Developers Analysis

Parth Kharadi
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OUTLINE

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  - Dashboard
- Discussion
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EXECUTIVE SUMMARY

1. This analysis is based on Stackoverflow survey data

2. Here we present some key findings from that analysis
   - Which technologies are most popular among developers and which are gaining popularity

   - Which frameworks and platforms developers are currently working and planning to work in future.

   - Developers distribution by age, gender, location and education

3. This analysis will help developers gain understanding of current trend in technologies and how we can make community more diverse.

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INTRODUCTION

1. Stackoverflow survey data analysis on developers who participated in that survey

2. We'll be representing here our findings based on analysis in visual format which will be easier for audience to understand and to have insights on trend
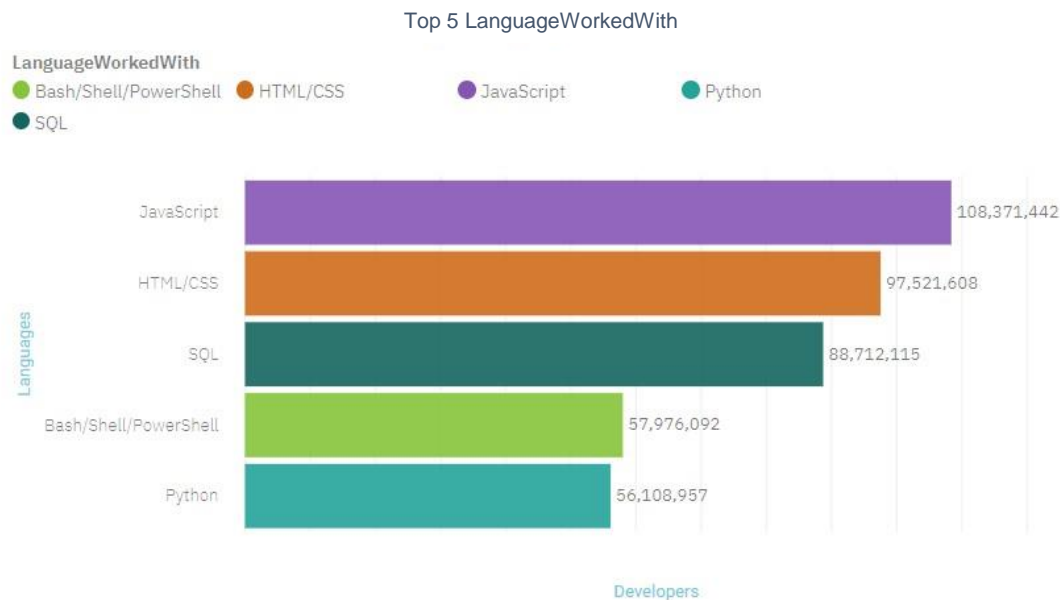
METHODOLOGY

1. We've first collected survey data and cleaned. Removed duplicates and missing value. Performed normalization and formatting

2. We extracted few summary and analyzed overall data

3. We did exploratory analysis on data

4. After that we analyzed data using visualization tools and technique
   - We've analyzed technology and db trend using bar and column chart
   - Most popular frameworks using Hierarchy bubble chart
   - Gender wise distribution of developers using pie chart
   - Map chart for location wise developers distribution
   - Line chart for number of developers relation with age
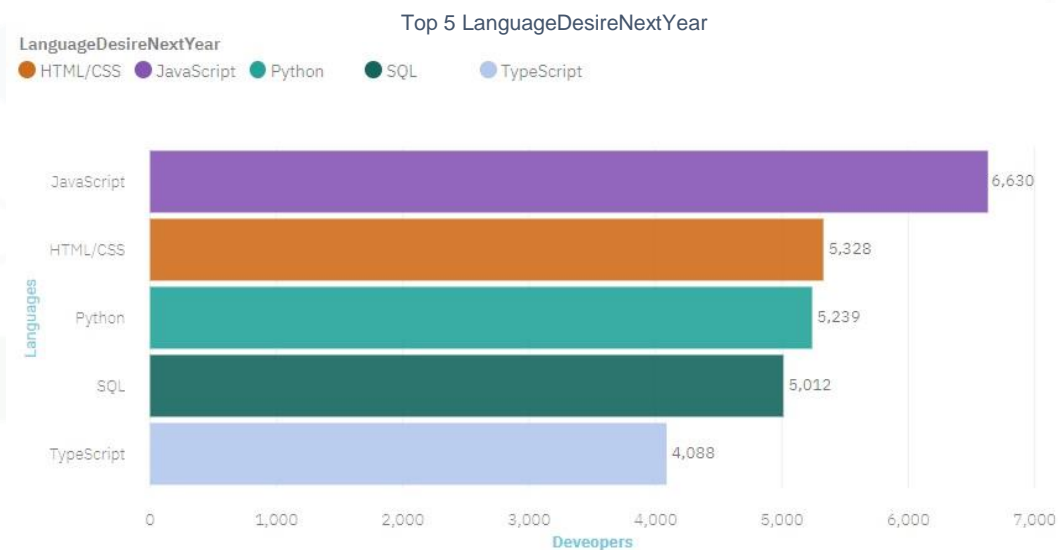
RESULTS

- We see some interesting results after analysis and visualization
  - We can analyze which are top 10 language developers are currently working and desiring to work in next 10 years
  - Which DBs are among top 10 in current year and which DBs they're desiring to work in next year
  - Which platforms and frameworks are most popular and which are gaining more popularity
  - How developers are distributed by age, gender, location

PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

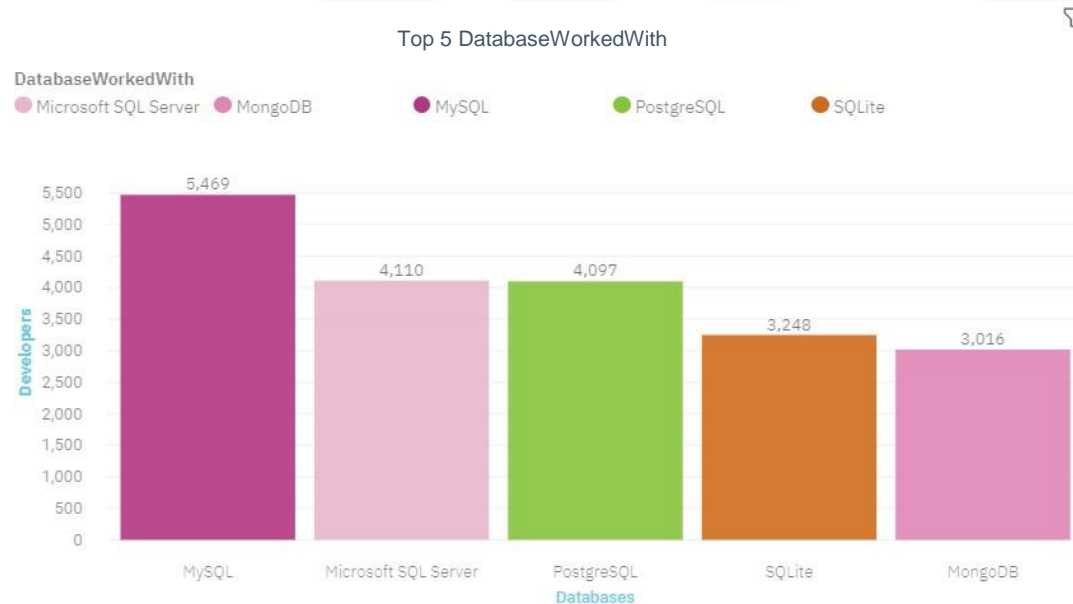# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Javascript and HTML/CSS have highest number of developers for current year and next year

- Python has lowest popularity among top 5 programming languages currently and by next year 5239 developers are planning to work with Python.

- Although typescript is not among top 5 languages developers worked current year, it is in top 5 for next year
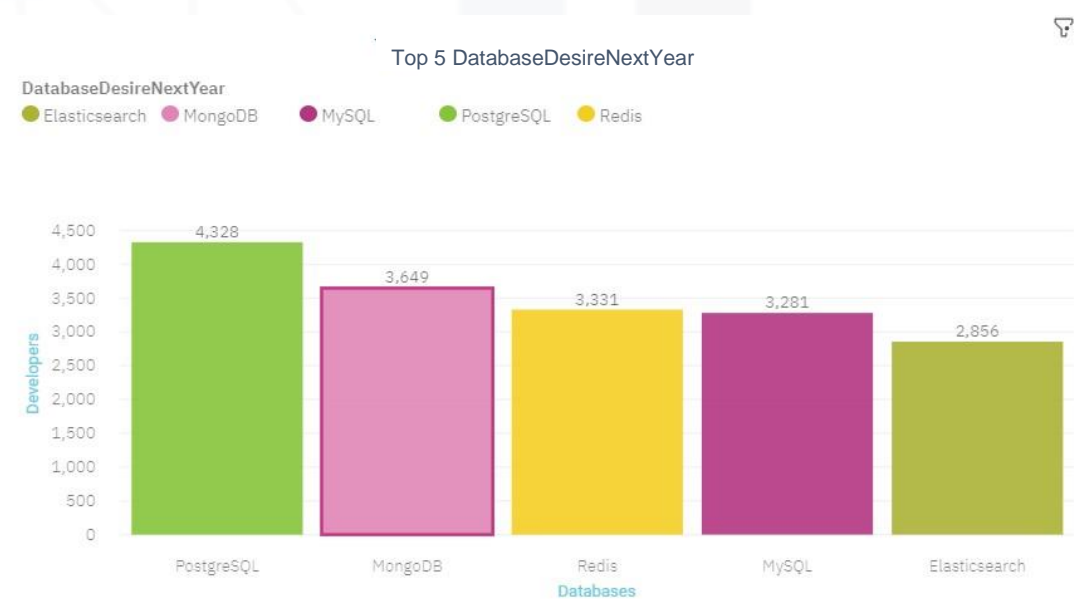
Implications

- More developers have worked with Javascript and HTML/CSS and more are planning to work by next year

- Python is gaining popularity and more developers are desiring to work with it

- Typescript might gain popularity by next year and may climb up in top ladder

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DATABASE TRENDS

Current Year

Top 5 DatabaseWorkedWith

Next Year

Top 5 DatabaseDesireNextYear

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL has highest number of developers count of 5469.

- PostgreSQL and MS SQL Server have almost same number of developers for current year. But more developers are planning to work with PostgreSQL by next year compared to MS SQL Server

- If we compare current year with next year, MySQL and PostgreSQL remains popular among developers. In next year graph we can see some new databases in top 5 list
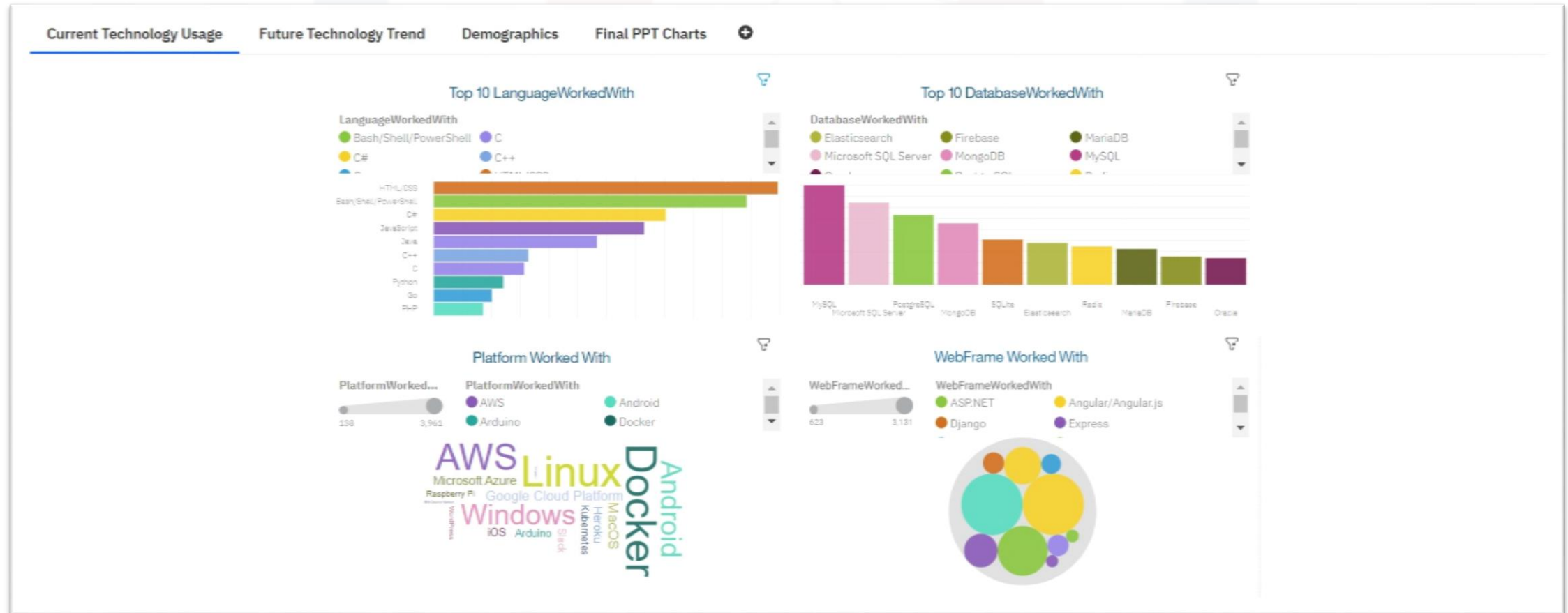
Implications

- MySQL remains most popular database for current year

- PostgreSQL is gaining more popularity and it might become most popular database by next year. Whereas MS SQL Server's demand is not increasing

- New databases like Mongo, Redis and ElasticSearch are gaining popularity and more & more developers are planning to work with it by next year
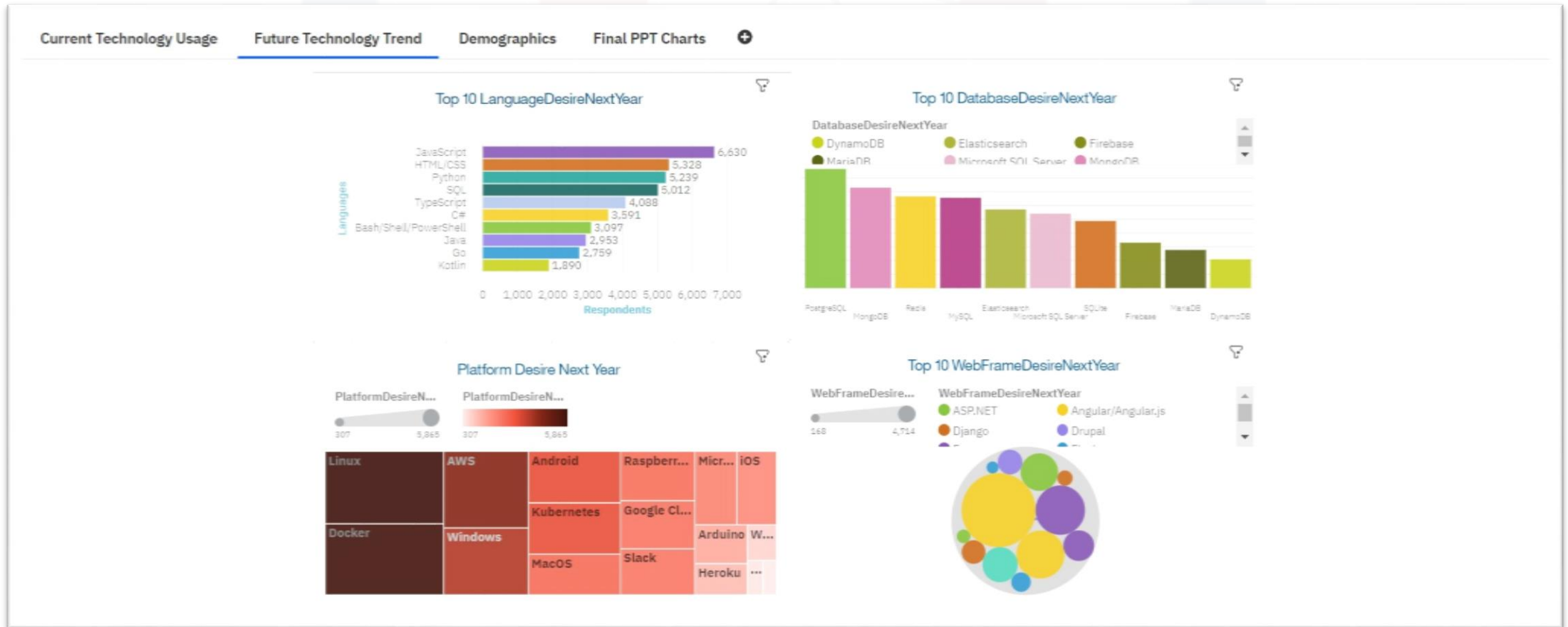
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DASHBOARD

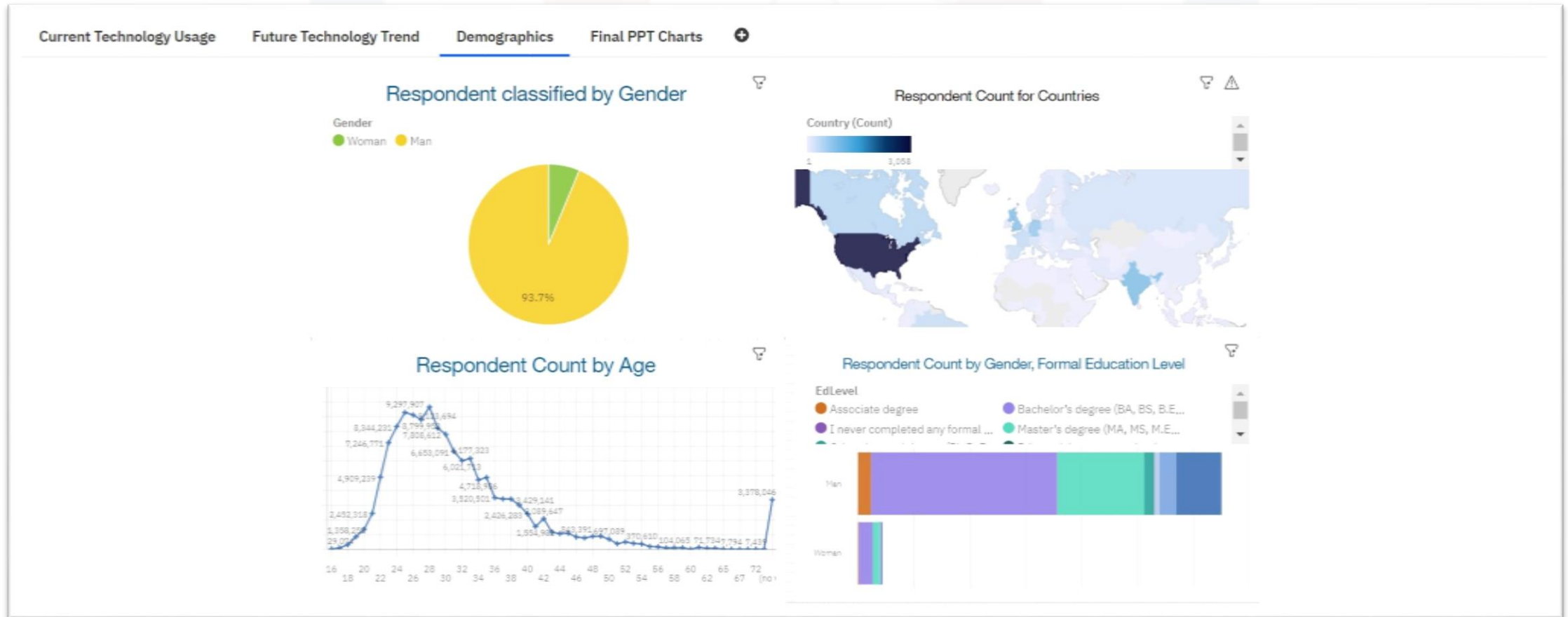[IBM Cognos Dashboard Link](#)

DASHBOARD TAB 1

DASHBOARD TAB 2

DASHBOARD TAB 3

DISCUSSION

- On which technology developers should focus on more?

- Woman respondents are very less compared to man respondents. What is the reason?

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OVERALL FINDINGS & IMPLICATIONS

Findings

- In next year graph for language and DB we can see new languages and DB are in top 5 list

- From pie chart we can see number of woman respondents are less compared to man. Around 6% only.

- Most of respondents are from specific part of world but we can see overall they're distributed evenly around world

- We've highest number of developers between 20-30 age.

Implications

- More and more developers are moving towards languages and DBs which are trending

- We need more contribution from woman developers

- Except few places we've developers around the world contributing

- With age number of respondents have declined which might suggest they either moved to managerial role or don't contribute that actively

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CONCLUSION

- Latest technolgoies are gaining popularity among developers
- More and more developers are working or desiring to work with new platforms and webframeworks
- Woman respondents are very less compared to man
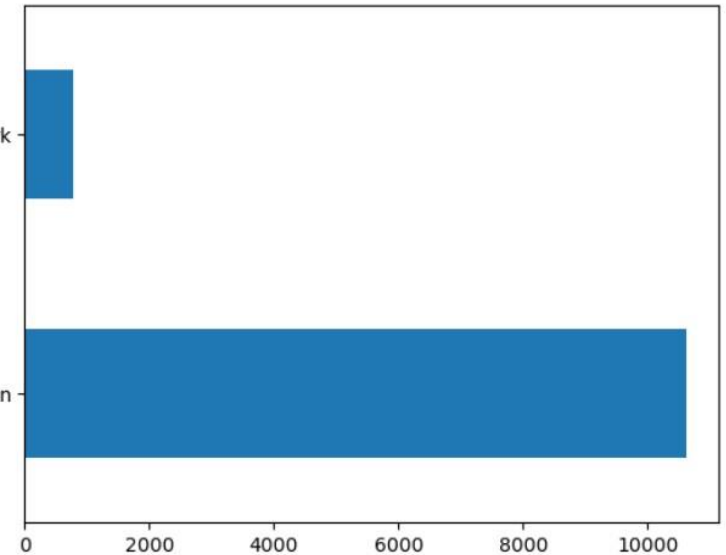- Most of developers are by profession
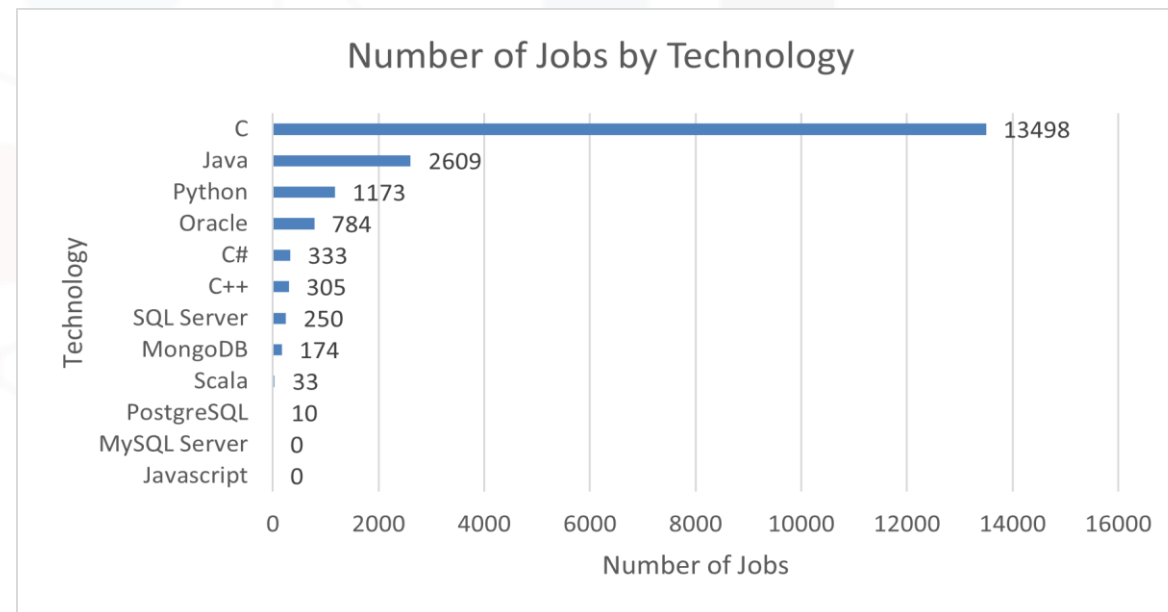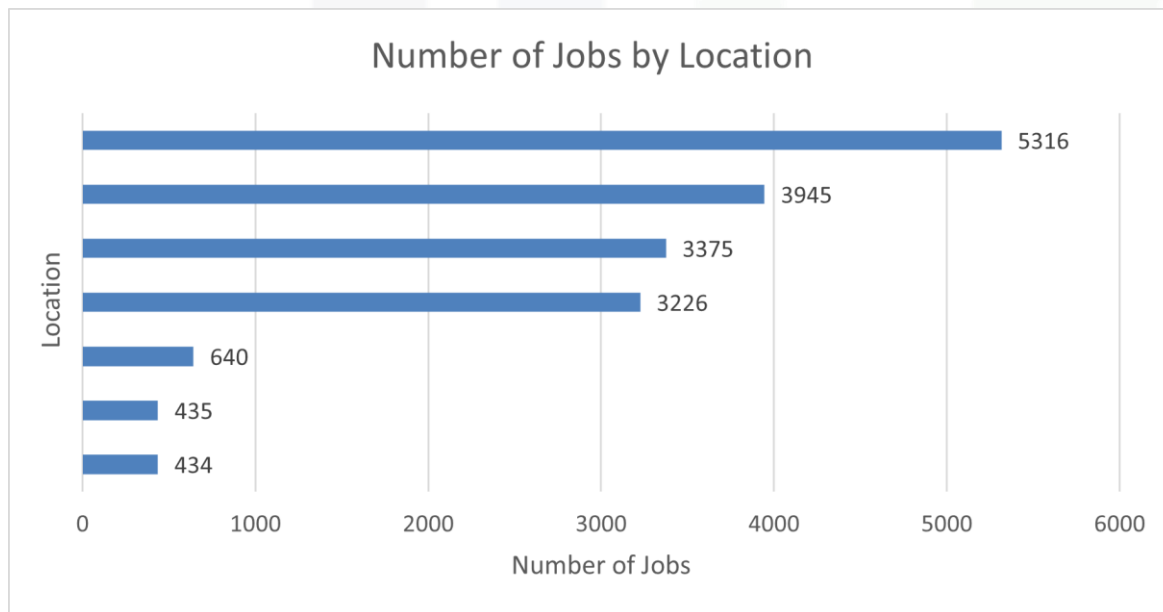
APPENDIX

Developers by Profession

JOB POSTINGS

POPULAR LANGUAGES

Average Annual Salary

Technology	Salary
Go	$94,082
R	$92,037
C#	$88,726
SQL	$84,793
PHP	$84,727
Swift	$1,30,801
Python	$1,14,383
C++	$1,13,865
Javascript	$1,10,981
Java	$1,01,013

Salary axis: $0 $20,000 $40,000 $60,000 $80,000 $1,00,000 $1,20,000 $1,40,000

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