

TREND OF TECHNOLOGY ANALYSIS

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OUTLINE



- Executive Summary
- Introduction
- Methodology
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 - Visualization Charts
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EXECUTIVE SUMMARY



- Current Technology Usage Trend
 - Language
 - Database
 - Platform
 - Web frame
- Future Technology Trend
 - Language
 - Database
 - Platform
 - Web frame
- Demographics Survey
- Country & Gender Difference

INTRODUCTION



- Analyze technology trend in software and web development among developers around the world
- Purpose of this Analysis
 - Identify the top programming languages, database, platform and web frame skills in demand
 - Identify skill requirements for future
 - Identify human resource gap in the industry
- Audience for this Presentation
 - Programmers
 - IT industry leaders
 - Computer science students

METHODOLOGY



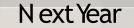
- Data Collection (Sources)
 - Stack overflow developer 2019 survey
 - GitHub job postings
 - Programming languages annual salary
- DataWrangling
- Data Exploration
- Data Cleaning
- DataVisualization
 - Python matplotlib & turtle
 - IBM Cognos
- Presentation

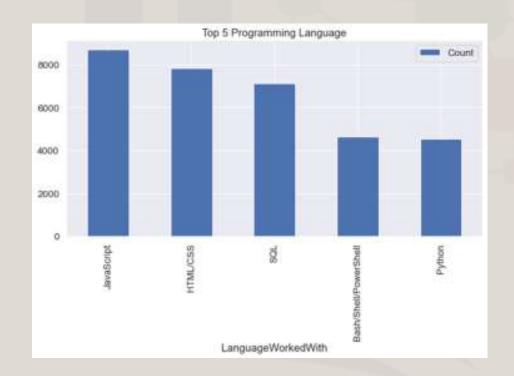
RESULTS

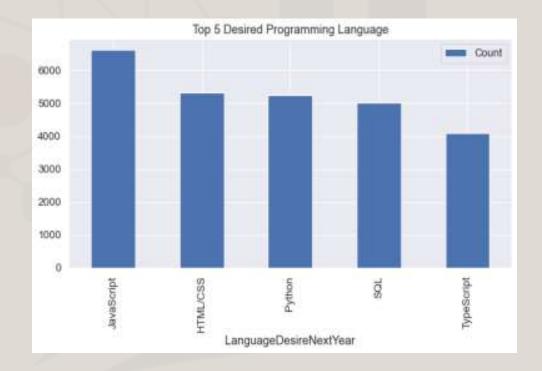
	Respondent	LanguageWorkedWith	LanguageDesireNextYear	DatabaseWorkedWith	DatabaseDesireNextYear	PlatformWorkedWith
0	4	С	С	MySQL	MySQL	Linux
1	4	C++	C#	SQLite	SQLite	Windows
2	4	C#	JavaScript	NaN	NaN	NaN
3	4	Python	SQL	NaN	NaN	NaN
4	4	SQL	NaN	NaN	NaN	NaN
74584	25142	Go	Python	NaN	NaN	NaN
74585	25142	HTML/CSS	R	NaN	NaN	NaN
74586	25142	PHP	NaN	NaN	NaN	NaN
74587	25142	Python	NaN	NaN	NaN	NaN
74588	25142	R	NaN	NaN	NaN	NaN

PROGRAMMING LANGUAGE TRENDS IN TECHNOLOGY

Current Year







PROGRAMMING LANGUAGETRENDS - FINDINGS & IMPLICATIONS

Findings

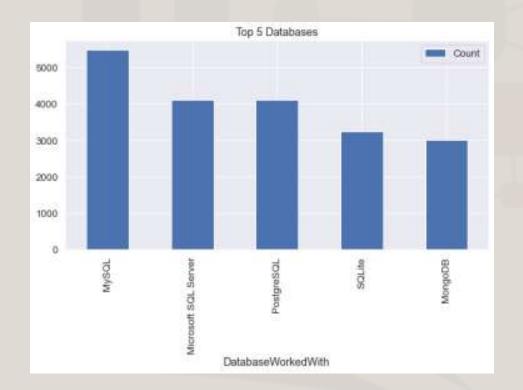
- JavaScript leads the programming language trends globally.
- Python and TypeScript are steadily gaining popularity across various applications.

Implications

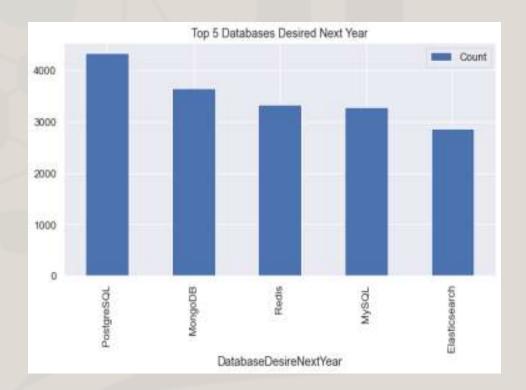
- Web development and developers are in continuous high demand due to the need for digital solutions and online experiences.
- JavaScript and TypeScript proficiency is essential for modern web development and application creation.
- Python is emerging as a trending language, particularly in the field of artificial intelligence, powering innovation and advancements.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the widely favored database system in various industries.
- Microsoft SQL Server remains a reliable choice for data management in many businesses.
- MongoDB and Redis lead the NoSQL category, preferred for flexible and scalable data storage.

Implications

- Open-source databases like MySQL are still popular choices.
- SQL remains crucial in software development and Big Data.
- NoSQL databases are set to transform the relational database landscape.

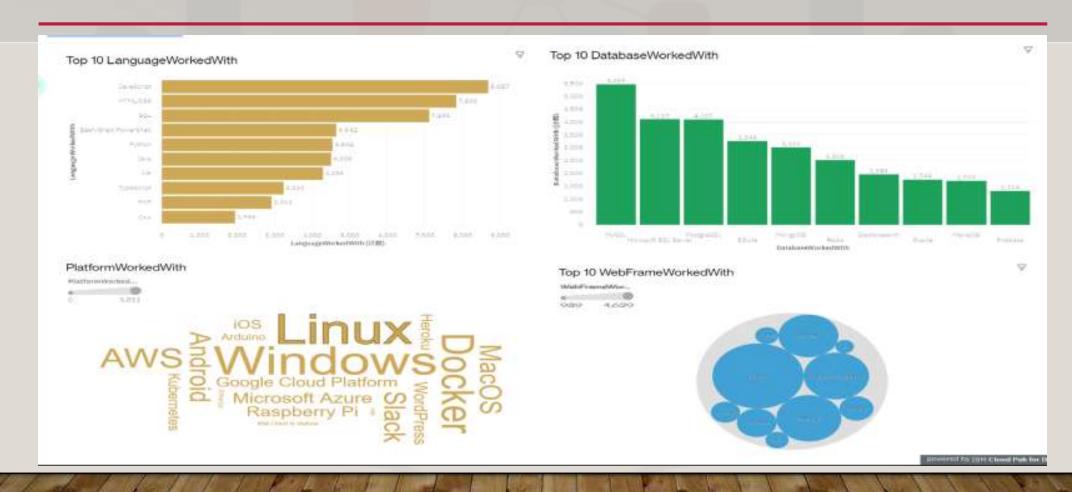
DASHBOARD



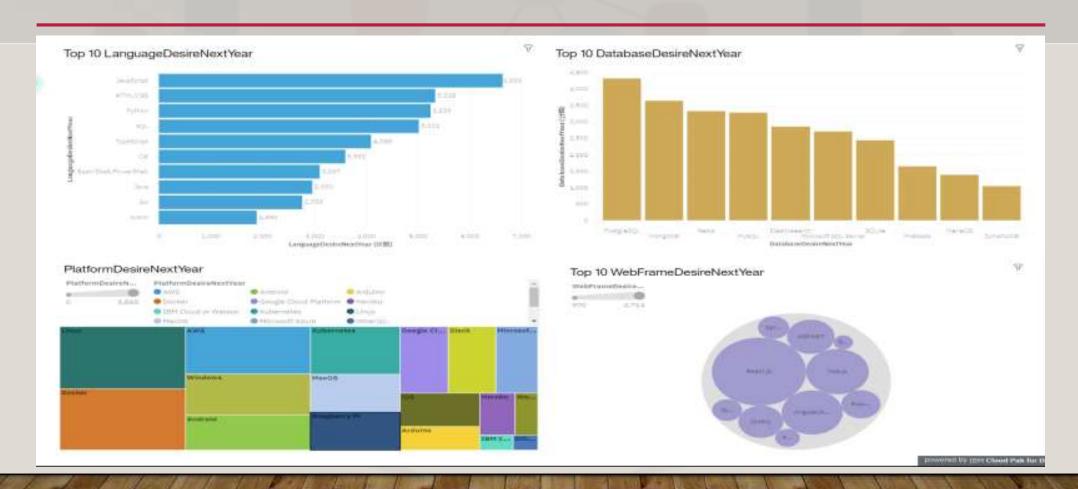
The permanent link of the read-only view of the Cognos dashboard:

https://github.com/nihal2329/Capstone-story-project/blob/34be1404959e81aba922e68a82e0f891a95a 68fb/A%20dashboard%20with%20Cognos%20Dashboard%2 0Embedded%20(CDE).json

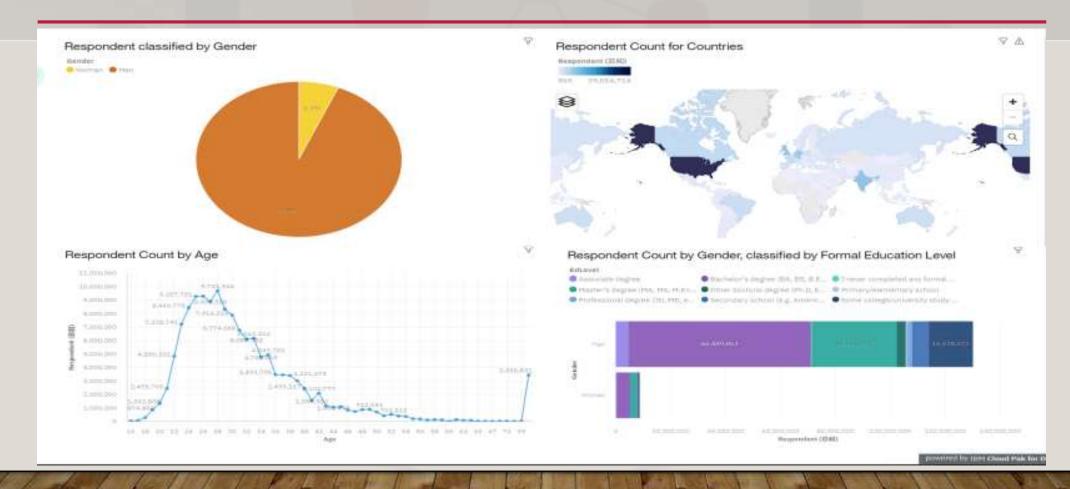
CURRENT TECHNOLOGY USAGE



FUTURETECHNOLOGYTREND



DEMOGRAPHICS



DISCUSSION



- Technology Usage
 Trends: Present and
 Future
- Disparities in the IT Industry: Gender, Age, and Education Bias.

OVERALL FINDINGS & IMPLICATIONS

Findings

- Yearly Tech Trend Changes
- USA's Role in Tech Leadership
- Gender and Age Bias in Tech
- Docker and AWS Platform Dominance

Implications

- Keeping Current: Programmers Must Embrace Technology Trends
- Equal Tech Exposure: Bridging the Global Gap

CONCLUSION



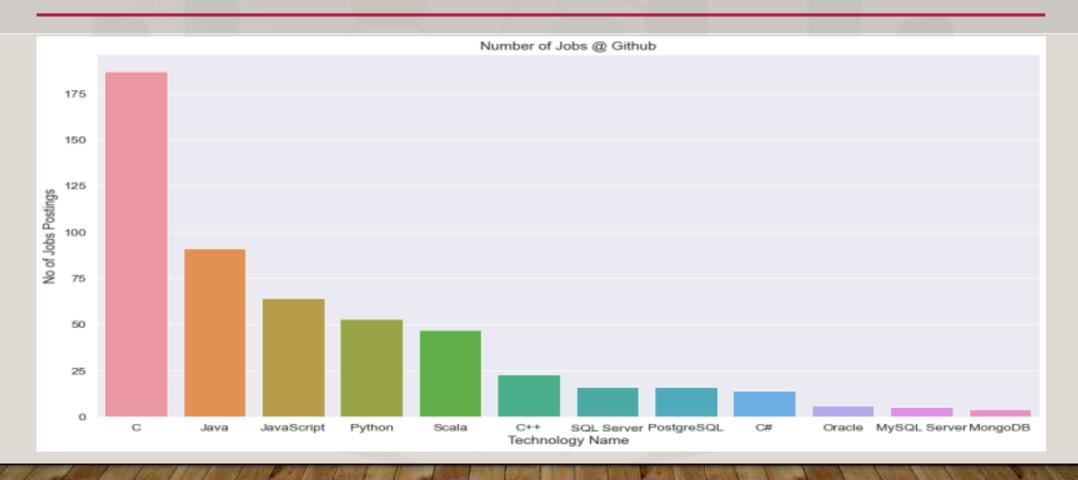
- Tech Trends: Languages, Databases, Platforms, Frameworks
- Demographics: Gender, Education
- Language Trends vs. Salaries

APPENDIX



- IBM Cognos Dashboard Embedded: AI-Powered Business Intelligence
- Supports Full Data Analytics Cycle
- User-Friendly Data Exploration
- No Formal Training Needed for Interactive Dashboards

GITHUB JOB POSTINGS



POPULAR LANGUAGES

