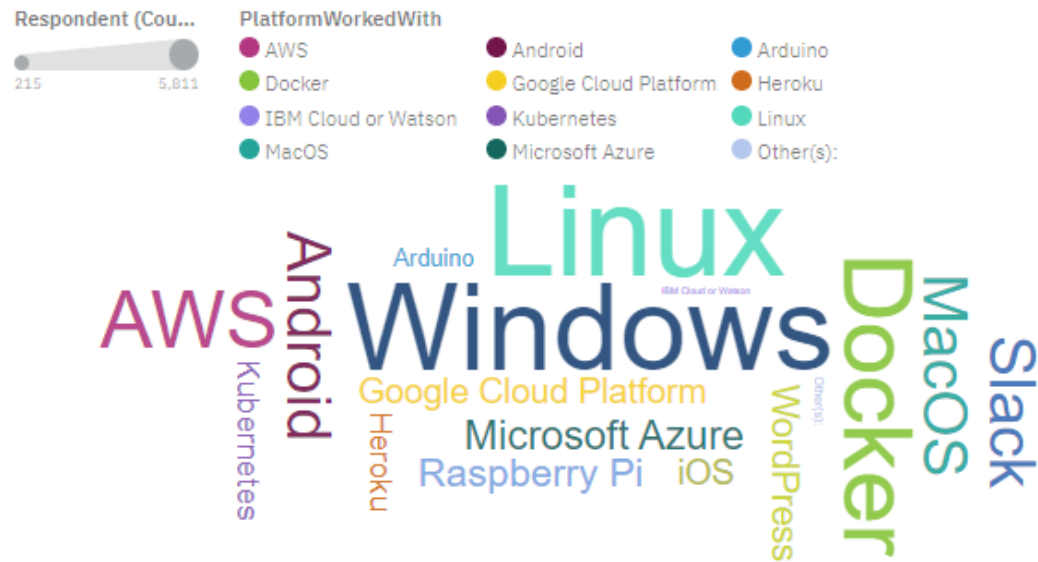
Places Such as Sudan, Ghana, Ethiopia, Algeria, Republic of Congo, All seemed to have respondent counts less than 8, safe to say that these places do not have wide adoption in technology.

More measures need to be put in place to raise awareness of the value of tech to economic and personal growth in Such Areas.

PLATFORM TRENDS

Current Year

PlatformWorkedWith



Next Year

Platform Desire 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.

JOB POSTINGS



I Could not do this.

POPULAR LANGUAGES

