

# Technology and Information System (SECP1513-03)

Data Visualization In Domestic Violent

## **Lecturer:**

Prof. Madya. Ts. Dr. Mohd Shahizan bin Othman

## **Group Members:**

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#### Part 1 - Group Details

Title of the reports: Data Visualization in domestic violent Group Leader: Mohamad Azri Hadif Bin Mohammad Rizal

- Describe Trends of Data Analytics, Industry Talk 7 and narrative of the analytics conducted

Group Members: Oon Yee Sem

- Explore the chosen data, clean it into usable format and create visualization

#### Part 2 - Introduction

### **Trends of Data Analytics in Different Sectors**

Data analytics is a procedure of reading uncooked datasets so that it will derive an end concerning the facts they hold.

There are 4 sector that are actively participated in Data Analytics which is;

- 1. Retail Retailers have continually been laser-centered on setting the proper merchandise withinside the palms of the proper consumers. Predictive facts analytics at the moment are getting used to now no longer most effective provide to shop for recommendations (along with the subsequent great provide on a buying site) however additionally to hyper-customise the whole patron revel in online.
- 2. Agriculture Developing green agriculture strategies is critical to each country, and information analytics are actually converting the manner farmers develop and offer food. One key instance is in Africa, in which agriculture is the most important industry, however plenty of the land is presently underutilized. Under acting farms, in particular, stand to advantage the maximum from those information-pushed agriculture programs.
- 3. Banking Predictive analytics is having a huge effect at the banking enterprise as well. Much like retail, banks are gaining knowledge of how to consolidate inner and outside purchaser records to construct a predictive profile of every banking consumer. Financial establishments can use the insights they accumulate to offer customers with value-pushed offerings which can be custom designed for every individual, in place of pushing out mass advertising packages that deal with all customers alike.
- 4. Government and Public Sector Public sector organizations throughout the globe are the usage of data analytics, natural language processing (NLP), machine learning, and speech and image recognition to remedy issues earlier than they erupt into crises.

Reflection that we got from these emerging trends is One aspect is clear: When it involves all of the opportunities facts analytics offers, 2021 is a 12 months of transformation. Data has by no means been more carefully tied to the achievement of businesses, because of this new possibilities for increase and development of a number of the facts specialists who're main the way.

#### **Industrial Talk 7**

What is Microsoft Power BI?

Microsoft Power BI is a suite of business intelligence (BI), reporting, and data visualization products and services for individuals and teams. The software is designed to assist businesses in their efforts to systematically analyze data and share insights.

#### When to use Microsoft Power BI?

- 1. A quick start is required. With an easy setup, no schooling required, and dashboards for offerings like Salesforce, Google Analytics, and Microsoft Dynamics, you may be capable of obtaining insights immediately.
- 2. Publication and dissemination are simplified. Analysts add visualizations to the Power BI carrier in preference to emailing or setting them on a shared disc, and their statistics are refreshed each time the underlying data set is changed.
- 3. Information that is current. As data is dispatched or streamed in, dashboards refresh in actual time, permitting visitors to immediately resolve troubles and find possibilities. Real-time data and visuals can be displayed and up to date in any report or dashboard. Factory sensors, social media sources, and something else which could acquire or transmit time-touchy information may be used as streaming data sources.

#### Where to use it?

The Power BI online service, including Pro and Premium, may be used from any web browser, but the Power BI Desktop version is not available for Linux or Mac. If you solely use Macs, Microsoft Power BI Desktop might not be the best option for you.

The reflection we get from the talk is Microsoft Power BI provides the team with great visual analytics capabilities as a business intelligence tool. It can be an ideal fit for your attempts to use data to enhance efficiency and productivity inside a business if you have the correct data and platform.

#### **Narrative**

#### Goals:

Our goal is to use Microsoft Power BI to perform data visualization on Domestic Violence so that we get a clear view on how to overcome this issue as well as improving the quality of Malaysian marriage.

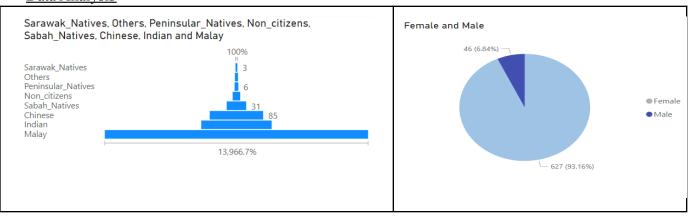
#### Question:

- 1. What are the top factors that contribute the most to domestic violence and how do we overcome it?
  - The top factor that contributes the most is Panas Baran where it has a total of 206 cases. Solutions that we came up with are to do seminars on how to manage our anger and a campaign on anger management. We also can make it compulsory for individuals to take it beforehand (e.g. work,marriage,sport).
- 2. What are the lowest factors that contribute to domestic violence? Lowest factors that contribute the least are berkahwin lain/semula for male victims and for female victims are sumbang mahram.

#### Conclusion:

- 1. We can conclude that most of the victims are female whereas there are also a male victims. Most of the victims are Malay, Indian and Chinese as they are the top 3 races in Malaysia. Sarawak has the lowest victims with 6 victims only.
- The factors that are conquering domestic violence are Panas Baran with 206 victims and factor with lowest number are berkahwin lain/semula for male and sumbang mahram for female.

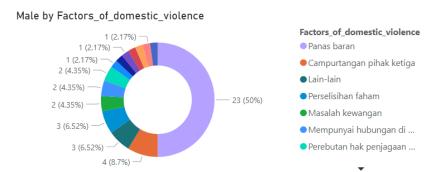
#### **Data Analysis**



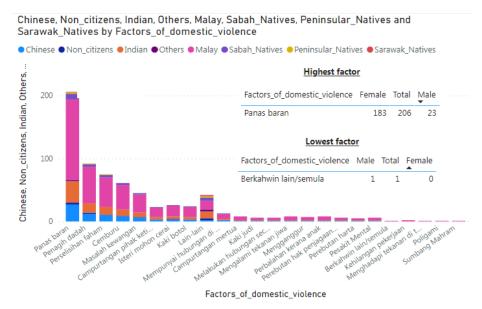
- In 2019, there will be a total number of 673 domestic-violence cases in Malaysia in 2019.
- Among 673 domestic-violence cases in Malaysia, 627 or 93.16% victims were female whereas 46 victims or 6.84% were male.
- Among 8 categories of ethnic, 419 or 62.46% were Malays which was the highest ethnic faced in domestic violence. However, only 3 or 0.45% Sarawak natives encountered domestic violence, which was the lowest among 8 categories.

#### Female by Factors\_of\_domestic\_violence Factors of domestic violence 7 (1.12%) Panas baran 19 (3.03%) 183 (29.19%) Penagih dadah 23 (3.67%) 26 (4.15%) Perselisihan faham Cemburu 39 (6.22%) Masalah kewangan 43 (6.86%) Lain-lain Isteri mohon cerai 61 (9.73%)

- Among 673 victims, 627 or 93.16% of them were female, which meant it was approximately 14 times greater than male.
- Based on the chart, there were 23 factors out of 24 except berkahwin lain/semula lead to domestic violence.
- Among 627 female victims, 183 or 29.19% of them encountered domestic violence due to Panas baran, which was the highest among the 24 factors of domestic violence.
- There were 92 or 14.67% and 72 or 11.48% of females faced domestic violence due to penagih dadah and perselisihan faham, which were the second and third highest among 7 factors of domestic violence respectively.



- Among 673 victims encountered domestic violence in Malaysia in 2019, 46 or 6.84% of them were males, which was 14 times less than female.
- Among 46 male victims, 15 out of 24 factors led them to encounter domestic violence.
- Among 46 male victims, no male victims were recorded among these factors factors which were kaki judi, penagih dadah,menganggur, menghadapi tekanan di tempat kerja, sumbang mahram, perebutan harta, cemburu, isteri mohon and dan melakukan hubungan secara paksa.
- Most of the male faced domestic violence were due to the factor banas baran, which was 23 or 50%, recorded the highest of 15 factors.
- The second highest factor affecting the number of males (4 or 8.7%) who became victims of domestic violence was campur tangan pihak ketiga.



- The highest factor of domestic violence is Panas Baran. Panas Baran led to a ridiculous amount of domestic violence where out of 206, 183 of them are female victims. 126 of them are Malay, 34 of them Indian and 27 are Chinese.
- The lowest factor of domestic violence is Berkahwin lain. Berkahwin lain are the lowest where only 1 male victim of Malay races encountered this.

Factors_of_domestic_violence	Male	Female	Chinese	Indian	Malay	Non_citizens	Sabah_Natives	Peninsular_Natives	Sarawak_Natives	Others
Panas baran	23	183	27	34	128	3	9	2	1	2
Campurtangan pihak ketiga		19	3	4	15	0	1	0	0	0
Lain-lain		39	2	11	14	3	5	2	2	3
Perselisihan faham	3	72	10	12	47	1	4	1	0	0
Masalah kewangan	2	43	6	7	29	1	2	0	0	0
Mempunyai hubungan di luar nikah	2	11	2	2	8	0	1	0	0	0
Perebutan hak penjagaan anak	2	4	1	1	4	0	0	0	0	0
Berkahwin lain/semula	1	0	0	0	1	0	0	0	0	0
Campurtangan mertua	1	7	1	1	6	0	0	0	0	0
Kaki botol	1	23	3	4	16	0	1	0	0	0
Kehilangan pekerjaan	1	1	0	0	2	0	0	0	0	0
Mengalami tekanan jiwa	1	7	1	1	6	0	0	0	0	0
Perbalahan kerana anak	1	7	1	1	6	0	0	0	0	0
Pesakit Mental	1	5	1	1	4	0	0	0	0	0
Cemburu	0	61	8	10	39	1	3	0	0	0
Isteri mohon cerai	0	26	3	4	17	1	1	0	0	0
Kaki judi	0	6	1	1	4	0	0	0	0	0
Melakukan hubungan secara paksa	0	6	1	1	4	0	0	0	0	0
Mengganggur	0	7	1	1	5	0	0	0	0	0
Menghadapi tekanan di tempat kerja	0	1	0	0	1	0	0	0	0	0
Penagih dadah	0	92	12	15	58	2	4	1	0	0
Perebutan harta	0	5	1	1	3	0	0	0	0	0
Poligami	0	1	0	0	1	0	0	0	0	0
Sumbang Mahram	0	1	0	0	1	0	0	0	0	0
Total			85	112	419	12	31	6	3	5

- The top races in domestic violence are Malay with 419 followed by Indian with 112 and Chinese with 85 victims. The other races have below 50 victims. If we compare the total, Sarawak has the least with only 6 victims.
- Panas baran has the highest number in domestic violence. Most of the victims are female with 183 victims and races with this issue are Malay with 128 victims. Indian and Chinese both also face the same problem where each has 34 and 27 respectively.