Data Analyst Capstone Project

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OUTLINE

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- Methodology
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EXECUTIVE SUMMARY

- **Current Technology Usage**
  - Top 10 Languages
  - Top 10 Databases
  - Platforms
  - Top 10 Web Frameworks
- **Future Technology Trends**
  - Top 10 Languages Desired
  - Top 10 Databases Desired
  - Platforms Desired
  - Top 10 Web Framework Desired
- Demographics
  - Gender
  - Country
  - Age
  - Education Level / Gender

INTRODUCTION

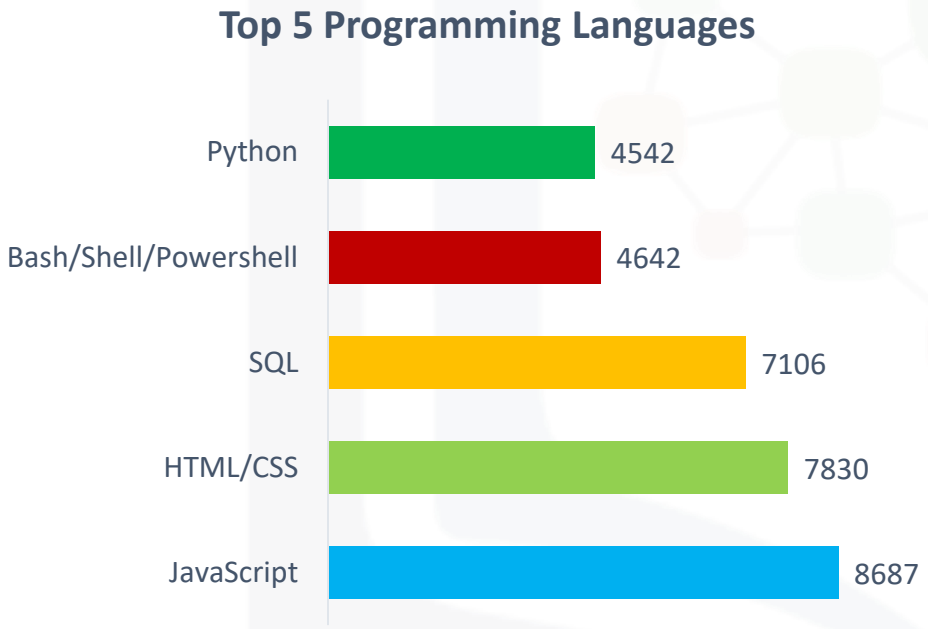
- The top in demand programming languages
- The top in demand database
- Most popular IDEs

METHODOLOGY

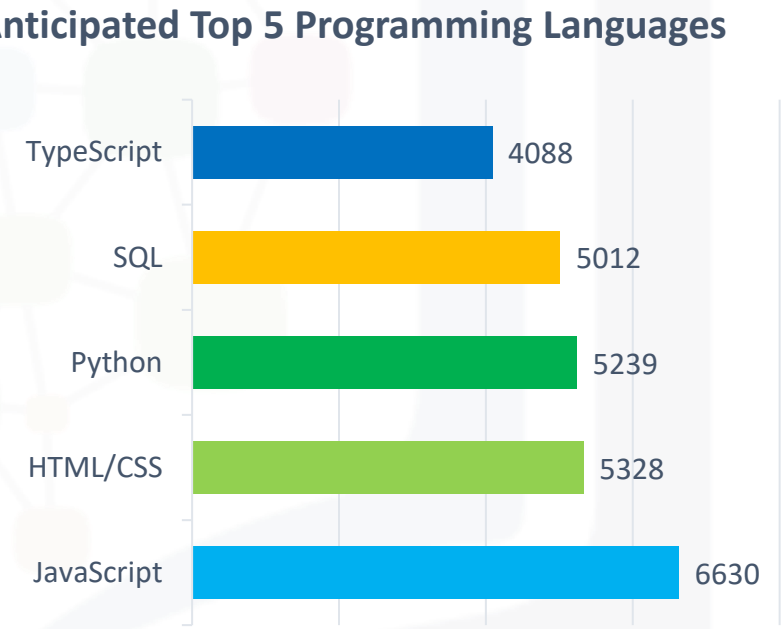
- Collecting Data using APIs
  - The GitHub Jobs API
- Scrape Data from the web
- Data Munging
  - Removing Duplicates
  - Imputing Missing Values
  - Normalizing Data
- EDA
  - Analyzing Data and Finding Outliers
  - Finding Correlation
- Data Visualization and Building a Dashboard

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

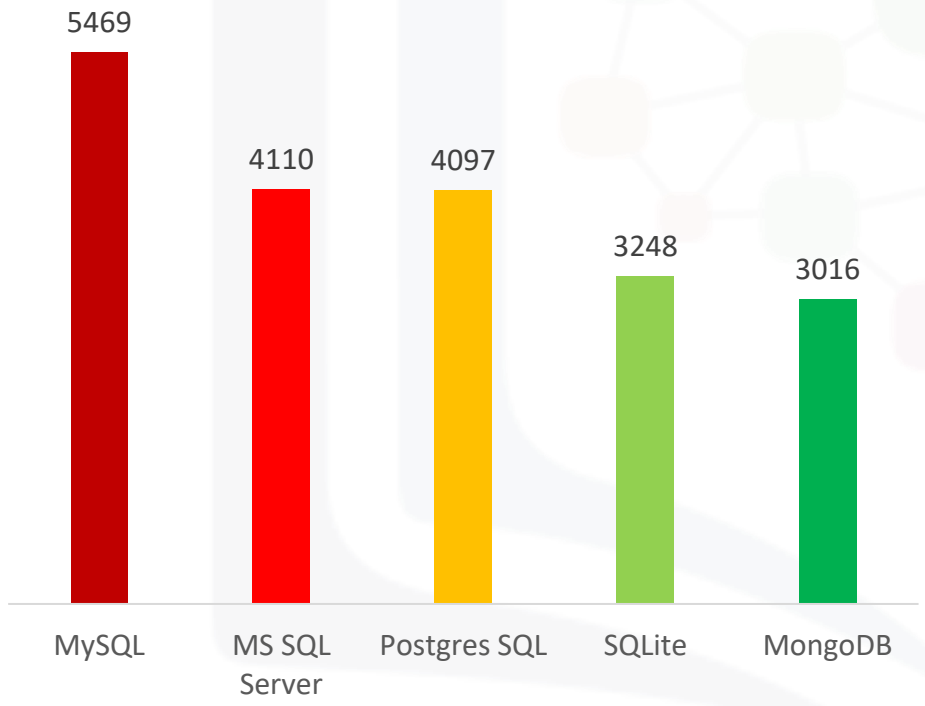
- JavaScript Is the most popular language to use currently and also in the future.
- HTML/CSS is the second most popular language to use currently in the future.
- Python trend is rising clearly.

Implications

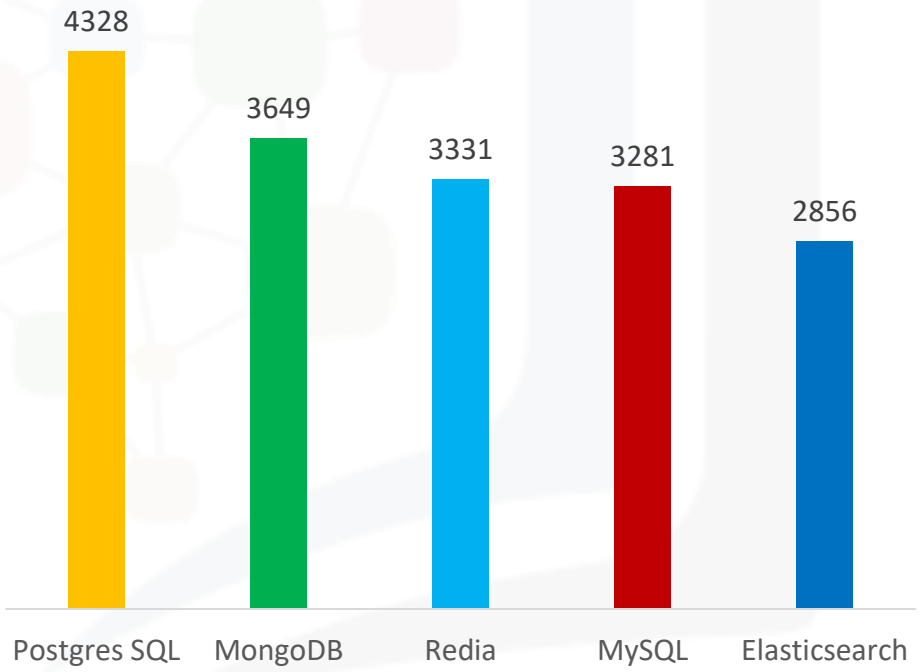
- Python Is than you trend for the future I need to be focused.
- TypeScript might be replacing JavaScript in the long future.
- SQL is losing its momentum.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- RDBMS has the dominant trend currently, but not for long.
- Non-RDBMS have the dominant trend in the future.

Implications

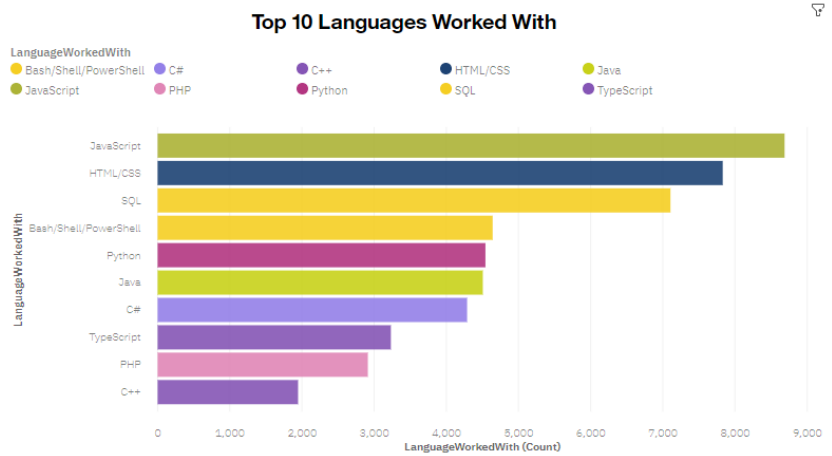
- NoSQL databases are getting more trending.
- Big Data appears to become popular in the near future.

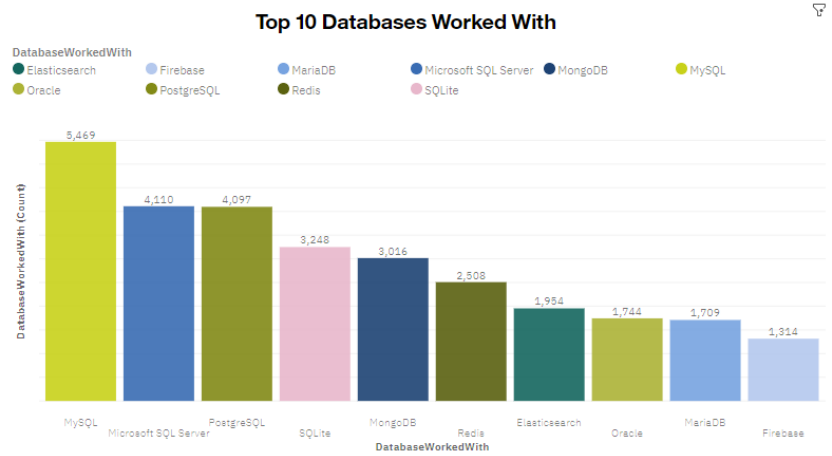
DASHBOARD

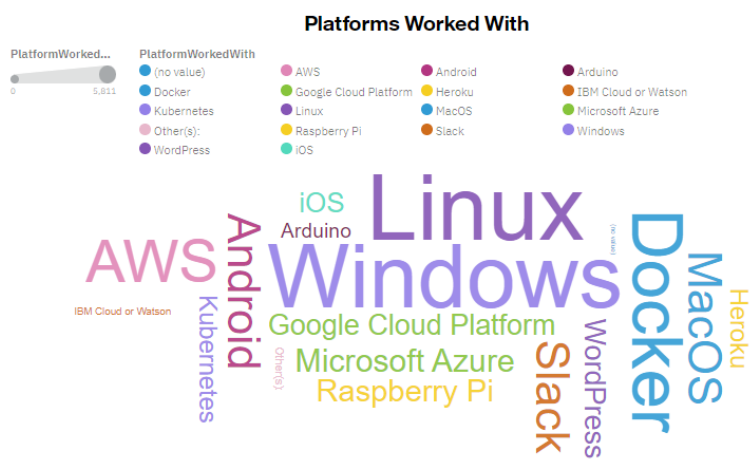
Cognos Dashboard Link

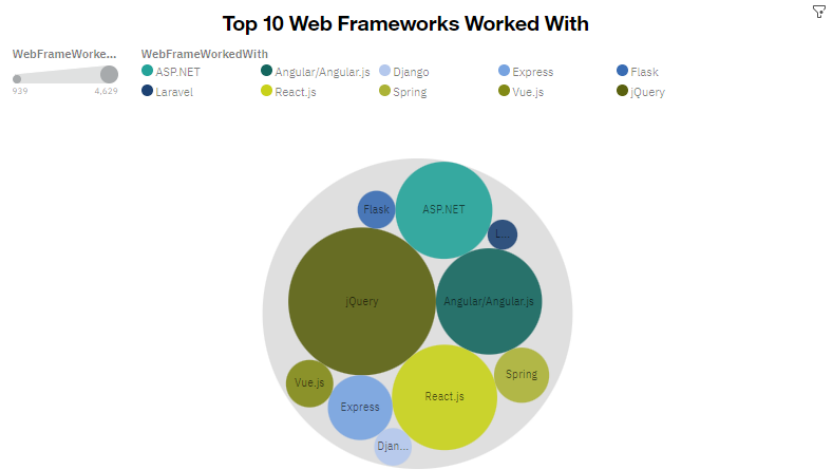
DASHBOARD TAB 1

Current Technology Usage | Future Technology Trend | Demographics





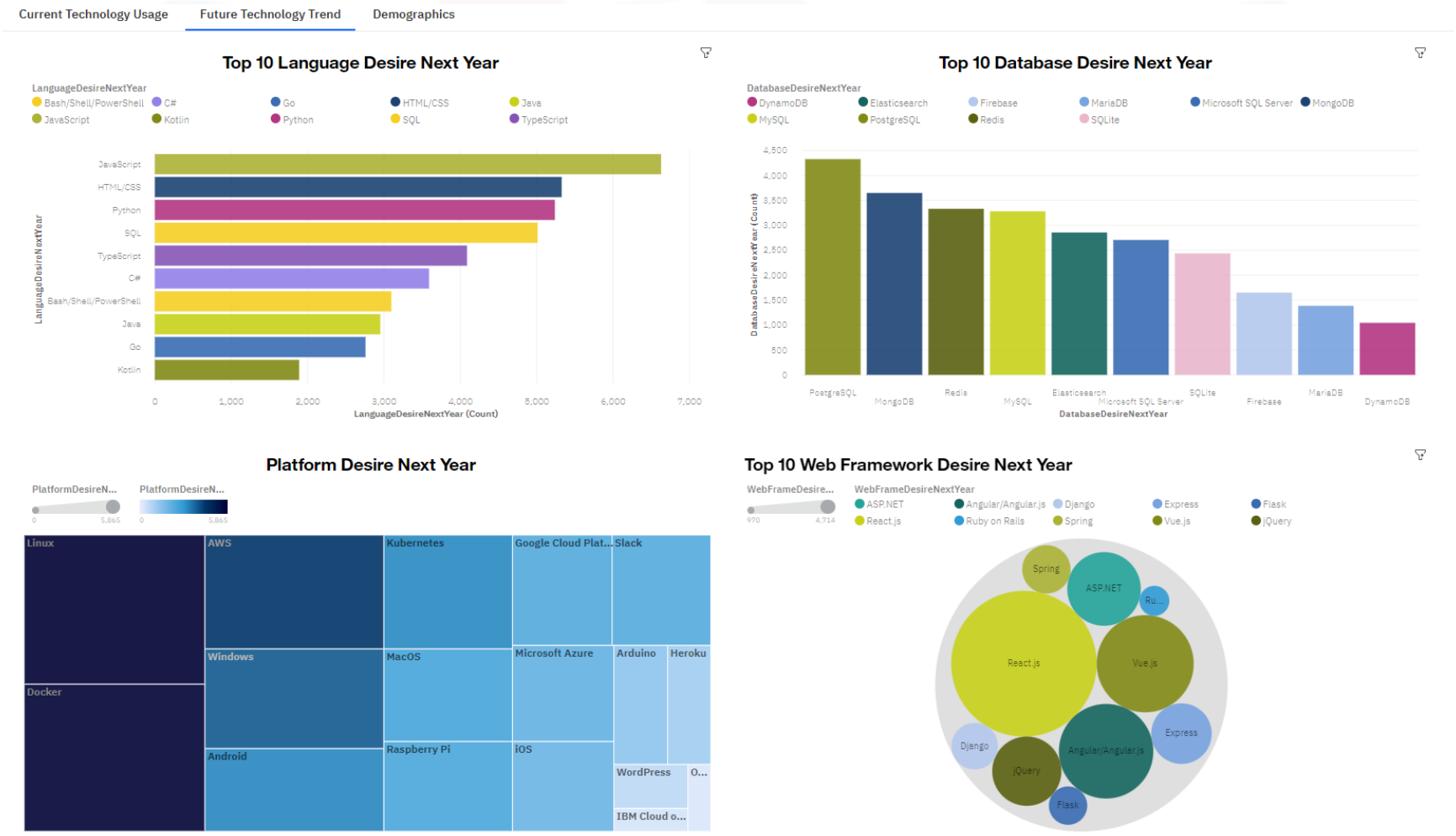




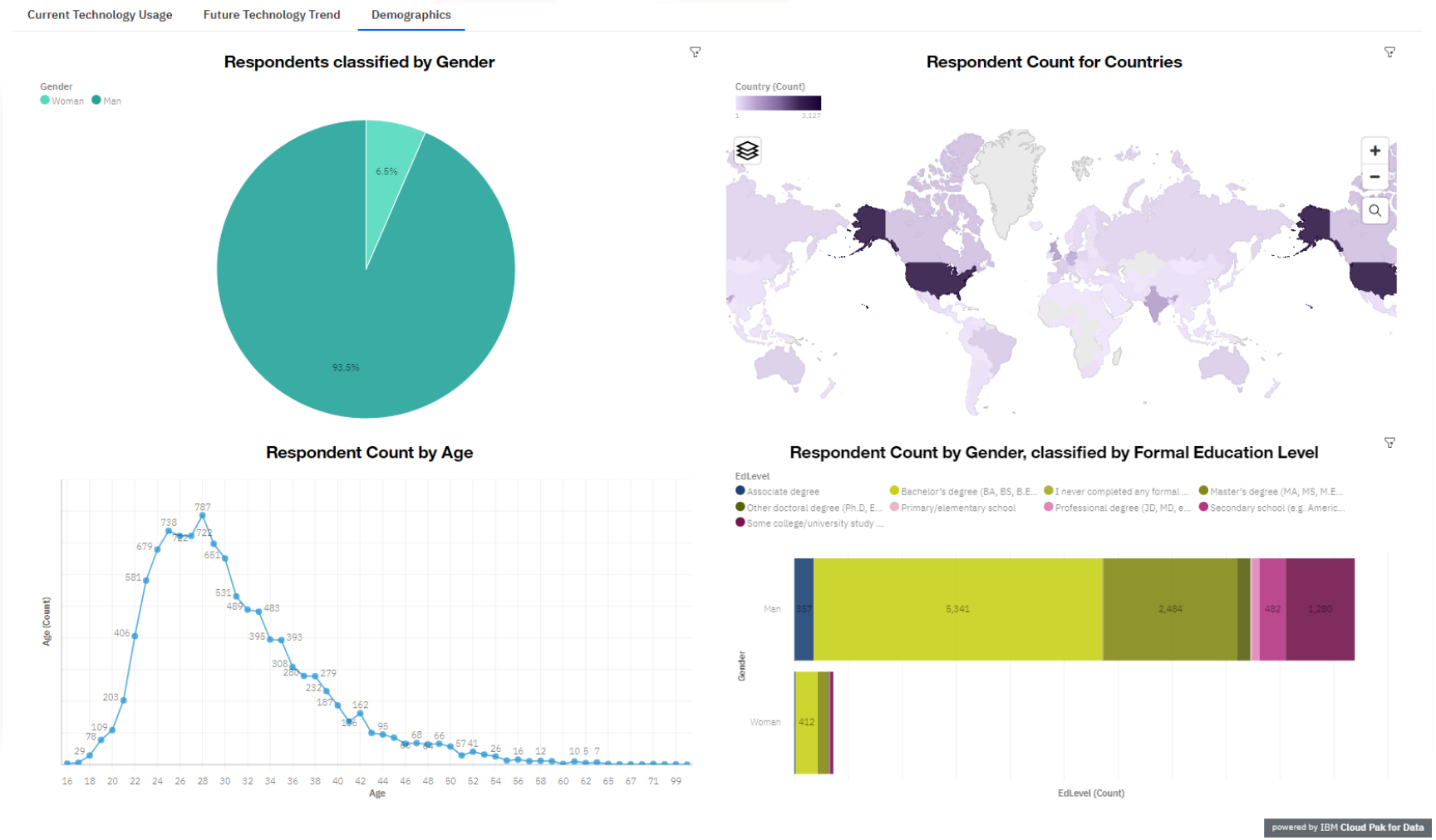
IBM Developer

SKILLS NETWORK

DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION

- It is clear from the previous study that, the upcoming future is big for big data and so the curve of dig data technologies and related programming languages is getting higher.

OVERALL FINDINGS & IMPLICATIONS

Findings

- The upcoming programming trend is for easier programming languages like Python, TypeScript.
- The databases' upcoming trend is for non relational databases.

Implications

- People are looking for advanced programming languages along with easy learning.
- People are looking for big data technologies as data is everywhere.

CONCLUSION

- Python is getting high in future demand.
- Non relational databases are trending and Postgres is getting lights on.
- React framework is getting higher interest.