

Project Title: EFFECT OF COVID ON TRADE (EXPORTS)

Project Brief:

Project Overview:

The goal of this project is to perform a wholesome analysis of the effect of COVID-19 on Global trade (Exports) focusing of some countries/continent (United Kingdom, East Asia, China, European, United States) from 2015 to 2021.

Objectives:

- Download csv file from excel format into a SQL database.
- Clean and transform the data to ensure consistency and accuracy.
- Conduct exploratory data analysis to identify trends, patterns and insights.
- Perform statistical analysis to understand the impact of COVID-19 on global trade revenue (export) focusing of the countries/continent listed above.
- Generate meaningful visualizations to present the findings to stakeholders.
- Identify potential areas in global trade channels based on the analysis.

Data Sources:

The data will be sourced from:

- <https://www.stats.govt.nz/large-datasets/csv-files-for-download/>

Methodology:

- Import downloaded csv data into SQL database
- Perform data cleaning and pre-processing to address missing values, duplicates and inconsistencies.
- Explore the data using SQL queries to identify key metrics, trends and patterns.
- Conduct statistical analysis to understand the impact of COVID-19 on different countries.
- Utilize SQL functions and aggregations to derive meaningful insight from the data.
- Create visualizations and reports using SQL or export data to external tool for visualization.

Questions:

- Determine the trade revenue for individual years from 2015 - 2021 and percentage change/growth.?
- Determine the trade revenue (by country/continent) for individual years from 2015 - 2021 and percentage change.
- Determine the trade revenue (by commodity) for individual years from 2015 - 2021 and percentage change.

Deliverables:

- SQL database containing the cleaned and transformed data.
- Inquisitive data analysis report highlighting key findings and insights.

- Statistical analysis report showing the impact of COVID-19 on world trade export.
- Visualizations and dashboards presenting the analysis.
- Documentation of the data cleaning, pre-processing, and analysis steps.
- Presentation slides for stakeholders summarizing the project and its outcome.

#### Suggested Timeline:

##### Day 1: Data gathering, import, cleaning and pre-processing

Focused on data gathering, importing of file into SQL database, data cleaning tasks such as removing unwanted fields and rows, renaming fields, removing null values, and inconsistencies.

##### Day 2: Inquisitive Data analysis

Perform thorough exploratory data analysis focusing on identifying key trends, patterns, and key insights.

##### Day 3: Statistical analysis

Indulged in basic statistical analysis such as calculating totals simple correlations to gain insights into the data.

##### Day 4: Visualization and reporting

Create basic visualization (e.g bar charts, line charts) to present key findings from the exploratory and statistical analysis.

Prepare a brief summary report outlining the major observations and insights.