



Technology: Now and Future

Ezra Julang P.

June 10, 2022

OUTLINE



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

EXECUTIVE SUMMARY



- The most used technology nowadays such as Javascript for Programming Language, MySQL for Database, Windows and Linux for Platform, and jQuery for Web Frame
- Top technology that might be trend in the future such as Javascript for Programming Language, PostgreSQL for Database, Linux and Docker for Platform, and React.js for Web Frame
- Programming Language for Web Development such as Javascript and HTML/CSS are and will still be the trend in industry, followed by SQL and Python
- PostgreSQL potentially take top spot of database ranking from MySQL in the future
- Linux is the leader for platform used and still will be in the future
- React.js catches the attention of web developer, likely take top spot of Web Frame from jQuery in the future

INTRODUCTION



- This study will cover trend of technology in current time and in the future
- Programming language, database, platform, and web frame usage are some of the technology that could represent technology trend
- Reader are expected to gain new knowledge about technology trend from the presentation provided
- This study might give developer insight on future trend of technology

METHODOLOGY



- Data used in this study generated from survey that has been done before and already normalized.
- Trend change in this study are based on currently used technology compared to next year technology consideration
- Trend calculation in this study are based on 4 representative technology :
 - Top Programming Language
 - Top Database
 - Top Platform
 - Top Web Frame
- This study using different type of chart that considered appropriate with data used
- IBM Cognos Analytics is the software used to visualize data

RESULTS

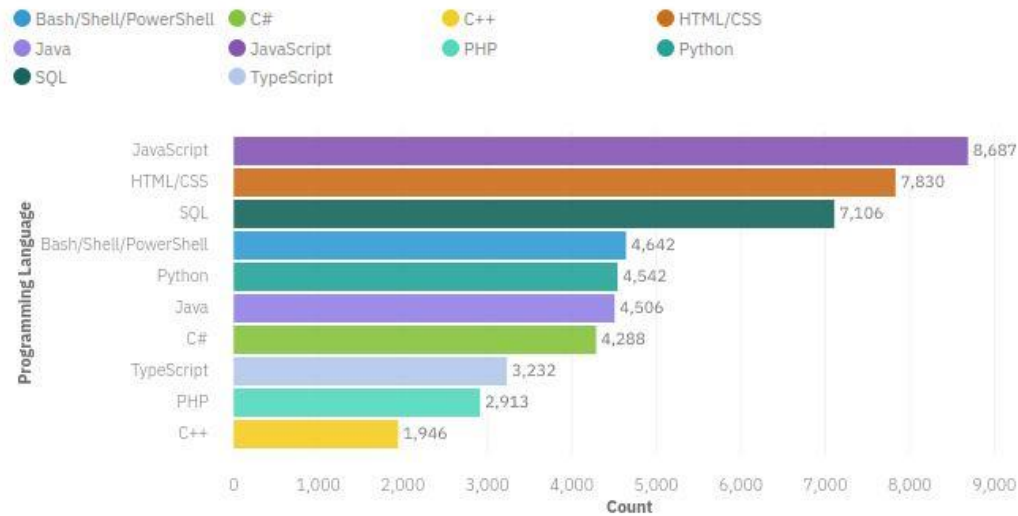
The results consists of 4 main parts:

- Programming language trend
- Database trend
- Platform trend
- Web frame trend

PROGRAMMING LANGUAGE TRENDS

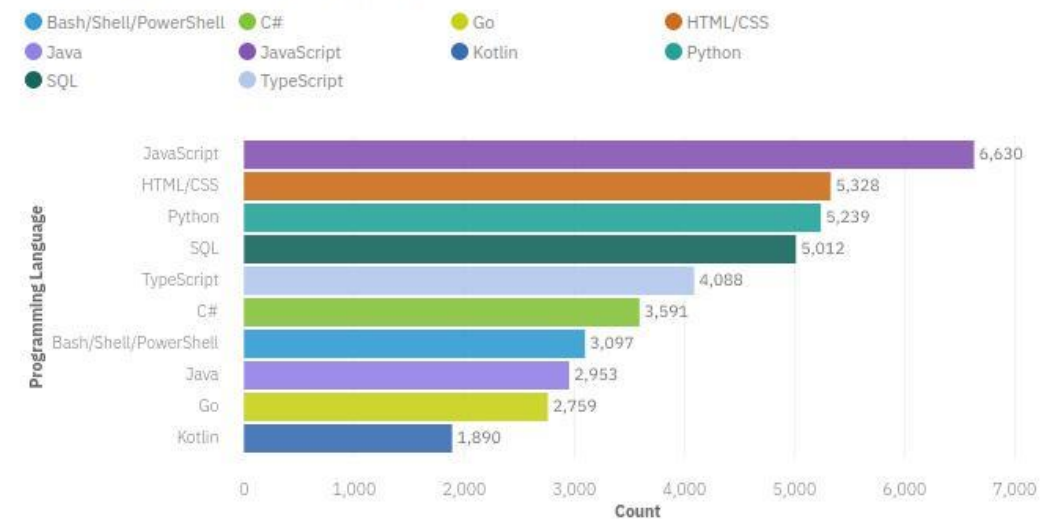
Current Year

Top 10 Programming Language Worked With



Next Year

Top 10 Programming Language Desire Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript & HTML/CSS are top programming languages for both current and future trend.
- Python climb to top 3 programming language for the future
- Newer language such as Kotlin and GO come to top 10,

Implications

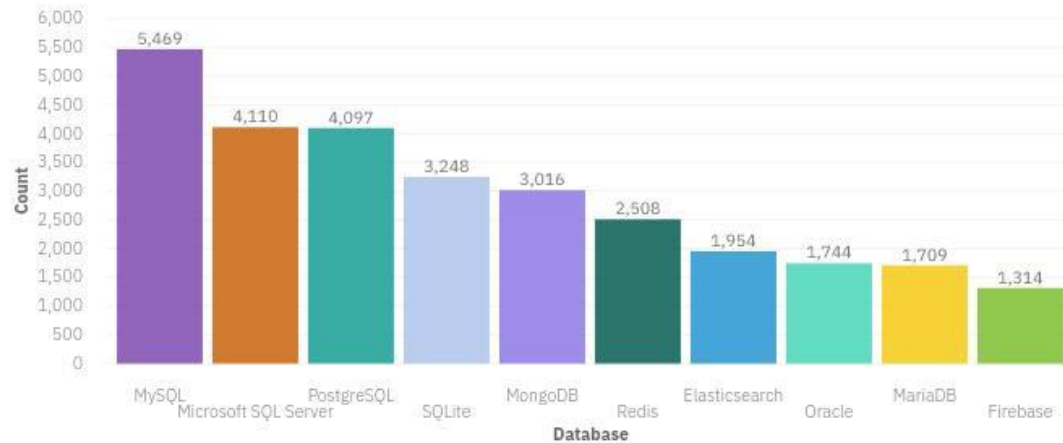
- Web programming languages still stay dominance in near future.
- Python widely usage in data science probably the reason python become more popular
- Newer language attract developer more than old language

DATABASE TRENDS

Current Year

Top 10 Database Worked With

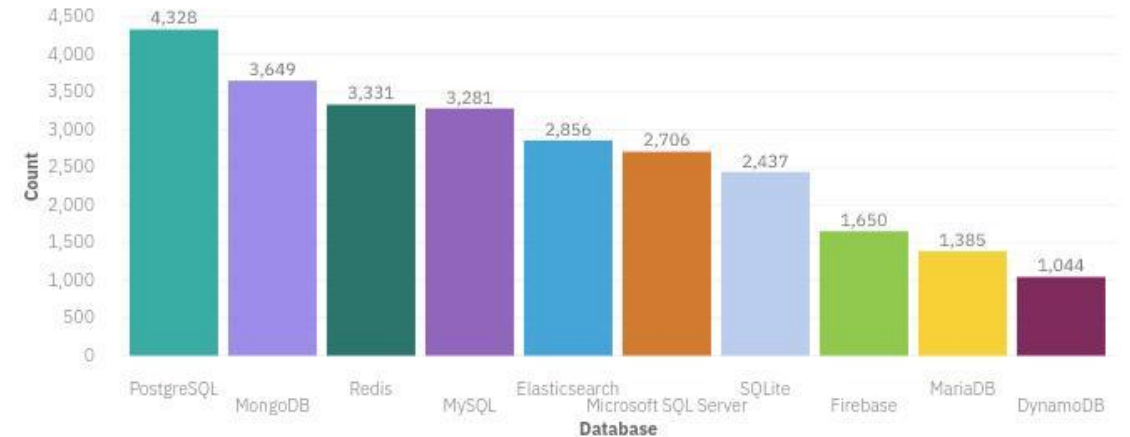
● Elasticsearch ● Firebase ● MariaDB ● Microsoft SQL Server ● MongoDB
● MySQL ● Oracle ● PostgreSQL ● Redis ● SQLite



Next Year

Top 10 Database Desire Next Year

● DynamoDB ● Elasticsearch ● Firebase ● MariaDB ● Microsoft SQL Server
● MongoDB ● MySQL ● PostgreSQL ● Redis ● SQLite



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- PostgreSQL take top database spot from MySQL
- Oracle disappearing from top 10 future database
- Most of top database list are relational database

Implications

- PostgreSQL becoming more popular database to learn
- Oracle that is one of the best known database becoming less attracting to study in the future
- Relational database still dominating database market

PLATFORM TRENDS

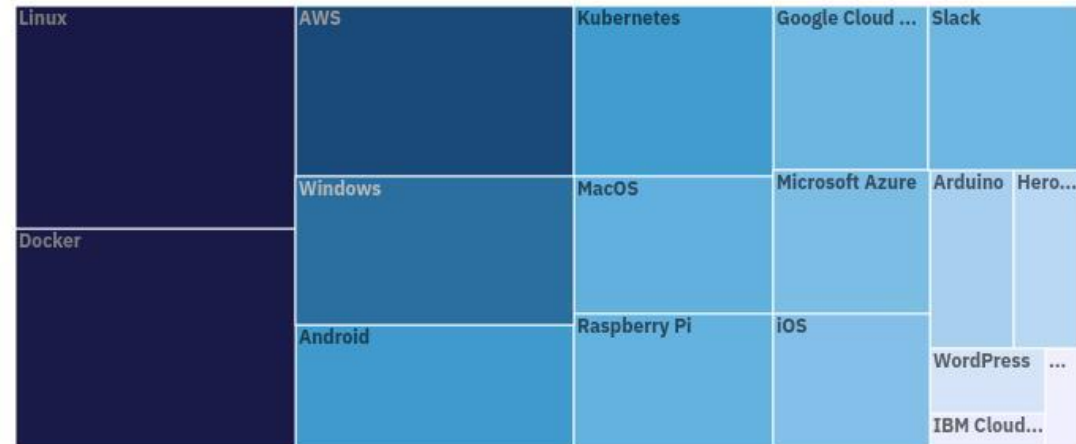
Current Year

Platform Worked With



Next Year

Platform Desire Next Year



PLATFORM TRENDS - FINDINGS & IMPLICATIONS

Findings

- Windows, Docker and Linux still dominates the platform market.
- Android still will rank better than iOS in mobile OS
- AWS still the leader of cloud computing platform

Implications

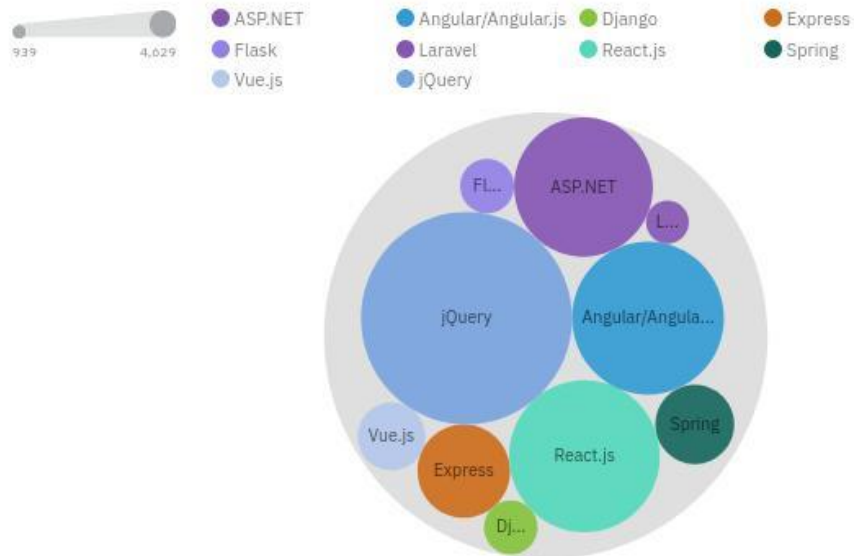
- Windows and Linux tightly compete for PC OS left MacOS behind
- Android phone have more user than apple phone
- AWS service still getting better and better

WEB FRAMEWORK TRENDS

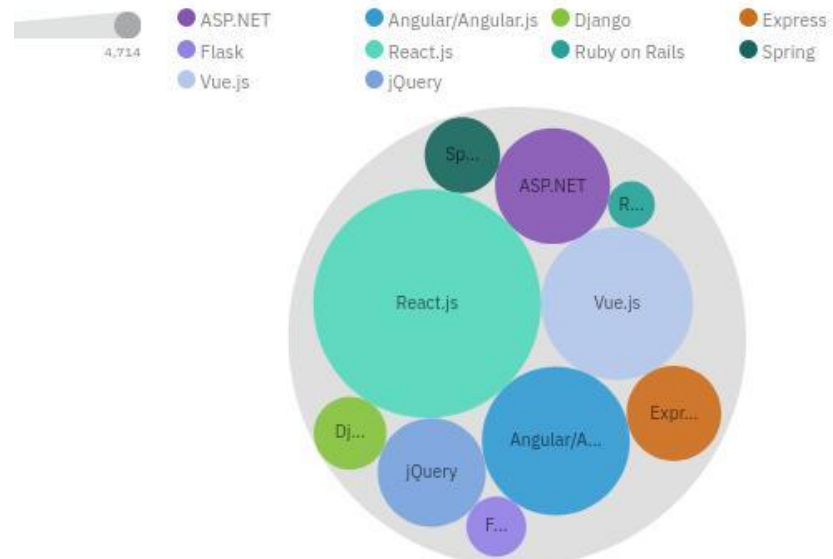
Current Year

Next Year

Top 10 Web Frame Worked With



10 Web Frame Desire Next Year



WEB FRAME TRENDS - FINDINGS & IMPLICATIONS

Findings

- React.js take top web frame spot from jQuery
- Vue.js move far up to top 3 web frame
- JQuery that previously top web frame, have to fall out of top 3 list

Implications

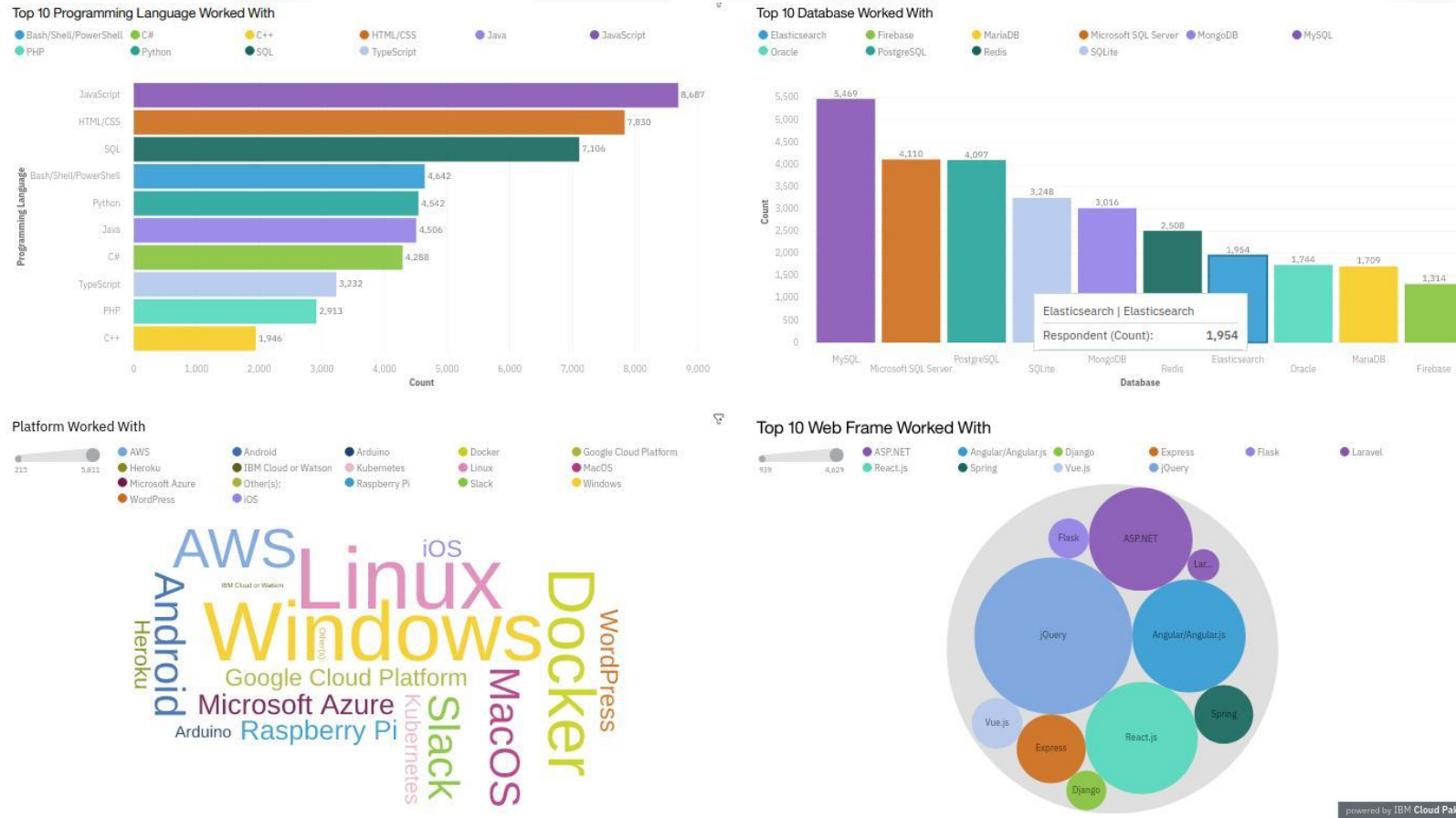
- React.js become the new favorite web frame
- Vue.js significantly attract web developer to study it
- JQuery might left behind on innovation compared to webframe like React,js or Vue.js

DASHBOARD



<https://jp-tok.datapatform.cloud.ibm.com/dashboards/0b09034d-81d1-473d-8aa5-71cee75e15dc/view/502aff2e229817f64ed7dce407987f577d3f2c5ee7bbd05284867b490a617297a8384698c82b1f5bde195135f3eb460f9b>

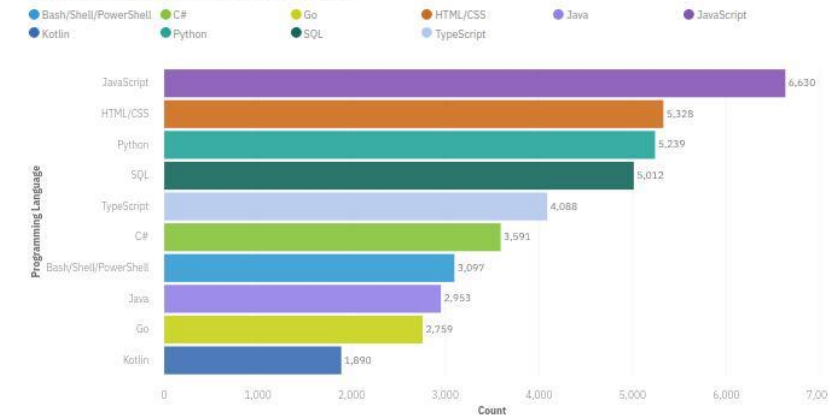
DASHBOARD TAB 1 : Current Technology Usage



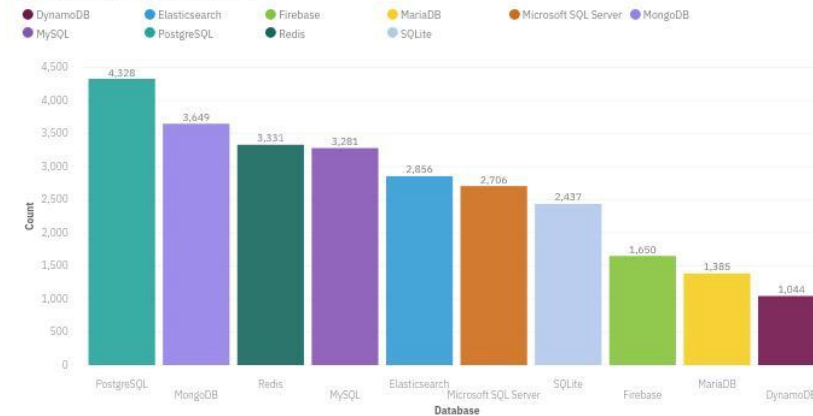
DASHBOARD TAB 2 : Future Technology Trend

Current Technology Usage **Future Technology Trend** Demographics

Top 10 Programming Language Desire Next Year



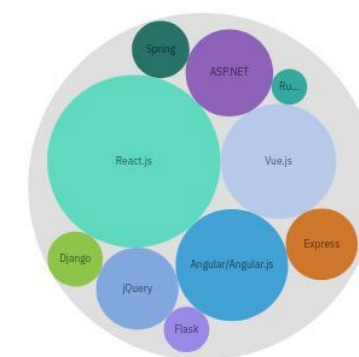
Top 10 Database Desire Next Year



Platform Desire Next Year

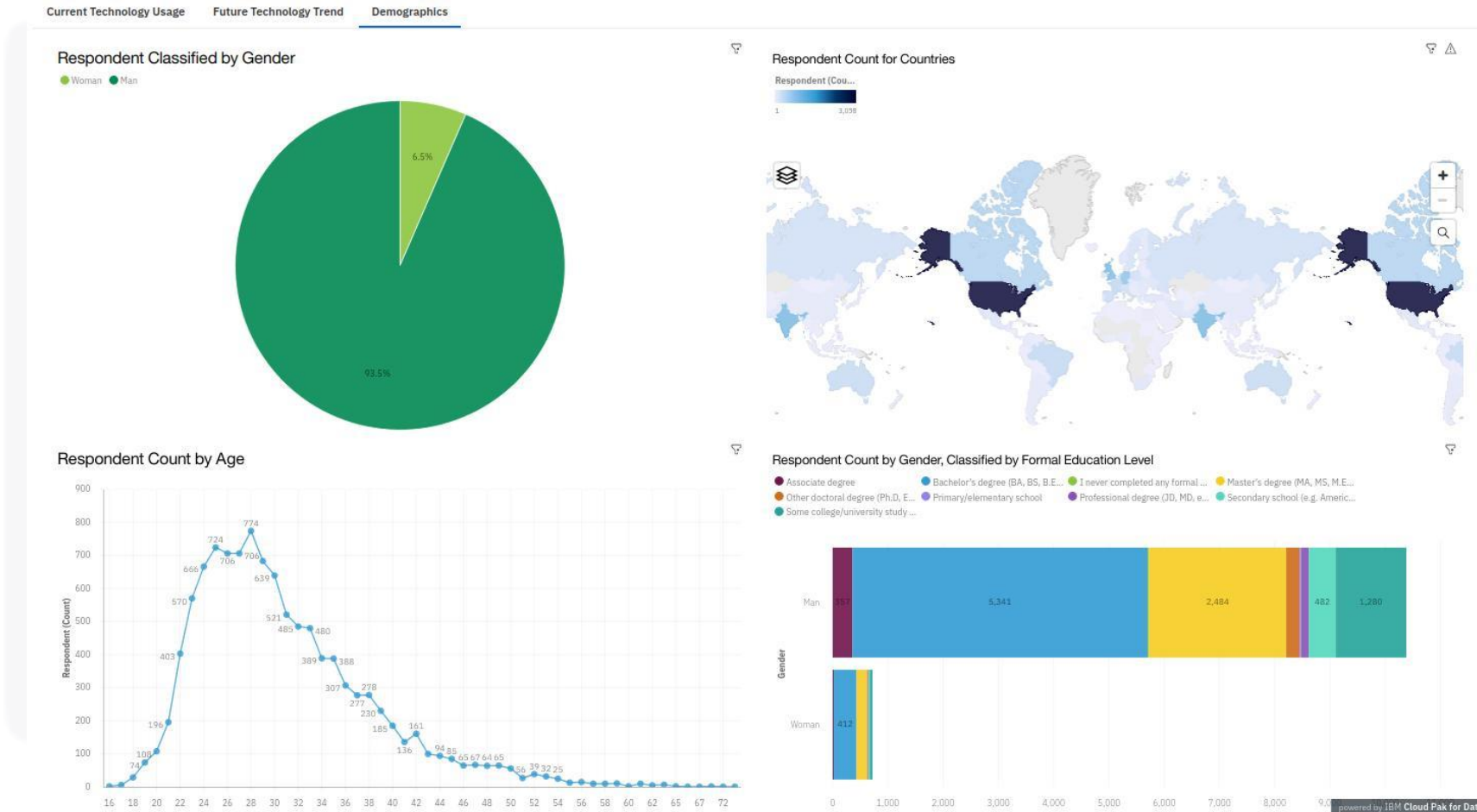


Top 10 Web Frame Desire Next Year



powered by IBM Cloud Pak for Data

DASHBOARD TAB 3 : Demographics



DISCUSSION



- What technology will be relevant in the future
- What should developer do to keep up with the market of technology?
- What kind of technology will be trend in the future?

OVERALL FINDINGS & IMPLICATIONS

Findings

- Newer technology getting more recognition by developer to study
- Web development technology keep growing and still being the leader of the software industry
- Data science technology get more attention than ever before

Implications

- Older technology should have innovation to keep up with market
- Web Developer job still have wide market in the future
- More company doing data science to increase their business

CONCLUSION



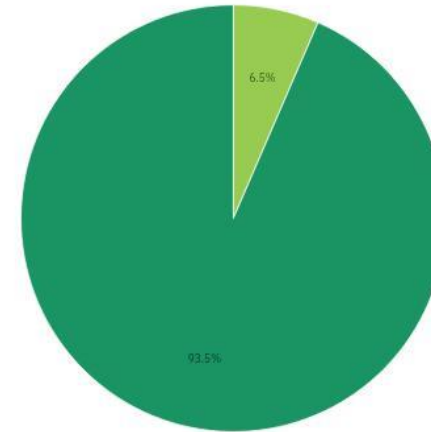
- Trend of technology shifting quickly every year
- Every year, people will consider learning newer technology to catch up with market demand
- To keep up with today industry, older technology should have innovation in their product

APPENDIX

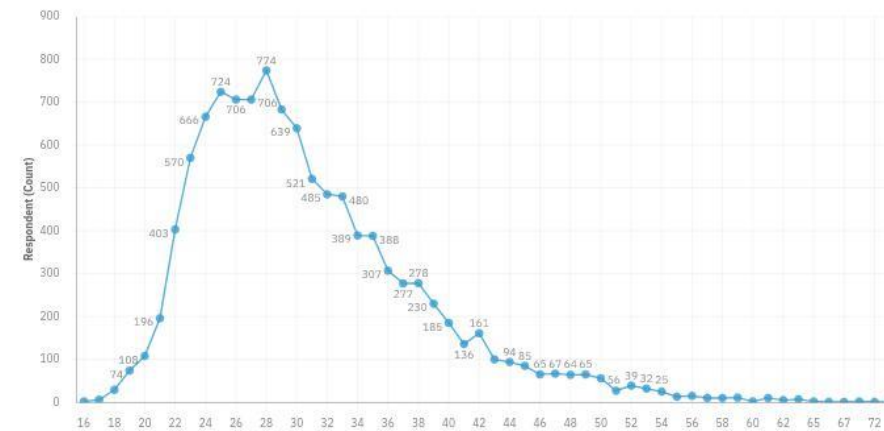


Respondent Classified by Gender

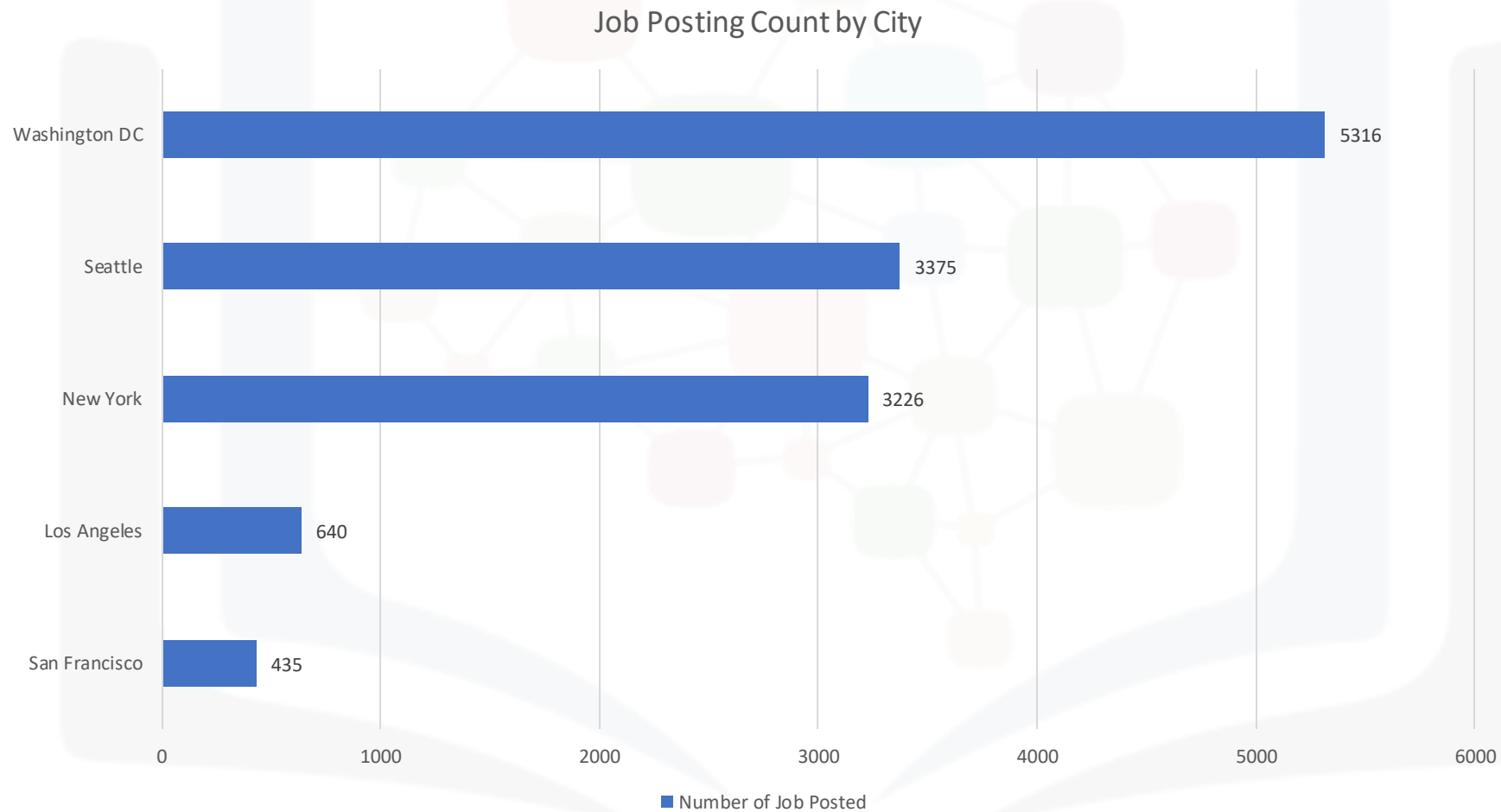
Woman Man



Respondent Count by Age



JOB POSTINGS



POPULAR LANGUAGES

