



Technology Trends and Analysis Presentation

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OUTLINE



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EXECUTIVE SUMMARY



- Trends in Programming languages and databases all over the world.
- Demographics survey.
 - Survey regarding the type of jobs and no. of jobs were collected.
 - Respondents Skill set, Education and their Job & career satisfaction were recorded.
- Technological gap in Countries.
- Gender gap in Jobs.

INTRODUCTION



- About
 - Analyzing the trends in Software Development
- Purpose
 - Identify Skill Requirements for the future.
 - What are the top programming languages demand.
 - What are the top database skills in demand.
- Audience
 - Human Resource Managers and IT Heads.

METHODOLOGY



- Data Collection from various and relevant sources.
- Exploring data for reliability.
- Data wrangling
- Exploratory Data Analysis
 - Analyzing the data distribution and identifying outliers.
- Data Visualization.
- Creating Dashboard.
- Presentation.

RESULTS

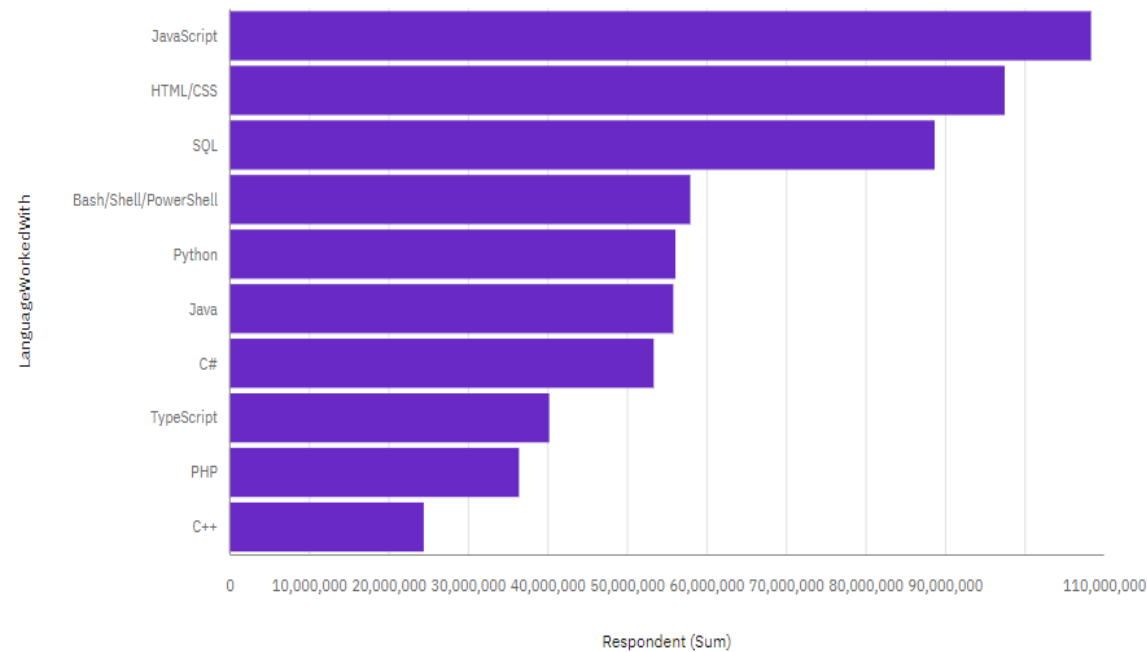
MainBranch	Hobbyist	OpenSourcer	OpenSource	Employment	Country	Student	EdLevel	UndergradMajor	...	WelcomeChange	SONewContent	Age	Ger
I am a developer by profession	No	Never	The quality of OSS and closed source software ...	Employed full-time	United States	No	Bachelor's degree (BA, BS, B.Eng., etc.)	Computer science, computer engineering, or sof...	...	Just as welcome now as I felt last year	Tech articles written by other developers;Indu...	22.0	I
I am a developer by profession	Yes	Once a month or more often	The quality of OSS and closed source software ...	Employed full-time	New Zealand	No	Some college/university study without earning ...	Computer science, computer engineering, or sof...	...	Just as welcome now as I felt last year	NaN	23.0	I
I am a developer by profession	Yes	Less than once a month but more than once per ...	OSS is, on average, of HIGHER quality than pro...	Employed full-time	United States	No	Master's degree (MA, MS, M.Eng., MBA, etc.)	Computer science, computer engineering, or sof...	...	Somewhat more welcome now than last year	Tech articles written by other developers;Cour...	28.0	I
I am a developer by profession	Yes	Never	The quality of OSS and closed source software ...	Employed full-time	United Kingdom	No	Master's degree (MA, MS, M.Eng., MBA, etc.)	NaN	...	Just as welcome now as I felt last year	Tech articles written by other developers;Indu...	26.0	I
I am a developer by profession	Yes	Less than once a month but more than once per ...	The quality of OSS and closed source software ...	Employed full-time	Australia	No	Bachelor's degree (BA, BS, B.Eng., etc.)	Computer science, computer engineering, or sof...	...	Just as welcome now as I felt last year	Tech articles written by other developers;Indu...	29.0	I

Results are based on this table

PROGRAMMING LANGUAGE TRENDS

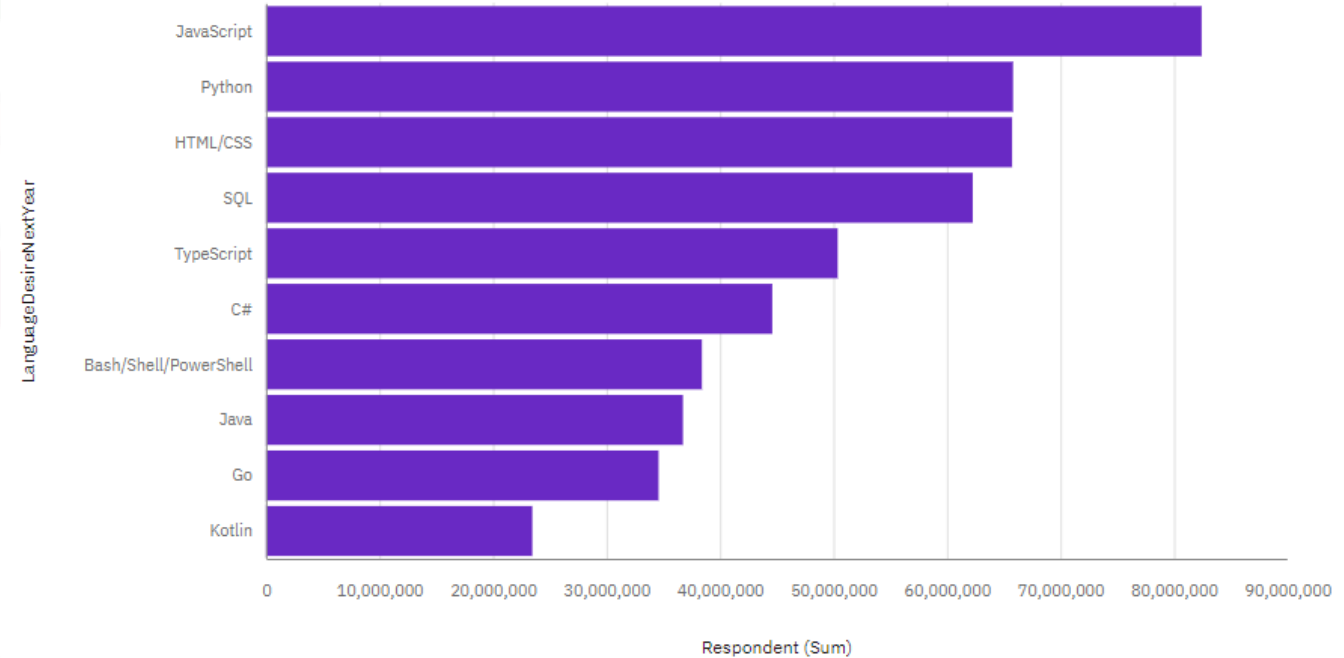
Current Year

Top 10 Languages Worked With



Next Year

Top 10 Languages Desired Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript, html/CSS, SQL are in the top 3 this year.
- Typescript and Python are becoming popular next year.
- PowerShell edged out in the next year.

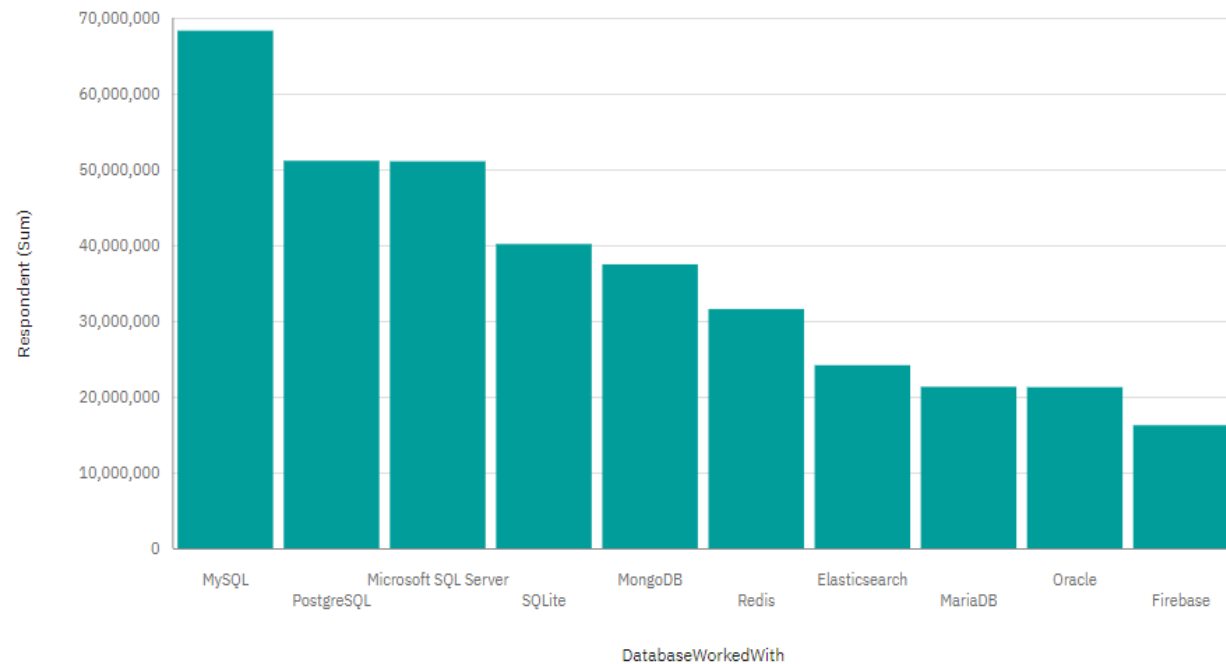
Implications

- Web development languages are still in demand.
- Big Data technology in companies still require SQL.
- With AI and ML rising in demand, Python will be the best choice.

DATABASE TRENDS

Current Year

Top 10 Data Base Worked With



Next Year

Top 10 Database Desired Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is most popular database.
- MongoDB and PostgreSQL will be upcoming favorites.
- New and upcoming database is Elasticsearch.

Implications

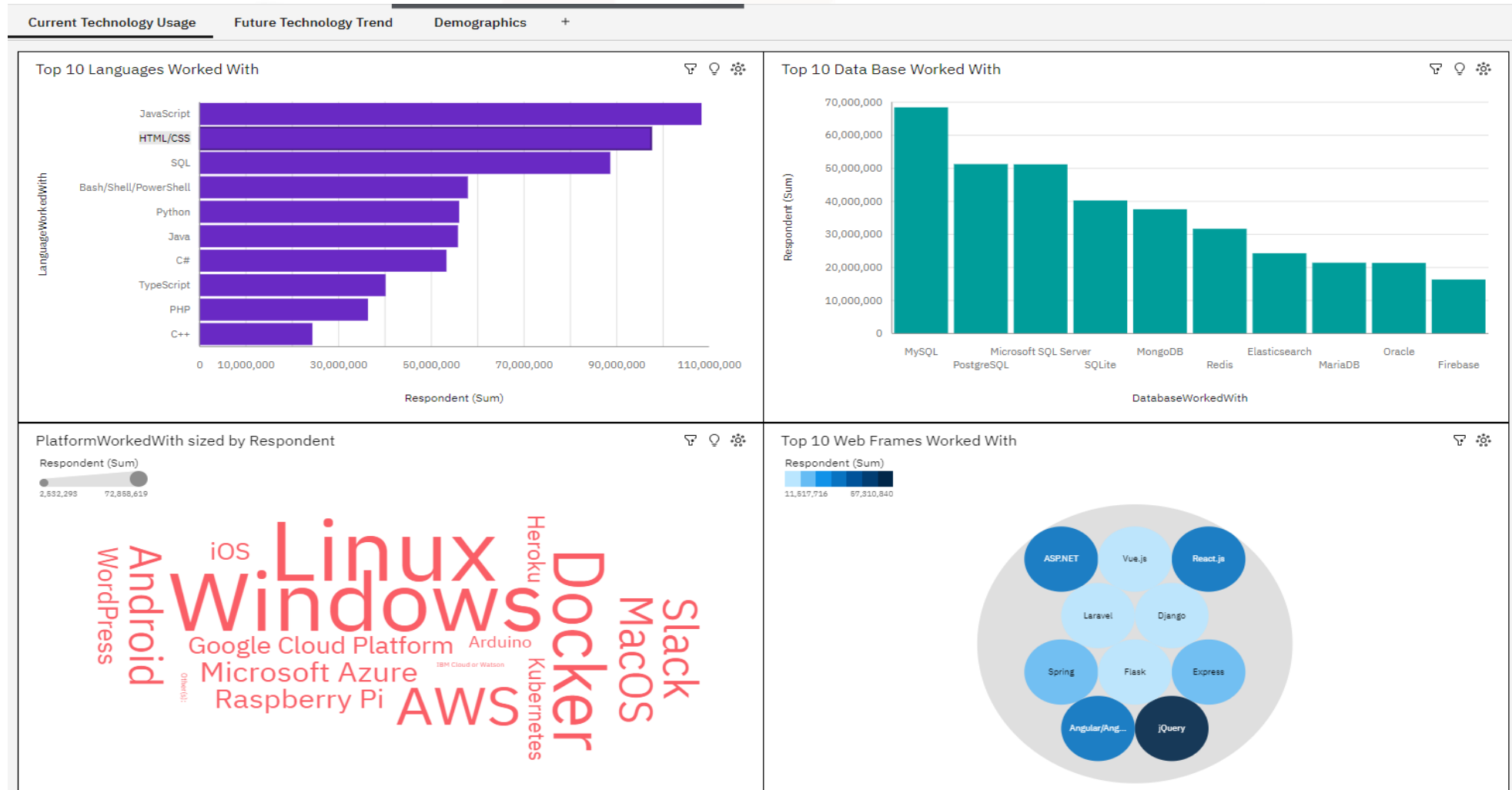
- Open source databases are still preferred.
- No SQL DB's will be go-to for saving Non-Relational Data.
- Redis supports abstract data types.

DASHBOARD

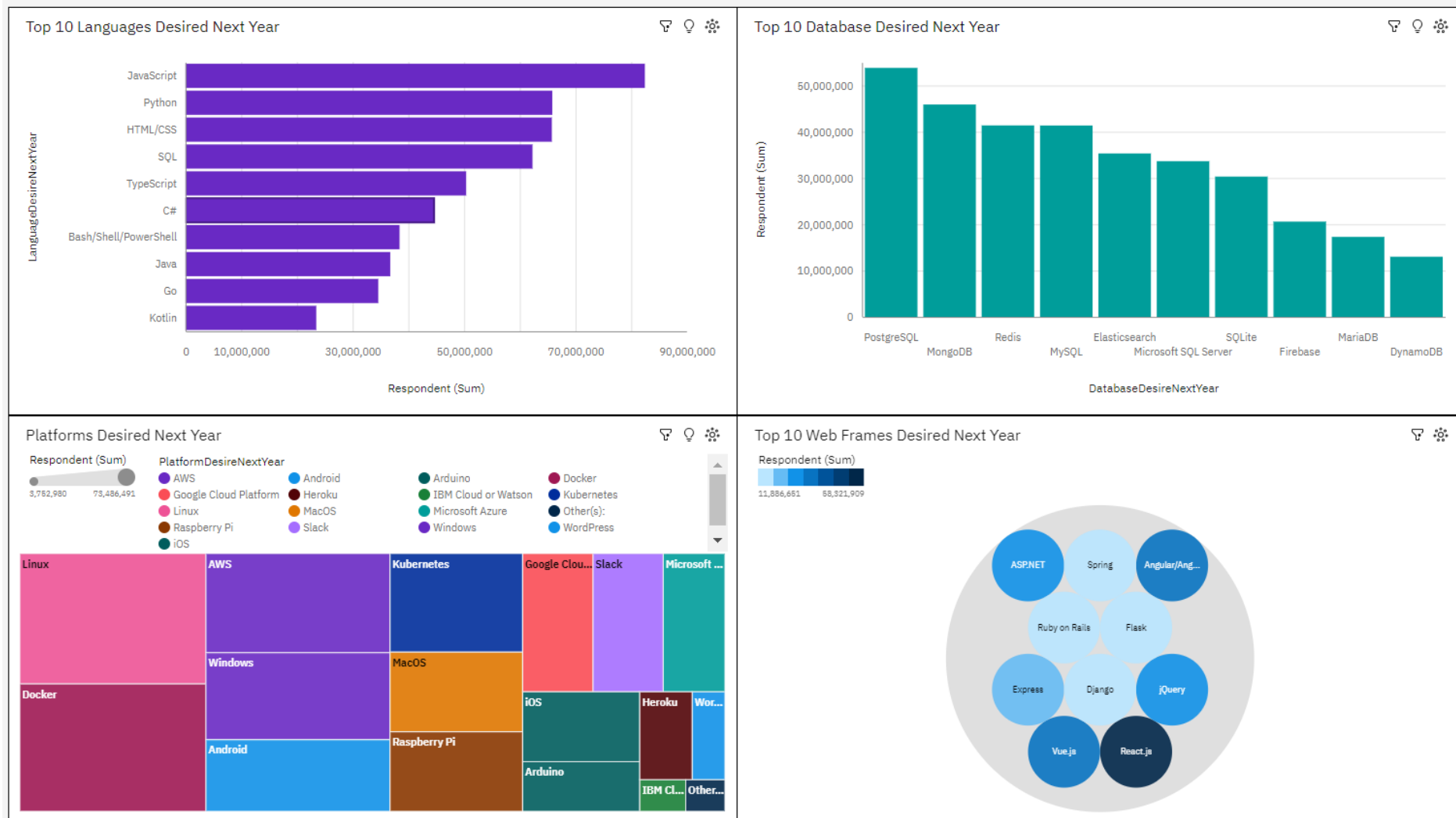


<https://github.com/ShashankParamashivam/ShashankParamashivam/blob/main/Data%20Analysis%20Project%20Dashboard.pdf>

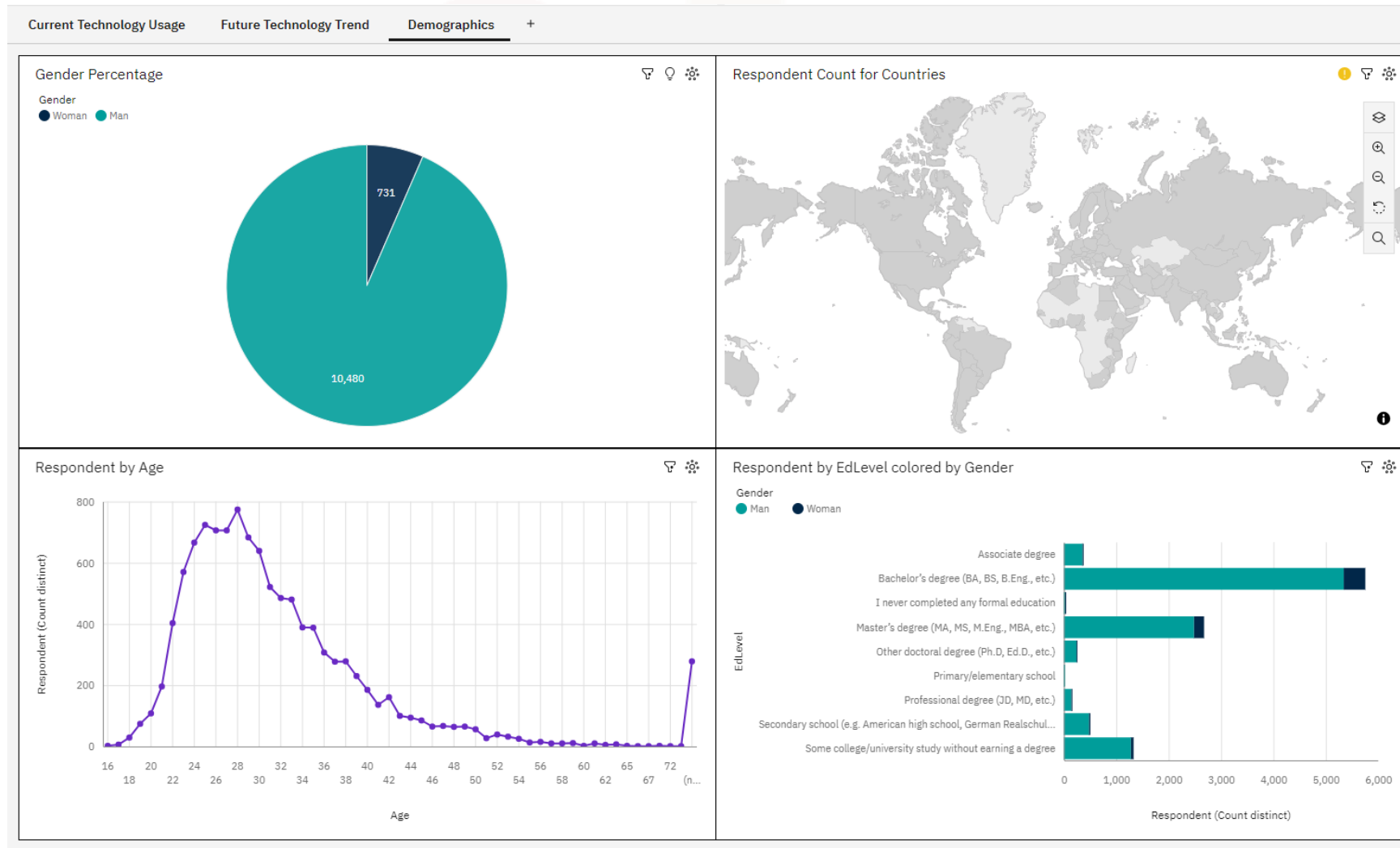
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3



DISCUSSION



- Technology Trends in current and future scenario.
- Training and reskilling works on trend basis.
- Female participation in technology field.
- Bridging the gaps in technological development in countries.

OVERALL FINDINGS & IMPLICATIONS

Findings

- There is a fast changing trend of technology every year.
- Concentration on several countries like India and USA.
- There is a tremendous gender gap.

Implications

- Companies should be ready to adapt to changing trends.
- Technologically backward countries need to start implementing technology improvements.
- Job hiring should balance hiring every type of gender.

CONCLUSION



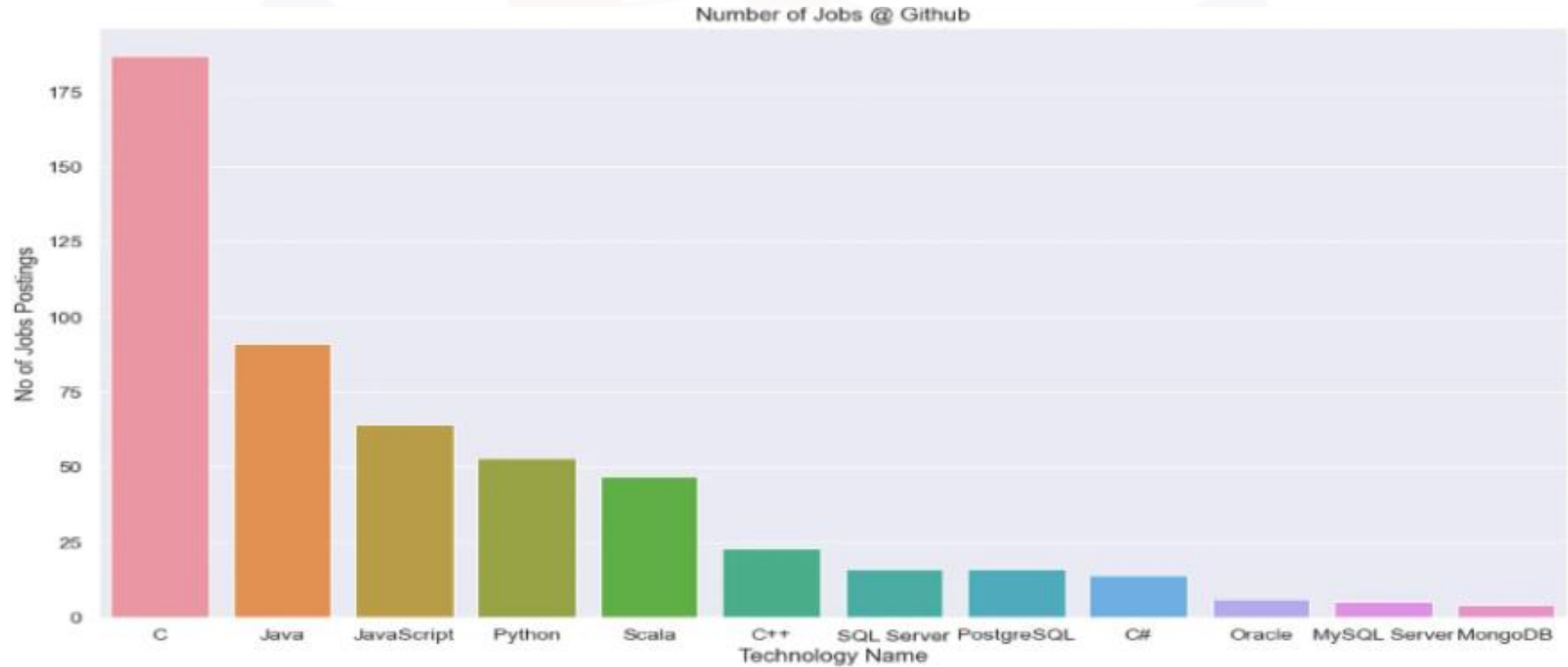
- Technological trends for current and next year.
- Programming language, Database and Platform overview.
- Demographics overview.
- Actions to be taken.
- Incorporate new technologies like ML and AI to stay in competition and relevant.

APPENDIX



- Include any relevant additional charts, or tables that you may have created during the analysis phase.

JOB POSTINGS



POPULAR LANGUAGES

