

UNIVERSITI TEKNOLOGI MARA

**MILITARY'S ASSETS EXPENDITURE
VISUALISATION DASHBOARD**

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BACHELOR OF INFORMATION TECHNOLOGY (Hons)

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**Military's Assets Expenditure Visualisation
Dashboard**

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Information Technology (Hons)
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SUPERVISOR'S APPROVAL

MILITARY'S ASSETS EXPENDITURE VISUALISATION DASHBOARD

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This thesis was prepared under the supervision of the project supervisor, Dr. Norfiza Ibrahim. 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. Norfiza Ibrahim
Project Supervisor

JULY 13,2022

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.

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ABSTRACT

Spending on diversity of assets in the military can further strengthen a country's defence. Currently, the management of military assets in some countries is disproportionate to other important needs of the country. In spending the allocation for the purchase of military assets, a country needs to have clear guidelines. The assets purchased are a tool of defence to the country. So, the allocation needs to be planned perfectly as this involves national security. Therefore, the objective of this research is to visualise the Military Assets Expenditure by countries. Research methodology that is used to achieve the Military's Assets Expenditure Dashboard consists of four phases which are Planning, Analysis, Development and Testing. To make the process of developing the dashboard run smoothly, restructured the raw dataset of Military's Asset Expenditure. The first thing that needs to be done before performing the data visualisation is to identify a suitable type to implement into the Military's Asset Expenditure dashboard. The user interface design on the Figma will be a guide to create the dashboard using Power Bi. The dashboard was created according to the data of the Military's Assets Expenditure. After that, the Military's Assets Expenditure dashboard is constructed. ETL is an important part of the implementation of the Military's Assets Expenditure Dashboard. The first step by creating the dashboard data visualisation is by extracting the data. The dashboard will load the data and transform it into graphical data using a visualisation tool. This phase requires a user testing activity to achieve the third objective, which is to evaluate the performance of the proposed dashboard interface based on the data analysis and visualisation results. There are 50 respondents including military officers who will perform UAT to test the Military's Assets Expenditure dashboard. The results show that the Military Asset Expenditure Dashboard is a decent dashboard with some refinement. Most respondents also agree that the dashboard is useful and verified the goal to identify the efficiency and effectiveness of Military Asset Expenditure Dashboard.