Technology Trends

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OUTLINE

- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

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SKILLS NETWORK

EXECUTIVE SUMMARY

- Trends in programming languages and databases

- Demographics survey

- Technological gap in countries

- Gender gap in jobs

INTRODUCTION

About:

Analyzing the trends in software development

Purpose:

- Identify skill requirements for future
- What are the top programming languages in demand?
- What are the top database skills in demand?
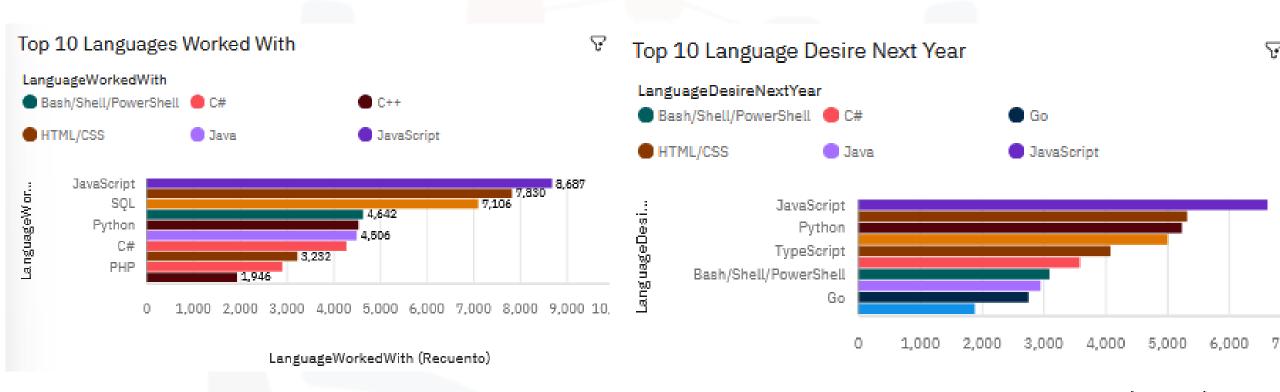- What are the popular IDEs

Audience: Human Resource and IT Head

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METHODOLOGY

- **Data Collection Sources**
  - Stack Overflow Developer 2019 Survey
  - Github Job Postings
  - Programming Languages Annual Salary

- **Data Exploration**

- **Data Cleaning Data Visualization**

- **Presentation**

PROGRAMMING LANGUAGE TRENDS

Top 10 Languages Worked With

LanguageWorkedWith
- ● Bash/Shell/PowerShell
- ● C#
- ● C++
- ● HTML/CSS
- ● Java
- ● JavaScript

Language	Count
JavaScript	8,687
SQL	7,830
(Bash/Shell/PowerShell)	7,106
Python	4,642
C#	4,506
(HTML/CSS)	3,232
PHP	1,946

LanguageWorkedWith (Recuento)

Top 10 Language Desire Next Year

LanguageDesireNextYear
- ● Bash/Shell/PowerShell
- ● C#
- ● Go
- ● HTML/CSS
- ● Java
- ● JavaScript

- JavaScript
- Python
- TypeScript
- Bash/Shell/PowerShell
- Go

LanguageDesireNextYear (Recuento)

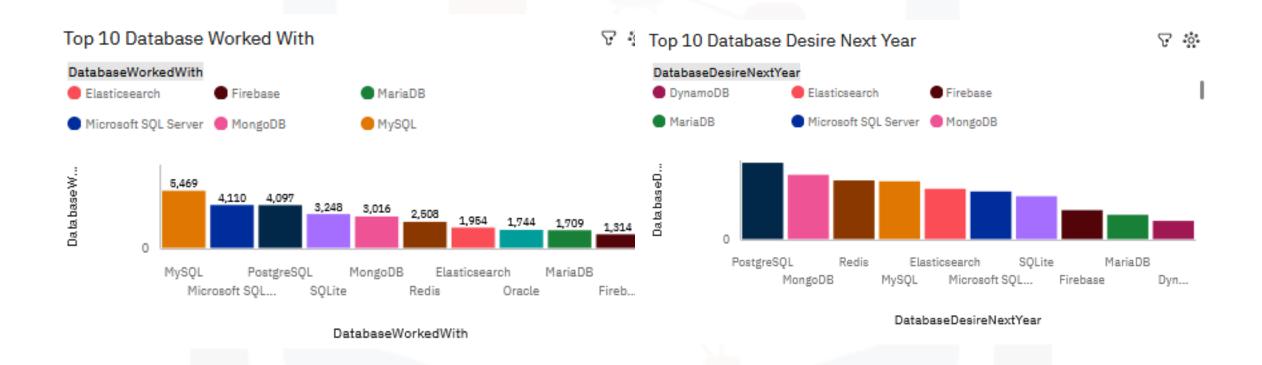# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- KavaScript, HTML/CSS, SQL are top 3 this year

- Python and Typescript becoming popular next year

- PowerShell edged out in next year

Implications

- Web development are still in high demand

- Big Data technology in companies still requires SQL

- With AI and ML in rising, Python is best choice

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DATABASE TRENDS

Top 10 Database Worked With

DatabaseWorkedWith
- Elasticsearch
- Firebase
- MariaDB
- Microsoft SQL Server
- MongoDB
- MySQL

MySQL: 5,469
Microsoft SQL...: 4,110
PostgreSQL: 4,097
SQLite: 3,248
MongoDB: 3,016
Redis: 2,508
Elasticsearch: 1,954
Oracle: 1,744
MariaDB: 1,709
Fireb...: 1,314

DatabaseWorkedWith

Top 10 Database Desire Next Year

DatabaseDesireNextYear
- DynamoDB
- Elasticsearch
- Firebase
- MariaDB
- Microsoft SQL Server
- MongoDB

PostgreSQL, MongoDB, Redis, MySQL, Elasticsearch, Microsoft SQL..., SQLite, Firebase, MariaDB, Dyn...

DatabaseDesireNextYear

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL most popular

- Behind is Microsoft SQL

- MongoDB and Redis are upcoming favorites

- New kid on the block: Elasticsearch

Implications

- Open source databases are still preferable in companies

- NoSQL databases will make an impact for storing non relational data

- Redis supports abstract data types

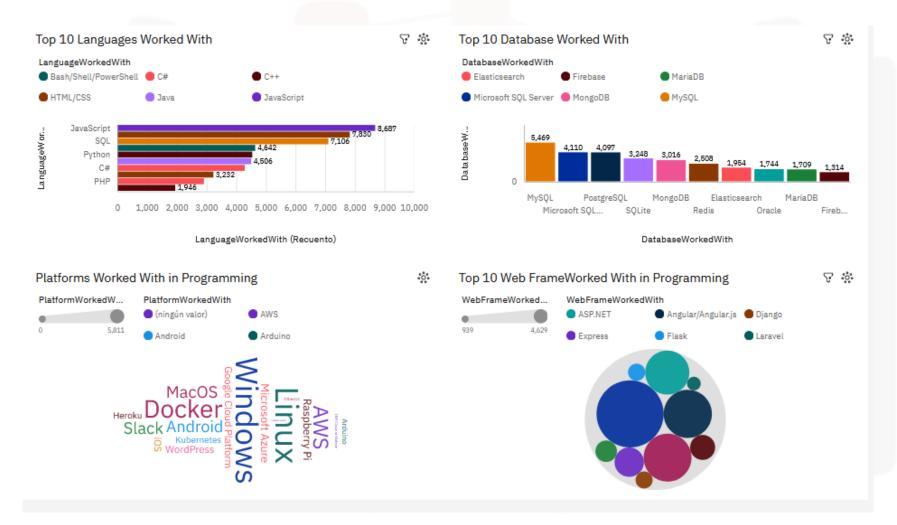- Pre tuned search to website, app, or ecommerce store

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DASHBOARD

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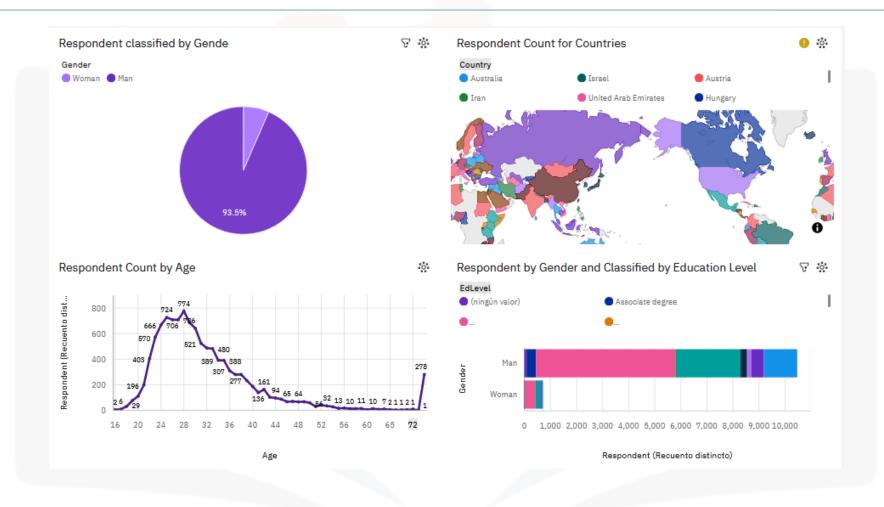
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DASHBOARD TAB 1

DASHBOARD TAB 2

Top 10 Language Desire Next Year

LanguageDesireNextYear
- Bash/Shell/PowerShell
- C#
- Go
- HTML/CSS
- Java
- JavaScript

Top 10 Database Desire Next Year

DatabaseDesireNextYear
- DynamoDB
- Elasticsearch
- Firebase
- MariaDB
- Microsoft SQL Server
- MongoDB

Platforms Desire Next Year in Programming

PlatformDesireNextYear
- (ningún valor)
- AWS
- Android
- Arduino

Top 10 Web Frame Desire Next Year

WebFrameDesireNextYear
- ASP.NET
- Angular/Angular.js
- Django
- Express
- Flask
- React.js

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DASHBOARD TAB 3

DISCUSSION

- Technology Trends now and future
- Training and Reskilling workers
- Females participation in Technology field
- Bridge divide of technology gaps in developing countries
- Eliminate age and education discrimination in employment

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OVERALL FINDINGS & IMPLICATIONS

Findings

- Fast changing technology every year
- Gender gap in technology jobs
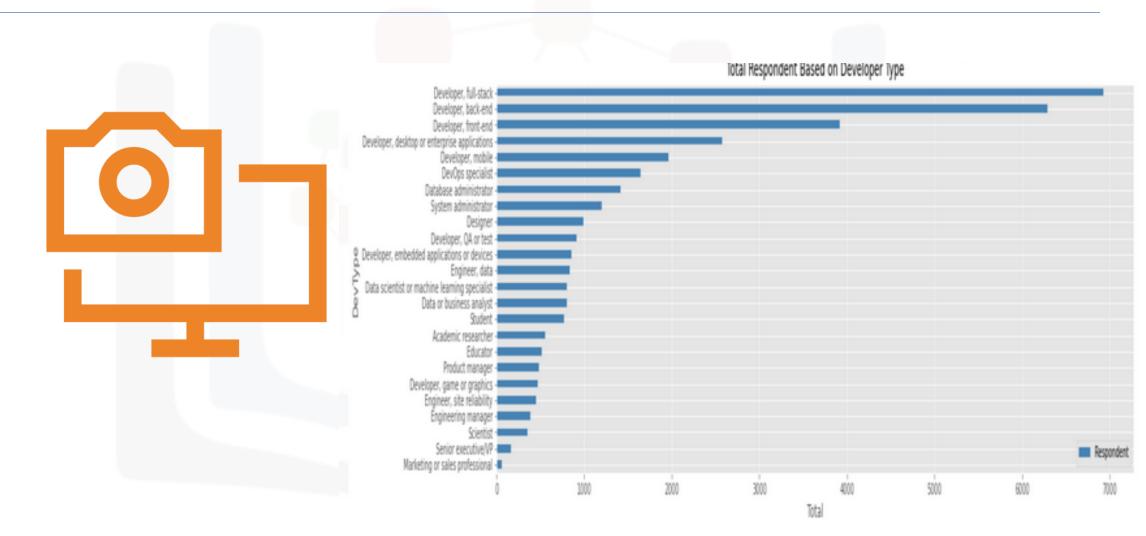- Platforms like Docker and AWS are growing

Implications

- Companies need to be flexible and adjust to rapid changes
- Impact of job hiring's
- Shift to faster app deployments and cloud services in future

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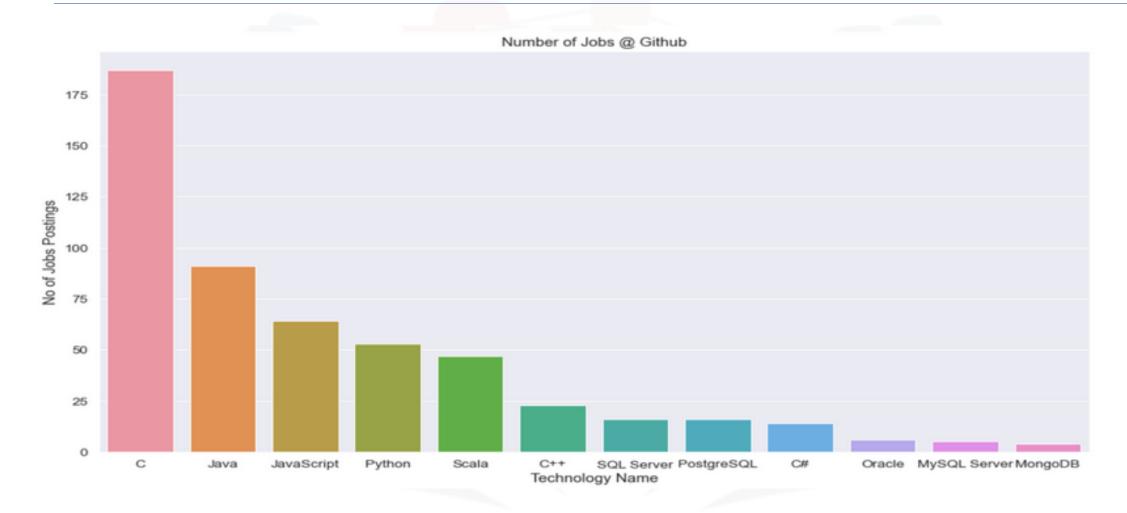SKILLS NETWORK

CONCLUSION

- Technology Trends for current and next year

- Programming Languages, Database and Platform overview

- Demographics overview

- In future, incorporate Machine Learning to predict trends and salaries

APPENDIX

Total Respondent Based on Developer Type

JOB POSTINGS

Number of Jobs @ Github

POPULAR LANGUAGES

Job Salaries