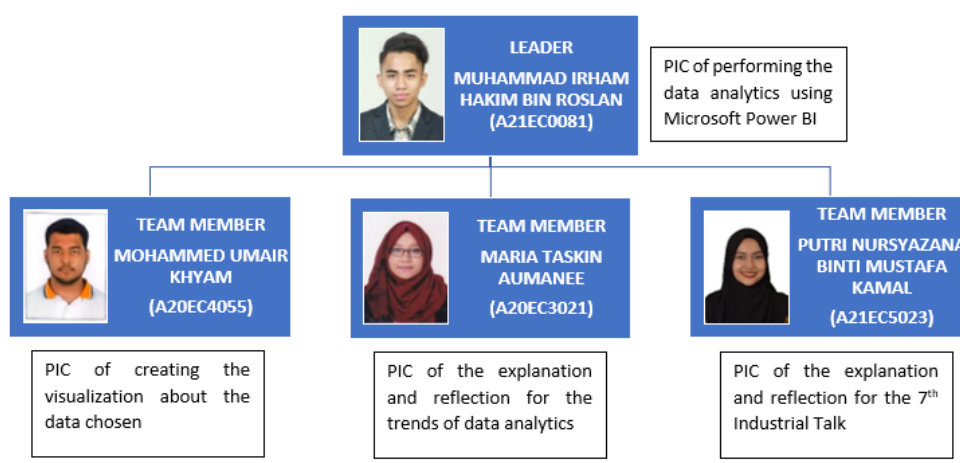ASSIGNMENT 4 - ONLINE DASHBOARD REPORT

SECP1513 Assignment 4 by Group 1

January 15, 2022

Trends of Data Analytics in Different Sectors

What is data analytics? Data analytics is a process where a certain dataset that has various sizes and comes from different sources are analyzed to get the relevant and valuable information. It is also a process of getting the conclusion regarding the information of any raw dataset. Data analytics are divided into four parts. Descriptive analytics, diagnostic analytics, predictive analytics and prescriptive analytics. Descriptive analytics usually explains what is happening over time. Diagnostic analytics are mainly focused on the reason for any occurrence that happened. It needs a lot of hypotheses and requires a much more diverse dataset. Predictive analytics are usually about the events that might happen in the near future. Prescriptive analysis shows a plan of action. It analyzes data and provides recommendations and guidance on what happens next. Moving forward, there are four steps in the process of data analytics. The first step is to determine the criteria for grouping the data. The second step is to collect the data. The third step is to organize the data. Lastly, the fourth step is to clean the data. There are five roles of data analysts in business. The first role is to study the information. The second role is to clean it from noise. The third role is to assess the data and the quality. The fourth role is to develop scenarios for machine learning and automation. Last but not least, the fifth role is to oversee the proceedings. Data analytics will be useful to anyone who knows how to use it. However, it will be especially useful for small businesses as it will help them think of myriads of ways on how to promote their products, manage their finances and how to engage with their partners

Industrial Talk 7 (Microsoft Power BI)

What - Microsoft Power BI is an easy-to-use tool that helps with data collecting, analytics, and visualizations. There are several instances for creations of Microsoft. Azure Data Services, Machine Learning Client, Analytics Platform System, and SQL Server are all Microsoft products.
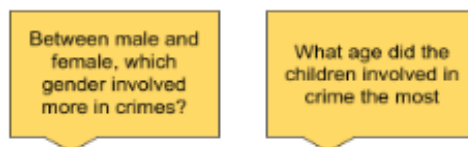
When - Microsoft Power BI is a business intelligence application that allows you to transfer

data directly from Microsoft Excel into Power BI, allowing you to enhance efficiency and make better decisions based on real facts in the manner of charts and graphs.

Where - Small organizations may utilize Power BI Desktop for free. Power BI Mobile is a smartphone app that is device-based. The license for Power BI Service is for large enterprises and has extensive functionality. For software vendors, Power BI Embedded is utilized. Businesses use Power BI Report Server to set up data and information on their systems.

Reflection - We know that Microsoft Power BI is amazing since it is accessible, easy to use, low-cost, allows machine translation search, and has an attractive website, based on the industrial talk 7 regarding Microsoft Power BI. By sharing the dashboard with the team and debating it further, Microsoft Power BI helps us to learn more about data. Microsoft Power BI is also a business intelligence program that helps companies of all sizes analyse data and share insights. Companies may use this technology to keep a closer check on their operations and get rapid responses through complete dashboards that can be accessed from any device. Because data preparation in BI supports the realization of analysis for a wide range of job domains, it has the potential to improve business cooperation efficiency. In any firm, Microsoft Power BI is a vital issue solver since it analyses complicated data quicker and more accurately, allowing us to reframe needed reports in a more thorough and safe environment in the quickest time frame.
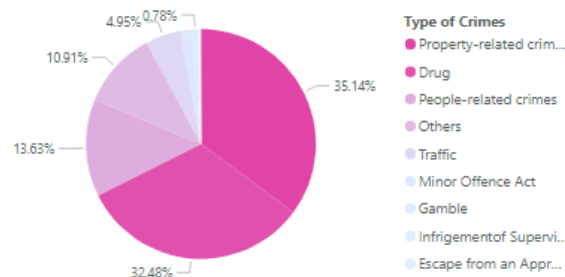
DATA ANALYTICS ON CHILDREN INVOLVED IN CRIME IN MALAYSIA, 2016

Between male and female, which gender involved more in crimes?

What age did the children involved in crime the most

Data Visualization ([POWER BI](#))

PERCENTAGE NO. OF CHILDREN BY TYPE OF CRIMES

%GT No. of Children by Type of Crimes

Type of Crimes
- Property-related crim...
- Drug
- People-related crimes
- Others
- Traffic
- Minor Offence Act
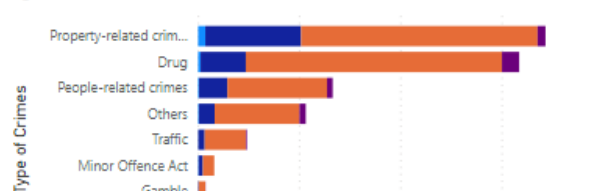- Gamble
- Infrigementof Supervi...
- Escape from an Appr...

In this pie chart, we have found the data which shows us the percentage number of children that are involved in a number of crimes. The highest number of crimes is property-related crimes which are 35.14% children and the lowest number is escaped from an appointed school. The high number of property-related crimes showed that type of crimes affected the number of children involved in crime in 2016.

NO. OF CHILDREN BY TYPE OF CRIMES AND AGE

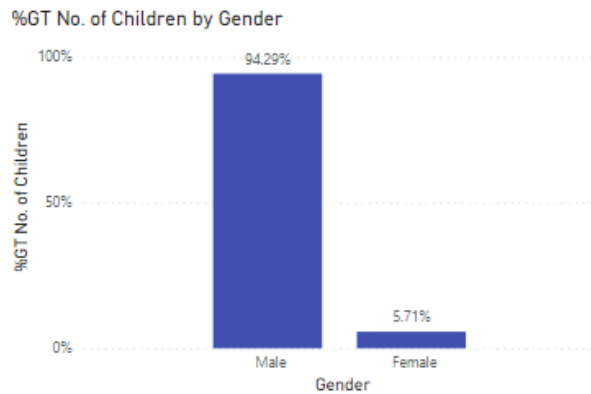
No. of Children by Type of Crimes and Age

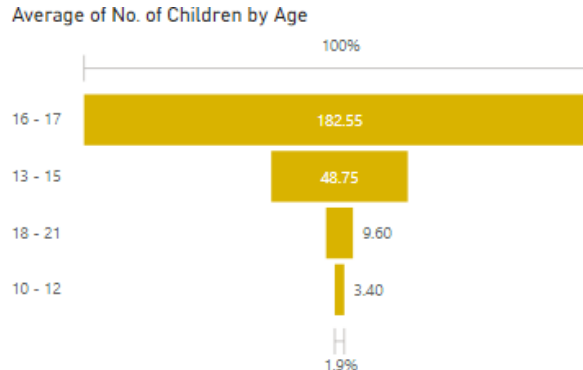Age ● 10 - 12 ● 13 - 15 ● 16 - 17 ● 18 - 21

In this bar graph, we show the number of children by the types of crimes and the age at

which the crimes are being committed. According to this data, the majority of the children involved in property-related crimes and between the ages of 16-17. Age 16-17. The type of crime is mostly affected by children aged 16-17.

PERCENTAGE NO. OF CHILDREN BY GENDER

In this graph, we provide visualization for the percentage number of children that were involved in crimes and the gender in 2016. The highest percentage is male offenders which are 94.29%. Whereas, the lowest record is female. The majority of crimes did come from male offenders and affected the number of children involved in crime in 2016.

AVERAGE OF NO. OF CHILDREN BY AGE

 In this graph, we represent the average number of children that were involved in crime in Malaysia in 2016 by their age. The average of children between the ages of 16-17 is the highest among the other ages which are 182.55. This showed that age affected the number of children involved in crime in 2016.

CONCLUSION

In our concluded interpretation, from this dataset one can possibly have a grasp of what kind of crimes the children may commit. The crimes that are committed vary on mostly the age and gender of the offender. As an instance, the most committed crime is by males and are mostly done by the age groups of 16-17. From the above data, we can see in which sector most crimes are being committed. Hence, one can predict or assume a future crime that can be committed in these sectors.

Online dashboard link : https://bit.ly/3nJAYXw