

UNIVERSITI TEKNOLOGI MARA

**DATA VISUALIZATION ON
OCCUPATIONAL ACCIDENTS IN
MALAYSIA**

MOHD ASRI BIN ATAN

**BACHELOR OF INFORMATION
TECHNOLOGY (Hons)**

JULY 2022

Universiti Teknologi MARA

**Data Visualization on Occupational
Accidents in Malaysia**

Mohd Asri bin Atan

**Thesis submitted in fulfilment of the requirements for
Bachelor of Information Technology (Hons)
Faculty of Computer and Mathematical Sciences**

July 2022

SUPERVISOR'S APPROVAL

DATA VISUALIZATION ON OCCUPATIONAL ACCIDENTS IN MALAYSIA

By

**MOHD ASRI BIN ATAN
2019713129**

This thesis was prepared under the supervision of the project supervisor, Dr Aznoora Osman. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Information Technology (Hons).

Approved by

.....
Dr. Aznoora Osman
Project Supervisor

August 5, 2022

STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

.....
MOHD ASRI BIN ATAN
2019713129

JULY 30, 2022

ABSTRACT

Data visualization is the graphical display of abstract information for two purposes: sense-making it also called data analysis and communication. Important stories live in our data and data visualization is a powerful means to discover and understand these stories, and then to present them to others. The information is abstract in that it describes things that are not physical. Statistical information is abstract. Whether it concerns sales, incidences of disease, athletic performance, or anything else, even though it doesn't pertain to the physical world, we can still display it visually, but to do this we must find a way to give form to that which has none. This translation of the abstract into physical attributes of vision such as length, position, size, shape, and color, to name a few can only succeed if we understand a bit about visual perception and cognition. In other words, to visualize data effectively, we must follow design principles that are derived from an understanding of human perception. Accident Workplace issues include total of death, total of accidents, total permanent disability, and total non-permanent disability. The objective consisting of developing data visualizations based on Organization Safety and Health information, analyses the factors that contribute to workplace Accidents, and the frequency of employee and employer daily routine also evaluate the data visualization using user acceptance test. The dataset was extracted from Portal Organization safety and health Malaysia Portal, then load and transform into Power BI application for dashboard visualization. It can be explained even more clearly by displaying visuals. As a result, it can raise awareness of a good Standard Operating Procedure (SOP). Data analytics using data visualization is a suitable tool because it helps students to understand how to reduce the number of accidents at work habits through visualization of their working routine.