<Current scenario and future scenario of the Data analysis >

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OUTLINE

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EXECUTIVE SUMMARY

- •The top 3 current and future programming languages the respondents worked and wanted to work with were: Java Script, HTML/CSS, and SQL
- •The Top 3 data bases the respondents worked with are: MySQL, Microsoft SQL Server, and PostgreSQL.
- •However, in the future, the respondents wanted to work with PostgreSQL was the first, next was Mongo DB, and third was MySQL
- •The top 3 cloud platforms the respondents worked with were: Windows, Linux, and Docker
- •Yet, in the future, the respondents wanted to work with Linux, Docker, and AWS.
- •The top 3 Web Frames the respondents worked with were: jQuery, Angular/Angular.js, and React.js
- •But, in the future, the respondents wanted work with React.js, Vue.js, and Angular/Angular.js

INTRODUCTION

- What technological languages, tools, and platforms would be used by programmers in the future?
- The problem: There are many languages, tools, and platforms being utilized by professionals
- What specific programming languages, databases, Cloud platforms and Web Frames programmers use and want to use in the future?

METHODOLOGY

- •Data source: Respondents from the US, Canada, the UK, Germany, France, Spain, India, Brazil, and Australia
- •Info gathered:
- •Gender
- •Formal education level
- •Age
- •Current programming languages, databases, cloud platforms, and Web Frames the participants are using,
- •Future programming languages, databases, cloud platforms, and Web Frames the participants wanted work next year
- •Other visualization tools such as Bar, line, and pie charts to visualize comparison of data

RESULTS

- The respondents desire did not deviate too much with the top 3 languages they are currently working with. The exception was the Python language and ranked 2nd most language that the respondents wanted to work with in the future.

- The respondents desire did not change too much with the top 3 databases they are currently working with. The exception was peak interest in working with Mongo DB, being the 2nd most data baes that the respondents wanted to work in the future.

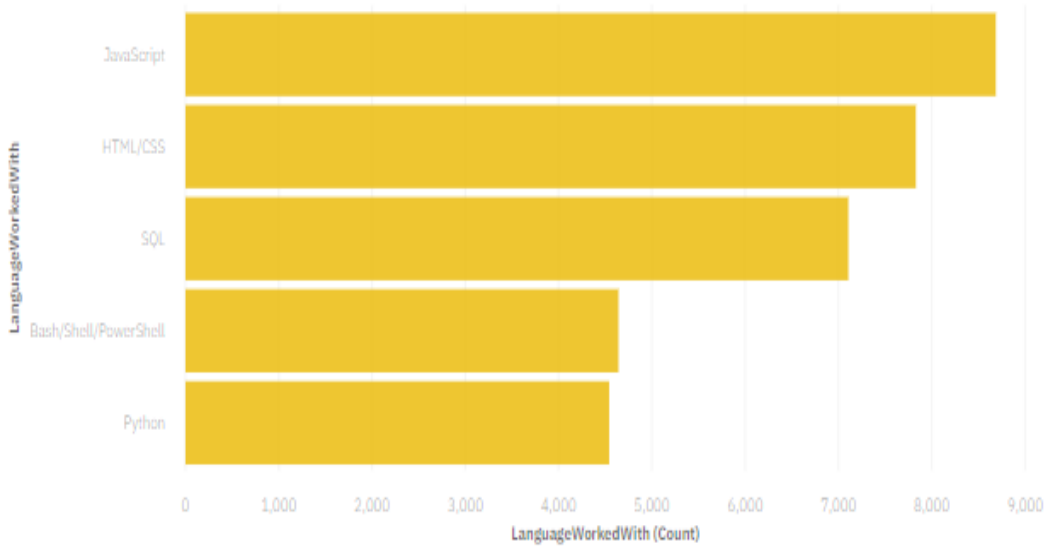
- The respondents to work with AWS Cloud platform peaked in the future.

- The most drastic result occurred in the Web Frame section. jQuery was practically abandoned and React.js was the most popular Web Frame the respondents wanted to work with.

PROGRAMMING LANGUAGE TRENDS

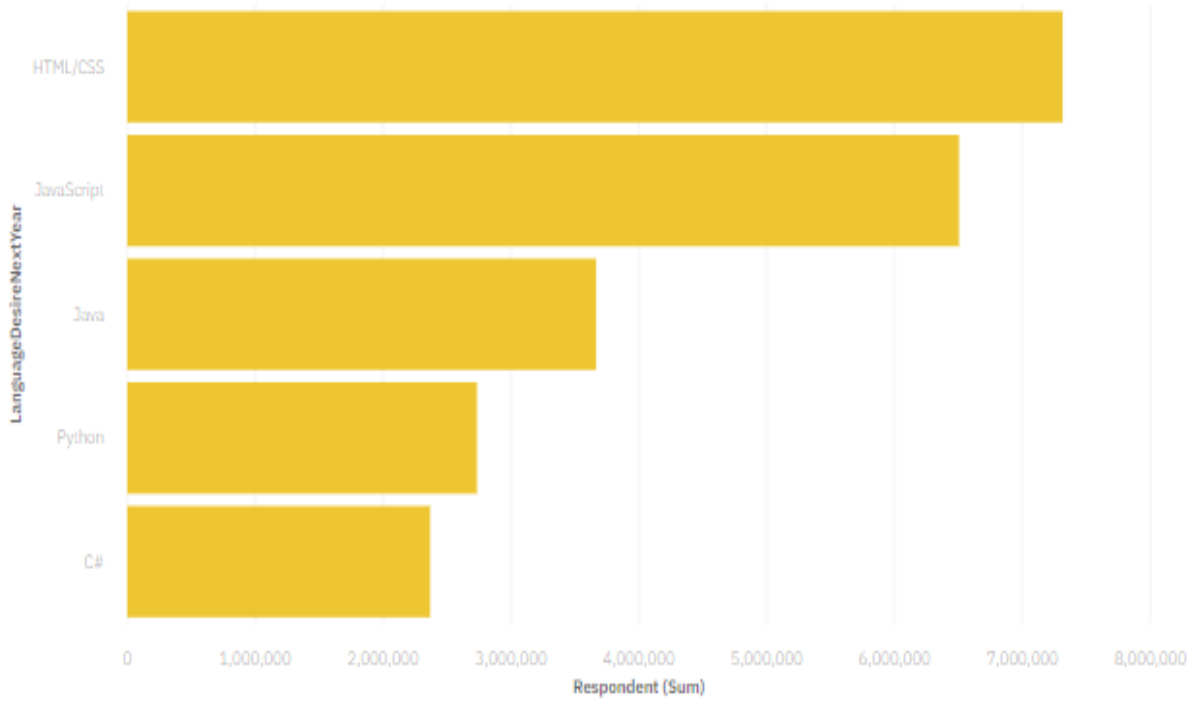
Current Year

<Bar chart of top 5 programming languages for the current year goes here.>



Next Year

Bar chart of top 5 programming languages for the next year goes here



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript is still the most popular programming language the respondents want to work right now and in the future
-
- Demand for Python is increasing
-
- Bash seems to be losing interests of the respondents

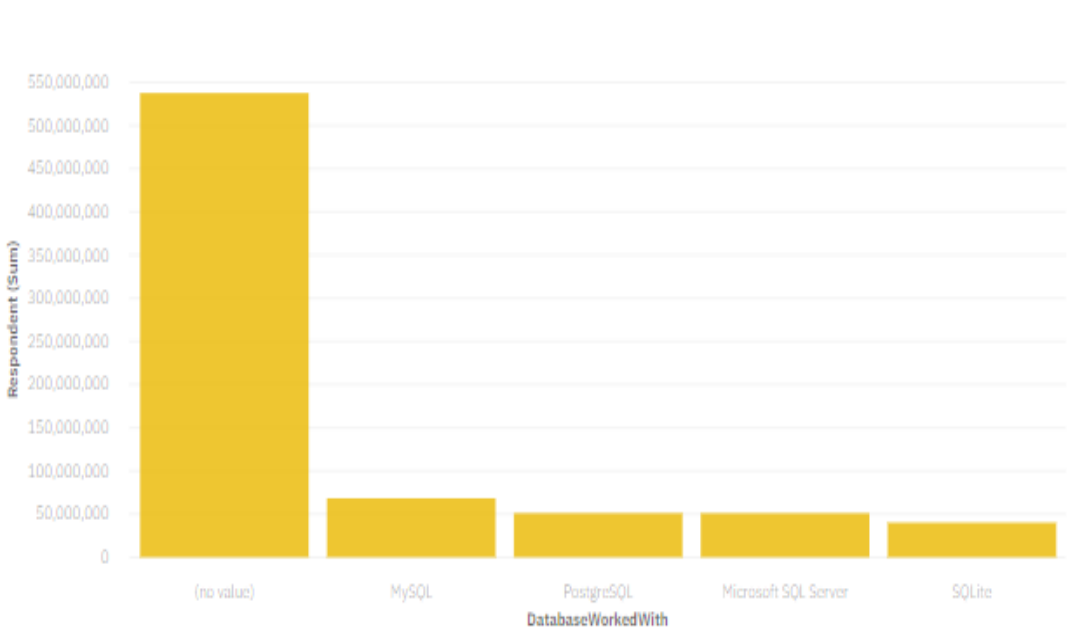
Implications

- Increase in Python demand may mean Python is an easy language to use
-
- Decrease in Bash demand may mean it is slowly being outdated
-
- JavaScript being popular through out the research means it may be the most fit

DATABASE TRENDS

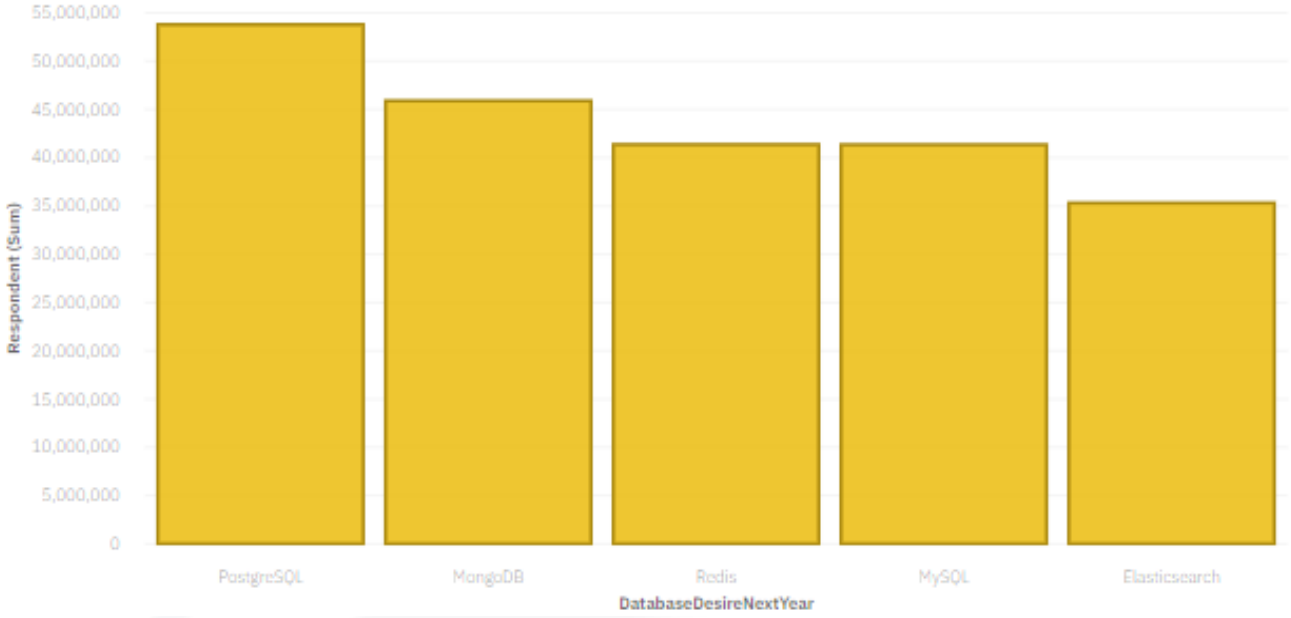
Current Year

The Current chart of the top 5 Databases the respondents desire to worked with



Next Year

The Current chart of the top 5 Databases the respondents desire to work next year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Demand to work with Postgre SQL spiked in the future, as well as the Mongo DB
-
- SQ Lite and Microsoft SQL server databases disappeared in the future works. They were replaced by Redis and Elasticsearch
-
- MySQL was the leader, but fell to 3rd most desired database the respondents wanted to work with

Implications

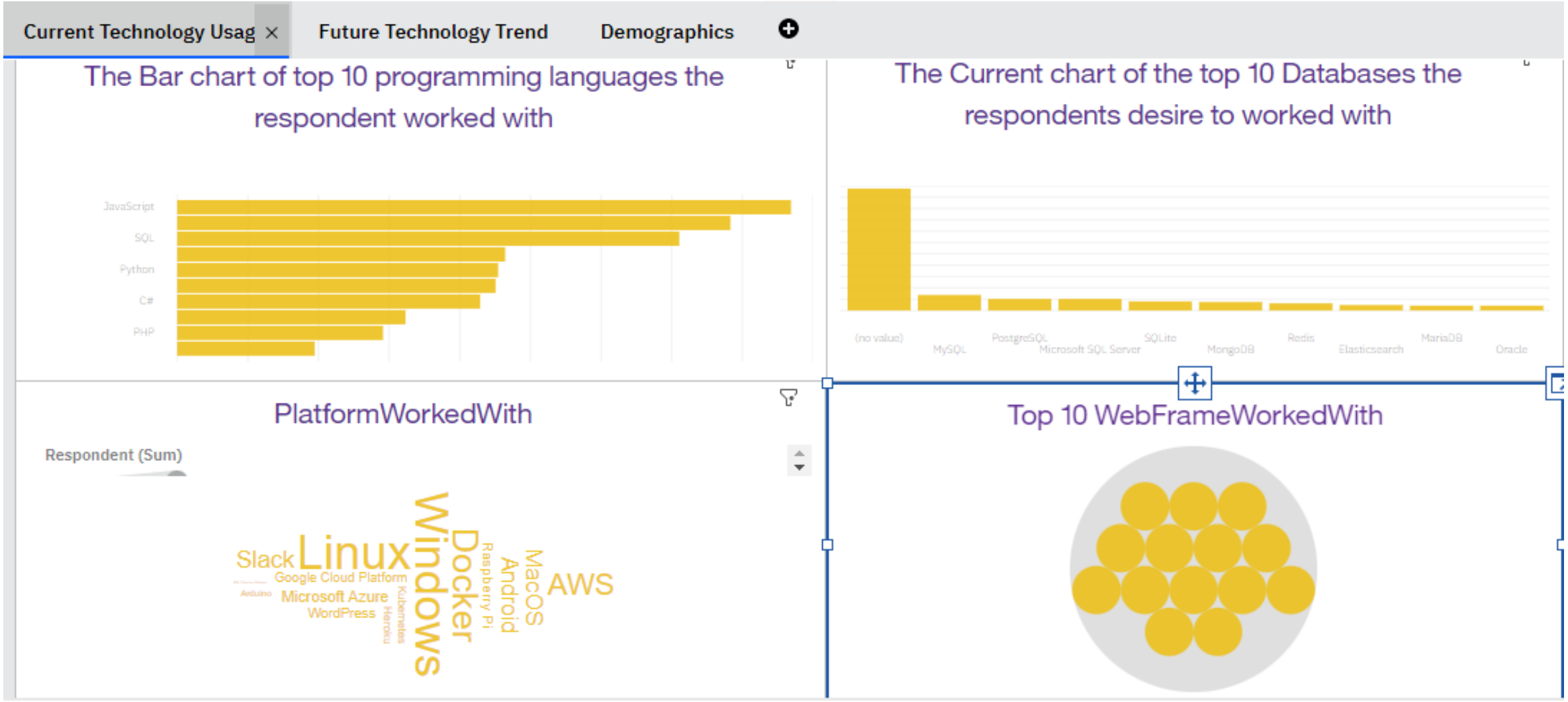
- Services being offered by SQ Lite and Microsoft SQL server may be inadequate or inconsistent
-
- Postgre SQL and MongoDB may be offering better features and reliable services
-
- MySQL is still useful, but may be slowly being outdated.

DASHBOARD

The link towards the Cognos Analytic visualization tool

https://dataplatform.cloud.ibm.com/dashboards/ad1e1101-c884-4701-b032-6c7ec0238490?project_id=fa35c21a-1999-4bd8-bff6-41bdb22b7d63&userfs=false&context=cpdaas&mode=consumption

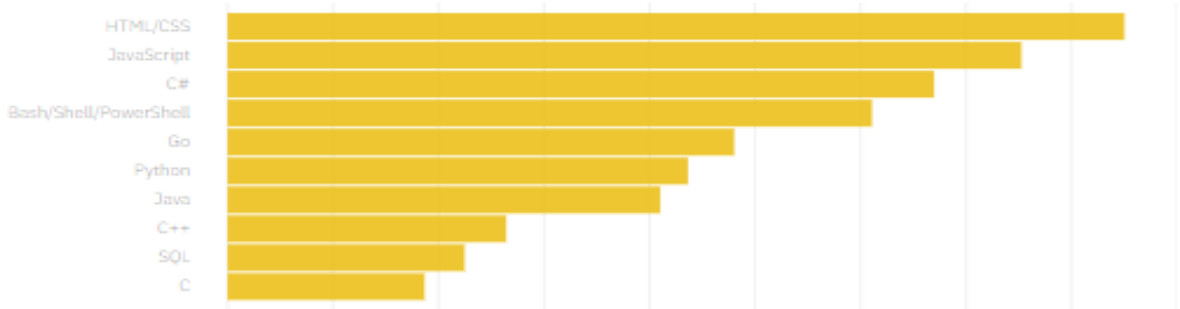
DASHBOARD TAB 1



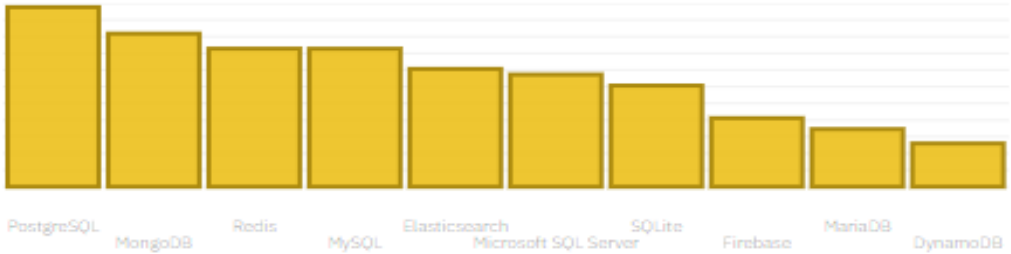
DASHBOARD TAB 2

Current Technology Usage | Future Technology Trend | Demographics

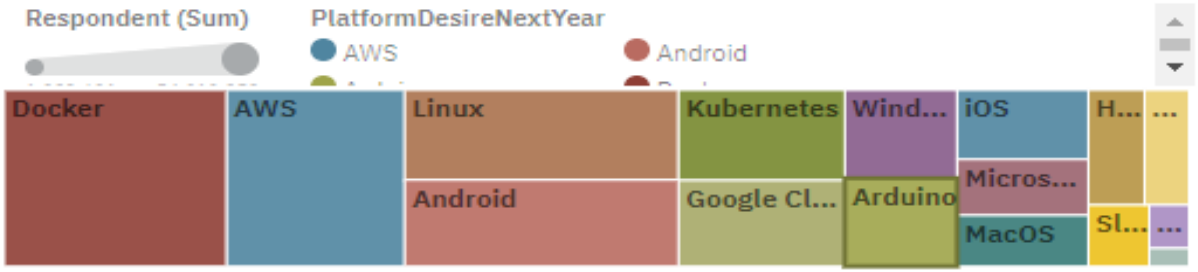
Bar chart of top 10 programming languages for the next year goes here



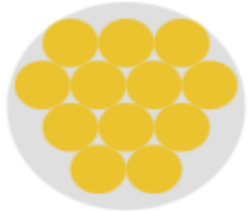
The Current chart of the top 10 Databases the respondents desire to work next year



The Heatmap of the respondents platform desire to work next year

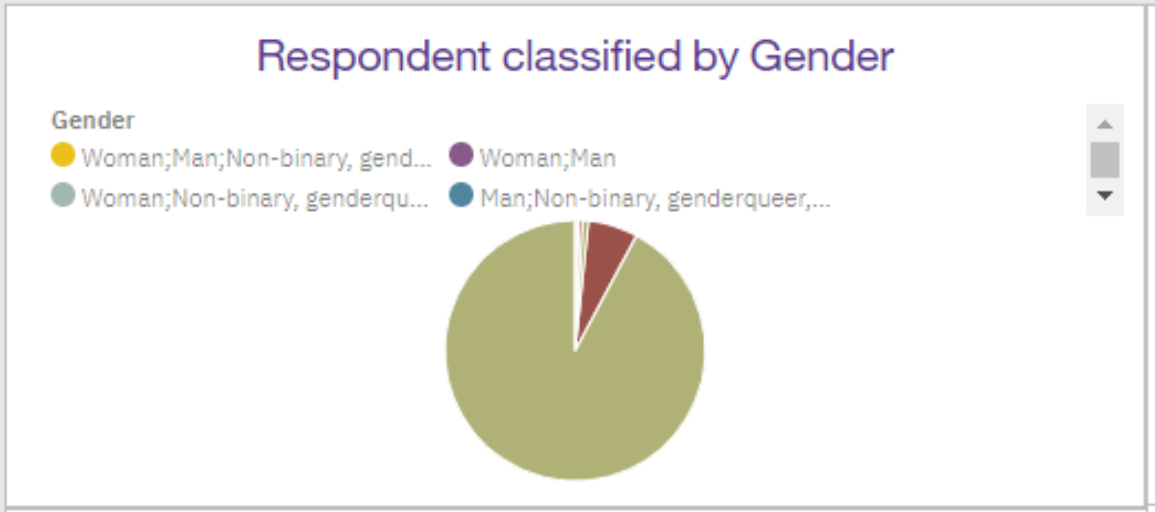


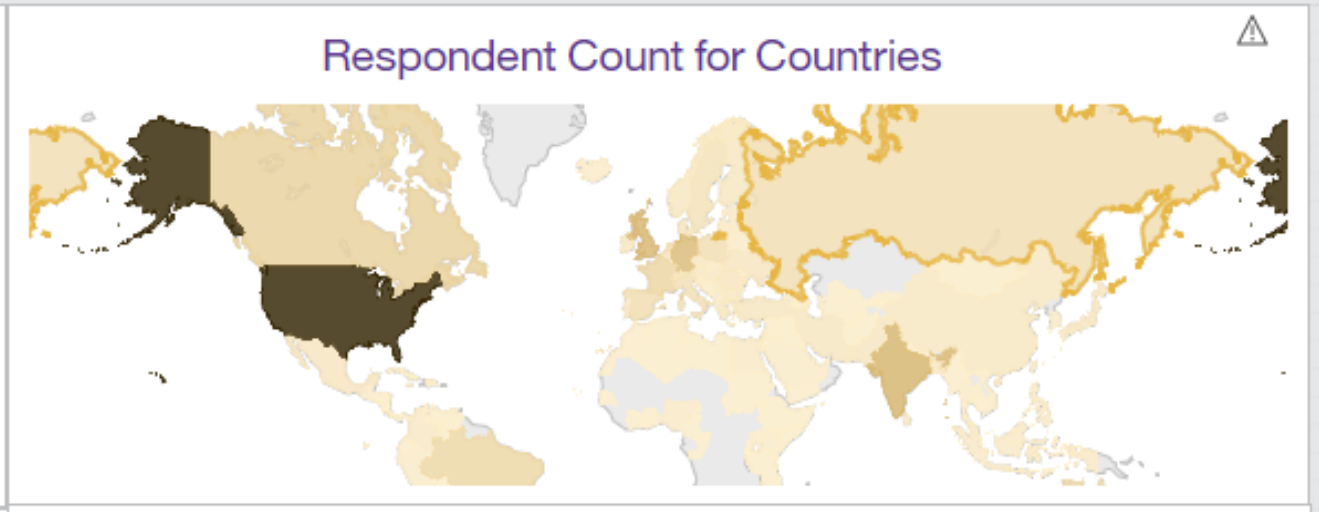
The Hierarchy Bubble chart of the respondents top 10 WebFrame desire to work next year

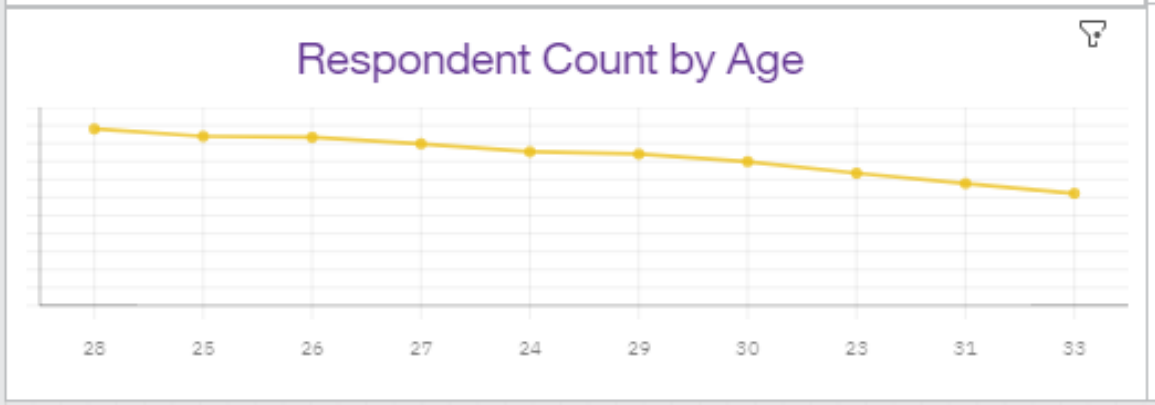


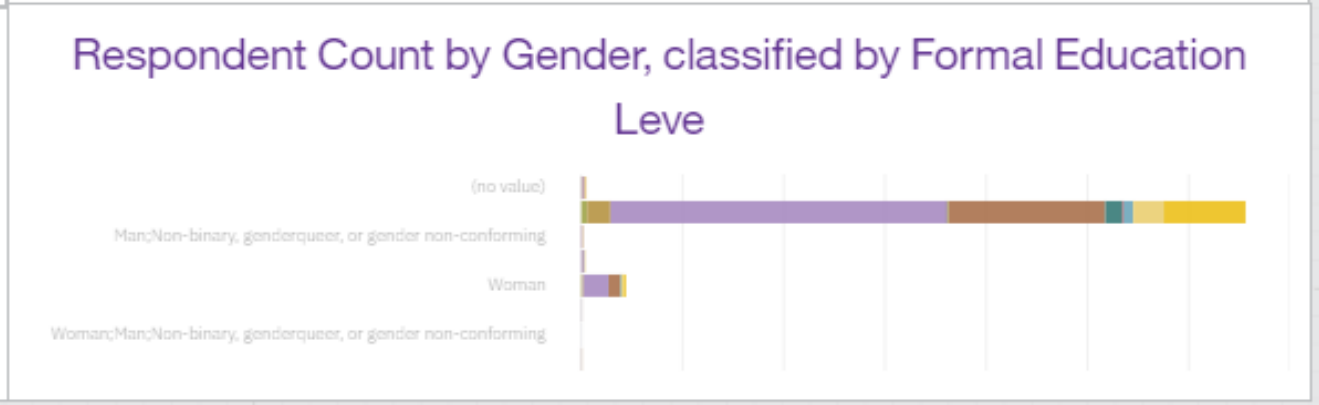
DASHBOARD TAB 3

Current Technology Usage | Future Technology Trend | Demographics









DISCUSSION

- •What would be the causes for the respondents to abandon and move to different languages and data bases?
- •
- •Why Javascript still remains popular programming language?
- •
- •Would the results would be different if we only gathered response from Masters degree and above?

OVERALL FINDINGS & IMPLICATIONS

Findings

- The world of technology is so dynamic that it's rare to observe one language or database or cloud platform or WebFrame dominating certain area for long time.
- Men are primary users of the technology tools
- The age range of respondents were majority from 23~33. However, there were respondents who were age 16 from 99.

Implications

- Whatever or whichever services the technologies offer may need to be easy to use, reliable, and convenient to access
- Women may not be interested in Data entry/ Data organizations compared to men

People who identified as the age 99 may be hackers/ crackers or wanted to remain anonymous.

CONCLUSION

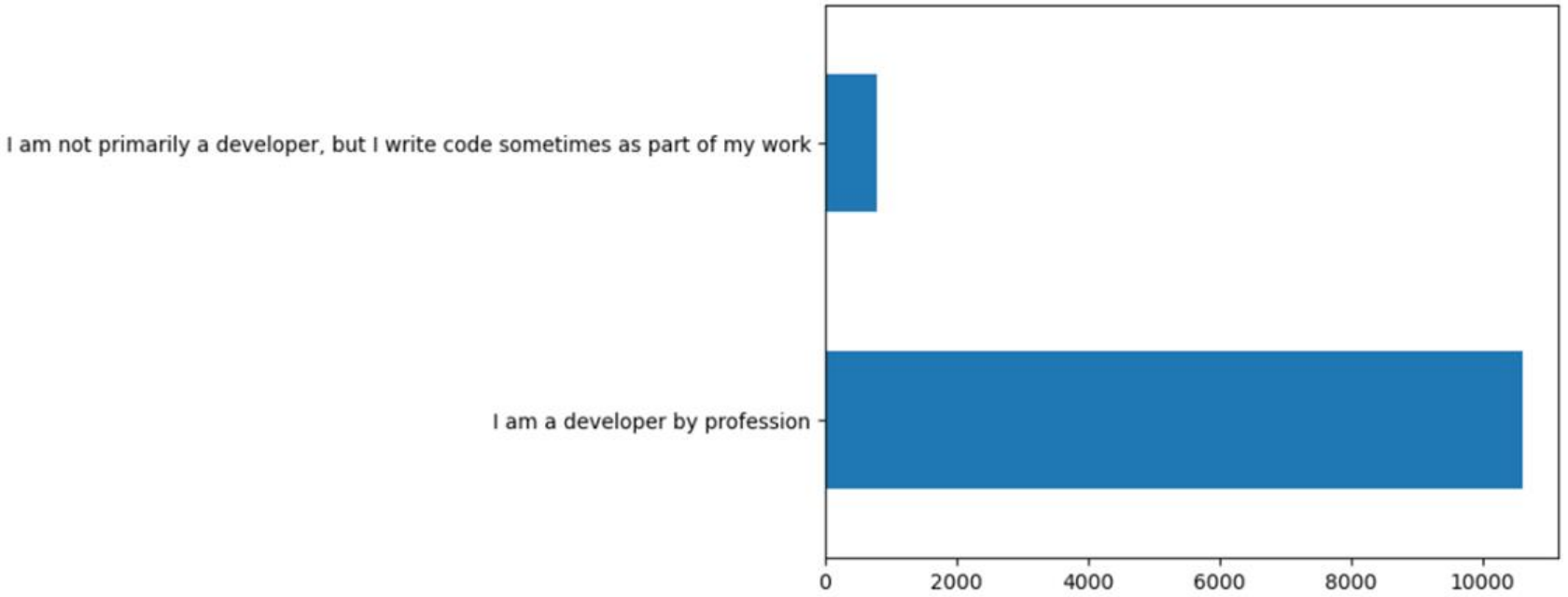
- •Javascript is the most popular programming language tool
- •
- •Respondents who has Bachelor’s degree and/or Master’s degree are the primary users of technologies
- •
- •Currently, MySQL is the most popular data base the respondents use. Yet, they will eventually shift to PostgreSQL to perform database related tasks.
- •
- •Linux is the most popular cloud platform
- •
- •Currently, jQuery is the most popular Web Frames the respondents use. However, they will eventually work with React.js.

APPENDIX

```
df.corr()
```

	Respondent	CompTotal	ConvertedComp	WorkWeekHrs	CodeRevHrs	Age
Respondent	1.000000	-0.013490	0.002181	-0.015314	0.004621	0.004041
CompTotal	-0.013490	1.000000	0.001037	0.003510	0.007063	0.006970
ConvertedComp	0.002181	0.001037	1.000000	0.021143	-0.033865	0.105386
WorkWeekHrs	-0.015314	0.003510	0.021143	1.000000	0.026517	0.036518
CodeRevHrs	0.004621	0.007063	-0.033865	0.026517	1.000000	-0.020469
Age	0.004041	0.006970	0.105386	0.036518	-0.020469	1.000000

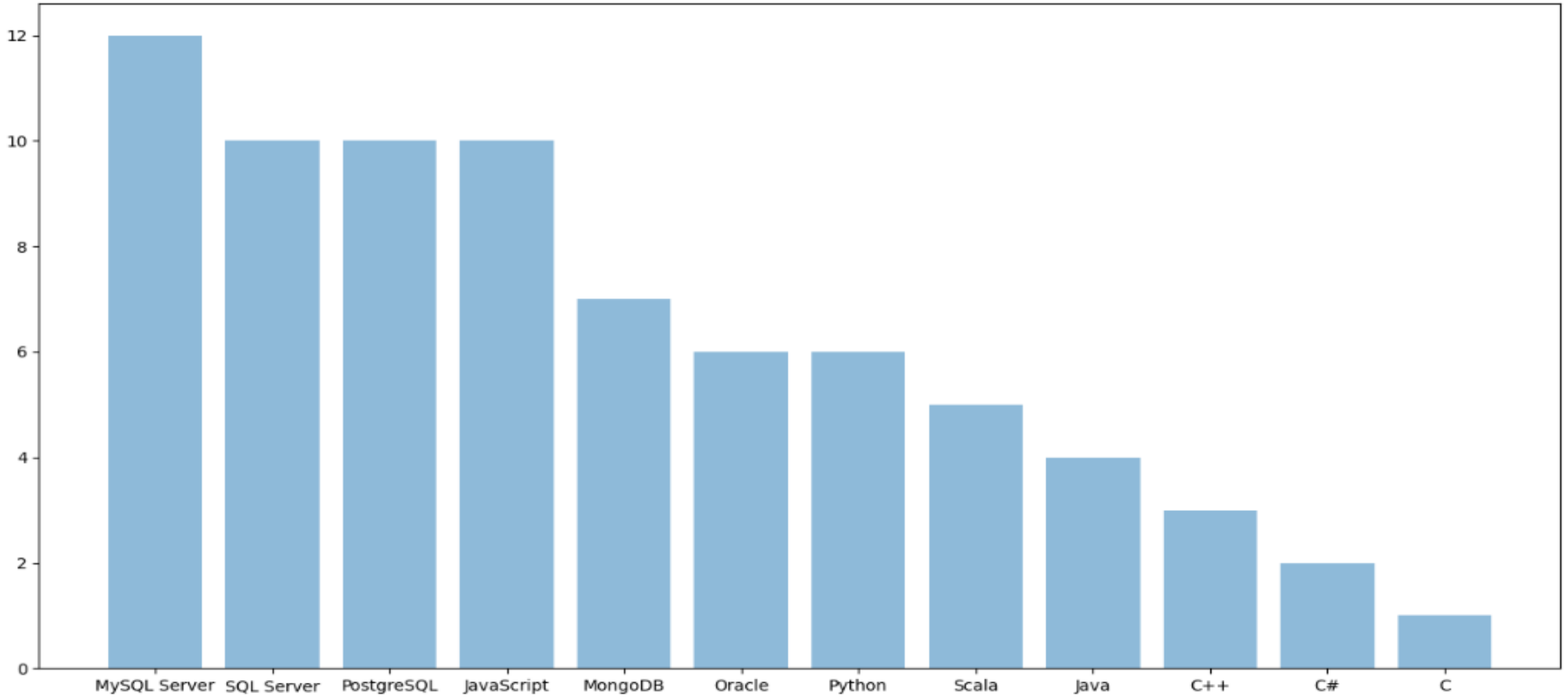
```
Language<-------->Average Annual Salary
Python<-------->$114,383
Java<-------->$101,013
R<-------->$92,037
Javascript<-------->$110,981
Swift<-------->$130,801
```



IBM Developer

SKILLS NETWORK

JOB POSTINGS



POPULAR LANGUAGES