OUTLINE

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- Methodology
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- Discussion
  - Findings & Implications
- Conclusion
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EXECUTIVE SUMMARY

- Current Technology Usage
  - Top 10 Languages
  - Top 10 Databases
  - Platforms
  - Top 10 Web Frames
- Future Technology Trends
  - Top 10 Languages desired for next year
  - Top 10 Databases desired for next year
  - Desired Platforms for the next year
  - Top 10 Web Frames desired for next year
- Demographic
  - Respondents classified by gender
  - Respondent count for countries
  - Respondent count by age
  - Respondent count by gender and classified education level

INTRODUCTION

- Top programing languages in demand
- Top database skills in demand
- Popular IDEs
- Correlation between numerical data
- Scraping the internet websites and accessing APIs to collect data

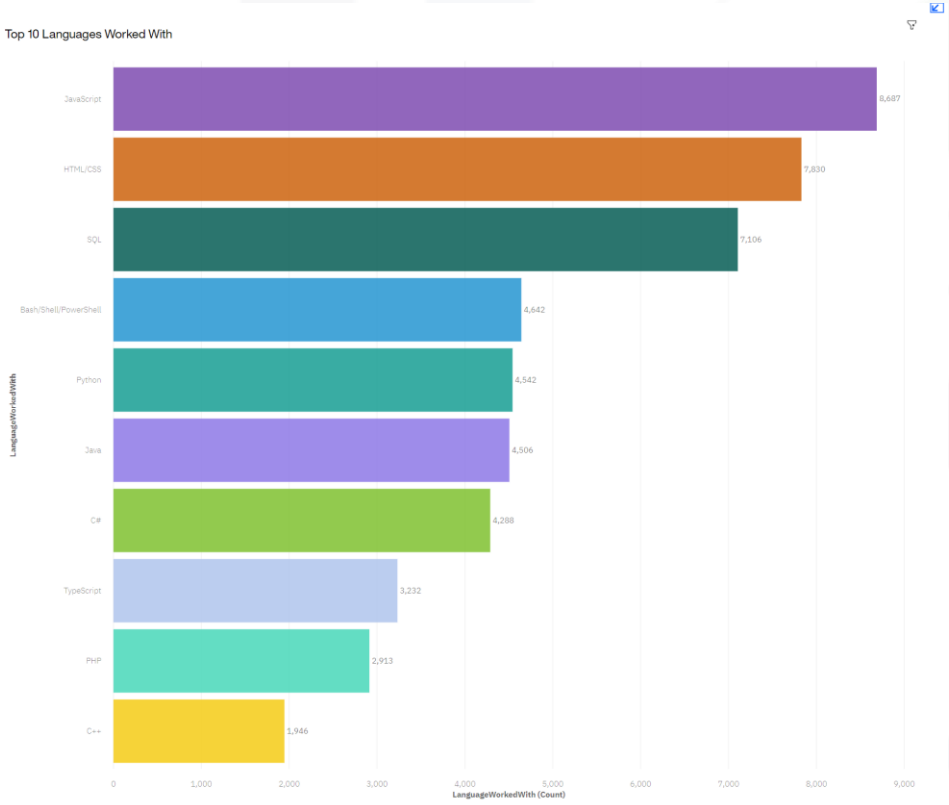
METHODOLOGY

- Collecting data using APIs
  - GitHub Jobs API allows us to search and view jobs with JSON
  - Allows us to query for the jobs based upon:
    - Technology: Python, SQL
    - City: New York, Los Angeles, Austin
- Collecting data using webscraping

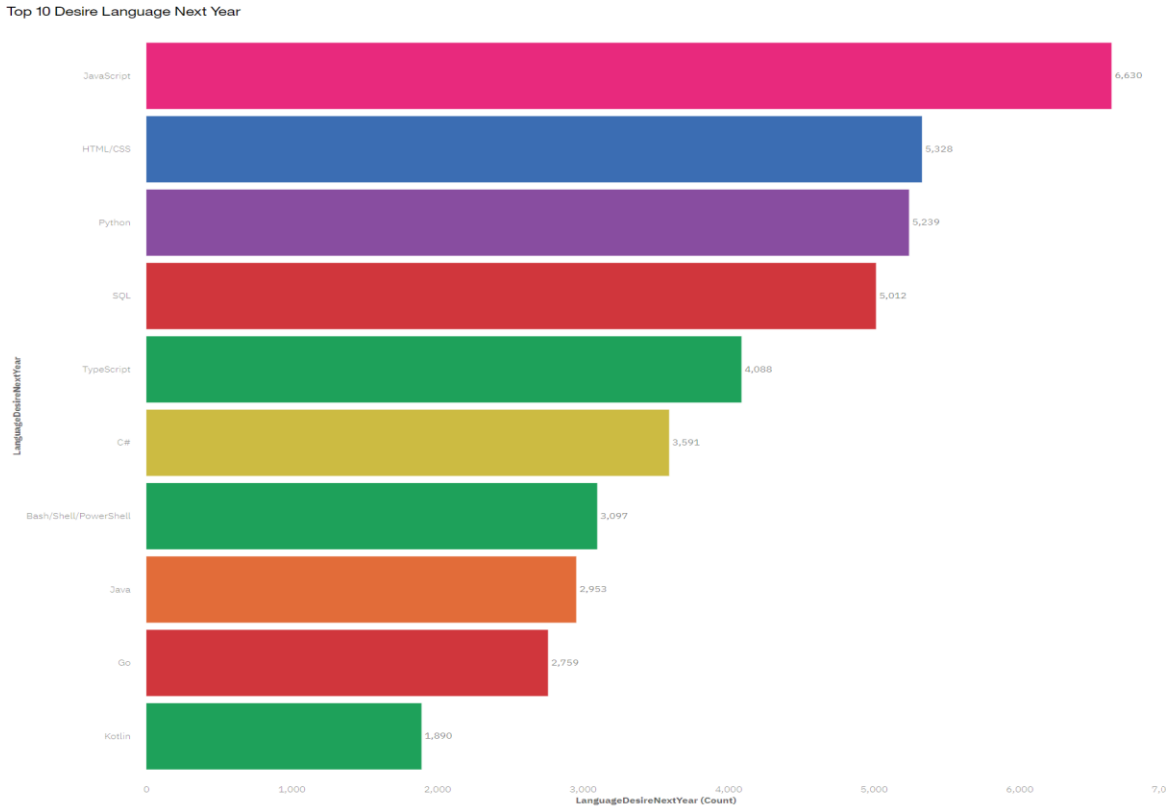
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



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PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

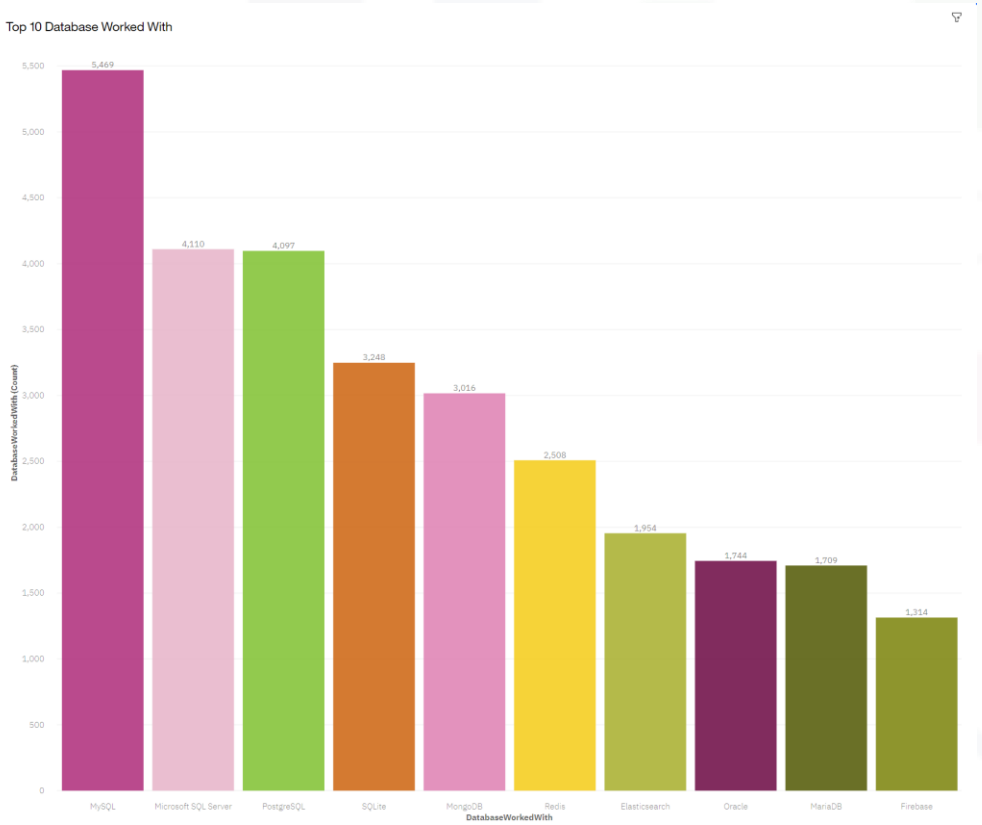
- JavaScript is the top trending language
- SQL and HTML/CSS are still great to use
- Python is becoming more popular

Implications

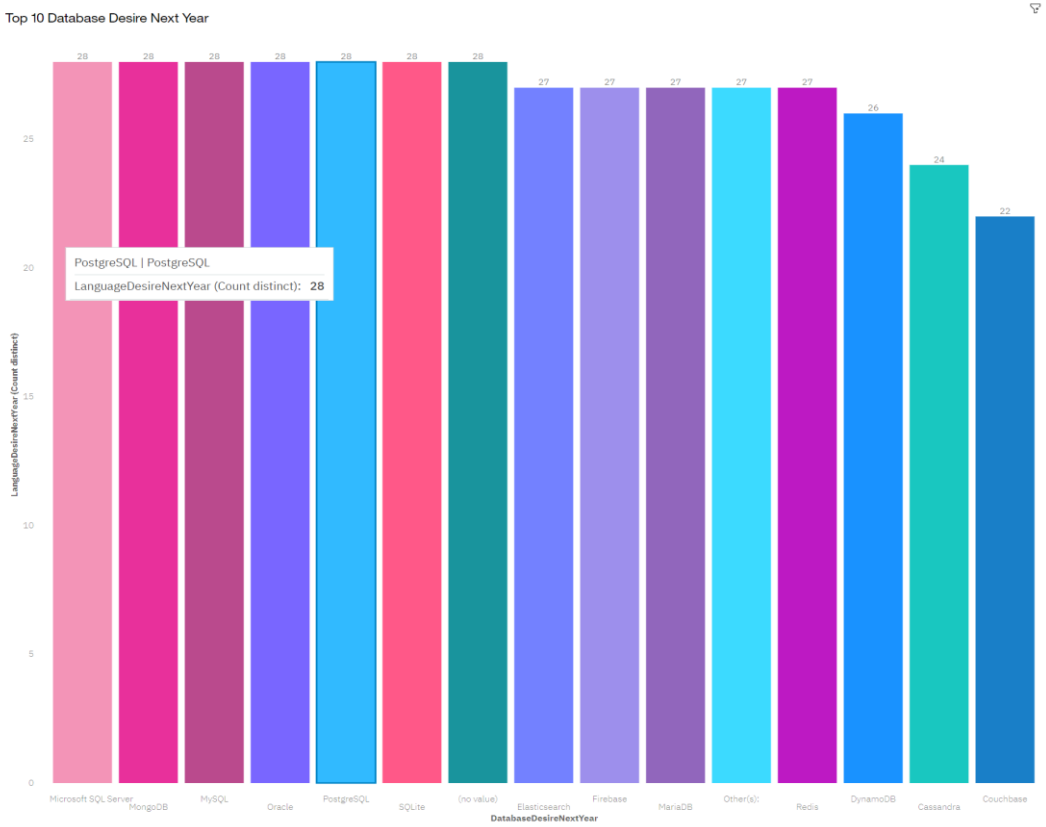
- Web developments are in high demand
- JavaScript is crucial to learn
- Python is becoming a trendy language to learn

DATABASE TRENDS

Current Year



Next Year



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DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- SQL Servers have the dominate trend
- RDBMS are slowly dying

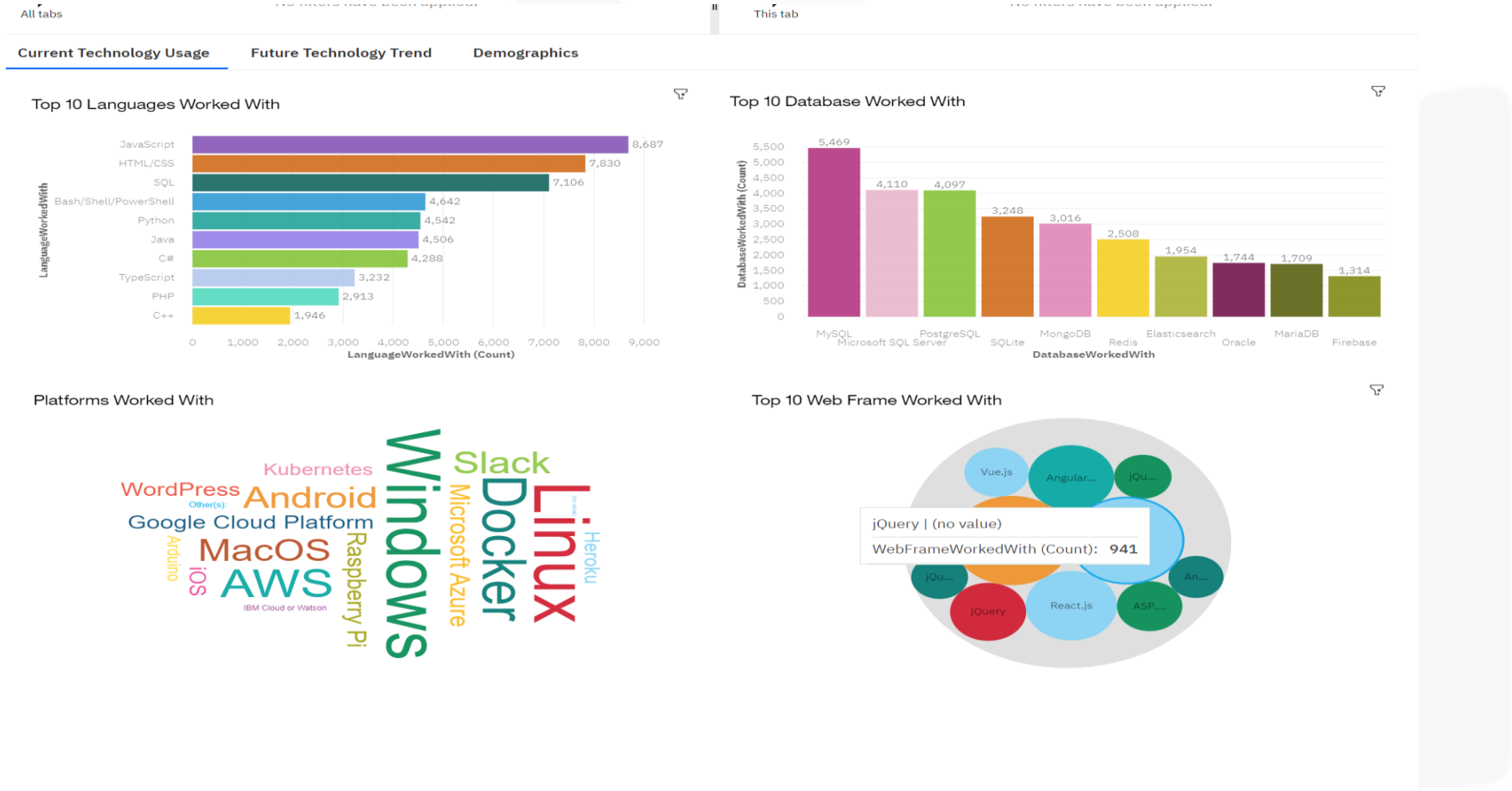
Implications

- People want to learn non relational databases
- Big data is going to continue to grow at a faster rate

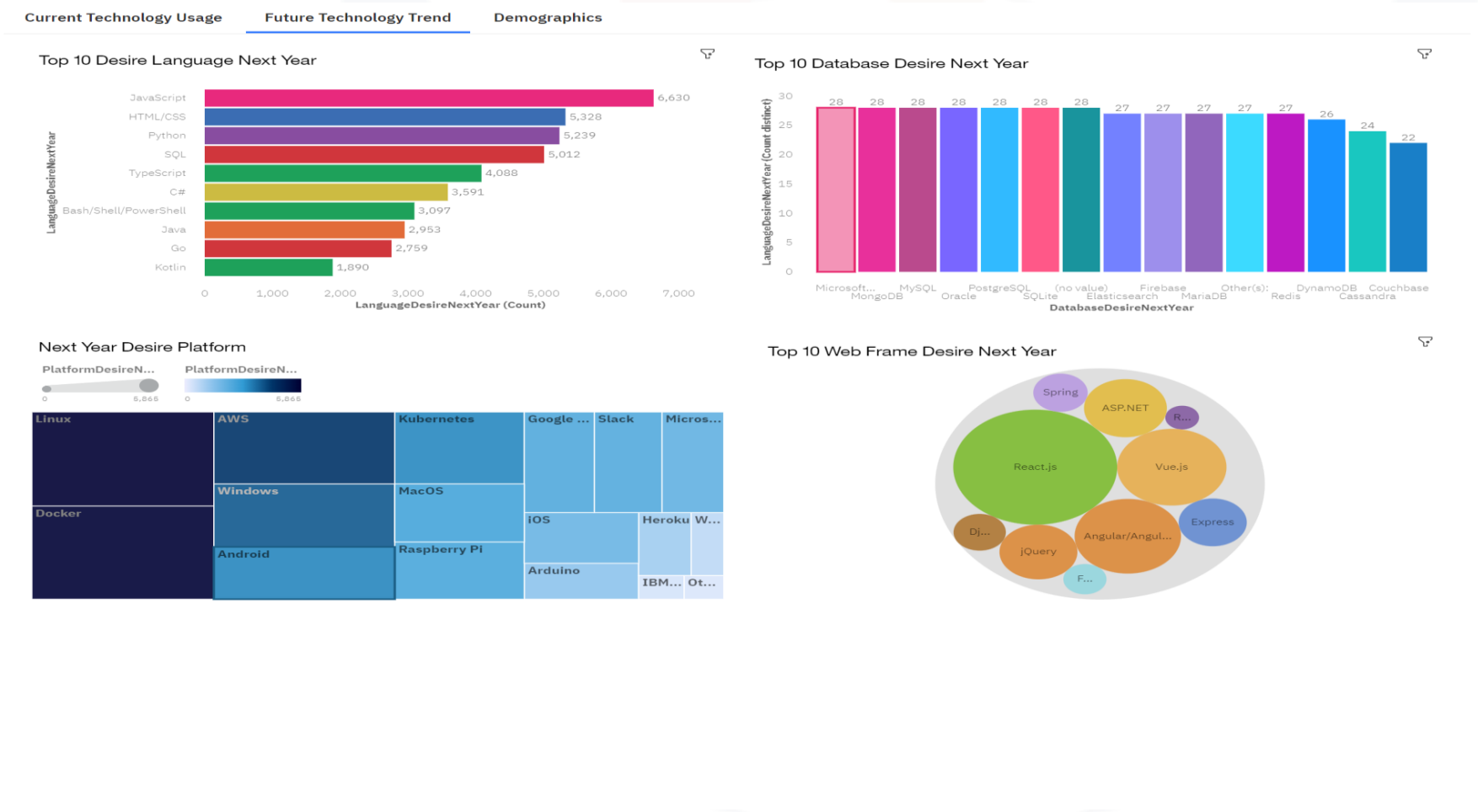
DASHBOARD

https://dataplatform.cloud.ibm.com/dashboards/263b4ce4-6c9b-467a-ac6d-2dce6d18525b/view/553bf47c23b737ea42c2cce4079b2e5378312359b1bbd10280867b490c697897a93b41c0c8284c5ed3100237a2e446519f

DASHBOARD TAB 1



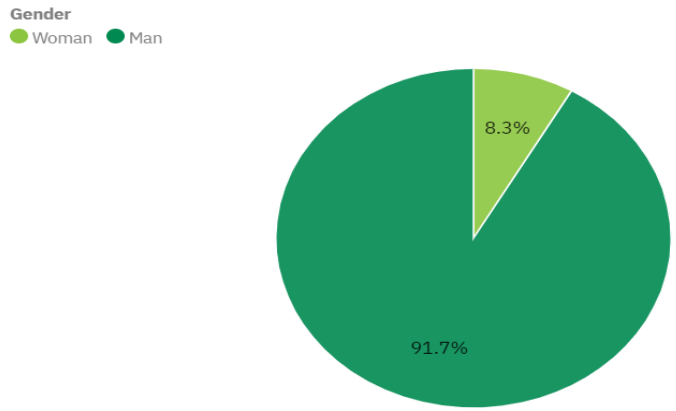
DASHBOARD TAB 2



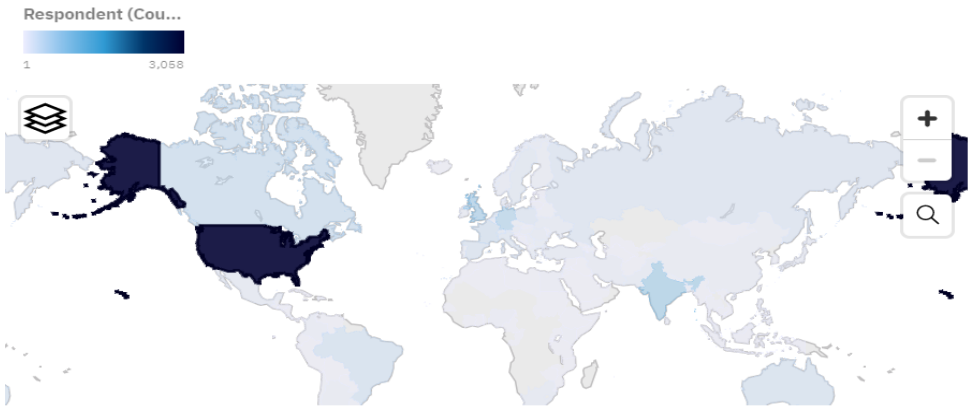
DASHBOARD TAB 3

Current Technology Usage | Future Technology Trend | Demographics

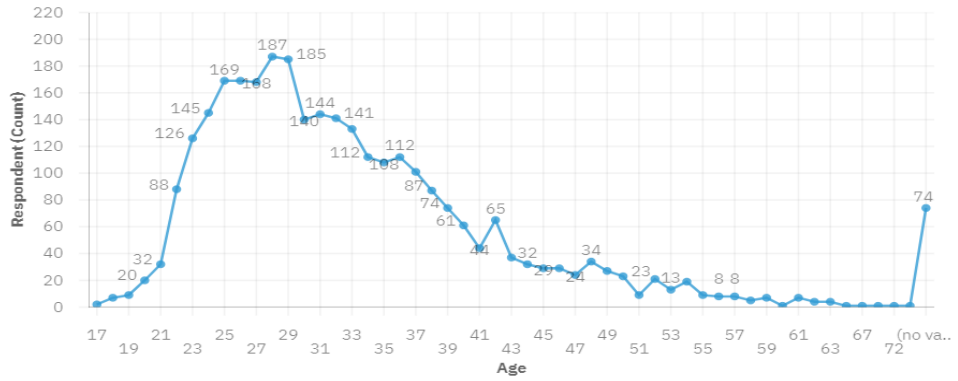
Respondents By Gender



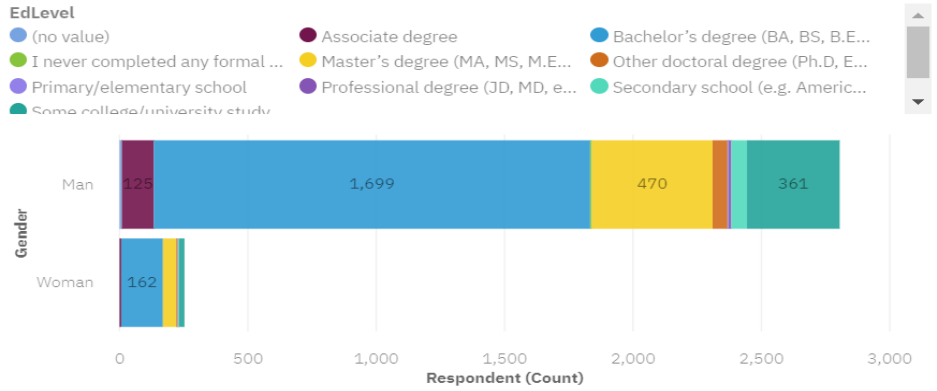
Respondents by Country



Respondents by Age



Education by Gender



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DISCUSSION

- It is clear from this study that the future is going towards big data. So the knowledge on big data and advanced programing languages will make a difference for these companies.

OVERALL FINDINGS & IMPLICATIONS

Findings

- Programing is becoming more advanced and necessary for businesses
- Databases are becoming more non relational

Implications

- People are learning more advanced programing languages
- Big data is everywhere and will continue to grow

CONCLUSION

- Top Programing languages
- Top database skills
- Popular IDEs
- Web scraping and accessing APIs to collect data

APPENDIX

- Data is from m5_survey_data_demographics.csv
- m5_survey_data_technologies_normalized.csv