STUDENTS' PERFORMANCE REPORT

Group Leader: Muhammad Syaif Alfariz Bin Ilyas Susanto A21EC0094

- Doing the report for students' performance.

Group Members: 1) Mohammed Abdulsalam Abdulrahman Abu Amoud A21EC0268
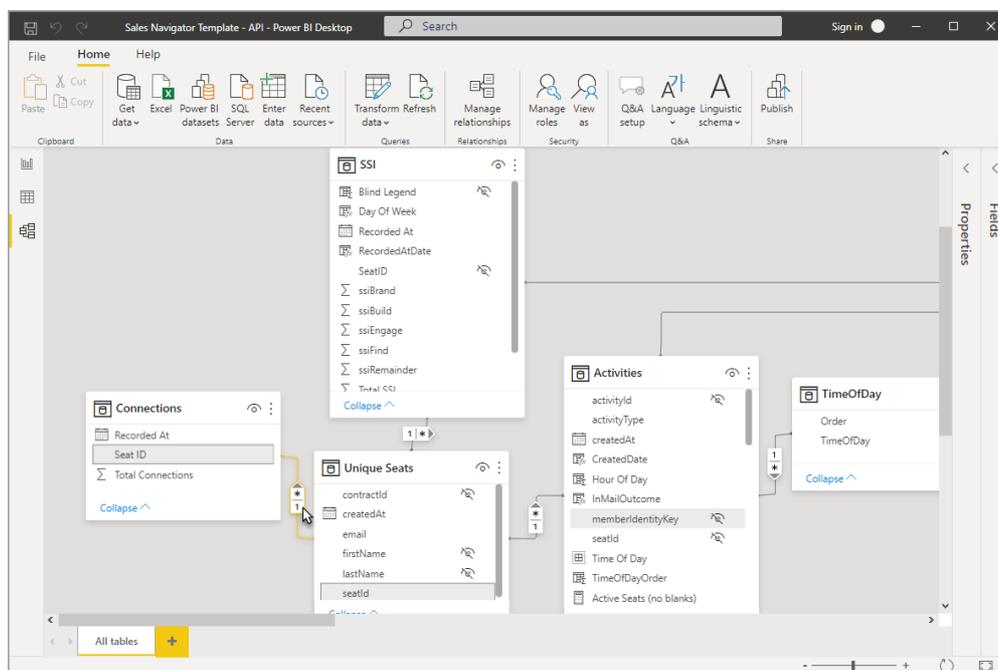
- Creating questionnaire and content of the report.

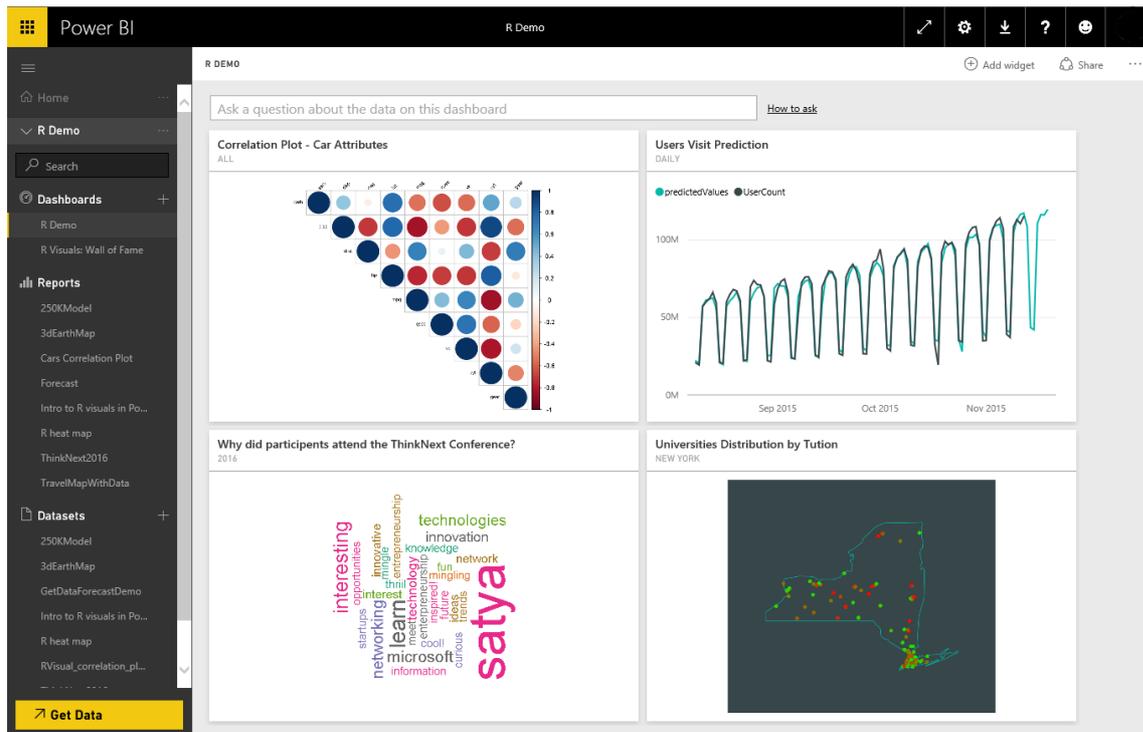2) Anis Sofea Asyikin Binti Abdullah A17KM0045

-helped with creating the questionnaire and power bi.

Introduction - There are top 10 different sectors trends of analytics by this year, 2022. The first one is Artificial Intelligence which are machines that can execute what is usually done by complex human intelligence. In this year 2022, there are a lot of AI technologies that have been used such as the new humanoid robot called 'Ameca' that can act like a human with realistic facial expression and smooth movement which attracts people at the show at CES 2022. Next is data security which is mainly about the security for information that a company keep. We know that in this year, there are a lot of technologies that can be used for something bad and also a lot of black hackers which can easily hacking the system of that company. Next one is Real-Time data and analytics. Seen the pandemic of Covid 19 arrived, some of the countries used the data to overcome the possible ensure survival in those uncertain times. There are other more different sectors for data analytics for 2022 such as data quality management, data automation, data literacy and data discovery.

Industrial talk 7 has introduced data visualization and some of the tools used. so, what is data visualization? Data visualization is the procedure of transforming and translating big data and metrics into graphs, charts and visuals to help the human brain to have better understanding of complex data and the ability to identify and share real time trends as well as monitor events and activities. This procedure can be achieved by using a software called MICROSOFT POWER BI. With Microsoft Power Bi you can quickly connect the data prep, model and visualize it as much or as little as you please. Microsoft power bi has the ability to connect to hundreds of data sources locally or on the cloud. examples salesforce excel, google analytics and even IOT devices to get real time information and turning all of that data into live interactive friendly visuals. The 3 main focus areas of Ms power bi is; reports, data and modeling.

For example modeling gives the ability to create relationships between tables with 4 types of cardinality; one to many, one to one, many to one and many to many. MS power bi has a wide range of visualization graphics to choose from to represent the data. For instance in a dashboard there are many chart types to choose from; pie, bar, line, scatterplot, bubble, heat map variations chart and more. It is a great tool for business analytics. Common areas to use data visualization; healthcare, politics, scientists and researches, finance and logistics,

Citation:

Calzon, B. (2021, December 14). See Top 10 Analytics & Business Intelligence Trends For 2022. BI Blog | Data Visualization & Analytics Blog | Datapine. https://www.datapine.com/blog/business-intelligence-trends/
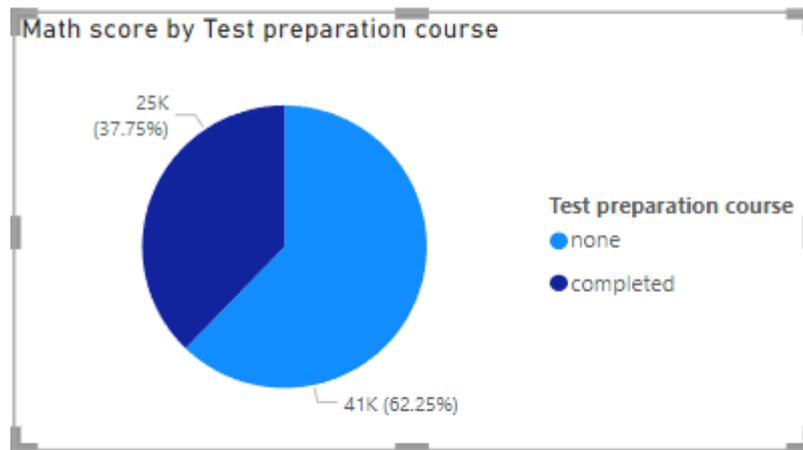
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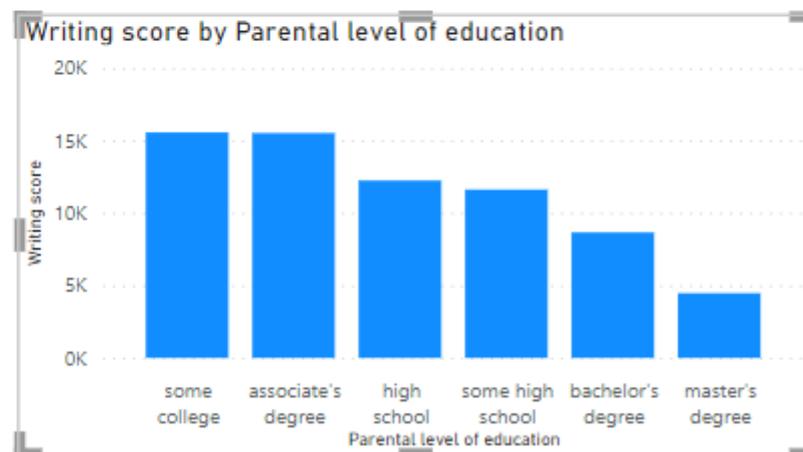
Reflection –

What we can see from the trends of data analytics, for the upcoming years which also will be more advanced in the industry revolution 4.0, the big data analytics will continue to play a huge role enhancing the technologies and advancement in research. Data visualization can have a great impact in various ways; analyzing data in better ways. analyzed reports whether its marketing strategy or visual representation of the business data can help business stakeholders to have clear vision on the areas that require attention. These analyses can help increase profits and better decision making for businesses or the user in general. Furthermore, complicated data can be easier to understand with visualization. patterns and errors are easier to recognize.

First Question: How many students completed the test preparation ?

Math score by Test preparation course

25K
(37.75%)

Test preparation course
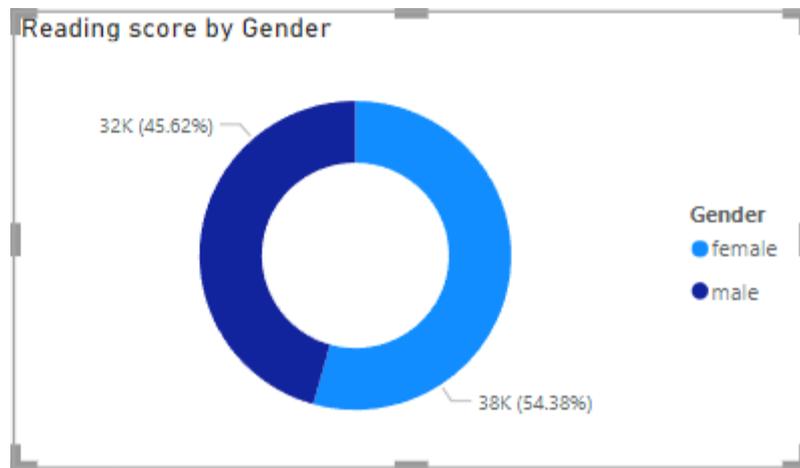● none
● completed

41K (62.25%)

Result: from the graph we can see that 35.7% of students completed the test preparation while 62.25% of students did not complete.

Second Question: what is the highest parental level education among the students?

Writing score by Parental level of education

20K

15K

Writing score
10K

5K

0K

some   associate's   high   some high bachelor's   master's
college   degree   school   school   degree   degree
            Parental level of education

Result: From the graph we can see that the highest parental level education among the students are those with some college and associate degree.

Third Question: How many females compared to males in taking the reading test?

Reading score by Gender

32K (45.62%)

38K (54.38%)

Gender
● female
● male

Result: From the graph we can see that the percentage of female students taking the reading test is higher than the male students.