

# COVID-19 USING COGNOS

## PROJECT DEFINITION:

The project involves analysing COVID-19 cases and deaths data using IBM Cognos. The objective is to compare and contrast the mean values and standard deviations of cases and associated deaths per day and by country in the EU/EEA. This project encompasses defining analysis objectives, collecting COVID-19 data, designing relevant visualizations in IBM Cognos, and deriving insights from the data.

## DESIGN THINKING :

### ➤ ANALYSIS OBJECTIVES :

Epidemiological Surveillance: To track the spread of the virus, understand transmission patterns, and identify potential hotspots.

Healthcare Resource Planning: Predicting healthcare system needs, including hospital beds, ventilators, and personal protective equipment (PPE), to ensure adequate

	MEAN	STANDARD DEVIATION(SD)
CASES	3661.011	6490.51
DEATHS	65.29194	113.9566

### COMPARISON OF MEAN :

The average of cases were greater than average of deaths. The cases having an average of 3661.011 data and the deaths having an average of 65.29194 data.

### COMPARISON OF STANDARD DEVIATION :

The cases having a higher standard deviation tells that the cases is more spread out or dispersed than the deaths. The cases had a standard deviation of 6490.51 whereas the deaths had a standard deviation of 113.9566.

### ➤ DATA COLLECTION :

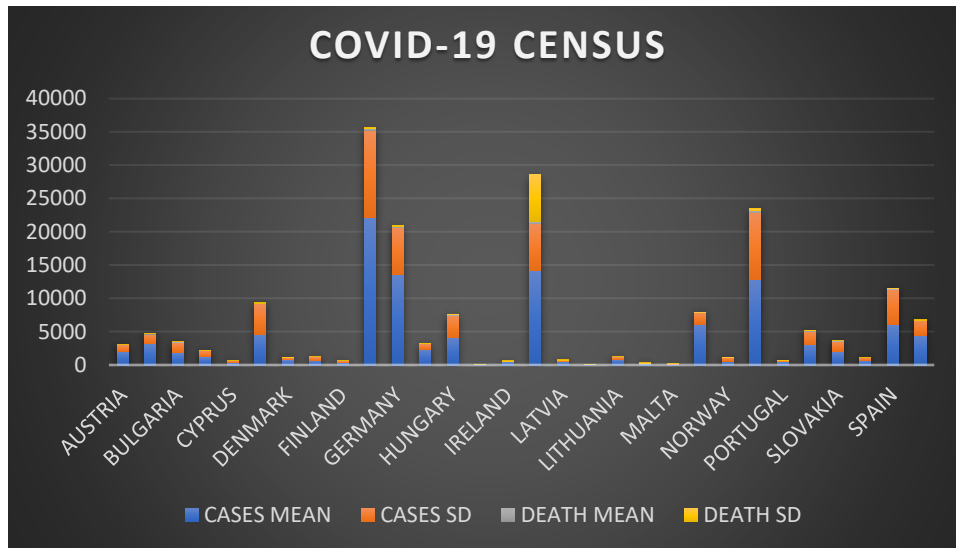
We will obtain our dataset from Kaggle. This data file containing COVID-19 cases and deaths information per day and by country in the EU/EEA.

### KAGGLE DATASET LINK :

<https://www.kaggle.com/datasets/chakradharmattapalli/covid-19-cases>

### ➤ VISUALIZATION STRATEGY :

Visualize the mean values and standard deviations of cases and deaths using IBM Cognos to create informative charts and graphs. The graph holds the mean values of cases and deaths and standard deviation of cases and deaths. This shows the relationship between the countries in cases and death of COVID-19.



### ➤ INSIGHTS GENERATION :

**Magnitude of the Pandemic:** If the mean number of cases is significantly higher than the mean number of deaths, it indicates that a large portion of COVID-19 cases are mild or asymptomatic. Conversely, if the mean number of deaths is proportionally higher, it suggests a more severe impact.

**Variability in Severity:** A higher standard deviation in deaths compared to cases may indicate greater variability in the severity of COVID-19 outcomes, with some regions or populations experiencing more severe consequences than others.

**Effectiveness of Healthcare:** Lower standard deviations in deaths relative to cases may suggest that healthcare systems are effectively managing and reducing mortality rates, leading to more consistent outcomes.

**Time Trends:** Over time, changes in the mean and standard deviation of cases and deaths can reveal the impact of public health measures, vaccination campaigns, and the emergence of new variants. Increasing standard deviations may indicate a more unpredictable and dynamic situation.