

DATA ANALYTICS USING MICROSOFT POWER BI

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TRENDS OF DATA ANALYTICS IN DIFFERENT SECTORS

Banking and Securities : To reduce fraudulent transactions, financial markets are monitored using network activity monitors and natural language processors. By monitoring the stock market, exchange commissions or trading commissions use big data analytics to ensure that no illegal trading occurs.

Communications and Media : For simultaneous real-time reporting of global events on multiple platforms (mobile, web, and TV). Big data is being used by the music industry, a subset of media, to keep track of the latest trends, which are then used by autotuning software to generate catchy tunes.

Sports : Understanding the patterns of viewership for various events in specific regions, as well as monitoring the performance of individual players and teams through analysis. Big data analytics is used extensively at sporting events such as the Cricket World Cup, the FIFA World Cup, and Wimbledon.

Education : To update and upgrade prescribed literature in a variety of fields that are rapidly developing. Universities all over the world are using it to monitor and track the performance of their students and faculties, as well as map student interest in various subjects through attendance.

What is data analytics ?

Data analytics is the science of analysing raw data in order to draw conclusions about it.

INDUSTRIAL TALK 7 : Introduction to Data Visualization (iCEO)

What?

Microsoft Power BI is an interactive data visualization tool used to focus on analyzing data and trends in business intelligence. It allows users to visualize data by company in a better way to allow better insight on information gathered so that decisions can be made effectively.

When?

Microsoft Power BI can be used when a company wants to make sense of data or interpret data that may consist of hundreds gigabit of data so that company can find current insight on trends and use it to effectively make decisions that can increase the success of the company in achieving their goal.

Where?

Microsoft Power BI is available to everyone who has knowledge and experience in using it. It can be used for free as a tool to help visualize data. Business ranging from big company to SME can also benefit from the usage of Power BI.

Reflection

We've learned a lot about how to collect data and make it easier to analyze. Data analytics is the study of raw datasets to draw conclusions. We can use this knowledge to collect data on our daily activities and time spent on them. We can collect the data and create an appealing pie chart. We've also learned about data analytics. Setting criteria for categorizing, collecting, organizing, and cleaning data determines the process flow.

MICROSOFT POWER BI VISUALIZATION

Our primary goal is to use Microsoft Power BI to create a data visualization of Crime Statistics for our audience. In accordance with the Investigation Paper in the State of Pahang for the year 2018, we can see the number of crimes that have occurred in Pahang and come up with strategies to reduce the number of crimes that have occurred.

Questions :

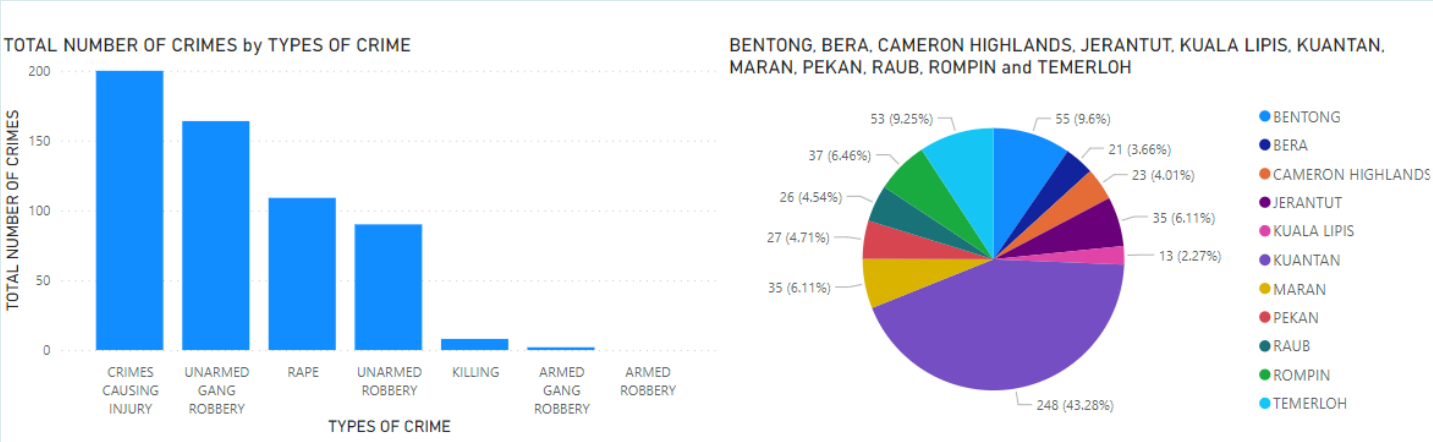
1. What is the type of crime that occurs the most in the State of Pahang and what can be done to prevent the crime from occurring?

-The type of crime that occurs the most in the State of Pahang are crimes that cause injury to people such as fighting, stabbing and violent behaviour. The most important thing to do to reduce these types of crime is to prepare ourselves. For example, individuals can take up martial arts class or carry defensive items such as pepper spray to defend ourselves.

2. What is the type of crime that occurs the least in the State of Pahang?

-The type of crime that occurs the least in the State of Pahang is armed robbery.

Data Analysis :



- Based on the bar chart, the type of crime that occurs the most are crimes causing injury. This may be caused due to lack of self-defense knowledge. (Diagnostic analytics)
- Based on the bar chart, the type of crime that occurs the least is armed robbery which is 0. Therefore, we can predict that the average number of crimes in the districts in Pahang will be 0 for the next year. (Predictive analytics)
- Based on the pie chart, the district that has the most crimes occurring is the Kuantan. If this continues to happen, a plan of action that can be done by the government is to make sure the law enforcement officers the number of patrol shifts to make sure the district of Kuantan is safe.

Conclusion

To summarize, we should always be aware of our surroundings because we never know what will happen to us or how we will react to it. When it comes to protecting ourselves from these crimes, we can do a variety of things such as installing security cameras in our homes and learning a little bit of martial arts to better prepare ourselves. Governments should also conduct public awareness campaigns to ensure that the general public is aware of the crimes that are taking place in their neighbourhood.