**Part 1 – THE BUSINESS ANALYTICS PROCESS**

1. Look for data set/news online related to covid cases.

-**DATA ANALYSIS: COVID 19** [**https://www.kaggle.com/code/dhifisiwar/data-analysis-covid-19/notebook**](https://www.kaggle.com/code/dhifisiwar/data-analysis-covid-19/notebook)

**2. Apply Business Analytics Process**

**2.1 Descriptive Analytics Analysis**

* **Case Study: United States**
* During the COVID-19 Pandemic, the retail sector in the United States experienced significant disruptions. The amount of traffic in physical stores has decreased, but e-commerce sales have increased. To survive these threats, many firms had to quickly shift their focus to online sales and doorstep delivery services. Furthermore, the variable levels of compliance with mask laws and social distancing measures between countries had a direct influence on the virus's transmission and, as a result, on the operating environment of enterprises.
* **Case Study: New Zealand**
* The New Zealand's strict border restrictions and early containment procedures were successful in obtaining relatively low COVID-19 case matters. This accomplishment enabled enterprises to operate with less constraints, which helped to preserve economic stability. However, because of international travel limitations, the pandemic posed considerable issues for New Zealand's tourism-dependent companies. As a result, several of these enterprises shifted their attention to increasing domestic tourism and implementing creative revenue-sustaining tactics.

**2.2 Predictive Analytics Analysis**

* The global COVID-19 pandemic has driven the application of strong predictive analytics tools to analyze and anticipate the virus's progress. These strategies have been critical in influencing public health policy, recognizing trends, and minimizing illness damage. Time Series Analysis, Machine Learning Models, and Epidemiological Models are three main predictive analytics methodologies to look out.
* Israel was an early adopter of predictive analytics in the context of COVID-19 vaccine distribution planning. The Israeli government worked with data scientists and healthcare specialists to develop a comprehensive model that took into account aspects like as population demographics, infection rates, vaccination supplies, and logistics. The goal of this prediction model was to forecast when a large fraction of the population would be vaccinated and when herd immunity may be attained.

**2.3 Prescriptive Analytics Analysis**

* The COVID-19 pandemic has shown the vital significance for data analytics in effectively managing healthcare crises. Three aspects of analytics stand out as critical success variables such as demand forecasting, resource allocation models, and vaccine distribution planning. These analytical methods, when combined, provide a complete foundation for reacting to the pandemic's changing problems. Demand forecasting, or projecting future demand for products or services, has emerged as a critical component in the fight against COVID-19. Its use in this context has helped to ensure the availability of critical medical supplies, particularly Personal Protective Equipment (PPE) and ventilators. Resource allocation models have become essential tools for understanding how to properly distribute few resources while taking demand, availability, and priority into account. In the midst of the COVID-19 crisis, healthcare institutions throughout the world have used these models to handle the pandemic's unique hurdles. The creation and dissemination of COVID-19 vaccinations represented an important turning point in the pandemic. The effective distribution of vaccinations, on the other hand, constituted a major operational problem that called for strict planning and optimization.