

PROGRAMMING SKILL TRENDS

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OUTLINE

- ❑ Executive Summary
- ❑ Introduction
- ❑ Methodology
- ❑ Results
 - Data Viz – Charts
 - Dashboard
- ❑ Discussion
- ❑ Conclusion
- ❑ Appendix



EXECUTIVE SUMMARY

- ❑ Collecting job openings from various technologies and locations.
- ❑ Analyzing the data to identify insights and trends
 - The top programming languages
 - The top databases skills
 - The popular IDEs
- ❑ Bring the information together with a dashboard that shows current skills, future trend skills, and demographics.



INTRODUCTION

In order to effectively keep up with the ever-evolving technology landscape, it is crucial to have a strong foundation in programming. Programming serves as the backbone for IT solutions and plays a vital role in the work of consultants. By proficiently analyzing data, professionals can uncover valuable insights and trends that can drive informed decision-making and enhance business strategies. The ability to harness the power of programming empowers individuals to navigate the complex world of technology with ease and precision, ensuring successful outcomes and staying ahead of the competition.

□ The focus problems are:

- What are the programming/database skills in the present?
- What are the programming/database skills in the future?

METHODOLOGY

- ❑ Data Collection
 - [Data Source](#): Job posting, Training portals and Surveys
- ❑ Data Wrangling
- ❑ Data Analysis
- ❑ Data Visualization
- ❑ Dashboard Creation
- ❑ Data Storytelling



RESULTS

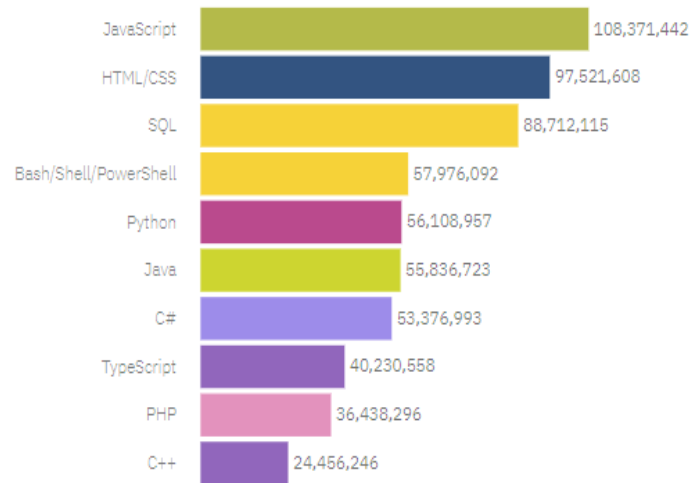
The collected data is transferred to a data cleaning process, and then statistical techniques are applied to analyze it. Once all the information is concluded, dashboards are created to show current and next year trends.



PROGRAMMING LANGUAGE TRENDS

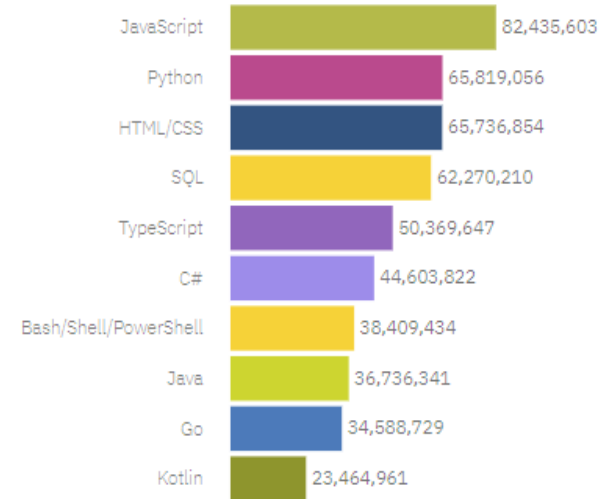
CURRENT YEAR

Top 10 Language Worked with



NEXT YEAR

Top 10 Language Desire Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

□ FINDINGS

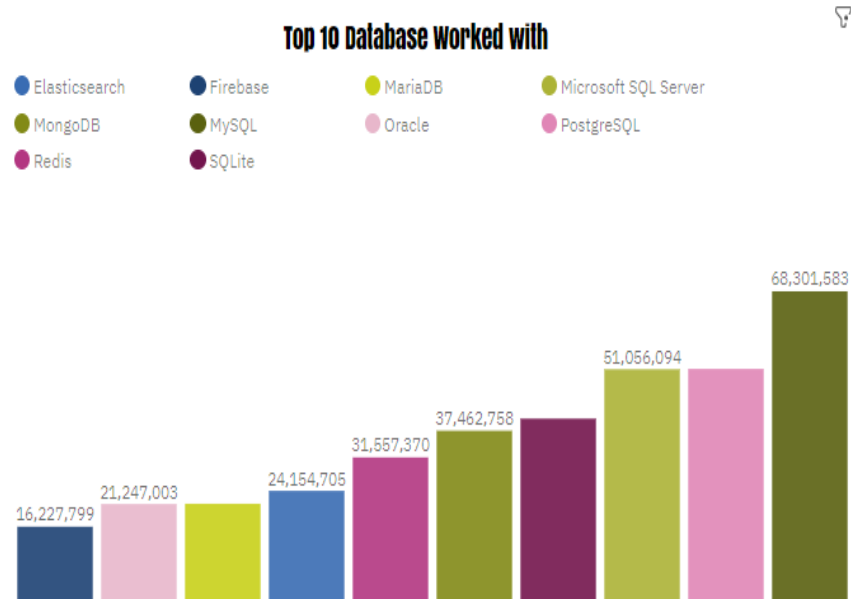
JavaScript has the most highest number of people working with

□ IMPLICATIONS

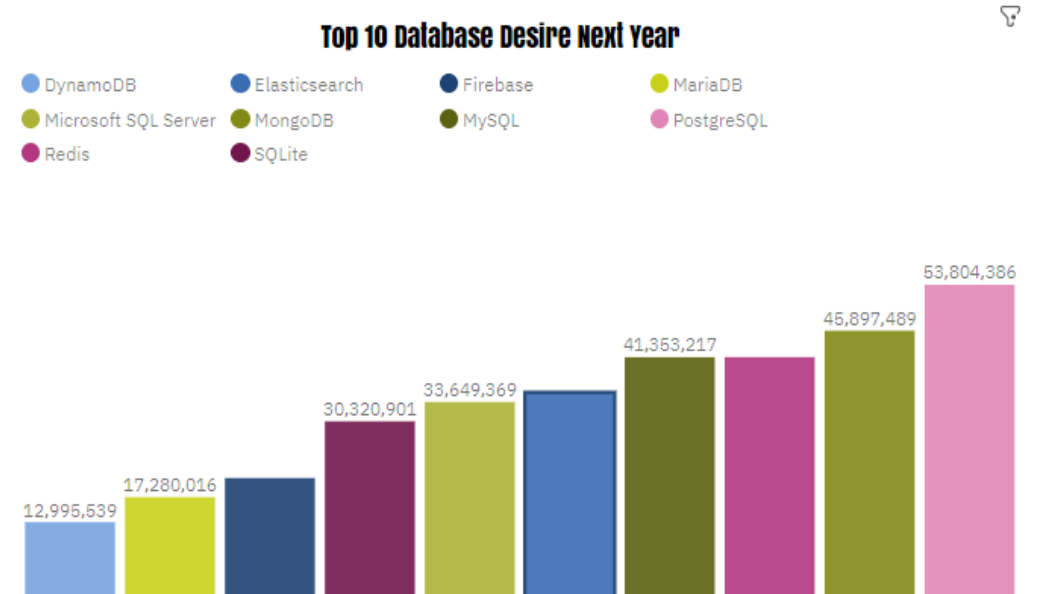
JavaScript will be still in the top of the food chain for the coming year

DATABASE TRENDS

CURRENT YEAR



NEXT YEAR



DATABASE TRENDS - FINDINGS & IMPLICATIONS

- FINDINGS

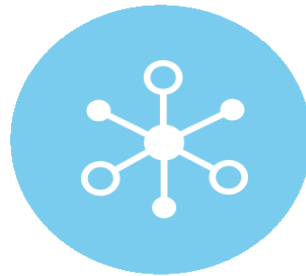
MySQL has the most highest number of people working with

IMPLICATIONS

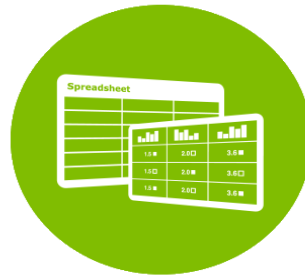
MySQL will be replaced by PostgreSQL but will still be relevant in the future

DASHBOARD

The shareable preview of the dashboard created in Watson Studio can be seen [HERE!](#)



Integrate

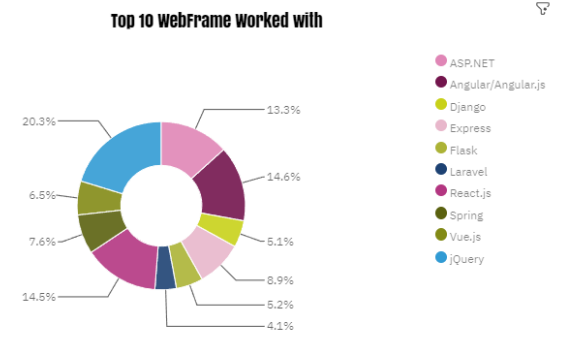
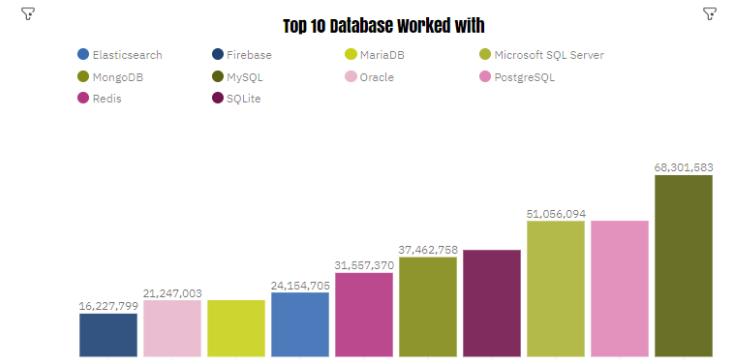
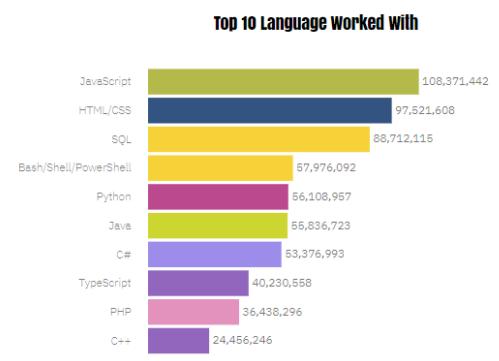


Analyze



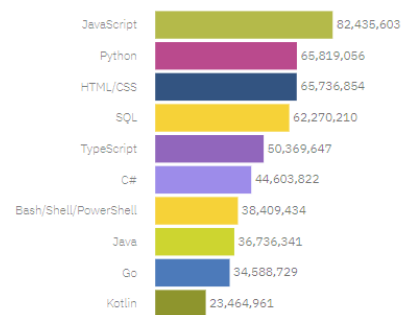
Visualize

CURRENT TECHNOLOGY USAGE

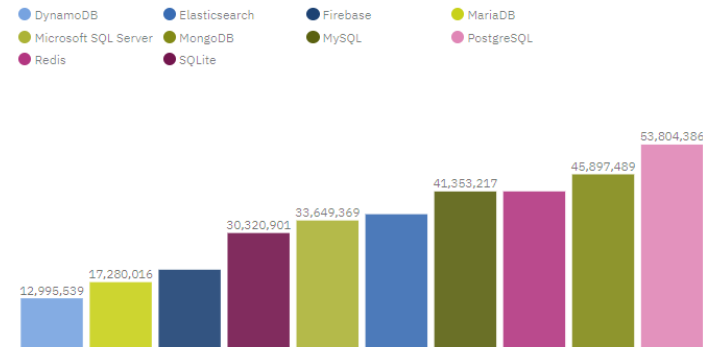


FUTURE TECHNOLOGY TREND

Top 10 Language Desire Next Year



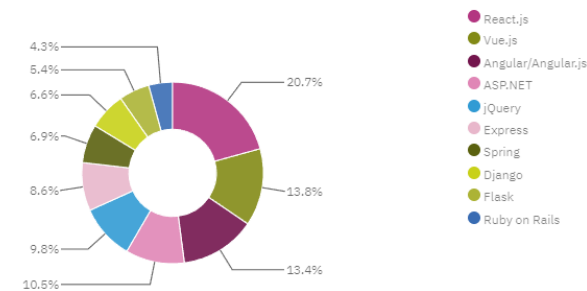
Top 10 Database Desire Next Year



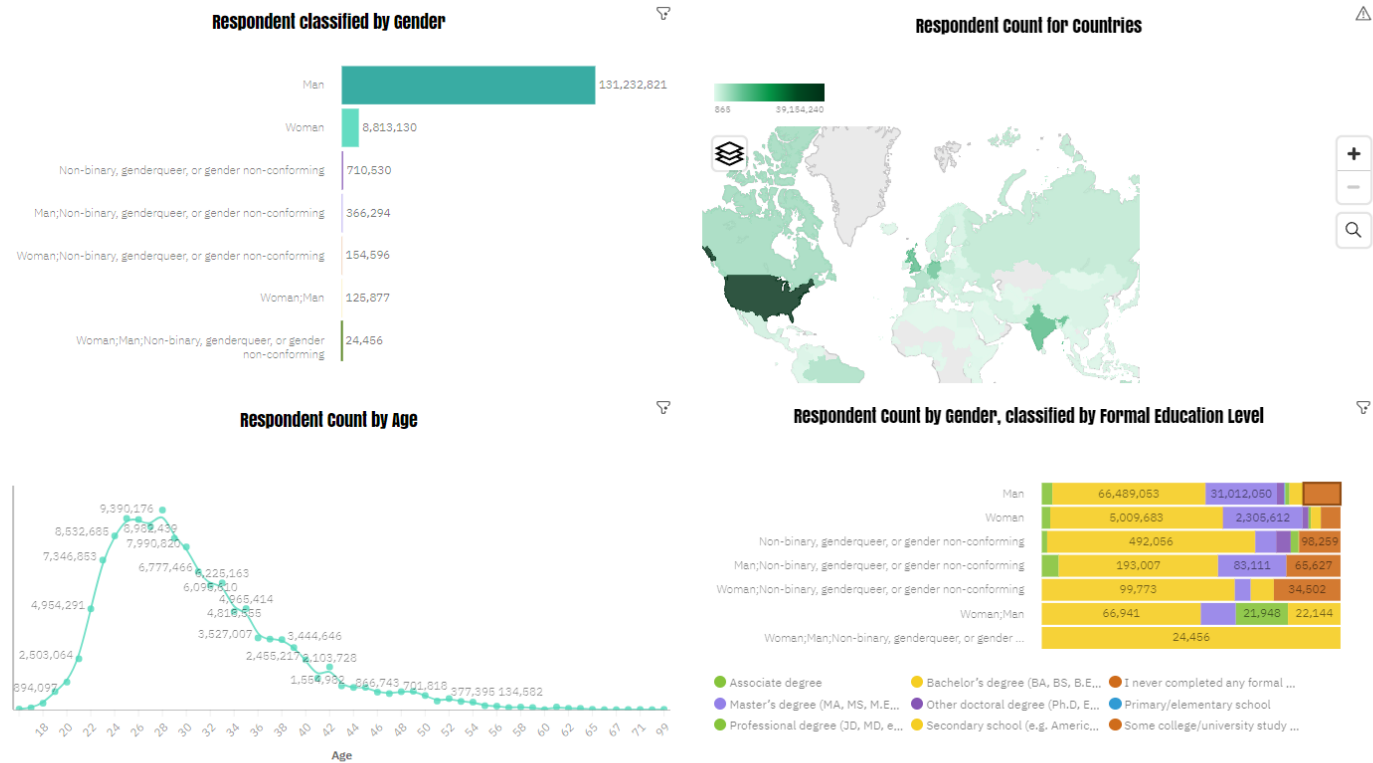
Platform Desire Next Year



Top 10 WebFrame Desire Next Year

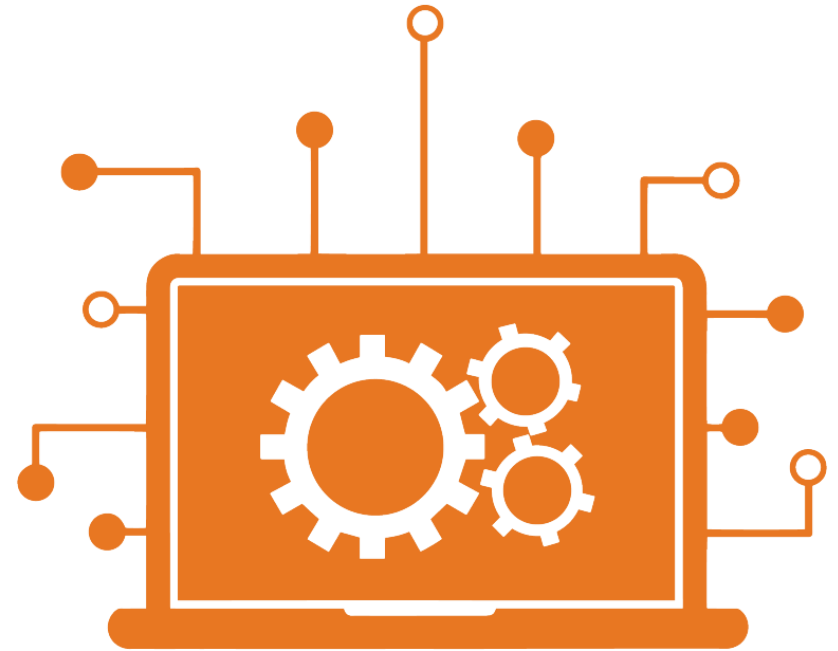


DEMOGRAPHICS



DISCUSSION

- ❑ Women's roles in global IT fields
- ❑ Why do SQL servers remain the most interesting in the future?
- ❑ What is the key value of HTML/CSS that continues to be in demand?

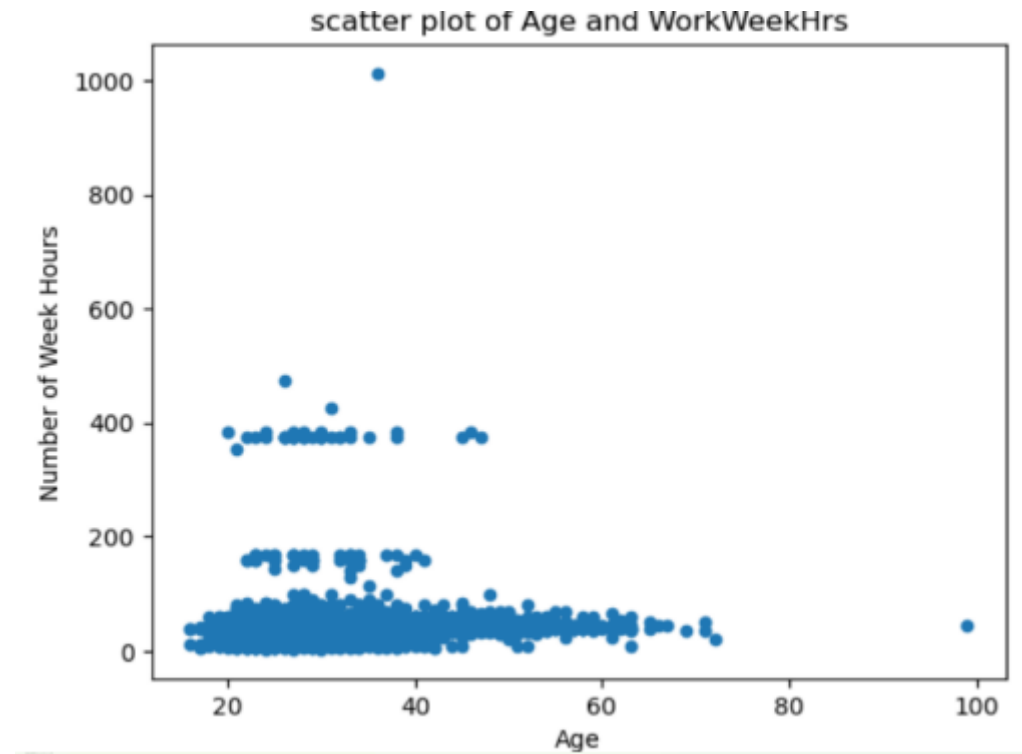


OVERALL FINDINGS & IMPLICATIONS

- ❑ JavaScript and HTML/CSS will remain in the top 1st and 2nd positions by next year.
- ❑ While SQL will be surpassed by Python, Bash/Shell/PowerShell are not expected to be prominent in the coming year.
- ❑ PostgreSQL is projected to be in the 1st place, replacing MySQL, while Microsoft SQL Server and SQLite are expected to disappear.
- ❑ Linux is the most widely used platform, with Docker predicted to replace Windows.
- ❑ In terms of web frameworks, React.js is predicted to be the most preferred option in the next year, replacing jQuery.
- ❑ In terms of gender, men are shown to respond more than women. The highest number of respondents are from the Russian Federation, and the average age is around 28 with a Bachelor's degree.
- ❑ JavaScript and HTML/CSS will continue to be popular.
- ❑ Python is expected to gain more interest.
- ❑ SQL servers will still be required, with PostgreSQL expected to be the most popular database.
- ❑ Docker is highly preferred, especially in Linux environments.
- ❑ The demand for jQuery is decreasing.
- ❑ It is assumed that a large number of young Russian men with Bachelor's degrees will respond to the analysis.

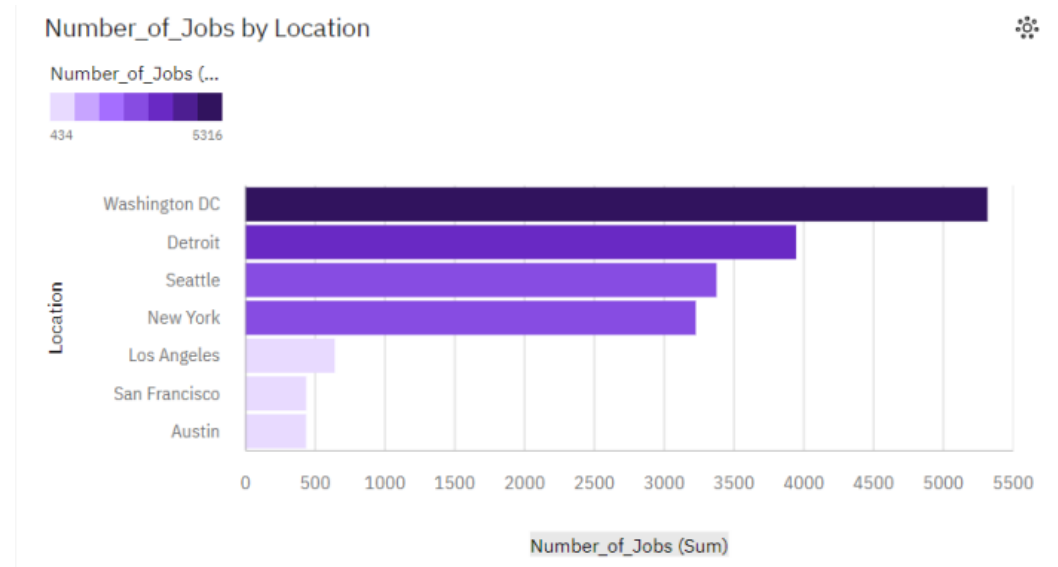
APPENDIX

SCATTERPLOT



APPENDIX

JOB POSTINGS



APPENDIX

POPULAR LANGUAGES

