

UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

**BIG DATA ANALYTICS AND ITS ROLE IN ELECTION – A
CASE STUDY ON MALAYSIA GENERAL ELECTION 15**

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IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL.

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ABSTRACT

The present research focused on using big data analytics to investigate voter preferences for Malaysia General Election 15 (GE15). Big data analytics involves analyzing large volumes of data to uncover trends and patterns for informed decision-making. Elections in Malaysia occur at both federal and state levels. The research aimed to understand the role of big data analytics in the election process. However, the extensive amount of data poses challenges in data collection. Sorting and analyzing the data manually can be time-consuming and stressful. Real-time analysis of all data is not feasible, potentially leading to inaccurate results. Data analytics tools help address these challenges by automating data collection, assessment, and providing real-time reports, improving decision-making and productivity. The research had two research objectives: conducting a survey among students, lecturers, and staff in the faculty of College of Computing, Informatics and Mathematics, UiTM Seremban 3 to determine their voting preferences for General Election 15 and identifying their preferences on issues related to the election. Questionnaires were distributed to the selected sample size to collect respondents' preferences. The collected data underwent a data cleansing process to identify missing or erroneous data. Microsoft Power BI was used to transform the data into interactive insights, providing a better understanding of the data for people.