

ANALYZING TECHNOLOGY TRENDS

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OUTLINE



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



EXECUTIVE SUMMARY



- Current Technology Usage
 - Top 10 Language, Dataframe, Webframe, Platform Worked With.
- Future Technology Trends
 - Top 10 Language, Dataframe, Webframe, Platform Desire Next Year.
- Demographics
 - Respondents classified by Country, Gender and Age
 - Respondent Count by Gender, classified by Formal Education Level





INTRODUCTION



IBM Developer

- Analyzing what is the current trend in technology like programming, databases, webframes, platforms.
- Future trends for next year regarding the same.
- Purpose of this analysis
 - Analyzing demand and supply of IT industry
 - Identifying future skill requirements in technology
 - Analyzing factors like country, age, gender w.r.t technology sector
- Targeted audience for this presentation
 - Technology domain hiring managers
 - Software engineers



METHODOLOGY



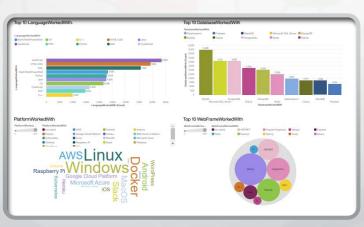
- Data Collection
 - Stack overflow developer survey dataset modified
- Data exploration
- Data Visualization
 - IBM Cognos dashboard
 - Python matplotlib
- Presentation

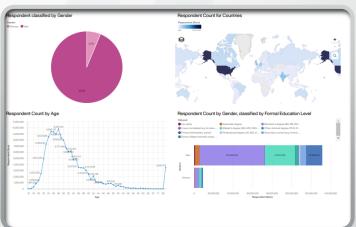




RESULTS





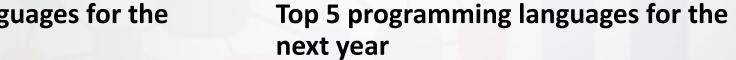


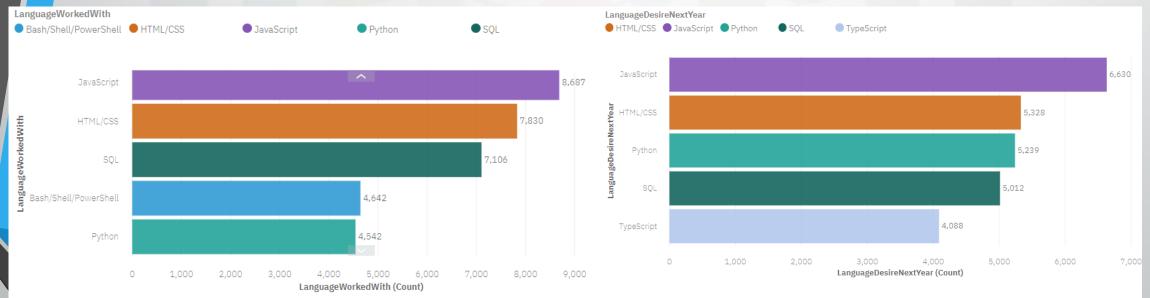
PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

Top 5 programming languages for the current year









PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript is most famous programming language and will continue to be so next year
- Python is gaining popularity and will increase in coming times
- HTML/CSS will continue to be in demand, whereas Bash/PowerShell trend will be reduced by next year

Implications

- Web Development will continue to grow and the developers will be in demand
- Because of trends like AI /ML Python will be used more in future.
- Technology like PowerShell will be less in demand so developers must upskill.





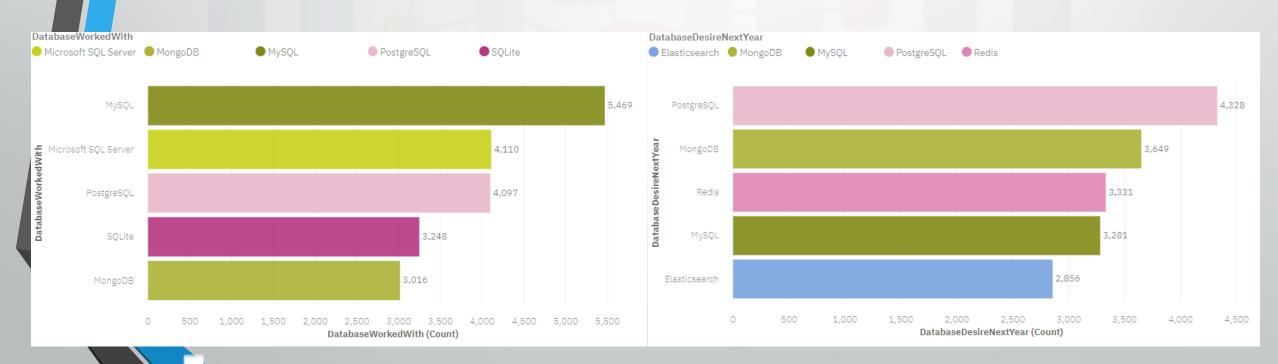
DATABASETRENDS

Current Year

Top 5 databases for the current year

Next Year

Top 5 databases for the next year







DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is most popular currently and will still be used in next year
- PostgreSQL and MongoDB will gain more popularity in future
- Microsoft SQL server is still used majorly but might reduce with time next year

Implications

- Databases are important for backend and big data; will continue to be in high demand
- MySQL open-source is still in very vast use
- NoSQL databases will be in impact more by next year









The permanent link of the read-only view of the Cognos dashboard

https://dataplatform.cloud.ibm.com/dashboards/e97bfa58-12db-4e21-98e8-

<u>7a6dd94d8cde/view/54oae71818b634e85cd6bde4o7992d53</u> <u>283f2cobbobbdoo482d47b49o9677597a93f45coc82d1dobdf</u> <u>4oo137f1be43occ9</u>

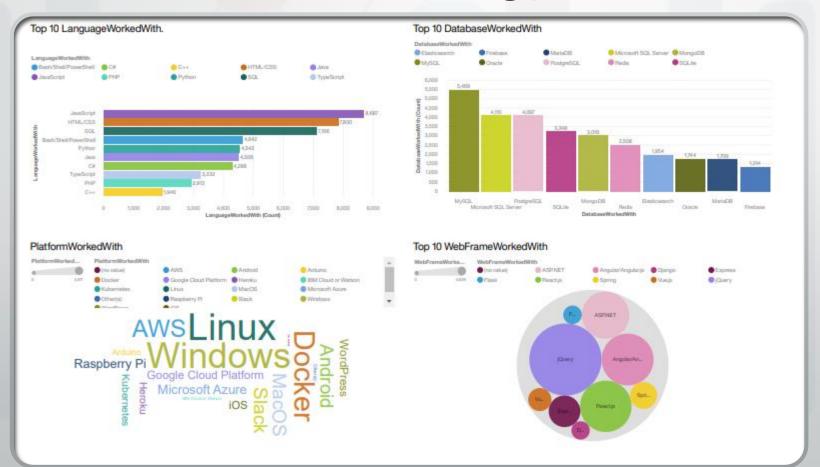




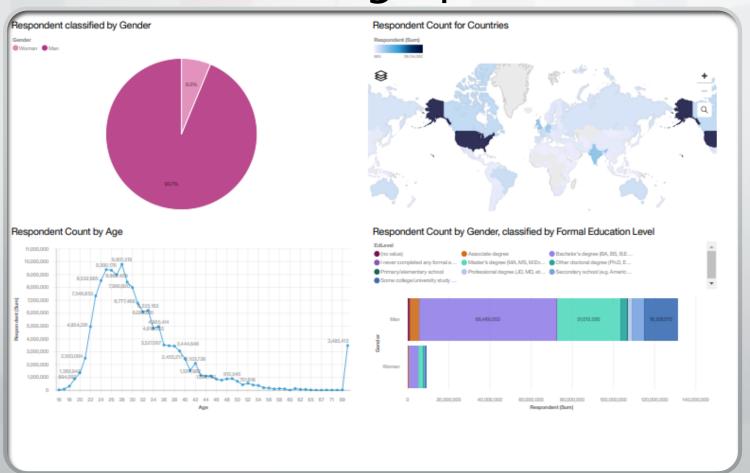
Current Technology Usage



Future Technology Trends



Demographics



DISCUSSION



- Current Technology usages and future trends
- Gender, Age, Education and Geographical discrimination in IT sector





OVERALL FINDINGS & IMPLICATIONS

Findings

- Technology keeps advancing and changing with time
- IT industry do have discriminations based on gender (majority Male) and age(majority in 20s and 30s)
- USA is much ahead than rest of world in technology

Implications

- Developers should continue to upskill themselves with time
- There is need to make IT industry more diverse in future without any discrimination on age, gender etc.
- Other countries need to have more exposure to technology





CONCLUSION

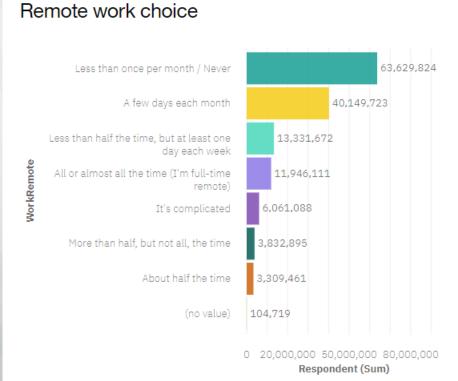


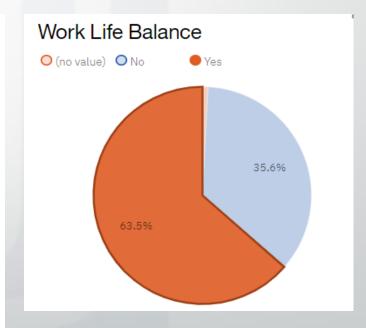
- Current and future trends in technology field
- Software engineering jobs with advancing technology with time
- Discrimination in the IT industry
- Formal higher education affect in IT



APPENDIX



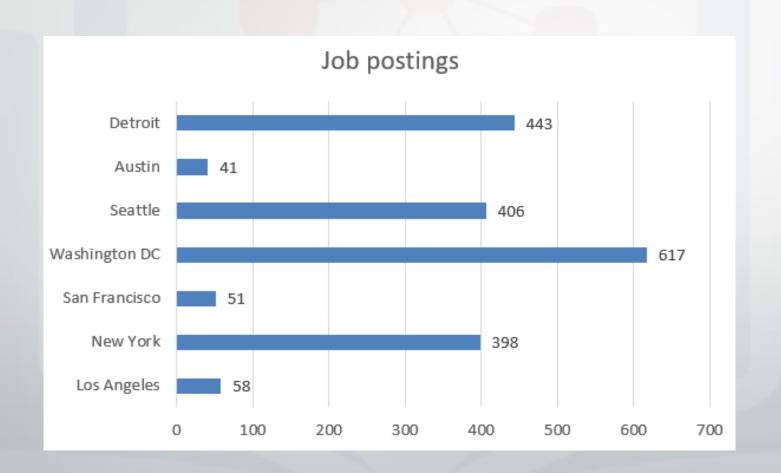








JOB POSTINGS



POPULAR LANGUAGES

