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BIG DATA ANALYSIS

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Big Data Analysis (BDA) enables organisation to make informed decisions on their projects. BDA can be defined as a collection of tasks and techniques used by mathematicians as toolkits. It aids in the understanding of the structure, rules, and processes of a target project or organisation and proposes solutions to achieve its objectives [6].

The first step in BDA research is formulating a more straightforward scope of analysis to solve the problem efficiently. One or more of the following three questions should be answered within this framework of the analysis:

1. What is going on? (Descriptive analysis).
2. What is going to occur? (Predictive analysis).
3. What can we do? (Prescriptive analysis).

The second step involves choosing the most applicable approach to the project target. The third step is to review the available data and assess if additional data are necessary. In this instance, the mathematician can either 1) try to use imputed data to compensate for inaccessible data or 2) move to the second-best model. It is likely that the data required for a particular model could not be collected. The fourth step is to validate the findings properly, and the last step is to transmit them correctly. Figure 3.1 illustrates the typical methodology flowchart of BDA.

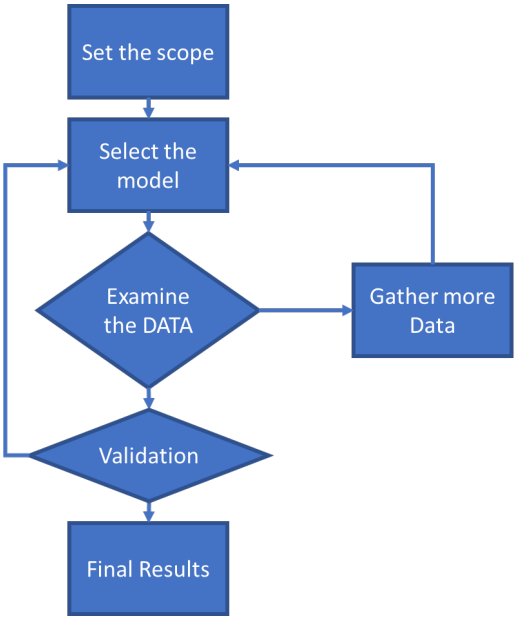

Figure 3.1 Methodology flowchart of BDA

3.1 DESCRIPTIVE ANALYTICS

Data are statistically analysed by descriptive analytics to determine what had ensued before and can be described by answering the matter "What has happened?" The data can be presented through graphs, diagrams, reports, and dashboards and helps a company evaluate their performance according to knowledge interpretation by stakeholders [7]. This method analyses real-time and historical data to gain insights into how the future can be approached. The descriptive analysis mainly aims to identify the reasons for past success or failure. The "past" here takes into account every previous occurrence of an incident, whether a month or even a minute earlier. This category of descriptive analysis includes many BDA systems used by organisations.

Descriptive analytics are based on standard database aggregate features that require only simple school-based mathematics and are the most common form of social analysis. Some groupings are summarised based on a simple number of events. There are only event counters for the number of followers, lovers, and posts. These measurements are used to analyse social issues such as average responsiveness time, average response time per message, percentage index, and the number of page views.