



Report on Programming Survey

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OUTLINE



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EXECUTIVE SUMMARY



- Comparing present and future trends in IT
- Classification by demographics such as:
 - Age
 - Gender
 - Education Level
- Identifying most used Languages, Databases and Webframes

INTRODUCTION



- Datasets on Data Technologies and Demographics were collected, cleaned and analyzed
- The purpose is to conclude on how Data Technology platforms are being utilized
- Findings are based on demographics believed to have influenced the use of these technologies

METHODOLOGY



- Top programming skills that are most in demand from various sources including:
 - Job postings
 - Training portals
 - Surveys
- The data source is given here [link](#)
- The data utilized were gathered using APIs and Webscraping

RESULTS



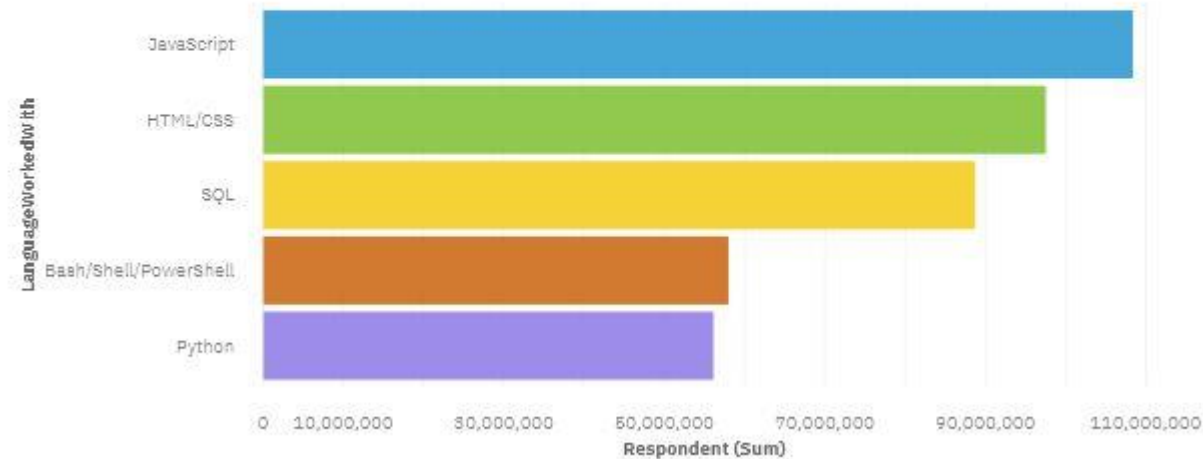
PROGRAMMING LANGUAGE TRENDS

Current Year

Top 5 LanguageWorkedWith

LanguageWorkedWith

● Bash/Shell/PowerShell ● HTML/CSS ● JavaScript ● Python ● SQL

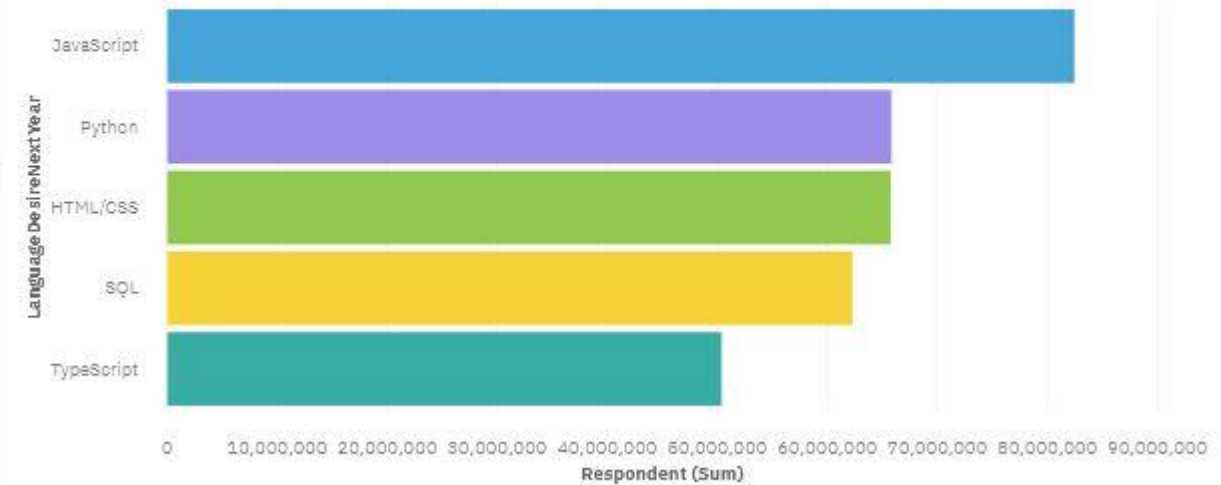


Next Year

Top 5 LanguageDesireNextYear

LanguageDesireNextYear

● HTML/CSS ● JavaScript ● Python ● SQL ● TypeScript



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

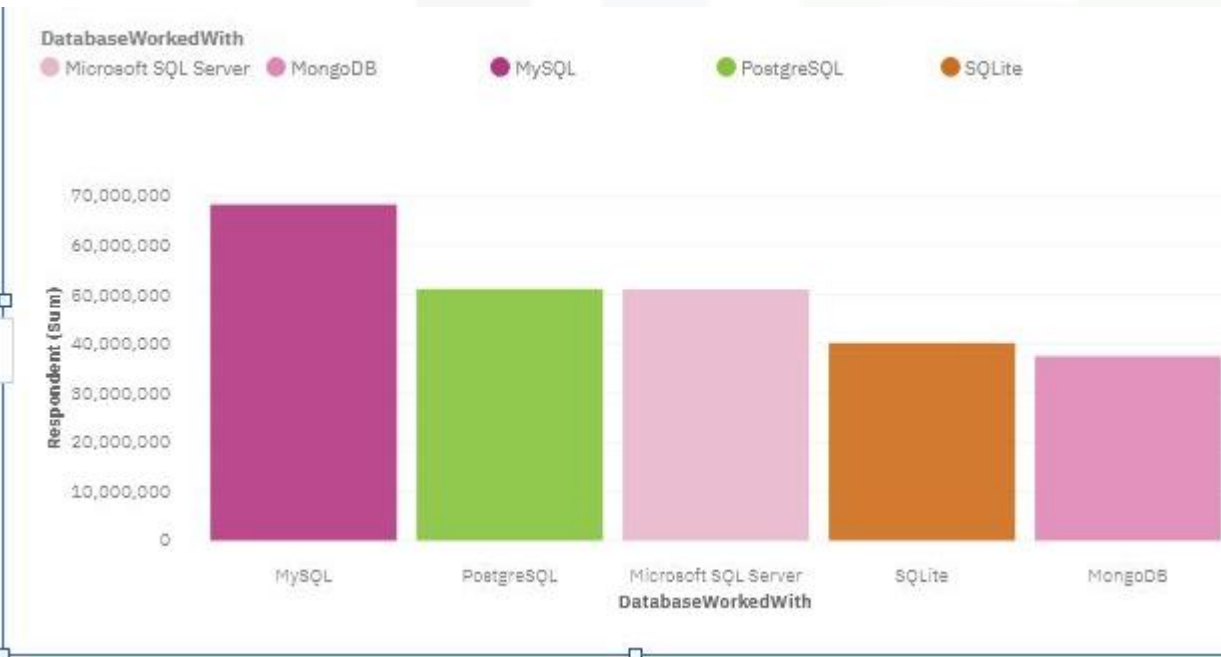
- JavaScript reaming the top programming language
- Python goes from 5th position to 2nd position

Implications

- There will be more people with JavaScript proficiency
- There is more demand for individuals with proficiency in Python language

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is top trending database for the current year but drop in future
- PostgreSQL and MongoDB are emerging database technologies

Implications

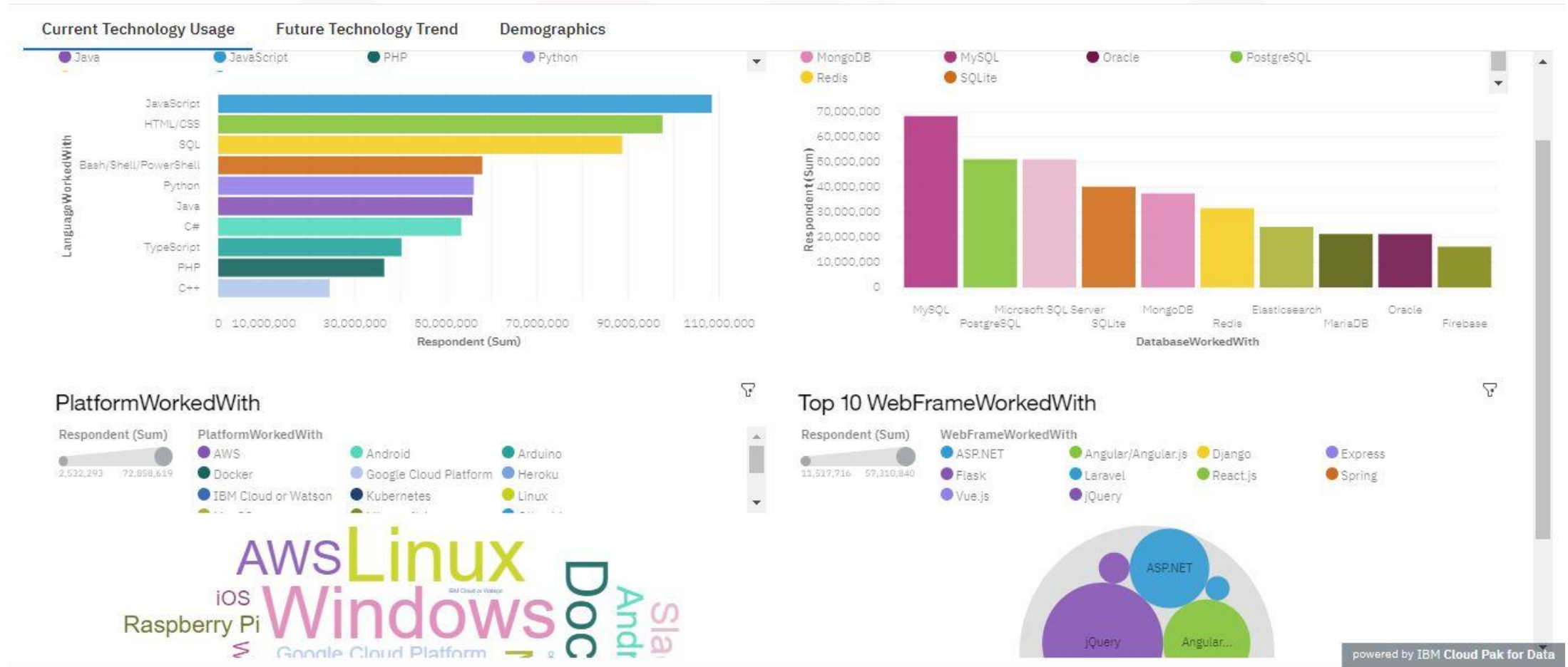
- Data Analysts primarily will not be required to have a compulsory knowledge of MySQL
- In the future there will be more people learning PostgreSQL and MongoDB

DASHBOARD



[<Dashboard Link>](#)

DASHBOARD TAB 1



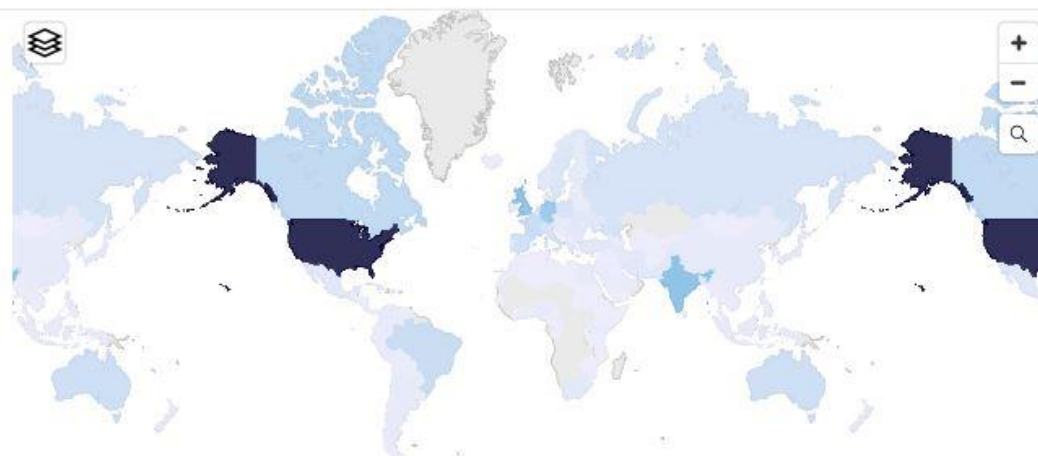
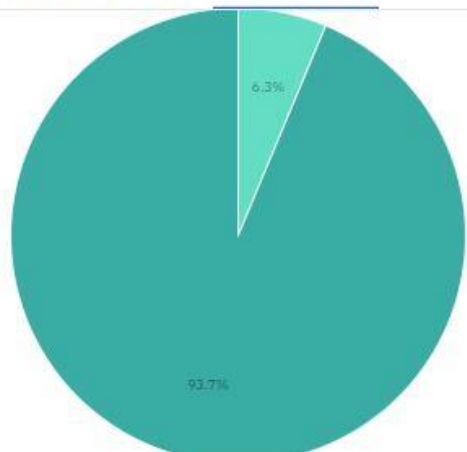


DASHBOARD TAB 3

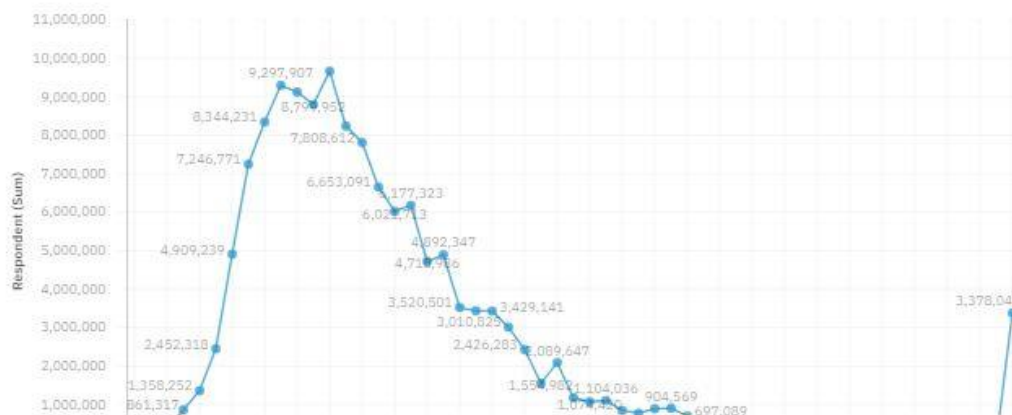
Current Technology Usage

Future Technology Trend

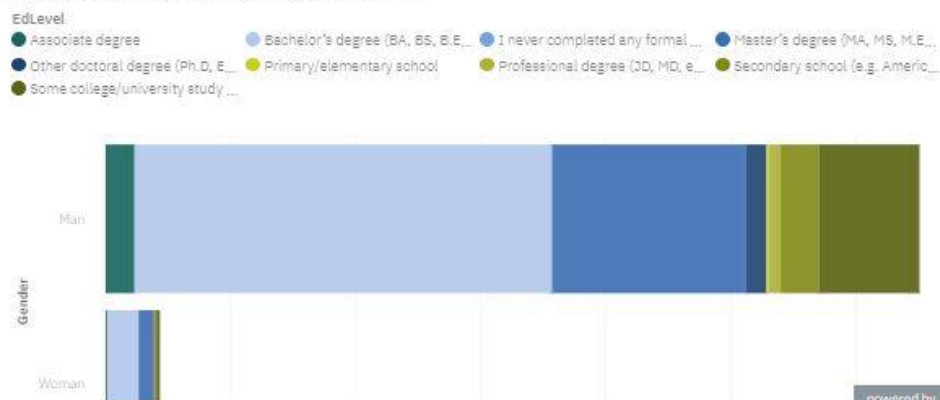
Demographics



Respondent Count by Age

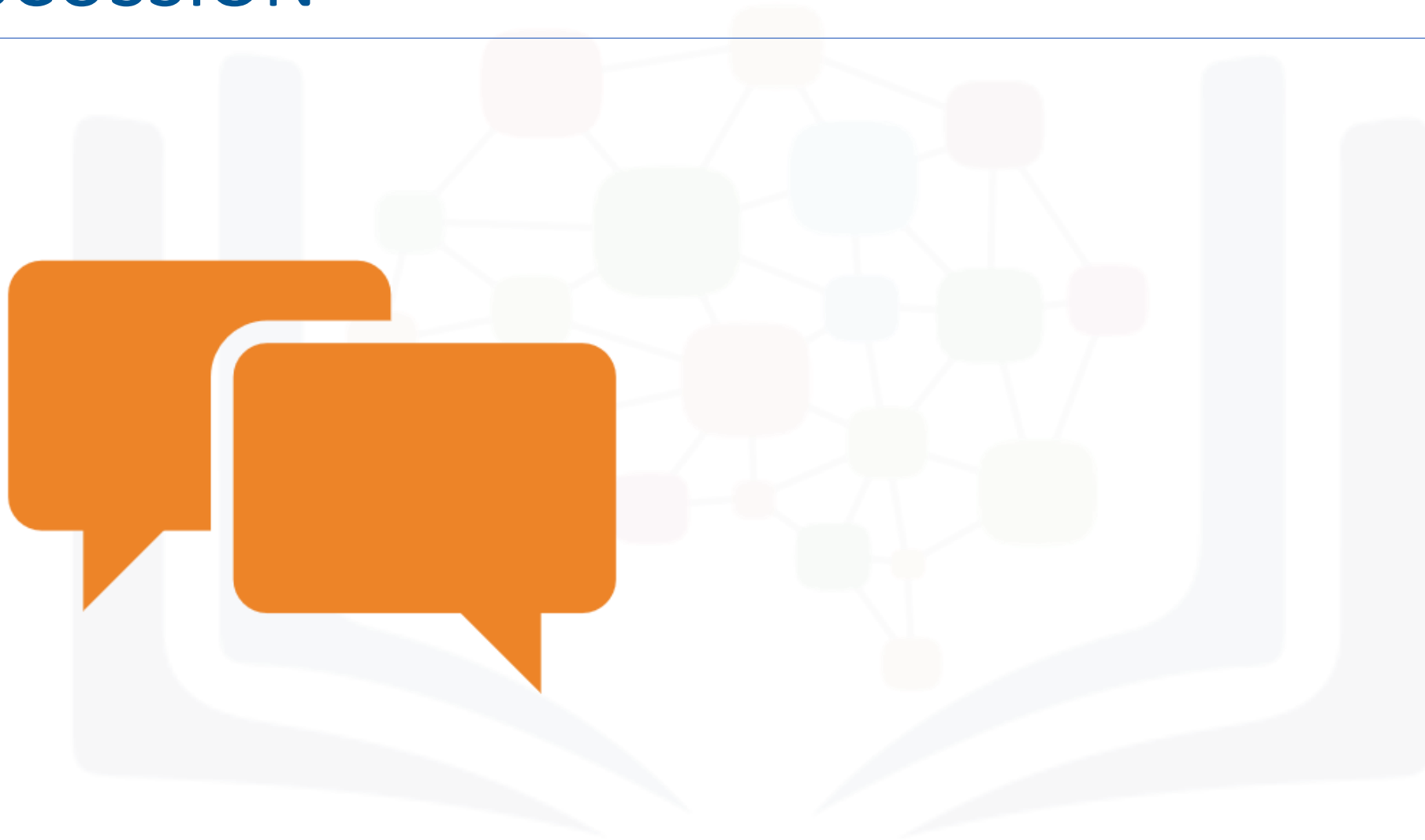


Respondent by Gender and EDLevel



powered by IBM Cloud Pak for Data

DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- The Male gender is the most domination in Data Technologies
- A large percentage of BSc holders are more interested in Data Technologies

Implications

- More of the IT roles will be filled by Male
- This will help improve their employability

CONCLUSION



- Python Language is a trend to look out for
- PostgreSQL and MongoDB are emerging database technologies
- A large percentage of BSc holders are increasing employability by interests shown in Data Technologies

APPENDIX

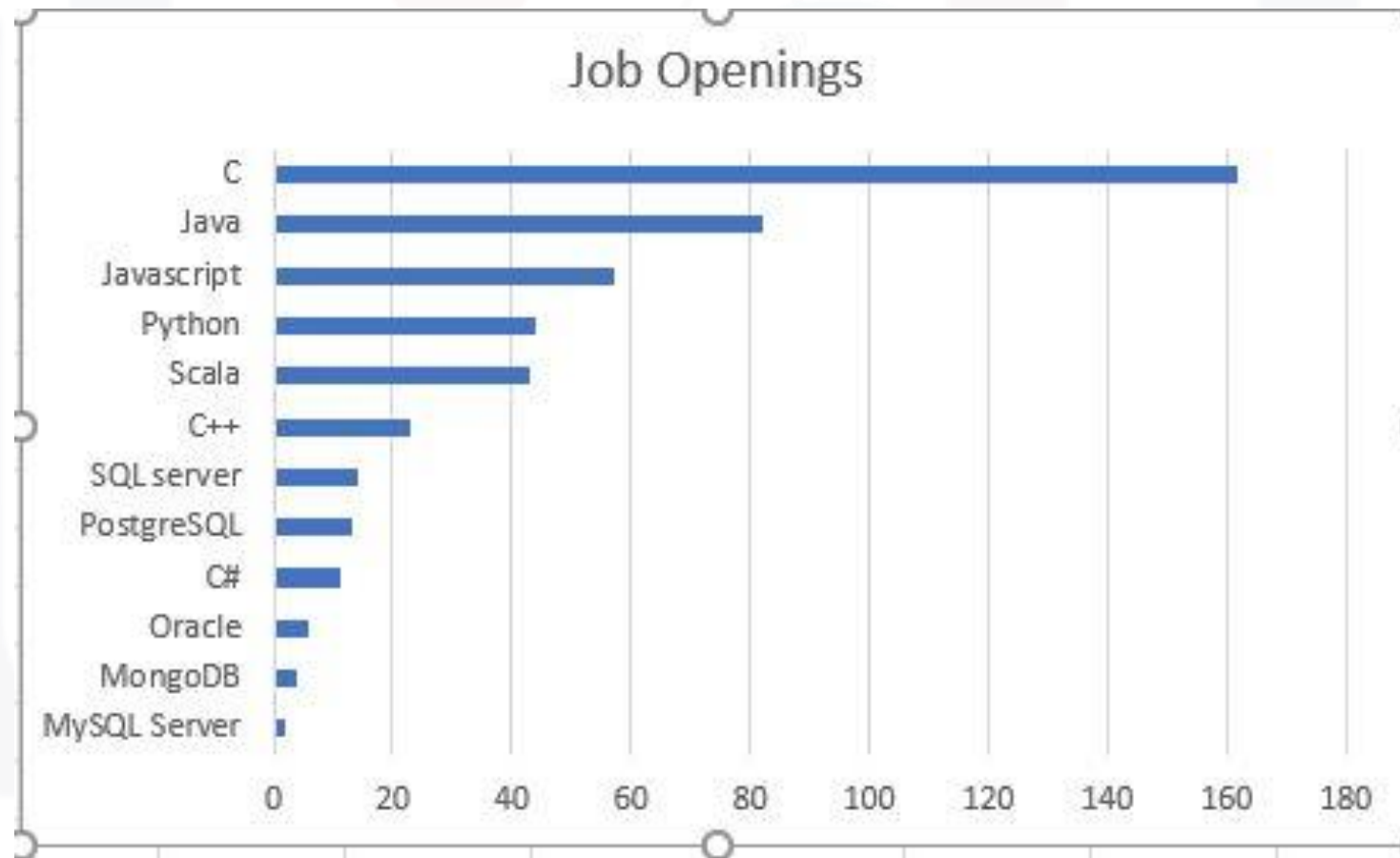


```
In [6]: my_file = pd.read_csv(r'C:\Users\...\Documents\data.csv')  
my_file.head()
```

Out[6]:

	Very interested	Somewhat interested	Not interested
Big Data (Spark / Hadoop)	1332	729	127
Data Analysis / Statistics	1688	444	60
Data Journalism	429	1081	610
Data Visualization	1340	734	102
Deep Learning	1263	770	136

GITHUB JOB POSTINGS



POPULAR LANGUAGES

